

# **R4** EM Light Duty Electronic Rotary Latch

Electronic access

- Auto re-lock and delayed re-lock version
- Push-to-close. electronic release
- Versatile rotary mechanism
- Concealed latching
- Microprocessor control
- Minimal power draw
- Simple mechanical over-ride
- Optional internal microswitch for latch open/close output signal

DOOR OPEN

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

w.southco.com/R4-EML

The R4-EM Light Duty Electronic Rotary Latch provides a simple, versatile electromechanical latch solution for a variety of applications. Add a 12-24 Volt DC power supply and any access control device to the R4-EM for a secure, concealed electronic access solution. The optional internal microswitch provides an output signal to remotely monitor latch status or control external systems. The Light Duty R4-EM provides a 65% weight savings over the standard steel housing version.









## **R4** EM Light Duty Electronic Rotary Latch

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### **Material & Finish**

Housings: PC/ABS Cam: Glass Filled Nylon

Trigger: PBT

Springs: Stainless Steel Pins: Steel, zinc plated

### **Electrical Specifications**

Recommended Operating Voltage: 12 to 24 VDC

Typical Operating Current (average at no load): Less than 600mA at 12VDC

Input Signal Current Draw: 25mA Max

\*\*Optional microswitch closes upon latch closure

Microswitch Rating: 3A Max at 12 VDC

# 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 12 Volts DC (Contact Southco for Higher Voltage Requirements)

PIN 4 Black: Microswitch Common

PIN 5 Blue: Microswitch N.O.

Contact

PIN 6 Grey: Microswitch N.C.

Contact

Wire Length: 150mm (5.90) with

connector

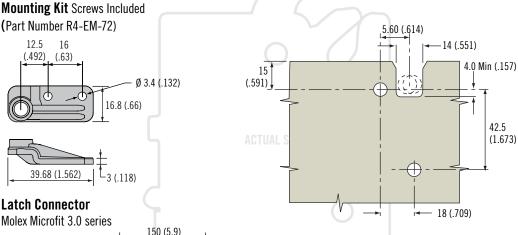
Contact Southco for mate connector and wire harness

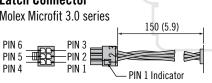
#### **Notes**

For mechanical release actuators and cables contact Southco

Parts are shipped individually boxed. For bulk packaging add -1 to the end of the part number (40 per box)

Striker Bolt (order separately)  $15.6 \pm 1.2$  $\emptyset 7.5 \pm 0.1$  $(.614 \pm .047)$  $(.295 \pm .004)$ Strike Bolt (Sold Seperately) 8.6 (.337) Ø11.7 (.461) 12.9 (.509) 5.75 (.226) Mounting holes 0.5 (.02) Min Bolt 10-24 thread. flange to housing 11.2 (.439) M5 X 0.8 thread, clearance, either side or  $\emptyset 5.5 \pm 0.1$  $42.5 \pm 0.4$ 0.5 (.02) Min Bolt 2.5 (.099)  $(\emptyset.217 \pm .004)$  $(1.673 \pm .016)$ flange to housing thru hole clearance, either side 65.3 2 X Ø2.4 (.094) (2.571)Accessory mounting holes for use with M3 X 8 self southdo tapping screws, Max length 8mm (.315) - 3.6 (.144)  $16 \pm 0.2 (.63 \pm .008)$ 6.6 14.7 (.581)  $18 \pm 0.4$ (.261)18.2 (.715)  $(.709 \pm .016)$ 12.6 (.495) 8.5 (.335) Unlocked trigger 62.2 (2.449) 150 ±5 (5.906 ±.197) position





Available without connector with 430mm (16.9in) length wires (stripped and tinned). Contact Southco for details.

R4-EM Light Duty Latch Part Number		
	No Microswitch	With Microswitch
	With connector	With connector
Ø 5.5 (.22) Thru hole mounting	R4-EM- <b>X</b> 3-131	R4-EM- <b>X</b> 3-161
M5 Threaded mounting	R4-EM- <b>X</b> 4-131	R4-EM- <b>X</b> 4-161
10-24 Threaded mounting	R4-EM- <b>X</b> 5-131	R4-EM- <b>X</b> 5-161
Striker Bolt Part Number		
Striker bolt	R4-90-511-20	

**X**=4 for Auto Re-lock version

X=6 for Delayed Re-lock version

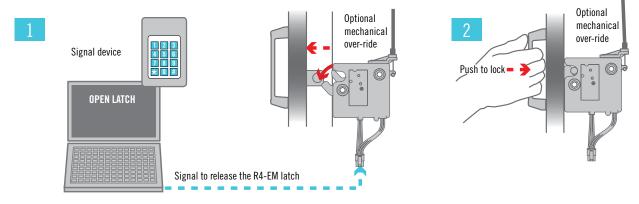




### **Operation**

### **Auto Re-lock Version**

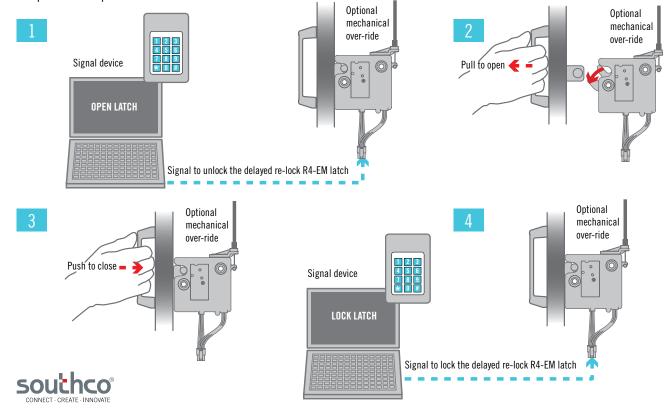
- 1. The signal momentarily unlocks and releases the spring loaded cam which rotates out to push a lightweight door open. The latch then immediately returns to the locked state ready to re-lock upon closing
- 2. Push door closed to engage striker with the R4-EM latch



### **Delayed Re-Lock R4EM**

Use the Delayed re-lock version for heavier doors that will not kick open or where remote lock/unlock manual door opening is preferred over a pop open style.

- 1. The signal unlocks the R4-EM latch leaving a biased closed door in the closed position.
- 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.





### The proven global leader in engineered access solutions

The advantage of 60 years of engineered access hardware and fastener experience lies in our cumulative applications knowledge and engineering expertise that make our broad range of existing solutions possible. In addition, our global manufacturing resources benefit OEMs and CEMs worldwide - no matter where they design, assemble, or sell. Southco offers flexibility and fast response:

- Engineering assistance on your schedule. Southco engineering resources in three key regions - North America, Europe, and Asia-Pacific - provide easy access to more than 150 design and sales engineers globally.
- Extensive capabilities for your benefit. In-house resources stamping, die-casting, cold-heading, roll-forming, turning, injection-molding, and assembly - at Southco Centers of Excellence around the world transform raw stock into polished solutions.
- Quick turnaround, on your timetable. 14 strategically located Southco manufacturing, assembly, and stocking facilities - in 8 countries across 4 continents - shorten lead times, lower shipping costs, and improve scheduling.
- Personal assistance, as you need it. The 24/7 availability of experienced Southco personnel - regardless of geographic location delivers the timely attention you require.

Whatever your access hardware needs, no one offers more. Contact a Southco representative today, to discover all the possibilities.



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### **Manufacturing & Stocking Locations**

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Seoul, South Kor

