

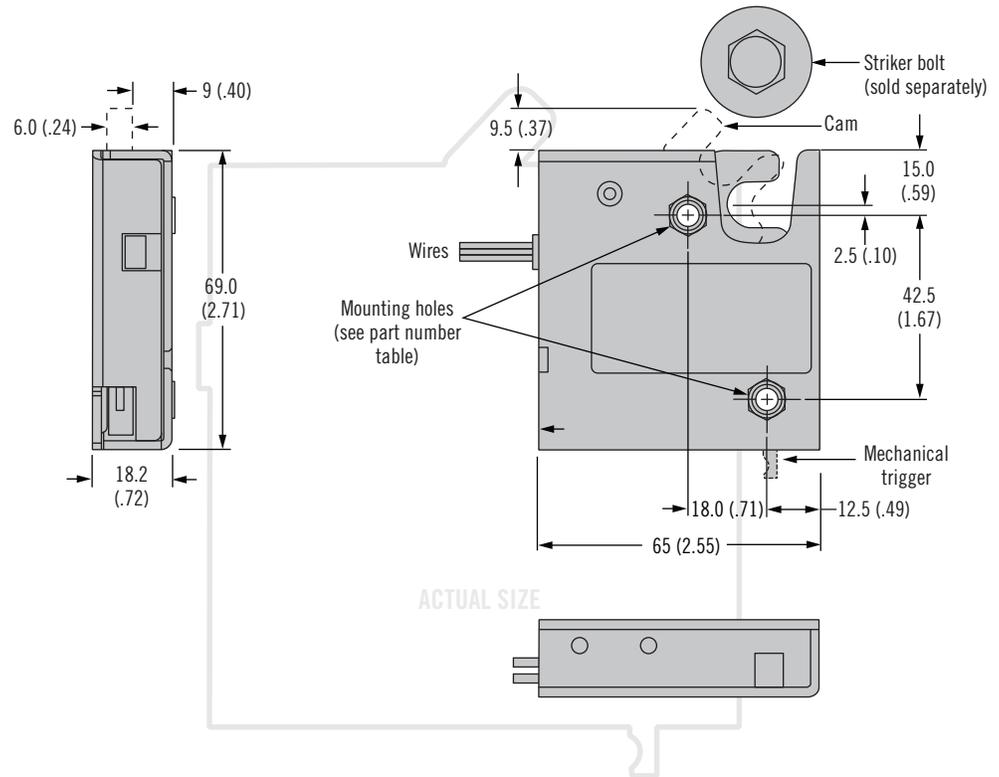
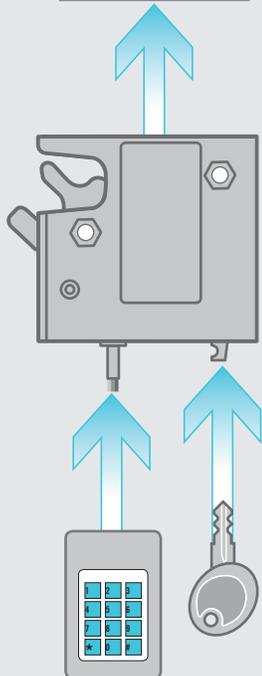


# R4-EM 1 & 2 Series Electronic Rotary Latch

All-metal construction

Electronic access with internal motor control

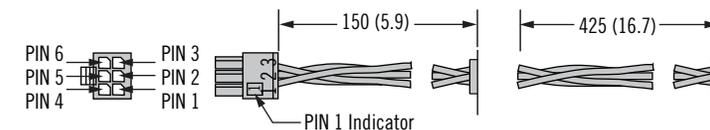
- High strength, steel construction
- Operates against high mechanical loads
- Push-to-close, electronic release
- Versatile rotary mechanism
- Concealed latching
- Microprocessor control
- Minimal power draw
- Simple mechanical override
- Optional internal microswitch for latch open/close output signal



## Latch Wiring Connections

With connector

Molex Microfit 3.0 series



## Part Number Selection

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

### T Trigger Styles

- 1 Auto relock, side trigger, with kick-out spring
- 2 Delayed relock, side trigger, with light spring
- R1 Auto relock, rear trigger, with kick-out spring
- R2 Delayed relock, rear trigger, with light spring

### B Base Mounting Style

- 1 1/4 - 20 thread
- 2 M6 thread
- 3 Ø 7.0 (.27) thru hole

### A Alternate Configurations

- None Standard configuration
- 2 Strong (kick out) cam spring (delayed relock)
  - 3 High strength cam
  - 4 High strength cam with strong (kick out) cam spring (delayed relock)

### P Packaging Options

- None Individually packaged
- 1 Bulk packaged

### C Connector Options

- 1 With connector
- 2 Without connector

### S Switch Options

- 3 No switch
- 6 Internal latch status switch

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



[www.southco.com/R4-EM](http://www.southco.com/R4-EM)

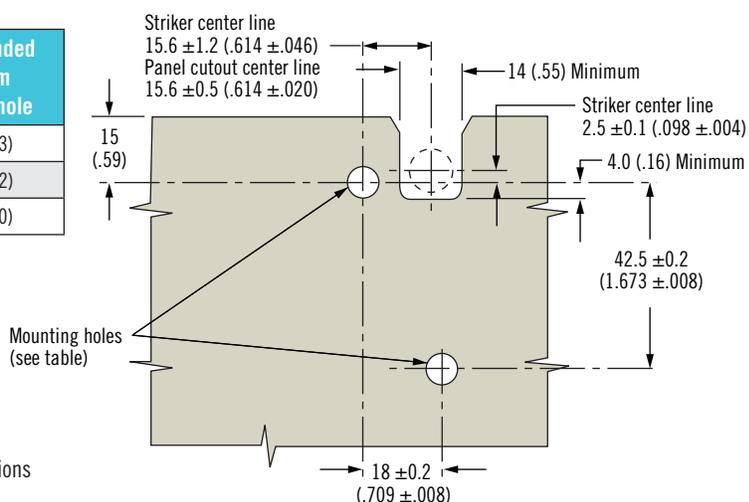
Dimensions in millimeters (inch) unless otherwise stated

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## Installation

### Panel Preparation

Base Mounting Style	Recommended minimum mounting hole
1/4-20 thread	Ø 7.2 (.283)
M6 thread	Ø 6.9 (.272)
Thru hole	Ø 7.6 (.300)



## Operation

See page 34 for operating instructions

## Accessories

### Striker Bolt or Cast Striker

See page 35



### Cable Mounting Kit

See page 35



### Electronic Actuators

See page 42



### Mechanical Actuators

See page 36



### Cables

See page 272



### Wiring/Junctions

See [www.southco.com](http://www.southco.com)



## 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: Less  
than 500mA at 12 VDC

Peak/Stall Operating Current: 1 A  
Standby Current: 185uA

Input Signal Current Draw: 25mA

\*\*Optional microswitch closes  
upon latch closure

Microswitch Rating: 3A at  
12VDC Maximum

## 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

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



[www.southco.com/R4-EM](http://www.southco.com/R4-EM)



# R4-EM Electronic Rotary Latch

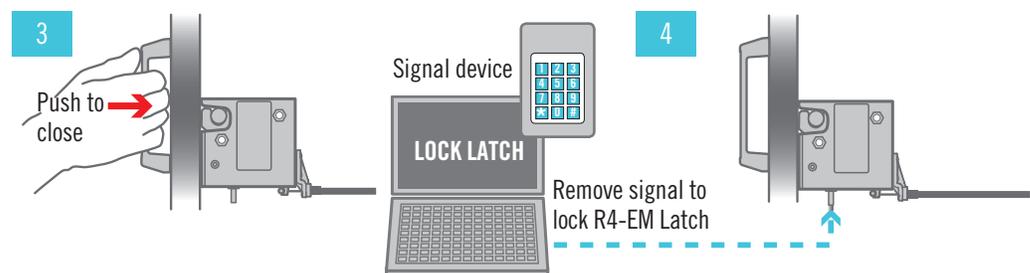
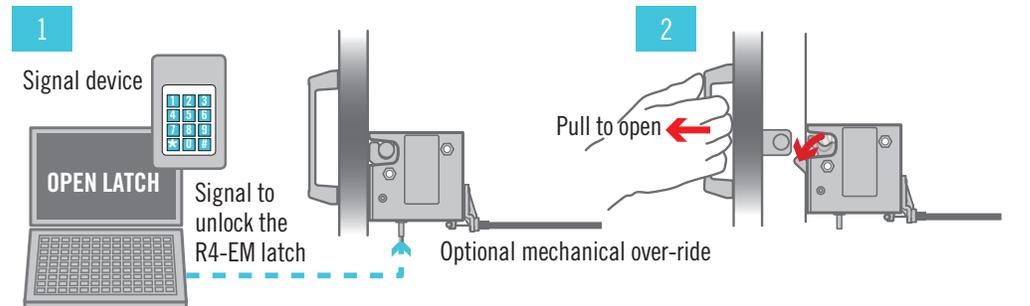
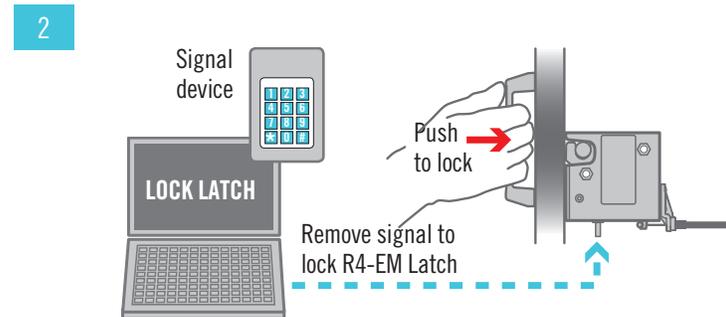
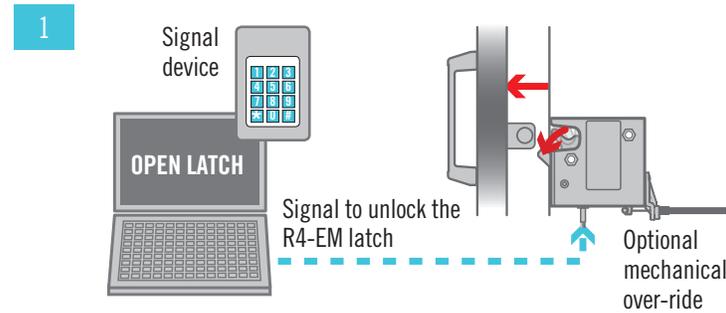
## Operating instructions

### Operation - Auto relock

1. The signal unlocks the R4-EM latch and releases the spring loaded cam which rotates out to push a lightweight door open. The mechanism will cycle through unlatched then re-latched state automatically, regardless of input signal on time.
2. Push door closed to engage striker after unlock time has expired. Striker will rotate cam to closed position.

### Operation - Delayed relock

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.



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



[www.southco.com/R4-EM](http://www.southco.com/R4-EM)

Dimensions in millimeters (inch) unless otherwise stated

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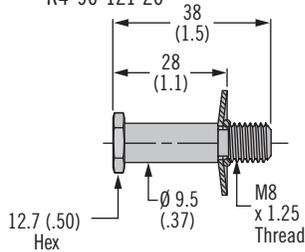
# R4-EM Electronic Rotary Latch

## Strikers - Cable mounting kits



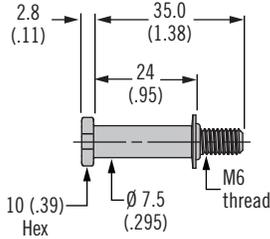
### Striker Bolt - Large

Part number R4-90-121-10  
R4-90-121-20



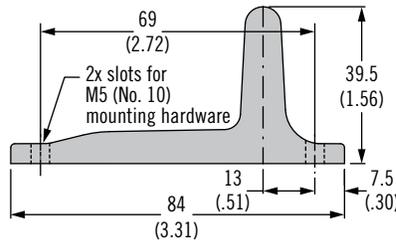
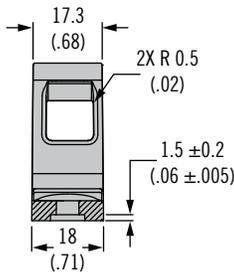
### Striker Bolt - Small

Part number R4-90-511-20



**Cast Striker with Door Sensor** Part number R4-90-804-10\*

**Cast Striker without Door Sensor** Part number R4-90-800-10\*

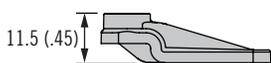
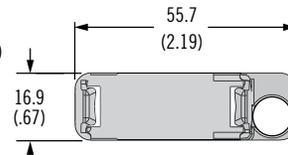
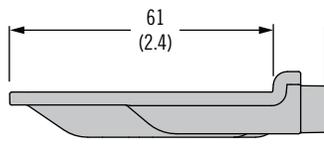
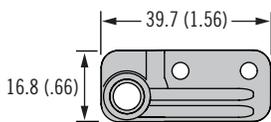


### Cable Mounting Kit

Part number R4-EM-52 – Rivets included  
Part number R4-EM-72 – Screws included

Part number R4-EM-87 – Rivets included

Part number R4-EM-952



	Striker Bolt		Cast Striker		Cable Mounting Kit			
	R4-90-121-XX	R4-90-511-20	R4-90-800-10	R4-90-804-10	R4-EM-52	R4-EM-72	R4-EM-87	R4-EM-952
R4-EM-9	✓		✓	✓				✓
R4-EM-8	✓		✓	✓				
R4-EM-5 & 7	✓		✓		✓		✓	
R4-EM-4 & 6		✓				✓		
R4-EM-1 & 2	✓		✓		✓		✓	

### Material and Finish

Striker bolts: Steel, zinc plated

Cast strikers: Zinc alloy

Cable mounting kits: Glass-filled nylon, black

\*Note: Latch and striker installation details can be found on the latch trade drawing at [www.southco.com](http://www.southco.com).