**Electromechanical Rotary Latches**

**Overview**

- **R4-EM-9 Series – Full-featured**
  The microprocessor controlled R4-EM 9 Series delivers next generation electronic rotary latching. All inputs are routed through the internal microprocessor, allowing expanded programing capability and customization of latch functionality. Extended housing provides added protection of the cam and an integrated trigger sensor provides indisputable lock/unlock status reporting. Additionally, the 9 Series offers a door retention feature which allows a door or panel to remain in the closed position until it is ready to be opened.

- **R4-EM-8 Series – Basic functionality**
  The R4-EM 8 Series combines the efficient and robust performance of a rotary latch mechanism with simplified DC motor actuation. The R4-EM 8 Series is available with or without an extended housing option to accommodate door sensing and to provide added protection of the locking cam. Additionally, the 8 Series is available with an integrated connector and mechanical override bracket, and features simple, concealed two-hole installation.

- **R4-EM-5 & 7 Series – Outdoor use**
  The R4-EM Outdoor provides reliable electronic access control in demanding environments. With its corrosion-resistant plated-steel or stainless steel outer body construction and fully-sealed internal actuator, the R4-EM Outdoor provides reliable electronic locking that is resistant to moisture and dust. The embedded electronic control allows integration with an external control system and flexible, concealed installation accommodates a variety of outdoor applications.

- **R4-EM-4 & 6 Series – Lightweight**
  The R4-EM Light Duty delivers proven electronic access control in a compact, lightweight integrated package. Easy push-to-close operation and simple installation make it an ideal solution for transitioning from mechanical to electronic access. The R4-EM Light Duty is available in both auto re-lock and delayed re-lock versions for added flexibility. Multiple mounting configurations and a compact size afford easy integration into existing designs.

- **R4-EM-1 & 2 Series – All-metal construction**
  The original, all-metal construction R4-EM delivers the convenience of electronic access control with the security of a proven, robust, all-metal rotary latch. Easy push-to-close operation and electronic actuation simplify access across a wide variety of applications. The R4-EM series accepts access control signals from access control devices as well as networked systems. An optional internal microswitch provides an output signal to remotely monitor latch status or control external systems.

- **R4-EM-05 Series – Compact Size**
  The R4-EM-05 Series provides push to close convenience with electronic release in a compact design. The microprocessor controlled gear motor releases reliably under high loads while the integrated latch and door sensors ensure the application is secure. Operation configurations include auto re-lock and delayed re-lock. The integrated electronics easily connect with various access controls systems.

- **Push-to-close, electronic release**
- **High electromechanical release load**
- **Minimal power draw**
- **Optional door sensor**
- **Mechanical over-ride**
- **5VDC, 12VDC and 24VDC options**
**Auto Relock Operation Style**

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.

**Delayed Relock Operation Style**

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-05 Series Electromechanical Rotary Latch
Compact Size · Door Sense Option
Electronic access with internal motor control

- Push-to-close, electronic release
- Compact design
- Sensors ensure secure latch & door
- Latch releases reliably even under high load
- Integrated mechanical over-ride

Part Number Selection

```
R4-EM-TM01SO-P
```

**T** Operation Style
- 05A Auto relock
- 05D Delayed relock
See page 21 for operation details

**S** Sensor Options
- 0 - Latch Sensor Only
- 5 - Latch & Door Sensor*
* Door sensor requires door sensor bracket

**M** Mounting Type
- 0 4.5mm thru
- 1 8-32 UNC
- 2 M4x0.7

Installation Panel Preparation

Dimensions in millimeters (inch) unless otherwise stated
**Optional Striker and Door Sensor Bracket**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molded Striker</td>
<td>R4-0-61336</td>
</tr>
<tr>
<td>Door Sensor Bracket</td>
<td>R4-99-966</td>
</tr>
</tbody>
</table>

**Material and Finish**
- Housing: PC/ABS
- Latch frames, Pivot pins, Cam and Trigger: Steel, zinc plated
- Striker: Steel, zinc plated or Glass-filled nylon, black
- Door Sensor Bracket: PC/ABS, Magnet: Neodymium

**Recommended Operating Voltage:** 5 to 12 VDC
**Typical Operating Current:** Less than 500mA

**Latch Connector PIN Assignment**
- PIN 1: Ground (-)
- PIN 2: Power (+)
- PIN 3: Not connected
- PIN 4: Control signal
- PIN 5: Latch status
- PIN 6: Door status

**Dimensions in millimeters (inch) unless otherwise stated**
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
- 12VCD to 24VCD 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

- **P** Packaging Options
  - None
  - Individually packaged
  - Bulk packaged

Dimensions in millimeters (inch) unless otherwise stated

www.southco.com/R4-EM
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>
</tr>
</tbody>
</table>

Operation
See page 21 for operating instructions

Accessories
Striker Bolt or Cast Striker
See page 36

Electronic Actuators
See page 48

Mechanical Actuators
See page 34

Cables
See page 322

Wiring/Junctions
See www.southco.com

Dimensions in millimeters (inch) unless otherwise stated

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
  24 V Models: Less than 250mA

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

www.southco.com/R4-EM
**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

### Extended Housing

This version is required when using door sensor.

### Standard Housing

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

### Part Number Selection

**R4 - EM - 8 B A - V S 0 - P**

**B** Base Mounting Style

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

**A** Housing Configurations

None Standard housing
6. Extended housing

**V** Voltage

2. 24 volts
3. 12 volts

**S** Integrated Door Sensor

3. No
4. Yes (Extended housing only)

**P** Packaging Options

None Individually packaged
1. Bulk packaged

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

www.southco.com/R4-EM
**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>
</tr>
</tbody>
</table>

**Operation**

See page 21 for operating instructions

**Accessories**

Striker Bolt or Cast Striker
See page 36

**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

**Electronic Actuators**

See page 48

**Mechanical Actuators**

See page 34

**Cables**

See page 322

**Wiring/Junctions**

See www.southco.com
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

Latch Wiring Connections
Sealed Connector
Molex MX150 series

Latch Wiring Connections
Sealed Connector
Molex Microfit 3.0 series

Part Number Selection

Part Number Selection

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>
</tr>
</tbody>
</table>

**Operation**

See page 21 for operating instructions

---

**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 Contact

PIN 5: Blue: Microswitch N.O. Contact

PIN 6: Grey: Microswitch N.C. Contact

---

**Accessories**

**Striker Bolt or Cast Striker**

See page 36

**Cable Mounting Kit**

See page 37

---

**Electronic Actuators**

See page 48

**Mechanical Actuators**

See page 34

**Cables**

See page 322

**Wiring/Junctions**

See **www.southco.com**
R4-EM 4 & 6 Series Electronic Rotary Latch
Compact size · Lightweight
Electronic access with internal motor control

- Light weight construction
- 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

Latch Wiring Connections
With Connector
Molex Microfit 3.0 series
PIN 6, PIN 5, PIN 4
PIN 1 Indicator

Without connector

Part Number Selection
R4 - EM - TBA - 1SC - P

T Trigger Styles
4 Auto re-lock with kick-out spring
6 Delayed re-lock with light spring

B Base Mounting Style
3 Ø 5.5 (.22) thru hole
4 M5 thread
5 10-24 thread

A Alternate Configurations
None Standard configuration
2 Strong (kick out) cam spring (delayed relock)

C Connector Options
1 With connector
2 Without connector

P Packaging Options
None Individually packaged
1 Bulk packaged

S Switch Options
3 No switch
6 Internal latch status switch

Dimensions in millimeters (inch) unless otherwise stated

www.southco.com/R4-EM
Installation

Panel Preparation

<table>
<thead>
<tr>
<th>Base Mounting Style</th>
<th>Recommended minimum mounting hole</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-24 thread</td>
<td>Ø 5.6 (.220)</td>
</tr>
<tr>
<td>M5 thread</td>
<td>Ø 5.9 (.232)</td>
</tr>
<tr>
<td>Thru hole</td>
<td>Ø 6.1 (.240)</td>
</tr>
</tbody>
</table>

Operation

See page 21 for operating instructions

Accessories

Striker Bolt
See page 36

Cable Mounting Kit
See page 37

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
Maximum
** 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 26 Volts DC
PIN 4: Black: Microswitch Common
PIN 5: Blue: Microswitch N.O.
Contact
PIN 6: Grey: Microswitch N.C.
Contact

Electronic Actuators
See page 48

Mechanical Actuators
See page 34

Cables
See page 322

Wiring/Junctions
See www.southco.com

Dimensions in millimeters (inch) unless otherwise stated
**R4-EM 1 & 2 Series Electronic Rotary Latch**

All-metal construction

Electronic access with internal motor control

- High strength, steel construction
- Operates against high mechanical loads
- Push-to-close, electronic release
- Versatile rotary mechanism
- Concealed latching
- Microprocessor control
- Minimal power draw
- Simple mechanical override
- Optional internal microswitch for latch open/close output signal

**Part Number Selection**

**Trigger Styles**

1. Auto relock, side trigger, with kick-out spring
2. Delayed relock, side 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
2. Strong (kick out) cam spring (delayed relock)
3. High strength cam
4. High strength cam with strong (kick out) cam spring (delayed relock)

**Latch Wiring Connections**

With connector
Molex Microfit 3.0 series

Without connector

**Packaging Options**

None
1. Individually packaged

**Connector Options**

1. With connector
2. Without connector

**Switch Options**

3. No switch
6. Internal latch status switch

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>
</tr>
</tbody>
</table>

Operation
See page 21 for operating instructions

Accessories
Striker Bolt or Cast Striker
See page 36

Material & Finish
Mechanism
Housing: Steel, zinc plated
Cam, trigger: Steel, zinc plated
Springs: 300 Series stainless steel
Pins: Steel, zinc plated

Electronic Actuator
Housing: PC/ABS
Cam / follower: Acetal

Electrical Specifications
Recommended Operating Voltage: 12 to 24 Volt DC
Typical Operating Current: Less than 500mA at 12 VDC
Peak/Stall Operating Current: 1 A
Standby Current: 185uA
Input Signal Current Draw: 25mA
**Optional microswitch closes upon latch closure
Microswitch Rating: 3A at 12VDC Maximum

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 26 Volts DC
PIN 4: Black: Microswitch Common
PIN 5: Blue: Microswitch N.O.
Contact
PIN 6: Grey: Microswitch N.C.
Contact

Dimensions in millimeters (inch) unless otherwise stated
Southco now offers a standard solution for remote mechanical actuation of the R4-EM Electronic Rotary Latch. The cable based solution provides a simple means of mechanically releasing the electronic lock in the event of electrical power loss providing fully redundant access.

**Installation**

1. Mount cable mounting bracket to R4-EM series latch with 2 rivets
2. Snap retainer over cable to hold in place against bracket
3. Slide ball end of cable out and slip wire into notch of manual override lever
4. Slide threaded fitting into slot in mounting bracket and secure in place with 2 mounting nuts
5. Pull wire tight and insert end into hole in actuator cable retainer and secure with hex head screw

**PT Latch Option** See Pages 202 - 203

**E5 Push to Close Option** See Pages 166 - 167
### How to Order

**Step 1** Select mechanical override lock and corresponding AC actuator assembly and AC cable bracket

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
<th>Latch Rotation Selection</th>
</tr>
</thead>
<tbody>
<tr>
<td>E5 Latch</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Push-to-Close assembly</td>
<td>A5-99-136</td>
<td>AND</td>
</tr>
<tr>
<td>See page 166</td>
<td></td>
<td></td>
</tr>
<tr>
<td>See drawing J-E5-53-A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AC Cable Bracket</th>
<th>AC-0-49617-11-R</th>
<th>E5-T-LF-TL-1K</th>
</tr>
</thead>
<tbody>
<tr>
<td>LLLL - Length from behind ball end to end of cable</td>
<td>See pages 166 - 167</td>
<td></td>
</tr>
</tbody>
</table>

**OR**

<table>
<thead>
<tr>
<th>AC Cable Bracket</th>
<th>AC-0-49617-11-L</th>
<th>E5-T-LF-TR-1K</th>
</tr>
</thead>
<tbody>
<tr>
<td>LLLL - Length from behind ball end to end of cable</td>
<td>See pages 166 - 167</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
<th>Latch Rotation Selection</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT Latch</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tubular Key cam Lock</td>
<td>A5-99-157</td>
<td>AND</td>
</tr>
<tr>
<td>See page 202</td>
<td></td>
<td></td>
</tr>
<tr>
<td>See drawing J-PT-1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AC Cable Bracket</th>
<th>AC-0-49618-11-R</th>
<th>PT-1-HC109-20K-KC</th>
</tr>
</thead>
<tbody>
<tr>
<td>LLLL - Length from behind ball end to end of cable</td>
<td>See pages 202 - 203</td>
<td></td>
</tr>
</tbody>
</table>

**OR**

<table>
<thead>
<tr>
<th>AC Cable Bracket</th>
<th>AC-0-49618-11-L</th>
<th>PT-1-HC101-20K-KC</th>
</tr>
</thead>
<tbody>
<tr>
<td>LLLL - Length from behind ball end to end of cable</td>
<td>See pages 202 - 203</td>
<td></td>
</tr>
</tbody>
</table>

**Step 2** Determine mechanical cable length required

<table>
<thead>
<tr>
<th>Mechanical Cable</th>
<th>Part Number</th>
<th>LLLL - Length from behind ball end to end of cable</th>
</tr>
</thead>
<tbody>
<tr>
<td>See drawing J-AC-C</td>
<td>AC-COH0-4-LLLL-TTT</td>
<td></td>
</tr>
</tbody>
</table>

| LLLL - Raw cable extension portion of LLLL length | |

**Step 3** Order cable mounting kit (one per R4-EM latch). See page 36 to select the kit to match your application.

<table>
<thead>
<tr>
<th>R4-EM-52</th>
<th>R4-EM-72</th>
<th>R4-EM-87</th>
<th>R4-EM-952</th>
</tr>
</thead>
</table>

Dimensions in millimeters (inch) unless otherwise stated
**Material and Finish**

Striker bolts: Steel, zinc plated or stainless steel

Cast strikers: Zinc alloy

*Note: Latch and striker installation details can be found on the latch trade drawing at [www.southco.com](http://www.southco.com).

---

**R4-EM Electronic Rotary Latch Strikers**

**Striker Bolt - Large**

Part number R4-90-121-10

Part number 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*

---

<table>
<thead>
<tr>
<th>Striker Bolt</th>
<th>Cast Striker</th>
</tr>
</thead>
<tbody>
<tr>
<td>R4-90-121-XX</td>
<td>R4-90-511-20</td>
</tr>
<tr>
<td>R4-EM-9</td>
<td>✔</td>
</tr>
<tr>
<td>R4-EM-8</td>
<td>✔</td>
</tr>
<tr>
<td>R4-EM-5 &amp; 7</td>
<td>✔</td>
</tr>
<tr>
<td>R4-EM-4 &amp; 6</td>
<td>❌</td>
</tr>
<tr>
<td>R4-EM-1 &amp; 2</td>
<td>✔</td>
</tr>
</tbody>
</table>

Dimensions in millimeters (inch) unless otherwise stated
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

Material and Finish
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.

---

<table>
<thead>
<tr>
<th>Cable Mounting Kit</th>
<th>R4-EM-52</th>
<th>R4-EM-72</th>
<th>R4-EM-87</th>
<th>R4-EM-952</th>
</tr>
</thead>
<tbody>
<tr>
<td>R4-EM-9</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>R4-EM-8</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>R4-EM-5 &amp; 7</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R4-EM-4 &amp; 6</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R4-EM-1 &amp; 2</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dimensions in millimeters (inch) unless otherwise stated