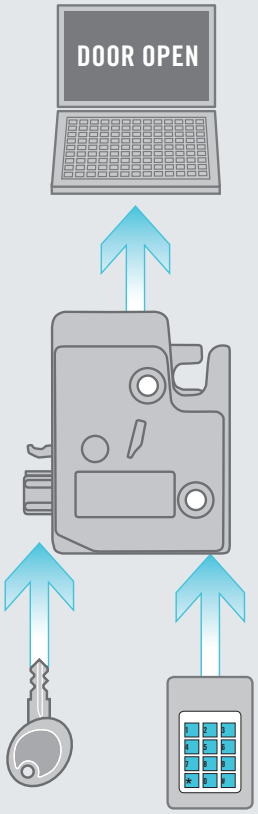
R4-EM 8 Series Electromechanical Rotary Lock

Door sensor option · Extended housing option
Electronic access without internal motor control

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

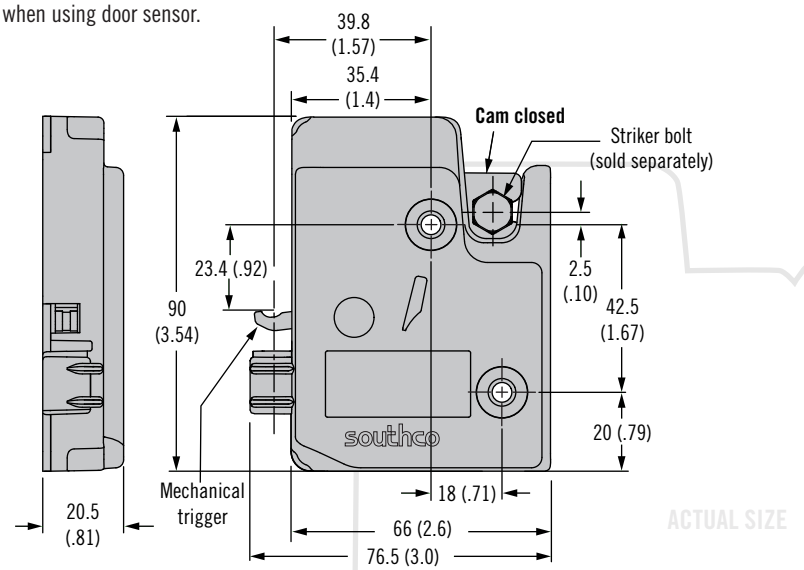
12V

24V



Extended Housing

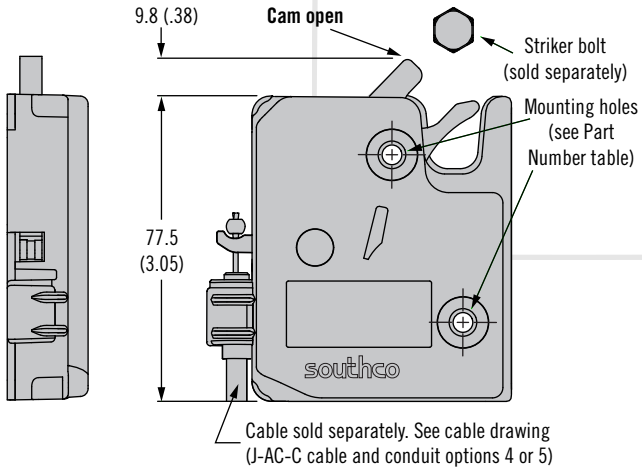
This version is required when using door sensor.



ACTUAL SIZE

Standard Housing

(Dimensions are the same as above, except as noted.)



Part Number Selection

R4 - EM - 8 [B] [A] - [V] [S] 0 - [P]

[P] Packaging Options
None Individually packaged
1 Bulk packaged

[B] Base Mounting Style
1 1/4-20 thread
2 M6 thread
3 Ø 7.0 (.27) thru hole

[S] Integrated Door Sensor
3 No
4 Yes (Extended housing only)

[A] Housing Configurations
None Standard housing
6 Extended housing

[V] Voltage
2 24 volts
3 12 volts

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

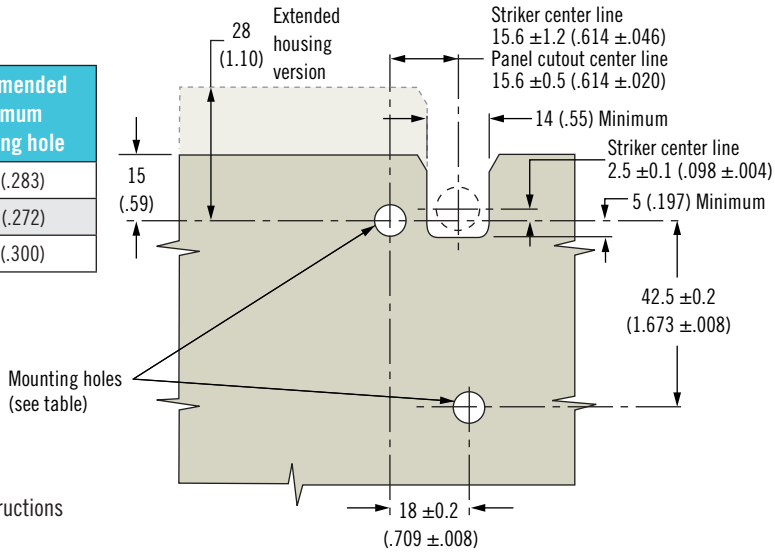
INFO CLIC *www.southco.com/R4-EM*

Dimensions in millimeters (inch) unless otherwise stated

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)



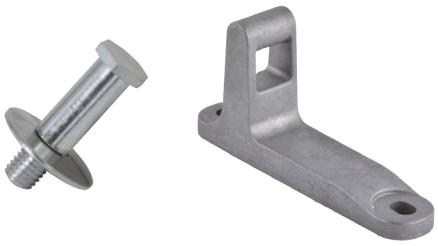
Operation

See page 34 for operating instructions

Accessories

Striker Bolt or Cast Striker

See page 35



Electronic Actuators

See page 42

Mechanical Actuators

See page 36

Cables

See page 272

Wiring/Junctions

See *www.southco.com*

Material & Finish

Top housing: Nylon
Gearbox cover: PC/ABS
Bottom housing, Pivot pins,
Screws: Steel, zinc plated
Cam, Trigger: Steel, sealed
Gears: Acetal
Pin, Springs: Stainless steel

Electrical Specifications

Recommended Operating Voltage:
- 12 V Models: 8 to 14 VDC
- 24 V Models: 21 to 26 VDC

Typical Operating Current :
- 12 V Models: Less than 200mA
- 24 V Models: Less than 100mA

Latch status switch: 1A Maximum

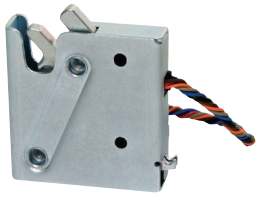
Latch Connector Pin Assignment

PIN 1: Power
PIN 2: Ground (-)
PIN 3: None
PIN 4: Latch status signal

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

INFO CLIC *www.southco.com/R4-EM*

Dimensions in millimeters (inch) unless otherwise stated

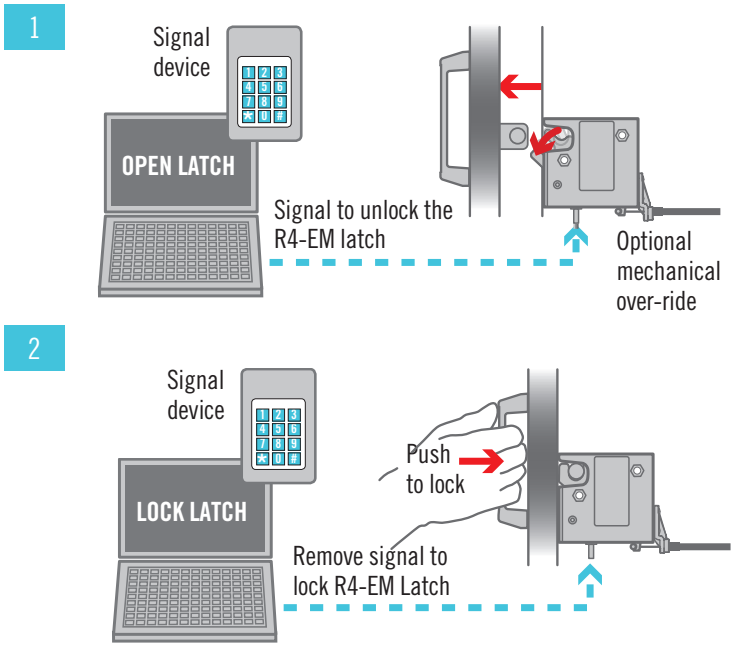


R4-EM Electronic Rotary Latch

Operating instructions

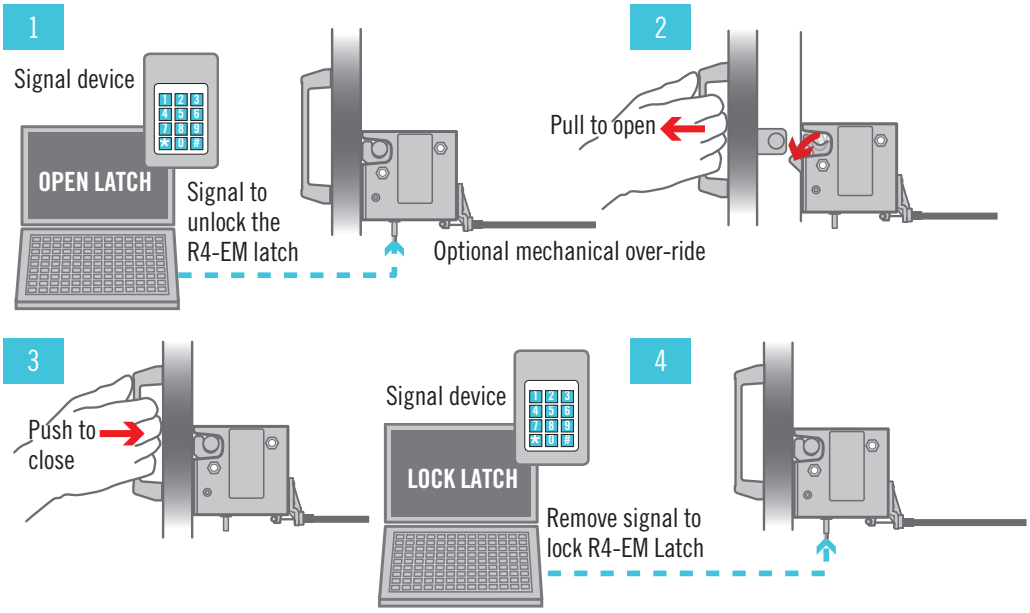
Operation - Auto relock

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.

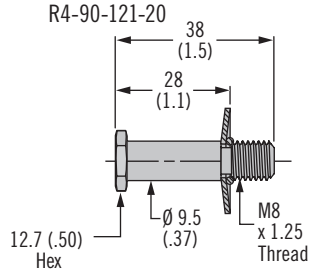


Other options available. For complete details on variety, part numbers, installation and specification, go to

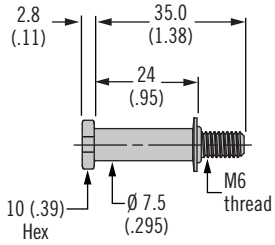
INFO CLIC *www.southco.com/R4-EM*

Dimensions in millimeters (inch) unless otherwise stated

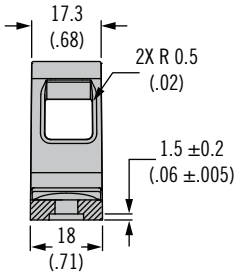
Striker Bolt - Large
Part number R4-90-121-10
R4-90-121-20

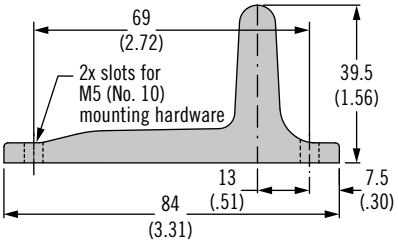


Striker Bolt - Small
Part number R4-90-511-20

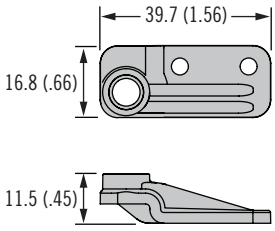


Cast Striker with Door Sensor Part number R4-90-804-10*
Cast Striker without Door Sensor Part number R4-90-800-10*

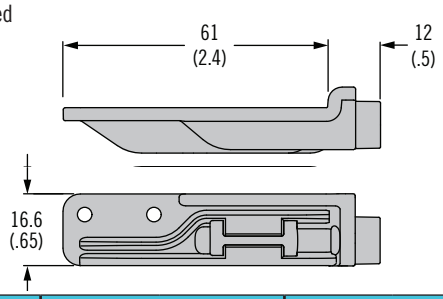




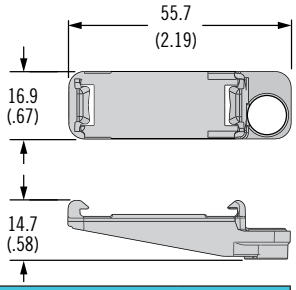
Cable Mounting Kit
Part number R4-EM-52 – Rivets included
Part number R4-EM-72 – Screws included



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.