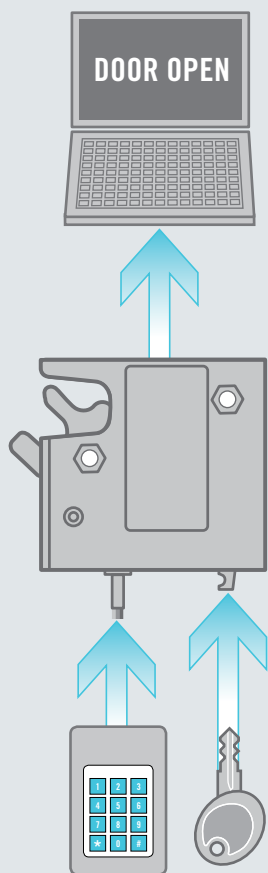


R4-EM Electronic Rotary Latch

Electronic access

- **Auto re-lock and delayed re-lock version**
- **Push-to-close, electronic release**
- **Versatile rotary mechanism**
- **Concealed latching**
- **Microprocessor control**
- **High strength**
- **Minimal power draw**
- **Simple mechanical over-ride**
- **Optional internal microswitch for latch open/close output signal**



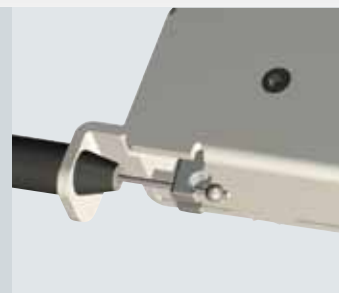
The R4-EM Electronic Rotary Latch provides a simple, versatile electromechanical latch solution for a variety of applications. Add a 12-24 Volt DC power supply and any access control device to the R4-EM for a secure, concealed electronic access solution. The optional internal microswitch provides an output signal to remotely monitor latch status or control external systems.



The efficient DC gear motor driven system releases the rotary cam under heavy loads with minimal power consumption.

The proven rotary mechanism provides push-to-close convenience and a secure closure.

Convenient mechanical over-ride feature for manual release in case of power failure. Contact Southco for manual release cables and mounting brackets.



Other options available. For complete details on variety, part numbers, installation and specification, go to



www.southco.com/R4-EM

Dimensions in millimeters (inch) unless otherwise stated

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R4-EM Electronic Rotary Latch

Electronic access

Material & Finish

Mechanism

Housing: Steel, zinc plated

Cam, trigger: Steel, zinc plated

Springs: 300 Series stainless steel

Pins: Steel, zinc plated

Electronic Actuator:

Housing: PC/ABS

Cam / follower: Acetal

Electrical Specifications

Recommended Operating Voltage:

12 to 24 Volt DC

Typical Operating Current (average at no load): Less than 600mA at 12 VDC

Input Signal Current Draw: 25mA MAX at 24 VDC

**Optional microswitch closes upon latch closure

Microswitch Rating: 3A MAX at 12VDC

Wire Color Code / Connector

Pin Assignment:

PIN 1: Brown: Ground (-)

PIN 2: Red: Power 8 to 26 Volts DC

PIN 3: Orange: Control Signal

8 to 26 Volts DC

PIN 4 Black: Microswitch Common

PIN 5 Blue: Microswitch N.O.

Contact

PIN 6 Grey: Microswitch N.C.

Contact

Wire Length: 150mm with connector, 430mm without connector

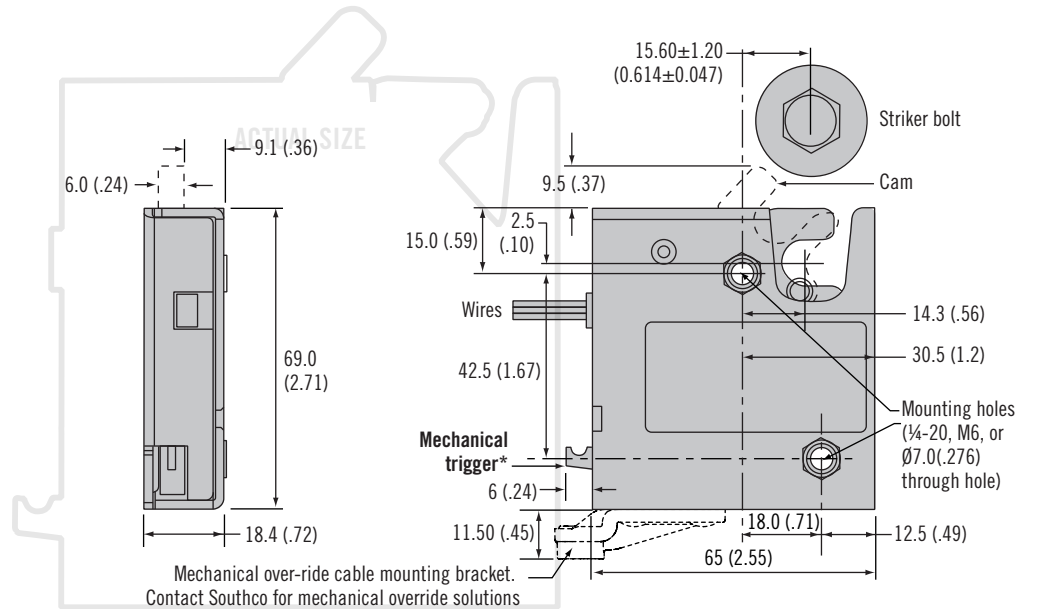
Contact Southco for mate connector and wire harness

Notes

For mechanical release actuators and cables contact Southco

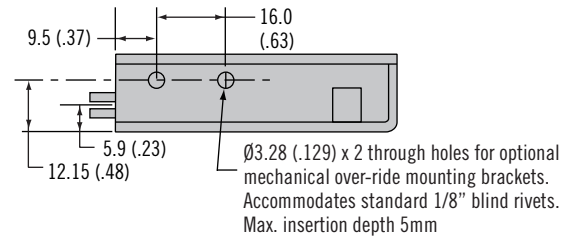
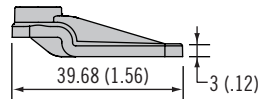
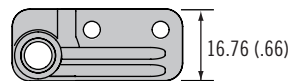
Parts are shipped individually boxed.

For bulk packaging add -1 to the end of the part number



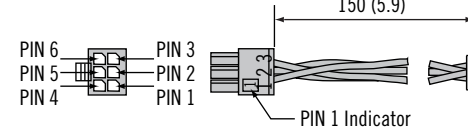
Mounting Kit Rivets included

(Part Number R4-EM-52)

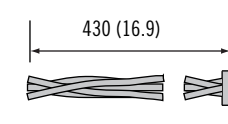


Optional Latch Connector

Molex Microfit 3.0 series

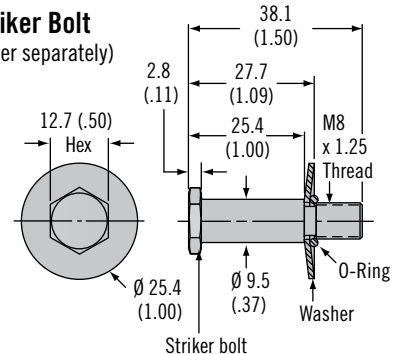


Without connector



Striker Bolt

(order separately)



R4EM Part Number				
Type	No Microswitch**		With Microswitch**	
	With connector	Without connector	With connector	Without connector
1/4 - 20 Threaded mounting	R4-EM-X1-131	R4-EM-X1-132	R4-EM-X1-161	R4-EM-X1-162
M6 Threaded mounting	R4-EM-X2-131	R4-EM-X2-132	R4-EM-X2-161	R4-EM-X2-162
Ø 7.0 (.27) Thru hole mounting	R4-EM-X3-131	R4-EM-X3-132	R4-EM-X3-161	R4-EM-X3-162
Striker Bolt Part Number				
Striker bolt	R4-90-121-10			

X=1 for Auto Re-lock version

X=2 for Delayed Re-lock version

Dimensions in millimeters (inch) unless otherwise stated

Other options available. For complete details on variety, part numbers, installation and specification, go to



www.southco.com/R4-EM

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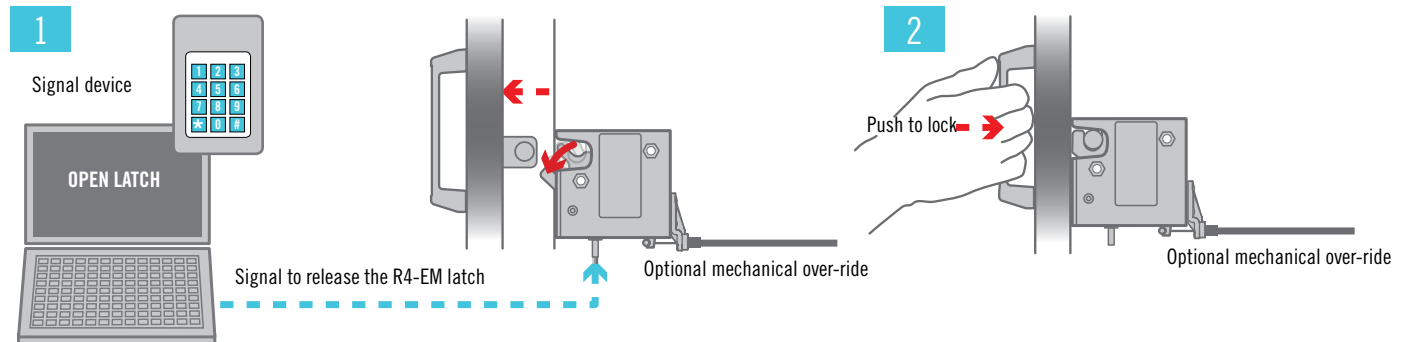
R4-EM Electronic Rotary Latch

Electronic access

Operation

Auto Re-lock Version

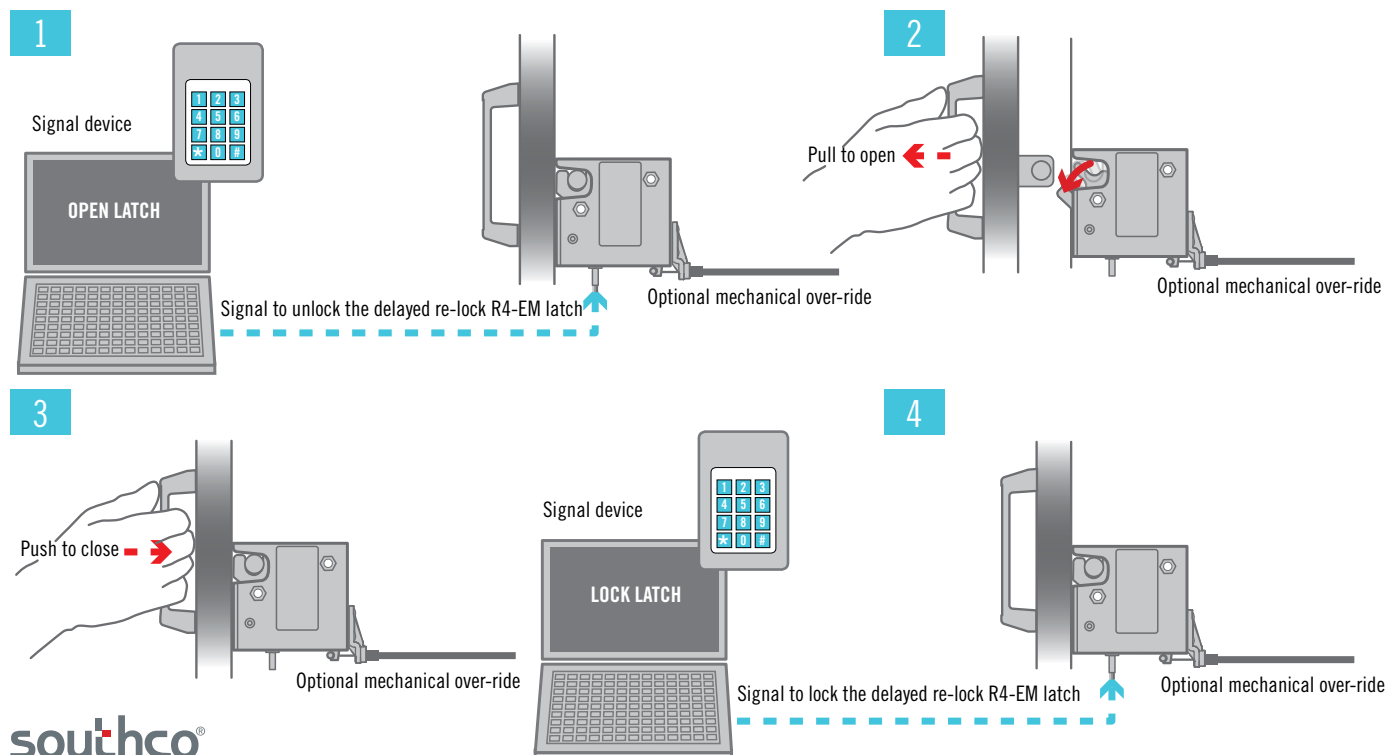
1. The signal momentarily unlocks and releases the spring loaded cam which rotates out to push a lightweight door open. The latch then immediately returns to the locked state ready to re-lock upon closing
2. Push door closed to engage striker with the R4-EM latch



Delayed Re-Lock Version

Use the Delayed re-lock version for heavier doors that will not kick open easily or where remote lock/unlock manual door opening is preferred over a pop open style.

1. The signal unlocks the R4-EM latch leaving a biased closed door in the closed position.
2. Manually pull door/striker free from R4-EM latch
3. Manually push door closed. Striker will rotate cam to closed position, however latch will remain unlocked and can be re-opened as long as signal is present
4. After accessing the door, the signal can be removed to re-lock the R4-EM. This can be done with the door in the open or closed position.





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- **Quick turnaround, on your timetable.** 14 strategically located Southco manufacturing, assembly, and stocking facilities - in 8 countries across 4 continents - shorten lead times, lower shipping costs, and improve scheduling.
- **Extensive capabilities for your benefit.** In-house resources - stamping, die-casting, cold-heading, roll-forming, turning, injection-molding, and assembly - at Southco Centers of Excellence around the world transform raw stock into polished solutions.
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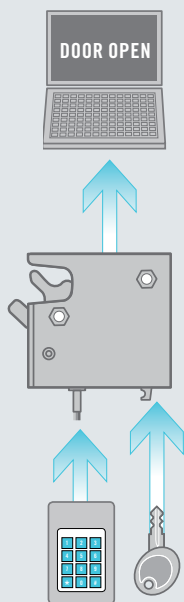
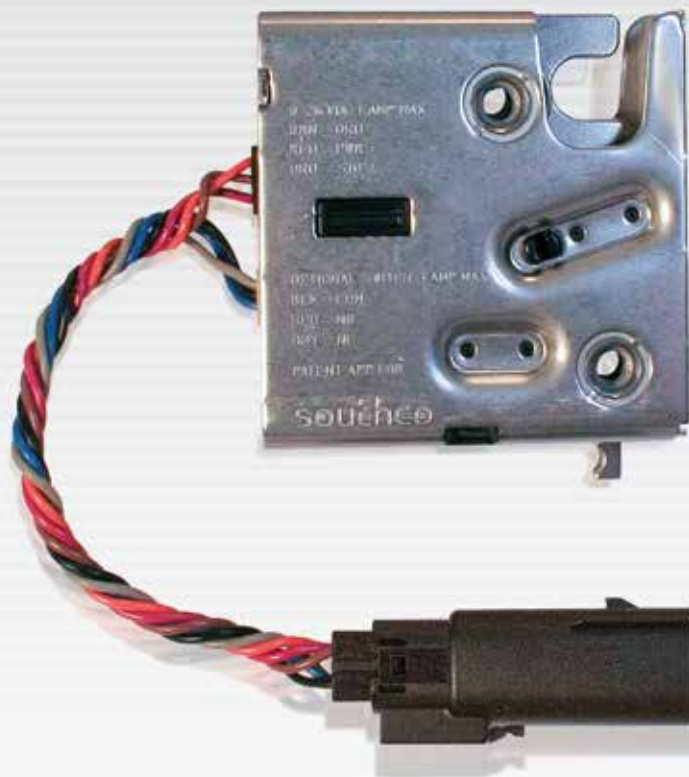


R4-EM Outdoor Electronic Rotary Latch

Electronic access

- **Push-to-close, electronic release**
- **Versatile rotary mechanism**
- **Motor actuator sealed against water and dust ingress to IP56**
- **High strength plated-steel and stainless steel options**
- **Concealed latching**
- **Microprocessor control**
- **Delayed re-lock functionality**
- **Minimal power draw**
- **Optional internal micro-switch for latch status**
- **Simple mechanical over-ride**

The R4-EM Electronic Rotary Latch with sealed actuator and plated-steel or stainless steel outer body construction provides a versatile electromechanical latch solution for outdoor and corrosive environments. Add a 12-24 Volt DC power supply and any access control device for a secure, concealed electronic access solution. The internal micro-switch options provide an output signal to remotely monitor latch status and control external systems.



Other options available. For complete details on variety, part numbers, installation and specification, go to



www.southco.com/R4-EM



Dimensions in millimeters (inch) unless otherwise stated

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R4-EM Outdoor Electronic Rotary Latch

Electronic access

Material & Finish

Mechanism

Housing, Cam, Trigger, Pins: Zinc
Nickel plated steel or stainless steel
Springs: 300 Series stainless steel
Electronic Actuator

Housing: PC/ABS

Bellows, Wire Seal: Silicone

Perimeter Seal: Buna

Cams: Acetal

Grommet: Santoprene

Electrical Specifications

Recommended Operating Voltage:

12 to 24 Volt DC

Typical Operating Current (average
at no load): Less than 600mA at
12 VDC

Input Signal Current Draw: 25mA

MAX at 24 VDC

Micro-switch Rating: 3A MAX at

12VDC

Wire Color Code / Connector

Pin Assignment:

PIN 1: Brown: Ground (-)

PIN 2: Red: Power 12 to 24 Volts DC

PIN 3: Orange: Control Signal

12 to 24 Volts DC

PIN 4 Black: Microswitch Common

PIN 5 Blue: Microswitch N.O.

Contact

PIN 6 Grey: Microswitch N.C.

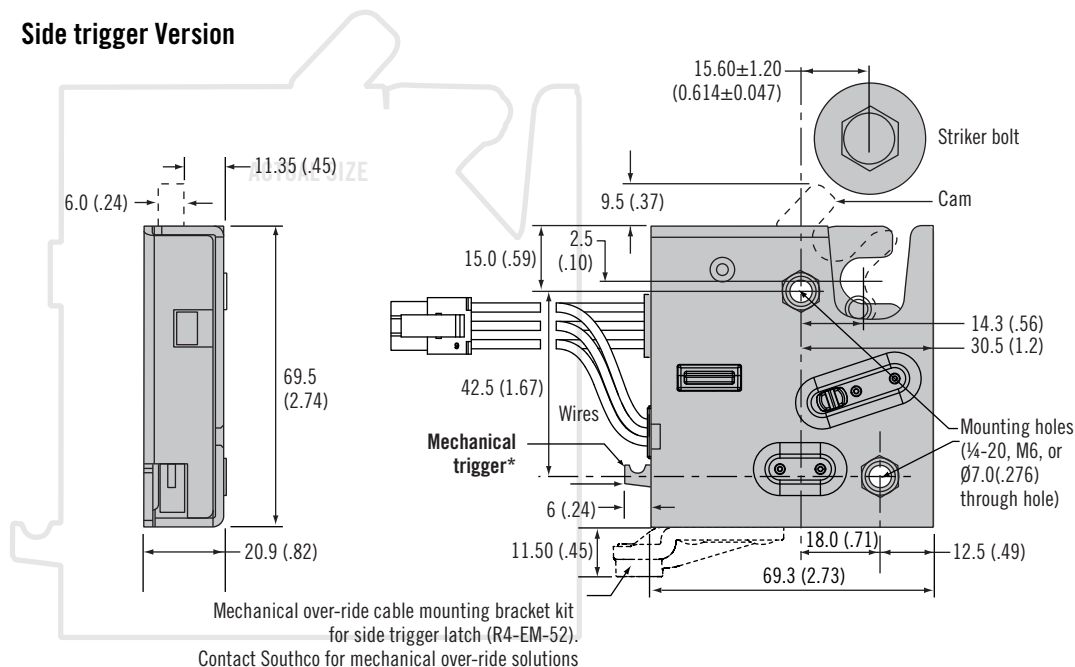
Contact

Contact Southco for mate connector
and wire harness options

Notes

For mechanical release actuators
and cables contact Southco

Side trigger Version

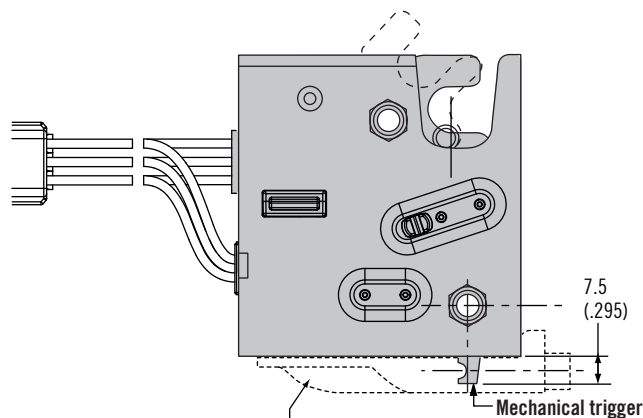
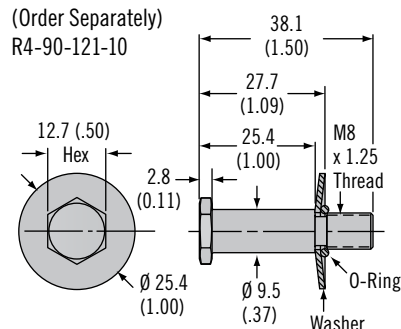


Rear trigger Version

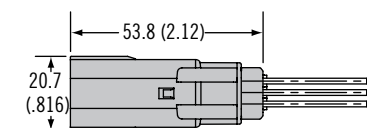
Striker Bolt

(Order Separately)

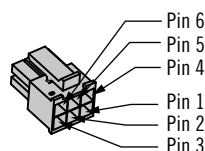
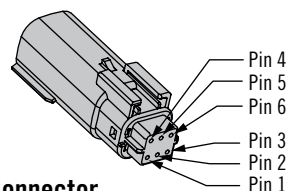
R4-90-121-10



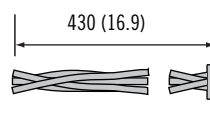
Connector Options



Sealed Connector



Non-sealed Connector



No Connector

Other options available. For complete details
on variety, part numbers, installation and
specification, go to



www.southco.com/R4-EM

Dimensions in millimeters (inch) unless otherwise stated

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R4-EM Outdoor Electronic Rotary Latch

Electronic access

Part Number Selection

T Trigger Style

- 7 Delayed Relock, Side Trigger
- R7 Delayed Relock, Rear Trigger

B Base Mounting Style

- 1 1/4-20 Threaded Mounting
- 2 M6 Threaded Mounting
- 3 Thru Hole Mounting

A Alternate Configurations

- None Light Cam Spring
- 2 Strong (Kick Out) Cam Spring

C Connector Options

- 1 Non-sealed Connector
- 2 No Connector (Stripped and Tinned)
- 3 Sealed Connector

P Packaging Options

- None Individually Packaged
- 1 Bulk Packaged

M Material Options

- None Steel, Zinc-Nickel Plated
- B Stainless Steel, Passivated

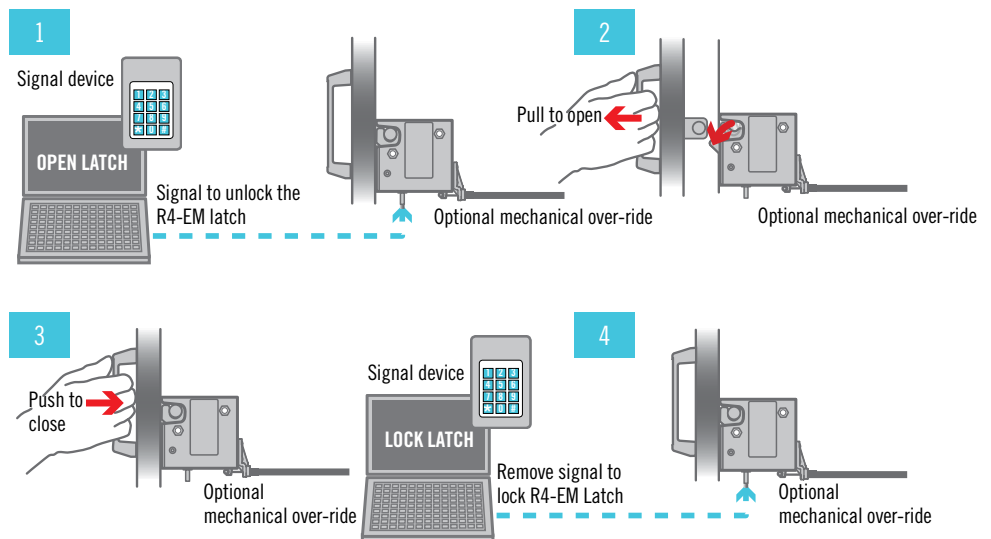
S Switch Options

- 3 No Switch
- 6 Single Switch (Cam Only)

R4-EM - T B A - 1 S C - P M

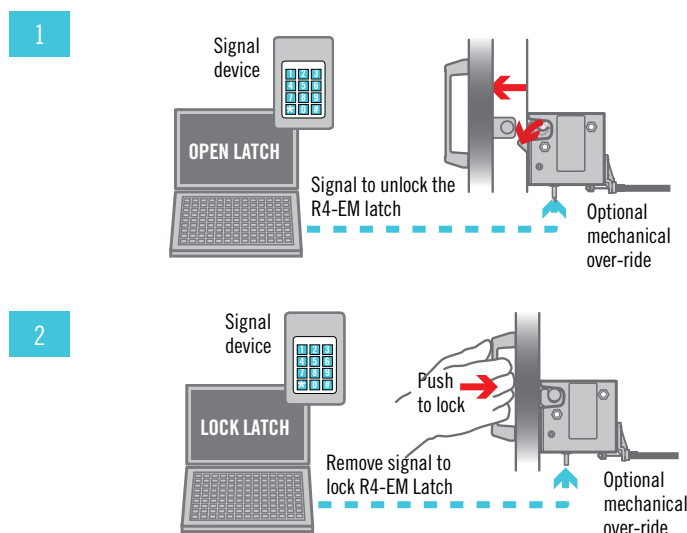
Operation - Light Cam Spring

1. The signal unlocks the R4-EM latch leaving a biased closed door in the closed position. The unlock time is controlled by the access control device.
2. Manually pull door/striker free from R4-EM latch.
3. Manually push door closed. Striker will rotate cam to closed position, however latch will remain unlocked and can be re-opened as long as signal is present.
4. After accessing the door, the signal can be removed to re-lock the R4-EM. This can be done with the door in the open or closed position.



Operation - Strong Cam Spring

1. The signal unlocks the R4-EM latch and releases the spring loaded cam which rotates out to push a lightweight door open. The unlock time is controlled by the access control device.
2. Push door closed to engage striker after unlock time has expired. Striker will rotate cam to closed position.





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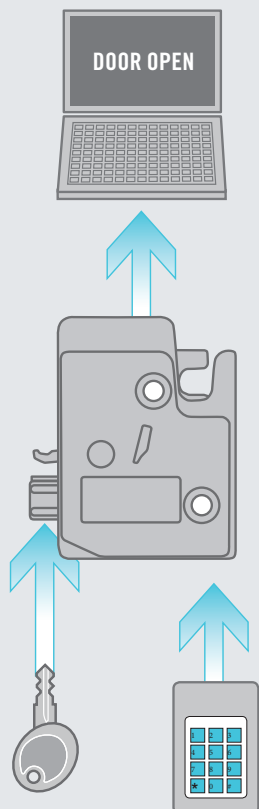


R4-EM 8 Series Electromechanical Rotary Lock

Electronic access

- Push-to-close, electronic release
- Minimal power draw
- Integrated connector
- Extended housing option for added security
- Optional door sensor
- Mechanical over-ride with integrated cable bracket
- Efficient DC motor actuation
- Simple two-hole installation

The R4-EM 8 Series offers an economical electromechanical lock for integration into applications with existing control and monitoring systems. Available in standard and extended lengths to accommodate door positioning sensor and added cam protection. An internal sensor provides an output signal to remotely monitor lock status. With high working and ultimate loads, the R4-EM 8 Series ensures reliable, vandal-resistant operation across a wide variety of applications.



Other options available. For complete details on variety, part numbers, installation and specification, go to



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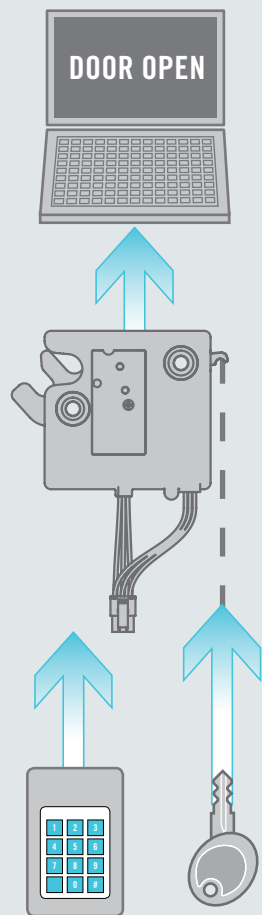


R4 EM Light Duty Electronic Rotary Latch

Electronic access

- **Auto re-lock and delayed re-lock version**
- **Push-to-close, electronic release**
- **Versatile rotary mechanism**
- **Concealed latching**
- **Microprocessor control**
- **Minimal power draw**
- **Simple mechanical over-ride**
- **Optional internal microswitch for latch open/close output signal**

The R4-EM Light Duty Electronic Rotary Latch provides a simple, versatile electromechanical latch solution for a variety of applications. Add a 12-24 Volt DC power supply and any access control device to the R4-EM for a secure, concealed electronic access solution. The optional internal microswitch provides an output signal to remotely monitor latch status or control external systems. The Light Duty R4-EM provides a 65% weight savings over the standard steel housing version.



Other options available. For complete details on variety, part numbers, installation and specification, go to

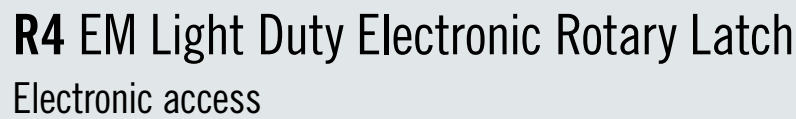


www.southco.com/R4-EML



Dimensions in millimeters (inch) unless otherwise stated

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Housings: PC/ABS
Cam: Glass Filled Nylon
Trigger: PBT
Springs: Stainless Steel
Pins: Steel, zinc plated

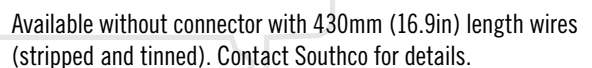
Recommended Operating Voltage:
12 to 24 VDC
Typical Operating Current (average
at no load): Less than 600mA at
12VDC
Input Signal Current Draw: 25mA
Max

Microswitch Rating: 3A Max at 12 VDC

PIN 1: Brown: Ground (-)
PIN 2: Red: Power 8 to 26 Volts DC
PIN 3: Orange: Control Signal
8 to 12 Volts DC (Contact Southco
for Higher Voltage Requirements)
PIN 4 Black: Microswitch Common
PIN 5 Blue: Microswitch N.O.
Contact
PIN 6 Grey: Microswitch N.C.
Contact

Contact Southco for mate connector and wire harness

For mechanical release actuators
and cables contact Southco
.....
Parts are shipped individually boxed.
For bulk packaging add -1 to the
end of the part number (40 per box)



X=4 for Auto Re-lock version
X=6 for Delayed Re-lock version

Other options available. For complete details on variety, part numbers, installation and specification, go to



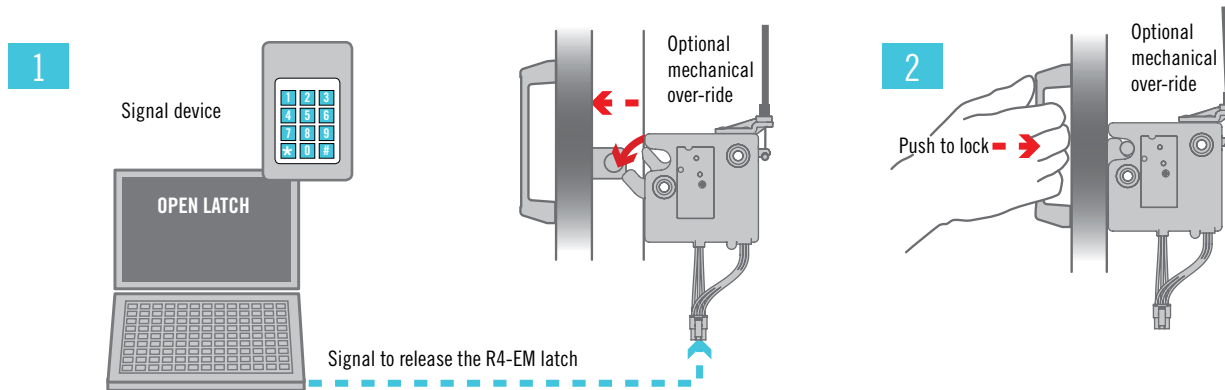
R4 EM Light Duty Electronic Rotary Latch

Electronic access

Operation

Auto Re-lock Version

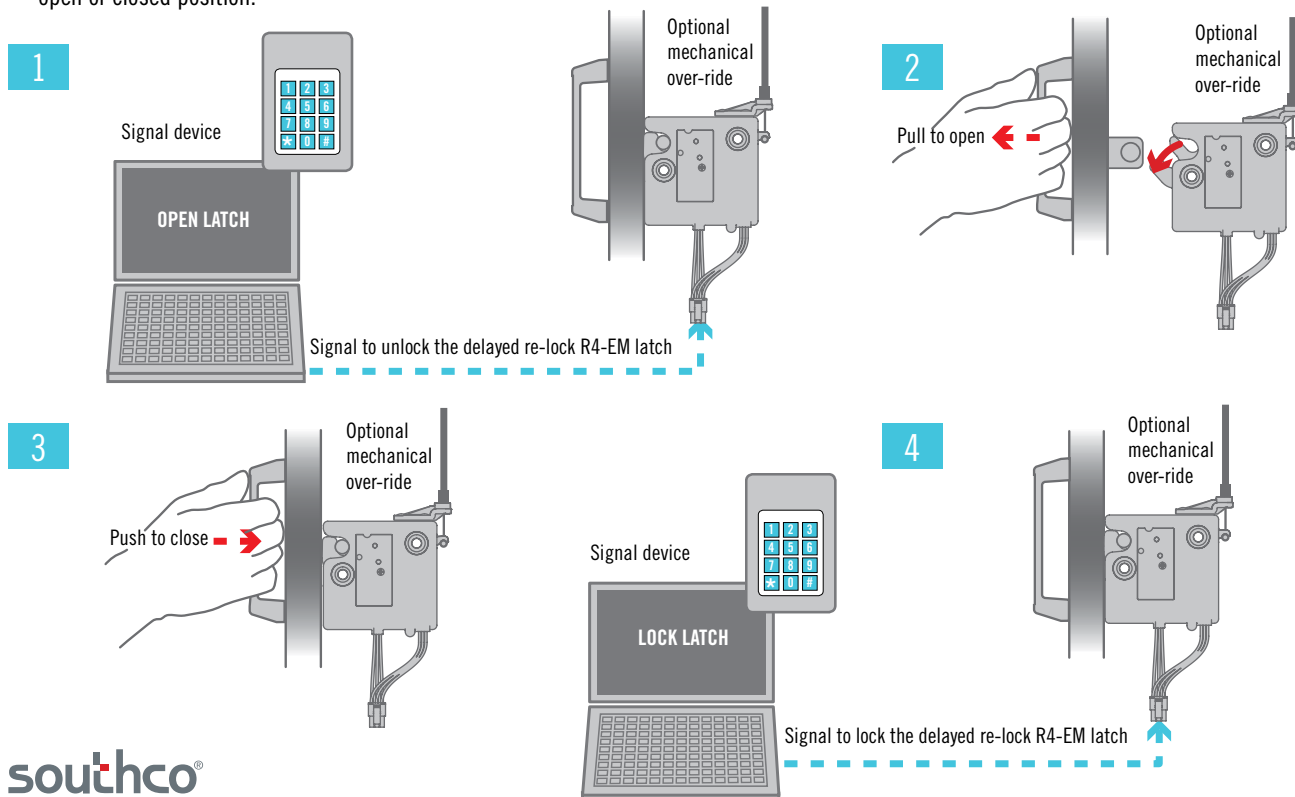
1. The signal momentarily unlocks and releases the spring loaded cam which rotates out to push a lightweight door open. The latch then immediately returns to the locked state ready to re-lock upon closing
2. Push door closed to engage striker with the R4-EM latch



Delayed Re-Lock R4EM

Use the Delayed re-lock version for heavier doors that will not kick open or where remote lock/unlock manual door opening is preferred over a pop open style.

1. The signal unlocks the R4-EM latch leaving a biased closed door in the closed position.
2. Manually pull door/striker free from R4-EM latch
3. Manually push door closed. Striker will rotate cam to closed position, however latch will remain unlocked and can be re-opened as long as signal is present
4. After accessing the door, the signal can be removed to re-lock the R4-EM. This can be done with the door in the open or closed position.





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Shenzhen, China

Tokyo, Japan

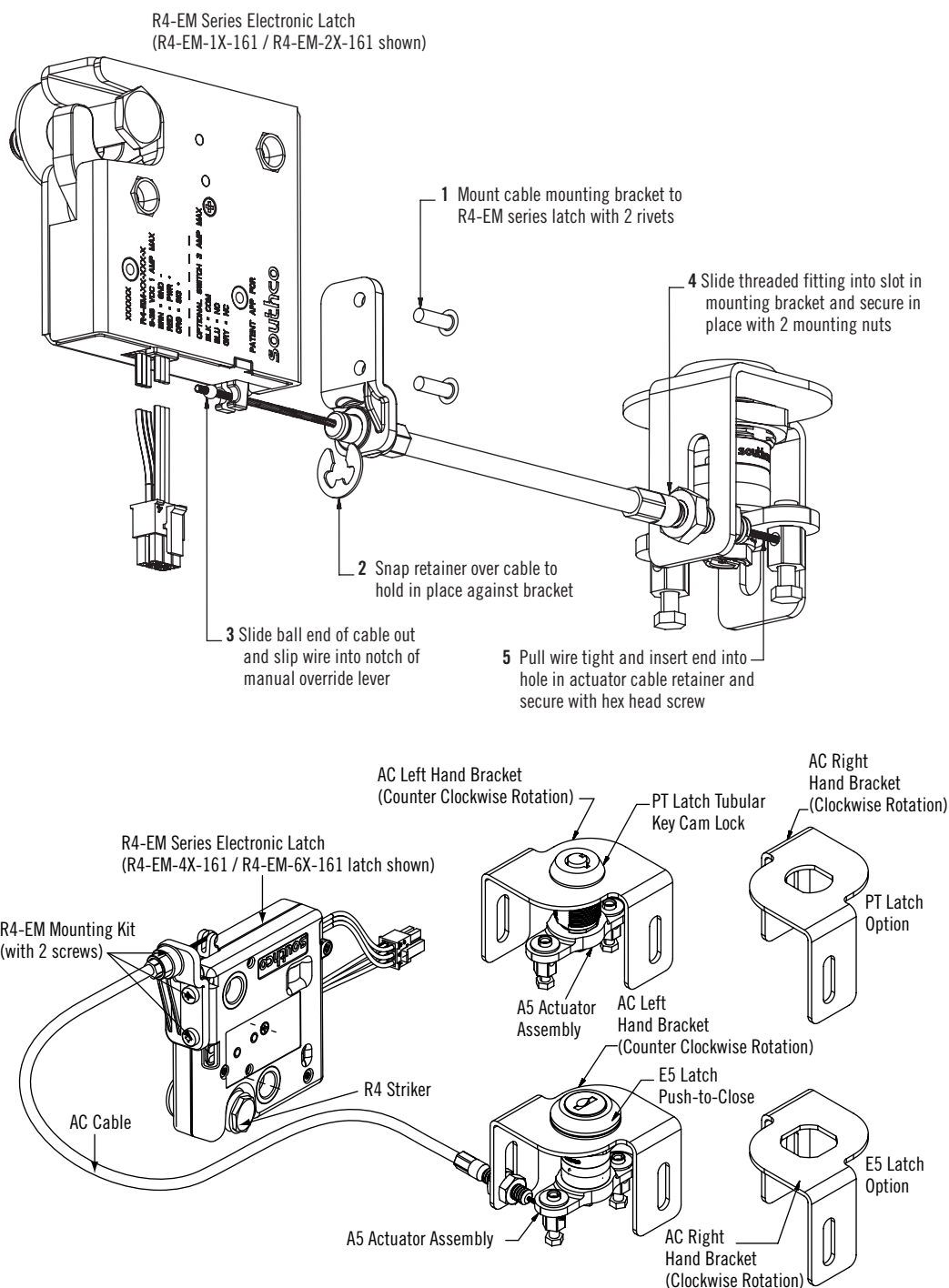


R4-EM Mechanical Override System

- Adapts to any standard Southco R4-EM Electronic Rotary Latch
- Choose from flat key or tubular key cam latch for remote key lock
- Simple installation with multiple adjustments and customized cable lengths to suit any application.
- Accommodates clockwise or counter clockwise key rotation for latch release

Southco now offers a standard solution for remote mechanical actuation of the R4-EM Electronic Rotary Latch. The cable based solution provides a simple means of mechanically releasing the electronic lock in the event of electrical power loss providing fully redundant access.

Installation



Other options available. For complete details on variety, part numbers, installation and specification, go to



www.southco.com/R4-EMR

Dimensions in millimeters (inch) unless otherwise stated

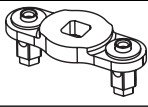
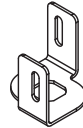
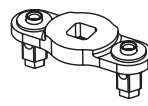
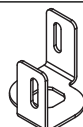
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AC Cable Assembly

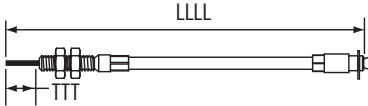


How to Order

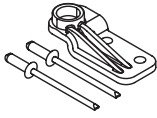
Step 1 Select mechanical override lock and corresponding AC actuator assembly and AC cable bracket

	Description	Part Number	
E5 Latch Push-to-Close assembly See drawing J-E5-53-A	A5 Actuator	A5-99-136	
	AND		
	AC Cable Bracket (Clockwise Rotation)	AC-0-49617-11-R	
	OR		
	AC Cable Bracket (Counter Clockwise Rotation)	AC-0-49617-11-L	
	Description	Part Number	
PT Latch Tubular Key cam Lock See drawing J-PT-1	A5 Actuator	A5-99-157	
	AND		
	AC Cable Bracket (Clockwise Rotation)	AC-0-49618-11-R	
	OR		
	AC Cable Bracket (Counter Clockwise Rotation)	AC-0-49618-11-L	

Step 2 Determine mechanical cable length required

Mechanical Cable See drawing J-AC-C	AC-C0H0-4-LLLL-TTT	LLLL - Length from behind ball end to end of cable TTT - Raw cable extension portion of LLLL length	
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Step 3 Order mechanical over ride bracket (one per R4-EM latch)

Mechanical Override Bracket for R4-EM-1X and R4-EM-2X versions See drawing J-R4-EM-52	R4-EM-52	
Mechanical Override Bracket for R4-EM-4X and R4-EM-6X versions. See drawing J-R4-EM-72	R4-EM-72	