



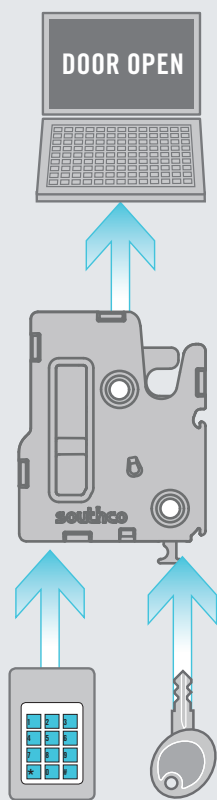
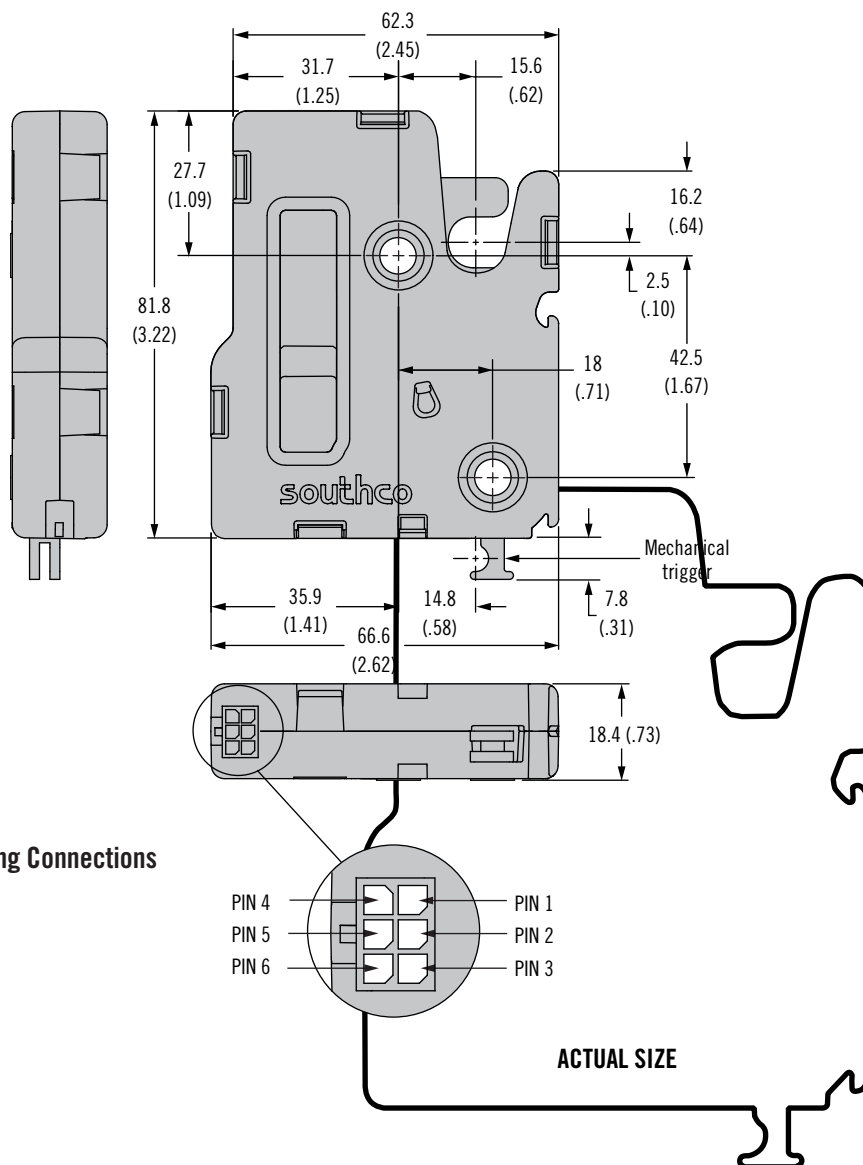
# R4-EM 9 Series Electromechanical Rotary Lock

Concealed cam

Electronic access with internal motor control

**southco**  
CONNECT · CREATE · INNOVATE

- Push-to-close, electronic release
- High electromechanical release load
- Minimal power draw
- Integrated connector
- Extended housing option for added security
- Door and Trigger Sensor
- Microswitch to detect latch status
- Mechanical over-ride with integrated cable bracket
- 12V to 24V operations
- Efficient DC gear motor actuation
- Detent mechanism for pull-open function
- Simple two-hole installation



Latch Wiring Connections

## Part Number Selection

**R4 - EM - 9 T B - 150 - P**

### T Trigger Styles

- A** Auto relock, rear trigger, with kick-out spring
- D** Delayed relock, rear trigger, with kick-out spring
- P** Delayed relock, rear trigger, pull to open

### B Base Mounting Style

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

### P Packaging Options

- None** Individually packaged
- 1** Bulk packaged

## 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)                      |

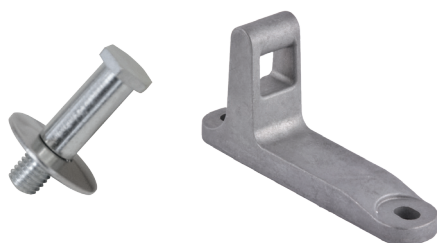
## Operation

See page 34 for operating instructions

## Accessories

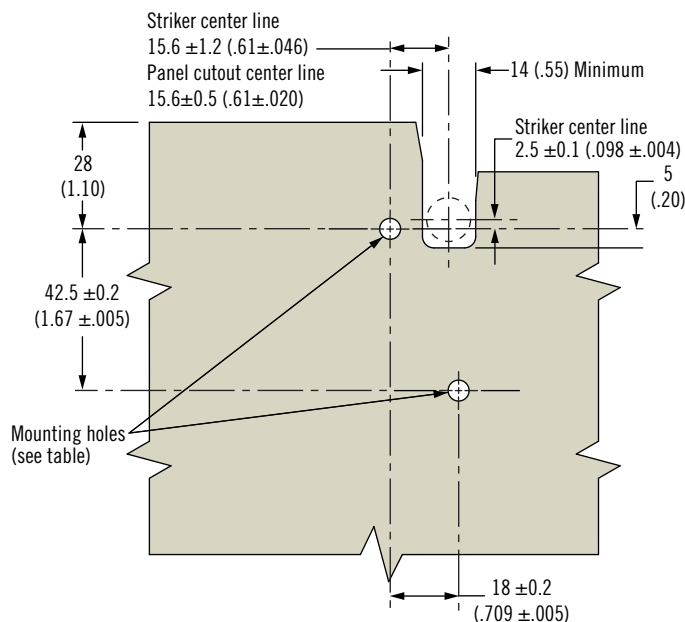
### Striker Bolt or Cast Striker

See page 35



### Cable Mounting Kit

See page 35



## Material & Finish

Top and Bottom housings:

PC/ABS

Pivot Pins: Steel, zinc plated

Cam, Trigger: Steel, sealed

Springs: Stainless steel passivated

Trigger Interlock Lever: Glass-filled nylon

Bistable Spring Retainer: Zinc Alloy

Drive Cam: Acetal, black

Output Cam: Acetal, white

## Electrical Specifications

Recommended Operating Voltage:

12 to 24 VDC

Typical Operating Current :

12 V Models: Less than 500mA

## Latch Connector

### Pin Assignment

PIN 1: Ground (-)

PIN 2: Power (+)

PIN 3: Control Signal

PIN 4: Latch Status

PIN 5: None

PIN 6: Door status

## Electronic Actuators

See page 42



## Mechanical Actuators

See page 36



## Cables

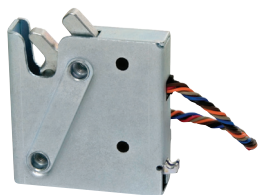
See page 272



## Wiring/Junctions

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



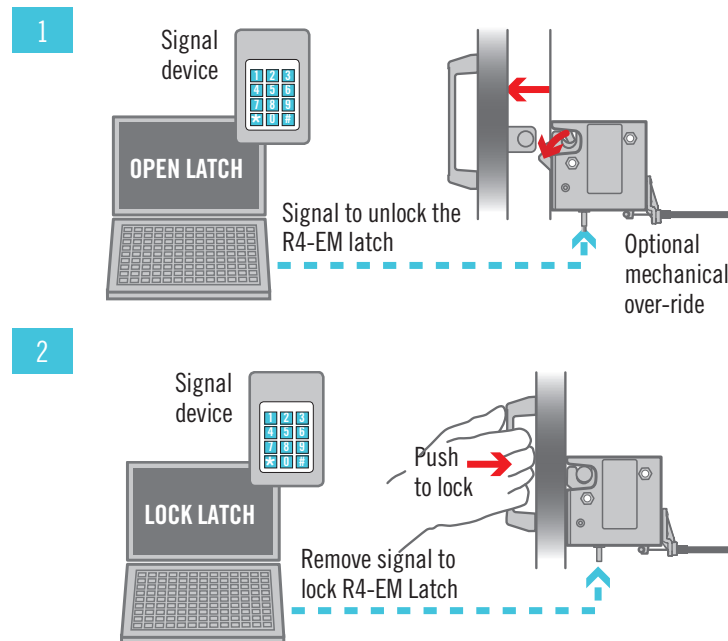


# R4-EM Electronic Rotary Latch

## Operating instructions

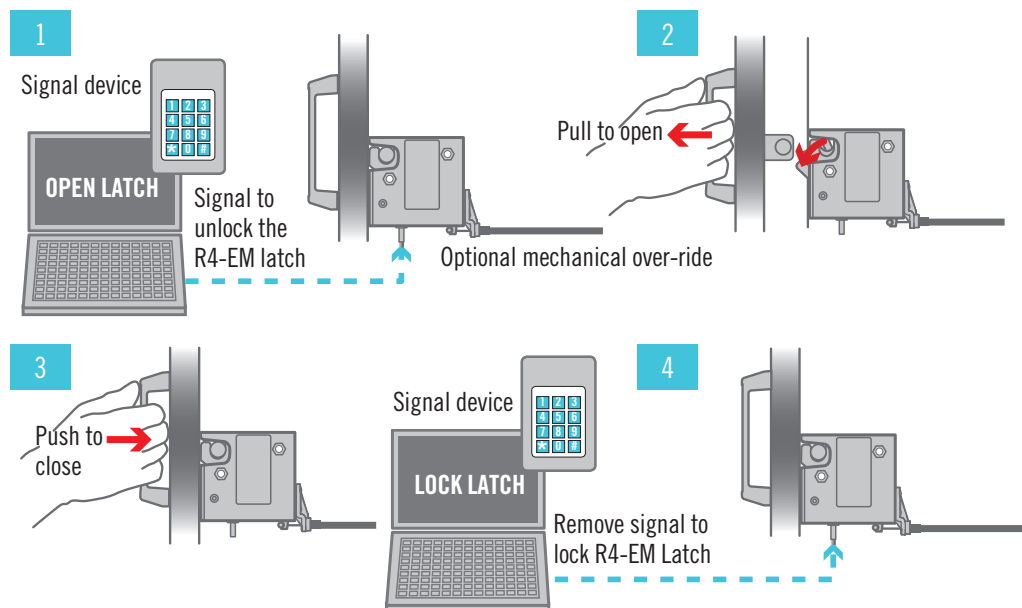
### Operation - Auto relock

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 relatched 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.



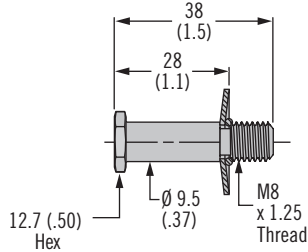
# R4-EM Electronic Rotary Latch

## Strikers - Cable mounting kits



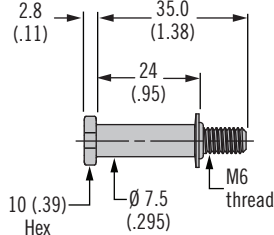
### Striker Bolt - Large

Part number R4-90-121-10



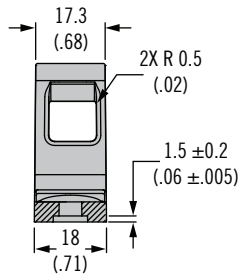
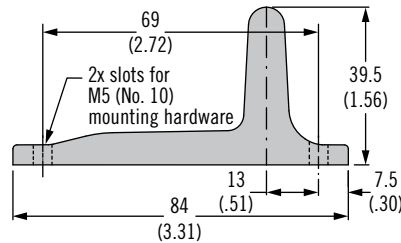
### Striker Bolt - Small

Part number R4-90-511-10



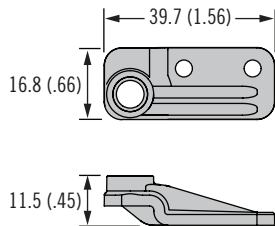
**Cast Striker with Door Sensor** Part number R4-90-804-10\*

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

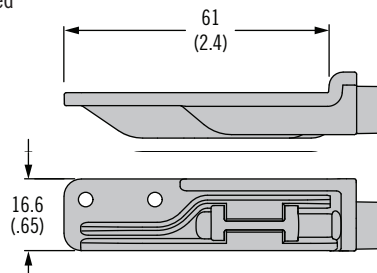


### Cable Mounting Kit

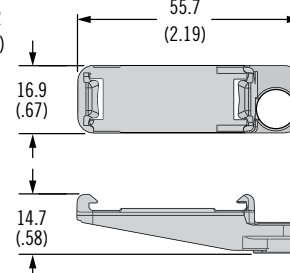
Part number R4-EM-52 – Rivets included  
Part number R4-EM-72 – Screws included



Part number R4-EM-87 – Rivets included



Part number R4-EM-952



|                                                                                                    | Striker Bolt |              | Cast Striker |              | Cable Mounting Kit |          |          |           |
|----------------------------------------------------------------------------------------------------|--------------|--------------|--------------|--------------|--------------------|----------|----------|-----------|
|                                                                                                    | R4-90-121-10 | R4-90-511-10 | R4-90-800-10 | R4-90-804-10 | R4-EM-52           | R4-EM-72 | R4-EM-87 | R4-EM-952 |
| <br>R4-EM-9     | ✓            |              | ✓            | ✓            |                    |          |          | ✓         |
| <br>R4-EM-8     | ✓            |              | ✓            | ✓            |                    |          |          |           |
| <br>R4-EM-5 & 7 | ✓            |              | ✓            |              | ✓                  |          | ✓        |           |
| <br>R4-EM-4 & 6 |              | ✓            |              |              |                    | ✓        |          |           |
| <br>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).