

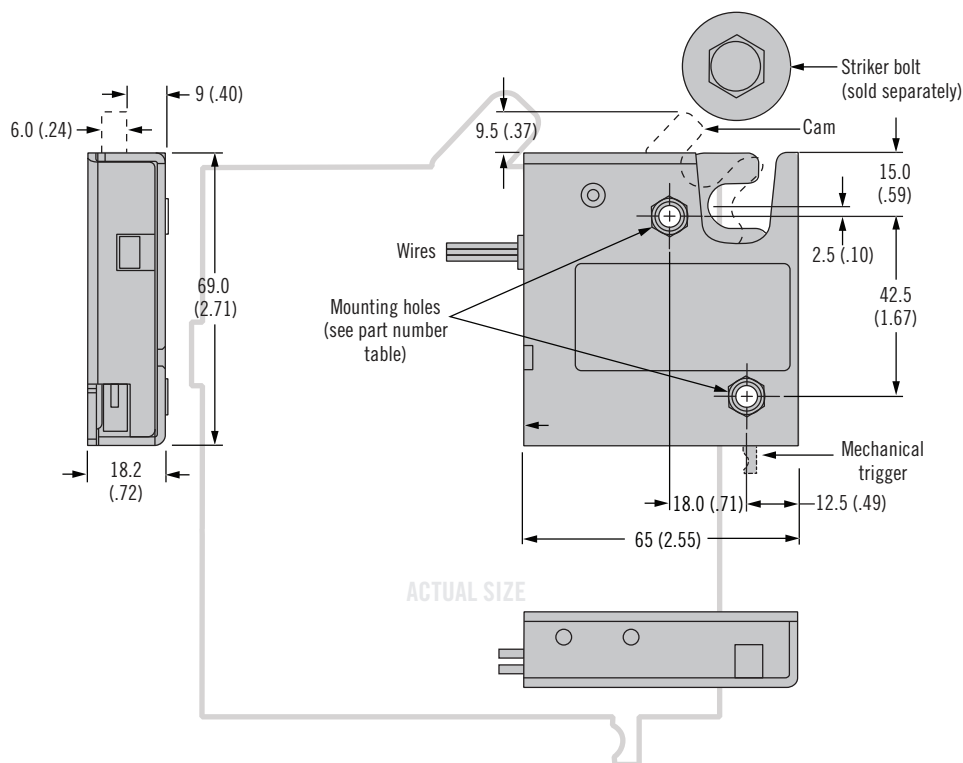
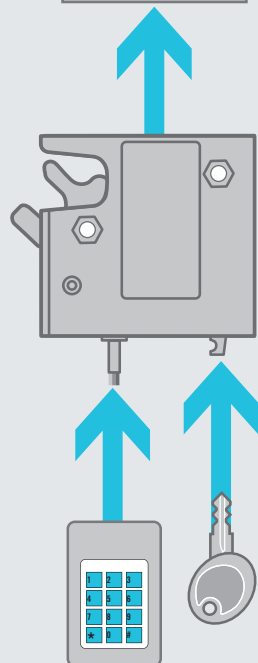


R4-EM 1 & 2 Series Electronic Rotary Latch

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

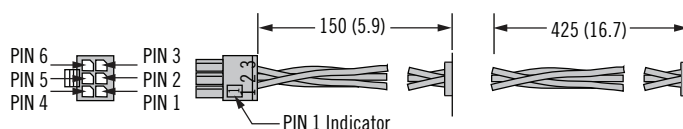


Latch Wiring Connections

With connector

Molex Microfit 3.0 series

Without connector



Part Number Selection

R4 - EM - T B A - 1 S C - P

T Trigger Styles

- 1 Auto relock, side trigger, with kick-out spring
- 2 Delayed relock, side trigger, with light spring
- R1 Auto relock, rear trigger, with kick-out spring
- R2 Delayed relock, rear trigger, with light spring

B Base Mounting Style

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

A Alternate Configurations

- None Standard configuration
- 2 Strong (kick out) cam spring (delayed relock)
- 3 High strength cam
- 4 High strength cam with strong (kick out) cam spring (delayed relock)

P Packaging Options

- None Individually packaged
- 1 Bulk packaged

C Connector Options

- 1 With connector
- 2 Without connector

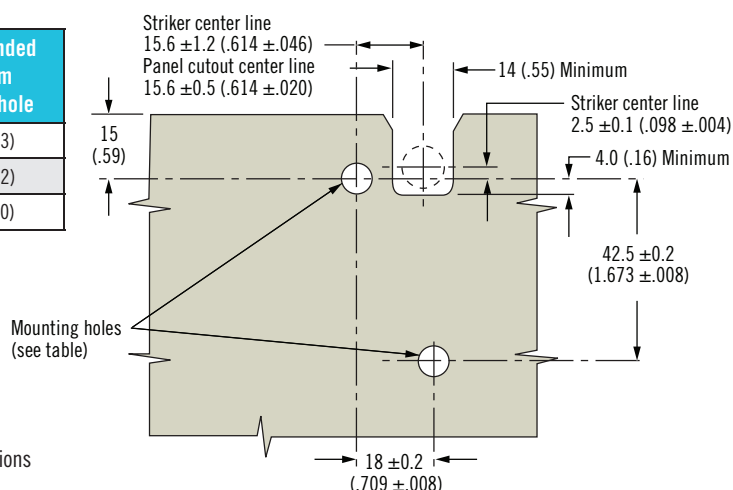
S Switch Options

- 3 No switch
- 6 Internal latch status switch

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)



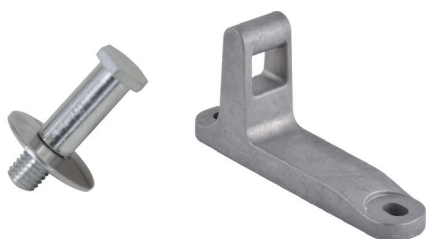
Operation

See page 21 for operating instructions

Accessories

Striker Bolt or Cast Striker

See page 36



Cable Mounting Kit

See page 37



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

Electronic Actuators

See page 48



Mechanical Actuators

See page 34



Cables

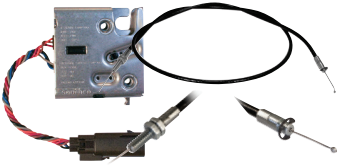
See page 322



Wiring/Junctions

See www.southco.com





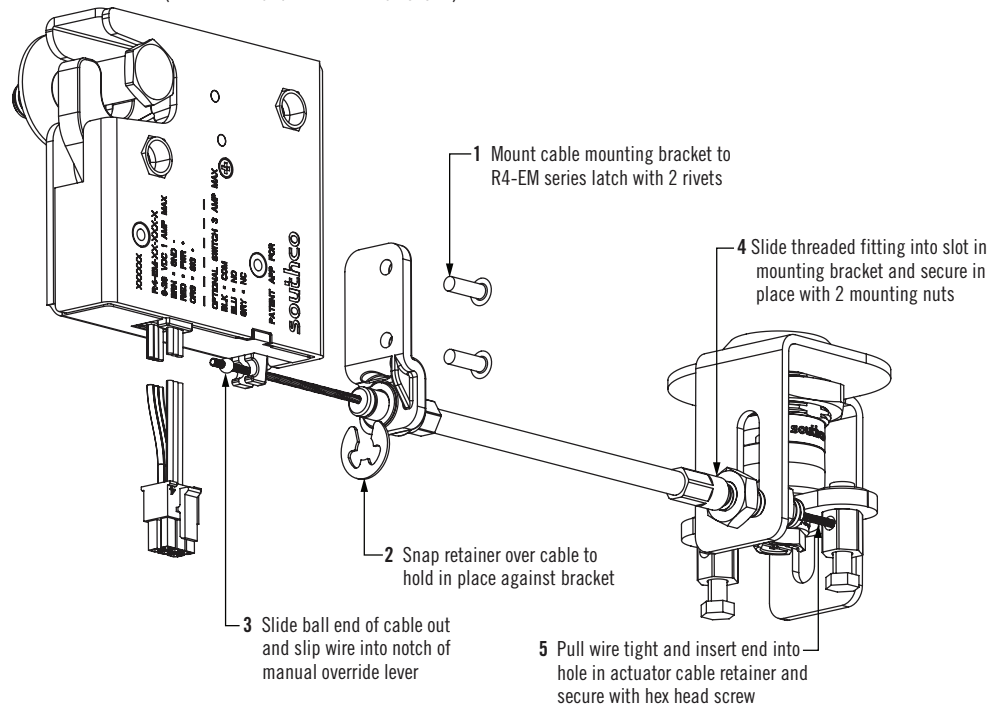
R4-EM Mechanical Override System

- Adapts to any standard Southco R4-EM Electronic Rotary Latch
- Choose from flat key or tubular key cam latch for remote key lock
- Simple installation with multiple adjustments and customized cable lengths to suit any application.
- Accommodates clockwise or counter clockwise key rotation for latch release

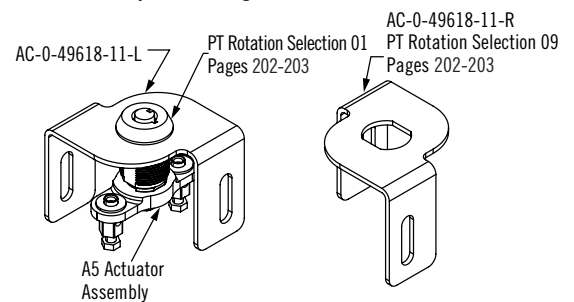
Southco now offers a standard solution for remote mechanical actuation of the R4-EM Electronic Rotary Latch. The cable based solution provides a simple means of mechanically releasing the electronic lock in the event of electrical power loss providing fully redundant access.

Installation

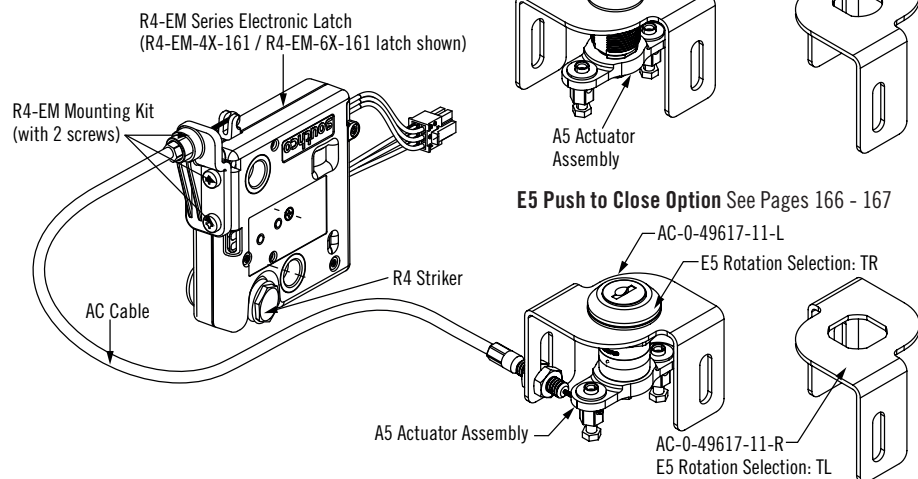
R4-EM Series Electronic Latch
(R4-EM-1X-161 / R4-EM-2X-161 shown)



PT Latch Option See Pages 202 - 203

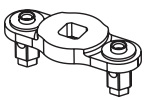
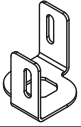


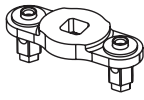
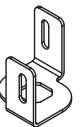
E5 Push to Close Option See Pages 166 - 167



How to Order

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

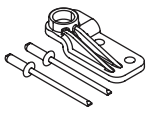
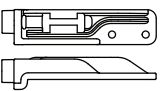
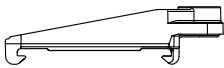
 E5 Latch Push-to-Close assembly See page 166 See drawing J-E5-53-A	Description	Part Number		Latch Rotation Selection
	A5 Actuator	A5-99-136		
	AND			
	AC Cable Bracket	AC-0-49617-11-R		E5-T-LF-TL-1K See pages 166 - 167
	OR			
	AC Cable Bracket	AC-0-49617-11-L		E5-T-LF-TR-1K See pages 166 - 167

 PT Latch Tubular Key cam Lock See page 202 See drawing J-PT-1	Description	Part Number		Latch Rotation Selection
	A5 Actuator	A5-99-157		
	AND			
	AC Cable Bracket	AC-0-49618-11-R		PT-1-HC109-20K-KC See pages 202 - 203
	OR			
	AC Cable Bracket	AC-0-49618-11-L		PT-1-HC101-20K-KC See pages 202 - 203

Step 2 Determine mechanical cable length required

Mechanical Cable See drawing J-AC-C	AC-C0H0-4-LLLL-TTT	LLLL - Length from behind ball end to end of cable TTT - Raw cable extension portion of LLLL length	
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Step 3 Order cable mounting kit (one per R4-EM latch). See page 36 to select the kit to match your application.

			
R4-EM-52	R4-EM-72	R4-EM-87	R4-EM-952



R4-EM Electronic Rotary Latch Strikers

Material and Finish

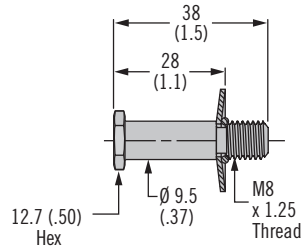
Striker bolts: Steel, zinc plated or stainless steel

Cast strikers: Zinc alloy

***Note:** Latch and striker installation details can be found on the latch trade drawing at www.southco.com.

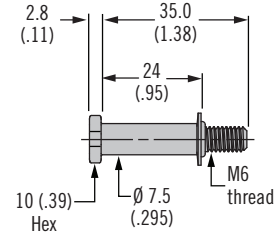
Striker Bolt - Large

Part number R4-90-121-10
R4-90-121-20



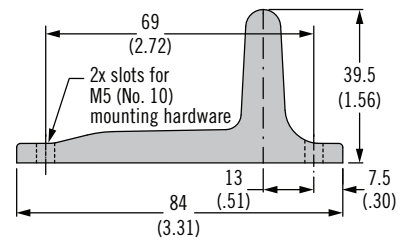
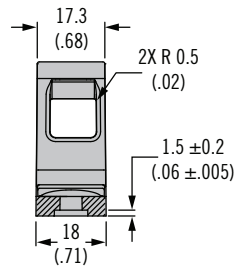
Striker Bolt - Small

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*



	Striker Bolt		Cast Striker	
	R4-90-121-XX	R4-90-511-20	R4-90-800-10	R4-90-804-10
 R4-EM-9	✓		✓	✓
 R4-EM-8	✓		✓	✓
 R4-EM-5 & 7	✓		✓	
 R4-EM-4 & 6		✓		
 R4-EM-1 & 2	✓		✓	

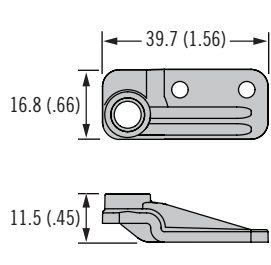
R4-EM Electronic Rotary Latch

Cable mounting kits

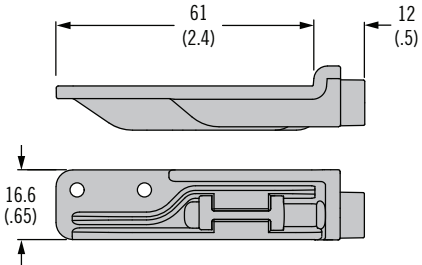


Cable Mounting Kit

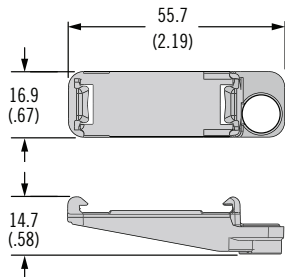
Part number R4-EM-52 – Rivets included
Part number R4-EM-72 – Screws included



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.

	Cable Mounting Kit			
	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	✓		✓	