**R4-EM 9 Series Electromechanical Rotary Lock**

Concealed cam  
Electronic access with internal motor control

- Push-to-close, electronic release
- High electromechanical release load
- Minimal power draw
- Integrated connector
- Extended housing 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 A - 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

- **A** Alternate Configurations
  - None
  - Plastic housing
  - Metal Housing

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

**Packaging Options**

- None
- Individually packaged
- Bulk packaged

Dimensions in millimeters (inch) unless otherwise stated
Installation
Panel Preparation

<table>
<thead>
<tr>
<th>Base Mounting Style</th>
<th>Recommended minimum mounting hole</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4-20 thread</td>
<td>Ø 7.2 (.283)</td>
</tr>
<tr>
<td>M6 thread</td>
<td>Ø 6.9 (.272)</td>
</tr>
<tr>
<td>Thru hole</td>
<td>Ø 7.6 (.300)</td>
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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 Housing: PC/ABS or Aluminum
Bottom Housing: PC/ABS or Zinc, Die Cast
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

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
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.

Dimensions in millimeters (inch) unless otherwise stated
## R4-EM Electronic Rotary Latch
**Strikers - Cable mounting kits**

### Striker Bolt - Large
- Part number R4-90-121-10
  - R4-90-121-20
- Diameter: Ø 9.5 (0.37) Hex
- Length: 38 (1.5)
- Ø 6 x 1.25 Thread

### Striker Bolt - Small
- Part number R4-90-511-20
- Diameter: Ø 7.5 (0.295) Hex
- Length: 24 (0.95)

### 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

### 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.

### Dimensions in millimeters (inch) unless otherwise stated

<table>
<thead>
<tr>
<th>Striker Bolt</th>
<th>Cast Striker</th>
<th>Cable Mounting Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>R4-90-121-XX</td>
<td>R4-90-511-20</td>
<td>R4-90-804-10</td>
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<tr>
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<td>R4-EM-52</td>
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