ACCURATE

LOCK & HARDWARE

AMERICAN CRAFTED SINCE 1972

M9100E-ELR Motor Drive Electrified Dual Motor Mortise Lock

ELECTRIFIED LATCH RETRACTION COMBINED WITH LOCK/UNLOCK LEVER CONTROL

MOTOR DRIVE ELECTRIFIED DUAL MOTOR MORTISE LOCK

M9100E-ELR

This dual electrified mortise lock features two independently powered motors to offer the convenience of ELR touch-free operation with fail-safe/fail-secure functionality. Its dual-motor design makes it ideal for data centers and stairwell applications, where strict access control, remote door management, and high-level physical security are required. The door will remain latched when closed to ensure code compliance.

M9100E-ELR

M9057E-ELR/M9058E-ELR/M9059E-ELR for doors $1^3/_8$" minimum (1" armor front)
M9157E-ELR/M9158E-ELR/M9159E-ELR 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"

APPLICATION: Upon receiving a signal from the access control system, the lock electrically retracts the latch to allow entry. Ideal for data centers, stairwell re-entry, and high-security controlled egress openings.

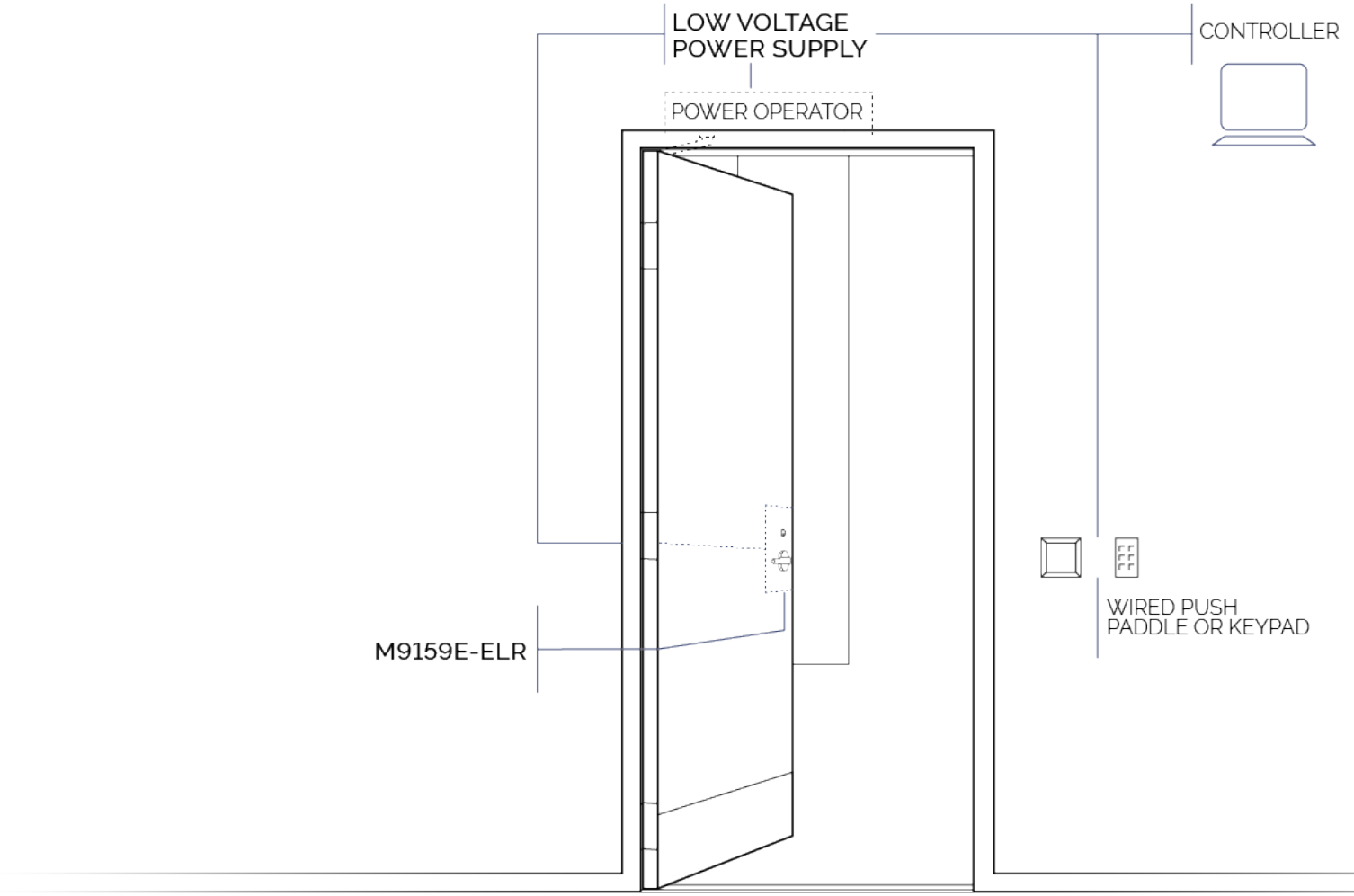
KEY BENEFITS:

- Continuous duty motor enables door to be scheduled for unlocked status for indefinite periods.
- Contributes to elevated accessibility by automatically retracting the latch rather than requiring manual operation, particularly when paired with a low energy automatic door opener. Similar to M9143ELR.)
- *Access control components (keypad, card reader, wall paddle, etc.) by others.*

METAL DOOR

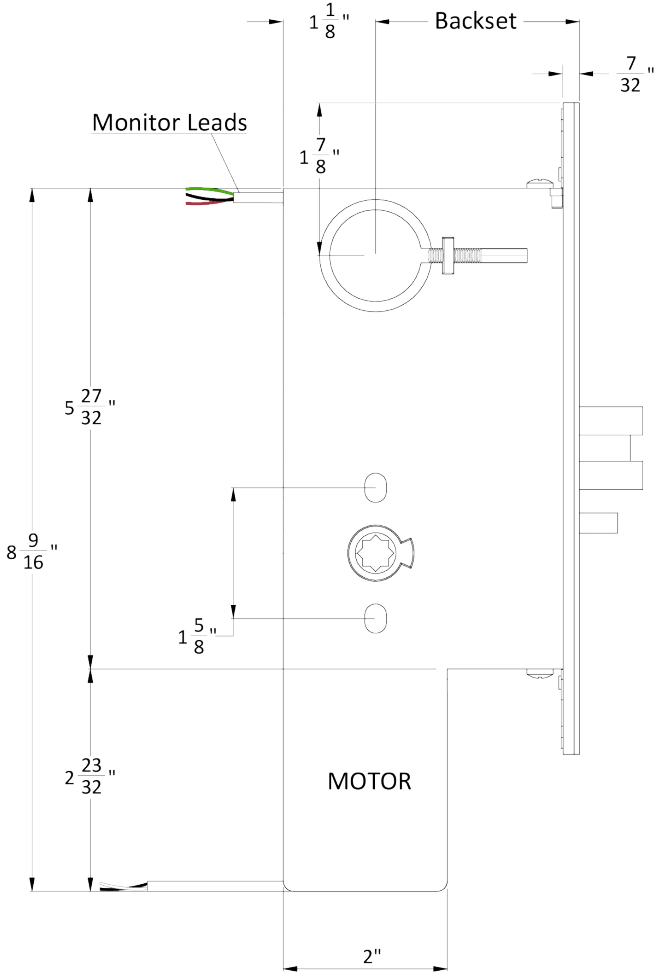
WOOD DOOR

M9100E-ELR Operation

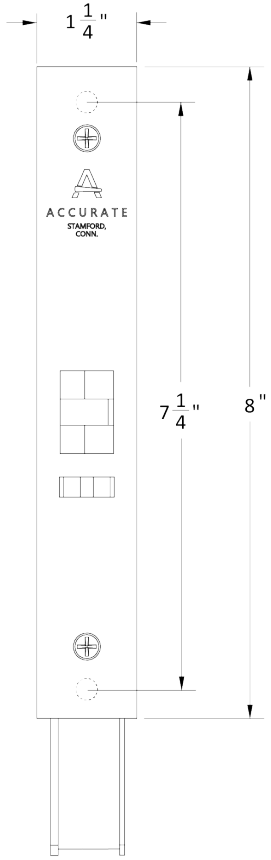


Access control components by others.

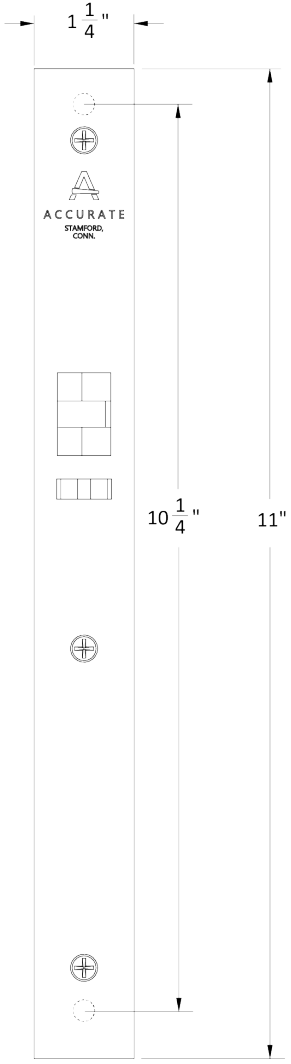
M9100E-ELR Dimensions



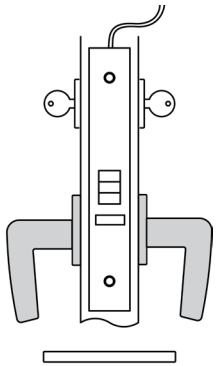
METAL DOOR



WOOD DOOR



M9100E-ELR Technical Details



M9157E-ELR
ELR + ELEC Dual-Sided Access Control

Latch bolt by key either side.

Auxiliary latch deadlocks latch bolt.

Motor Driven Electric Latch Retraction: Latch retracts when power is applied to ELR (FAIL SECURE only).

Motor Drive FAIL SAFE Electric Controlled Lever Operation.

NORMAL POWERED OPERATION: Inside and outside trim remain rigid. Authorized credential activates ELR to retract the latch for access from either side.

POWER FAILURE OPERATION: Outside trim remains rigid, maintaining secure entry. Inside trim becomes operable, providing mechanical egress without power.

FAIL SAFE LEVER CONTROL applies to the inside trim only. Loss of power releases the inside lever for egress while the outside lever remains locked.

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

Motor Electric Controlled Locking/Unlocking (Blue Leads)

Voltage: 12-24V AC/DC (11V-30V)

Current: 250mA MAX Inrush, 10mA MAX Holding

Non-polarized leads

Motor Drive Electric Latch Retraction (White Leads)

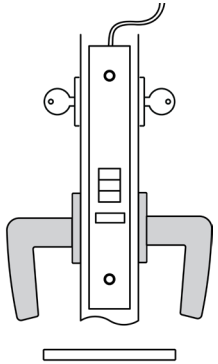
Filtered and Regulated Power Supply

Voltage: 24VDC (21VDC-30VDC)

Current: 625mA MAX Inrush, 150mA MAX Holding

Non-polarized leads

M9100E-ELR Technical Details



M9158E-ELR
ELR + ELEC Dual Door Control

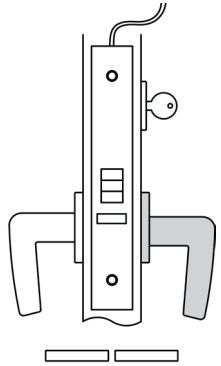
Latch bolt by key either side.

Auxiliary latch deadlocks latch bolt.

Motor Drive Electric Latch Retraction
Latch retracts when power is applied (FAIL SECURE only).

Motor Drive Electric Controlled Locking/Unlocking
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-ELR
ELR + ELEC Dual Door Control

Inside trim always free.

Latch bolt by key outside.

Auxiliary latch deadlocks latch bolt.

Motor Drive Electric Latch Retraction.
Latch retracts when power is applied (FAIL SECURE only).

Motor Drive Electric Controlled Locking/Unlocking
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.

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

Motor Electric Controlled Locking/Unlocking (Blue Leads)

Voltage: 12-24V AC/DC (11V-30V)

Current: 250mA MAX Inrush, 10mA MAX Holding

Non-polarized leads

Motor Drive Electric Latch Retraction (White Leads)

Filtered and Regulated Power Supply

Voltage: 24VDC (21VDC-30VDC)

Current: 625mA MAX Inrush, 150mA MAX Holding

Non-polarized leads

M9100E-ELR 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-ELR 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

LMR – LATCH BOLT MONITOR RETRACTED

A dry contact closure will occur 0.5 seconds after the full retraction of the main latch bolt under power and will remain until power is removed of if the main latch bolt unintentionally extends.

ELECTRICAL SPECIFICATIONS:

Dry contact Non-polarized leads

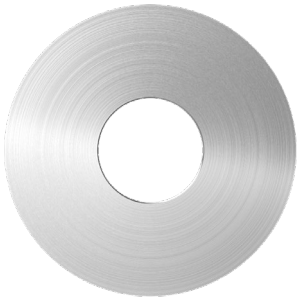
M9100E-ELR Allowable Monitoring Combinations

Applies to: M9158E-ELR/M9159E-ELR | All Backsets Standard and Upside Down (USD) Configurations 2-1/2”, 2-3/4”, 3-3/4”, 5”, 6” Backsets							
AE Authorized Egress	AM Auxiliary Latch Monitor	LB Locking Bar Monitor	SM Security Monitor	SM2 Security Monitor	LM Latch Bolt Monitor	DPS Door Position Sensor	LMR Latch Bolt Monitor Retracted
Inside Hub When Outside Locked	*Dead Latch*		*AM + LB in Series (3 Wires)*	*AM + LB (6 wires)*			
X	X	X			X	X	X
X			X		X	X	X
X				X	X	X	X
X					X	X	X

M9100E-ELR Trim Examples

21L LEVER

1R ROSE



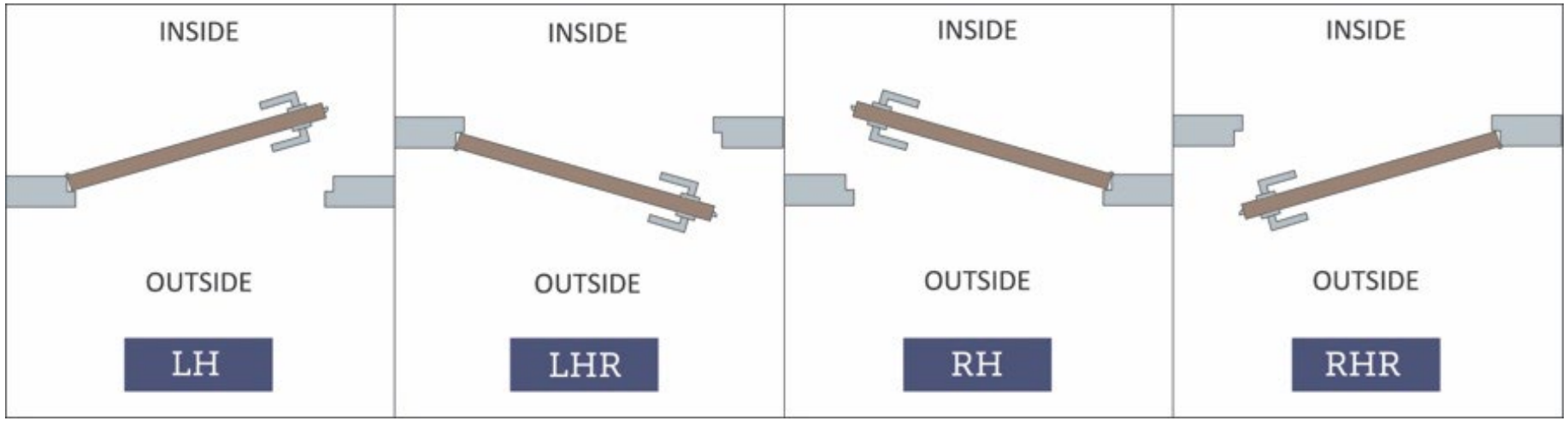
ACCURATE TRIM

Specify Accurate levers, roses, escutcheons, pulls, etc. Click or scan to see trim options.

SCAN HERE

HOW TO SPECIFY

HANDING



FINISHES

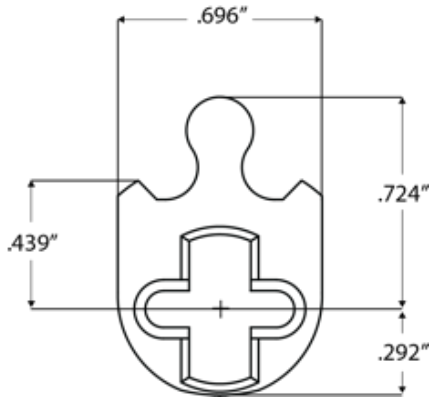
GROUP 1: US4, US4NL, US32D*, US26D

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-ELR 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.DOORTYPE

FUNCTIONS
Page 6

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

TRIM
Accurate trim
or specify other trim manufacturers or spindle size

FINISHES
See available finishes page 12

DOOR TYPE
HM – Hollow Metal
WD – Wood Door

EXAMPLES

Dual Motor Mortise Lock | Authorized Egress | Accurate Trim
E.g.: M9159E-ELR-AE.212.29L/2R.US26D.RH.134.HM

Dual Motor Mortise Lock | Accurate Trim
E.g.: M9158E-ELR.234.19L/1R.US4.LH.134.WD

Dual Motor Mortise Lock | Latch Bolt Monitor Retracted | Accurate Trim
E.g.: M9158E-ELR-LMR.234.21L/1E.US26D.RH.134.HM

Note: Access Control Components by Others.
M9100E-ELR lock is ideal to pair with a low energy power operator (by others).

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

SPECIAL OPTIONS AVAILABLE

- SS-Security Strikes
- USD K x K Upside Down (cylinder below knobs)
- USD L x L Upside Down (cylinder below levers)
- K x L Knob Outside, Lever Inside
- L x K Lever Outside, Knob Inside
- Compatible with the following add-ons: SilentPac™ Lever Dampening Disc

ACCURATE LOCK & HARDWARE
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