R4-EM 5 & 7 Series Electronic Rotary Latch
Sealed motor · Stainless steel housing option
Electronic access with internal motor control

- Motor actuator sealed against water and dust ingress to IP56
- Corrosion resistant plated-steel and stainless steel options
- Push-to-close, electronic release
- Versatile rotary mechanism
- Concealed latching
- Microprocessor control
- Auto or delayed relock functionality
- Minimal power draw
- Optional internal micro-switch for latch status
- Simple mechanical over-ride

Latch Wiring Connections

Part Number Selection

Trigger Style
5 Auto re-lock, side trigger, with kick-out spring
7 Delayed re-lock, side trigger, with light spring
R5 Auto re-lock, rear trigger, with kick-out spring
R7 Delayed re-lock, rear trigger, with light spring

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

Alternate Configurations
None Standard configuration
2 Strong (kick out) cam spring (delayed relock)
3 High strength cam (steel cam only) M = none only
4 High strength cam with strong (kick out) cam spring (delayed relock, steel cam only) M = none only

Material Options
None Steel, zinc-nickel plated
B Stainless steel, passivated
A = none or 2

Packaging Options
None Individually packaged
1 Bulk packaged

Connector Options
1 Non-sealed connector
2 No connector (stripped and tinned)
3 Sealed connector

Switch Options
3 No switch
6 Internal latch status switch

Dimensions in millimeters (inch) unless otherwise stated

www.southco.com/R4-EM
**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: TPE

**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
Maximum at 24 VDC
Micro-switch Rating: 3A Maximum 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

**Operation**

See page 34 for operating instructions

**Accessories**

Striker Bolt or Cast Striker
See page 35

Cable Mounting Kit
See page 35

**Installation**

Panel Preparation

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<th>Base Mounting Style</th>
<th>Recommended minimum mounting hole</th>
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<tr>
<td>1/4-20 thread</td>
<td>Ø 7.2 (.283)</td>
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<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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**Dimensions in millimeters (inch) unless otherwise stated**

www.southco.com/R4-EM

Other options available. For complete details on variety, part numbers, installation and specification, go to www.southco.com
**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 unatched 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.

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**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
Part number R4-90-121-20

- Ø 9.5 (.37) Hex
- 12.7 (.50)
- 38 (1.5)
- 28 (1.1)

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

- Ø 7.5 (.295) M6 thread
- 24 (.95)
- 35.0 (1.38)
- 2.8 (.11)

**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.

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<th>Cast Striker</th>
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<td>R4-EM-72</td>
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