

M3 Compression System

Remote compression latch

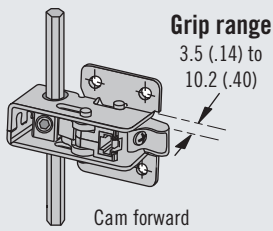
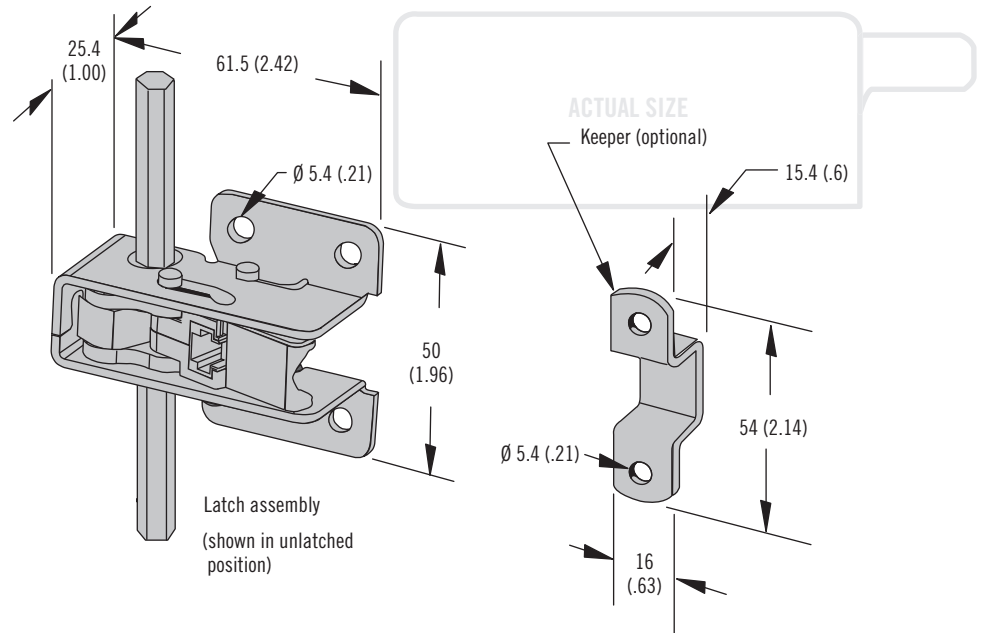
- Consistent compression driven by rotational rod
- Adjustable grip
- Meets NEMA 4 / IP66 and EMI standards
- Can be driven by hand, tool or key-locking actuators

Material and Finish

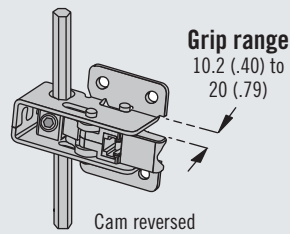
Zinc alloy and steel, zinc plated

Performance Details

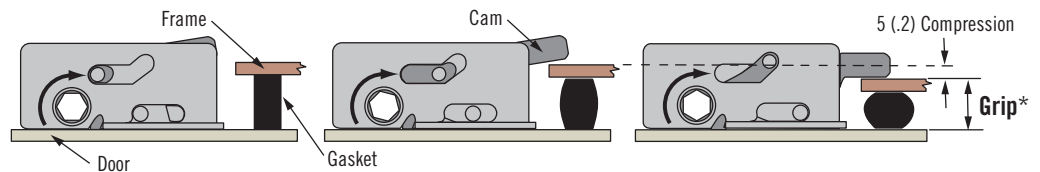
Max. static load:
890 N (200 lbf) per latch
Average ultimate load:
1335 N (300 lbf)



Cam forward

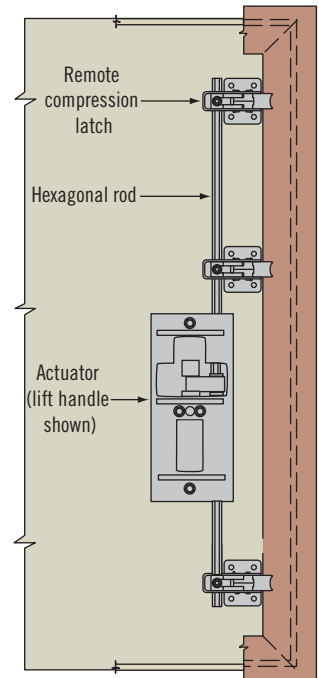
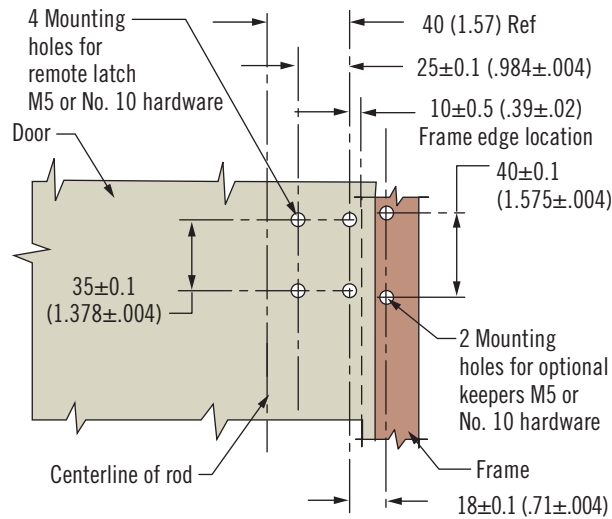


Cam reversed



* Measure your **Grip** from the latch mounting surface to the inside frame surface, with gasket compressed

Inside view



Notes

Do not exceed 20 (.79) grip range with cam reversed

Part Number

The complete system consists of:
Remote compression latch and/or optional keeper (see page 210)
Actuator (see pages 211-214)
Rods (see page 215)

Order each component separately

Part Number	
Remote compression latch	M3-50
Keeper (optional) use for grip ranges 15 - 30 (.59 - 1.18)	M3-51

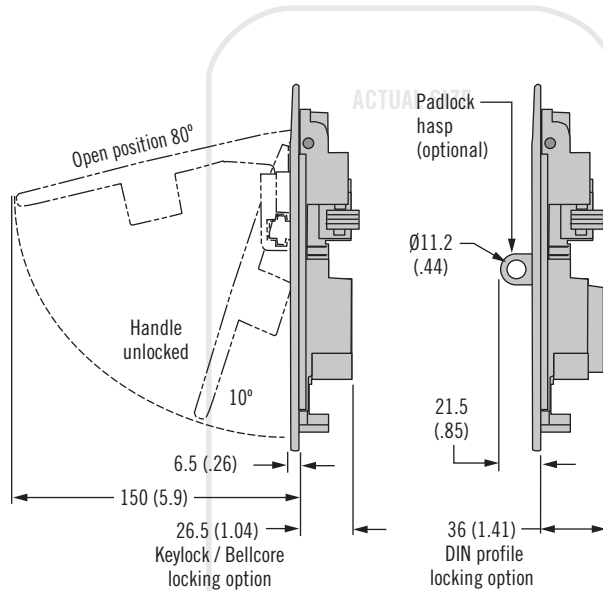
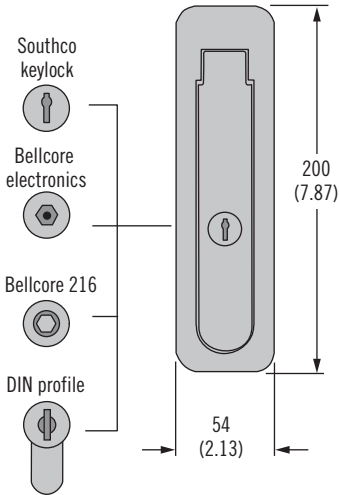
M3 Compression System

Actuators · Lift handle



Lift Handle

Locking options



- Suitable for left and right side latching
- Meets NEMA 4/ IP66 and EMI standards
- Ejecting handle

Material and Finish

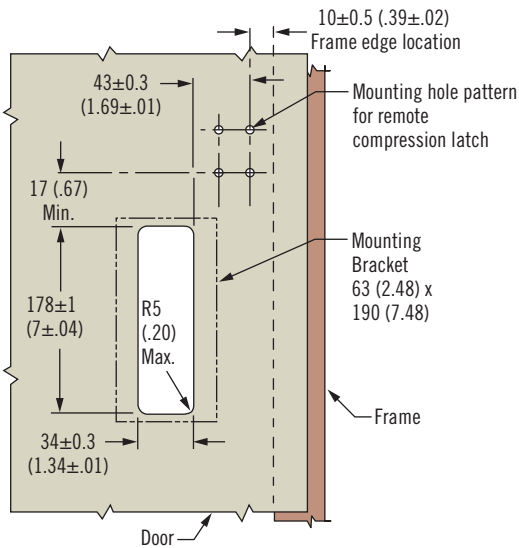
Zinc alloy black powder coated and steel, zinc plated

Sealing Notes

NEMA 4 / IP66 achieved using gasket supplied

DIN Profile Key Part

M3-0-36406



P Padlock option

- 0 Non padlock
- 1 Padlockable

D Door thickness range

- 10 1.5 - 3 (.06 - .12)
- 11 3 - 4.5 (.12 - .18)
- 25 24 - 25.5 (.94 - 1.0)

M3 - 40 - L P - D

L Lock style

- 10 Key-locking keyed alike CH751 (two keys supplied)
- 11 DIN profile supplied keyed alike 347876 (three keys supplied)
- 12 DIN profile, lock not supplied
- 13 Push button
- 16 Bellcore 216
- 17 Bellcore electronics

Part Number Selection

Actuator only

The complete system consists of:
Remote compression latch and/or optional keeper (see page 210)
Actuator (see page 211-214)
Rods (see page 215)

Order each component separately



M3 Compression System

Actuators · Push-button handle

- Suitable for left and right side latching

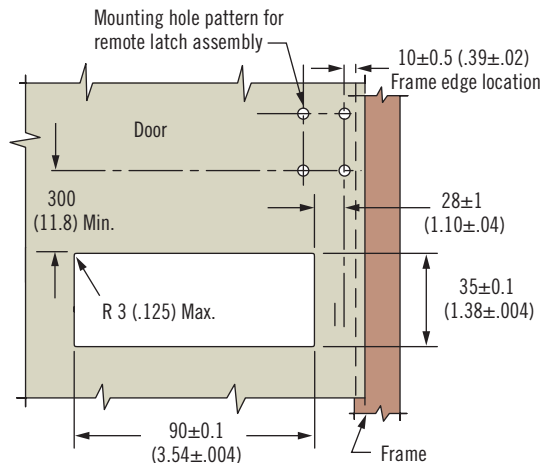
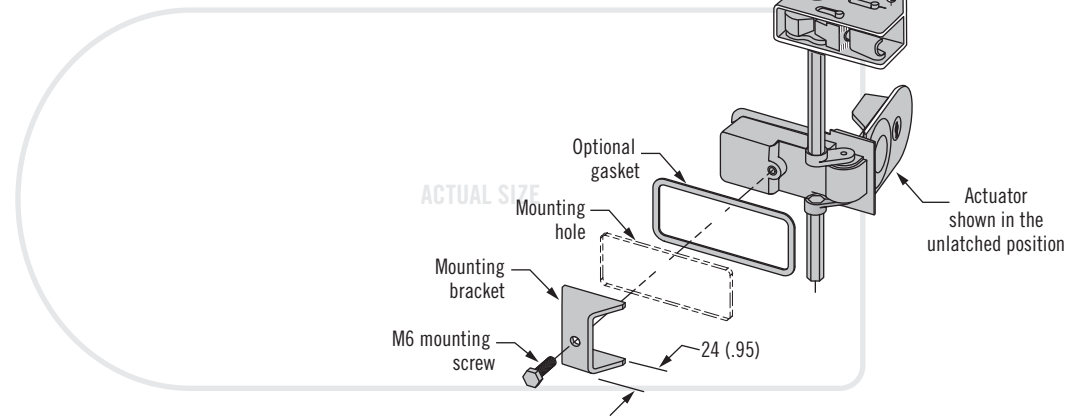
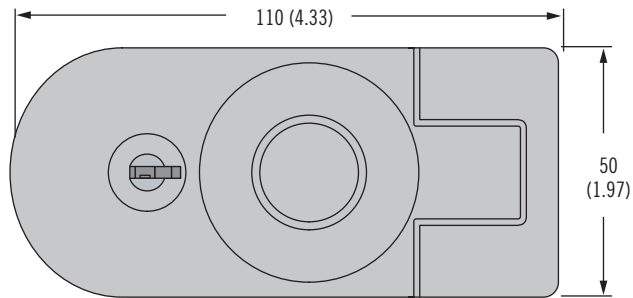
Material and Finish

Zinc alloy, black powder coated and steel, zinc plated

Sealing Notes

NEMA 4 / IP66 achieved using optional gaskets (ordered separately)

Push-Button Handle



Part Number

Actuator and sealing gasket only see table

The complete system consists of: Remote compression latch and/or optional keeper (see page 210) Actuator (see pages 211-214) Rods (see page 215)

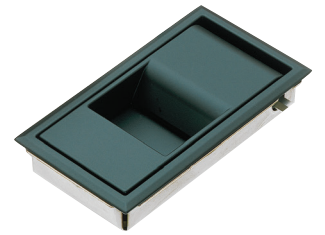
Order each component separately

Actuator	Door Thickness Range	Part Number
Push-button handle	0 - 5 (0 - .20)	M3-90
	5 - 10 (.20 - .39)	M3-92
Push-button handle with key-lock	0 - 5 (0 - .20)	M3-91
	5 - 10 (.20 - .39)	M3-93

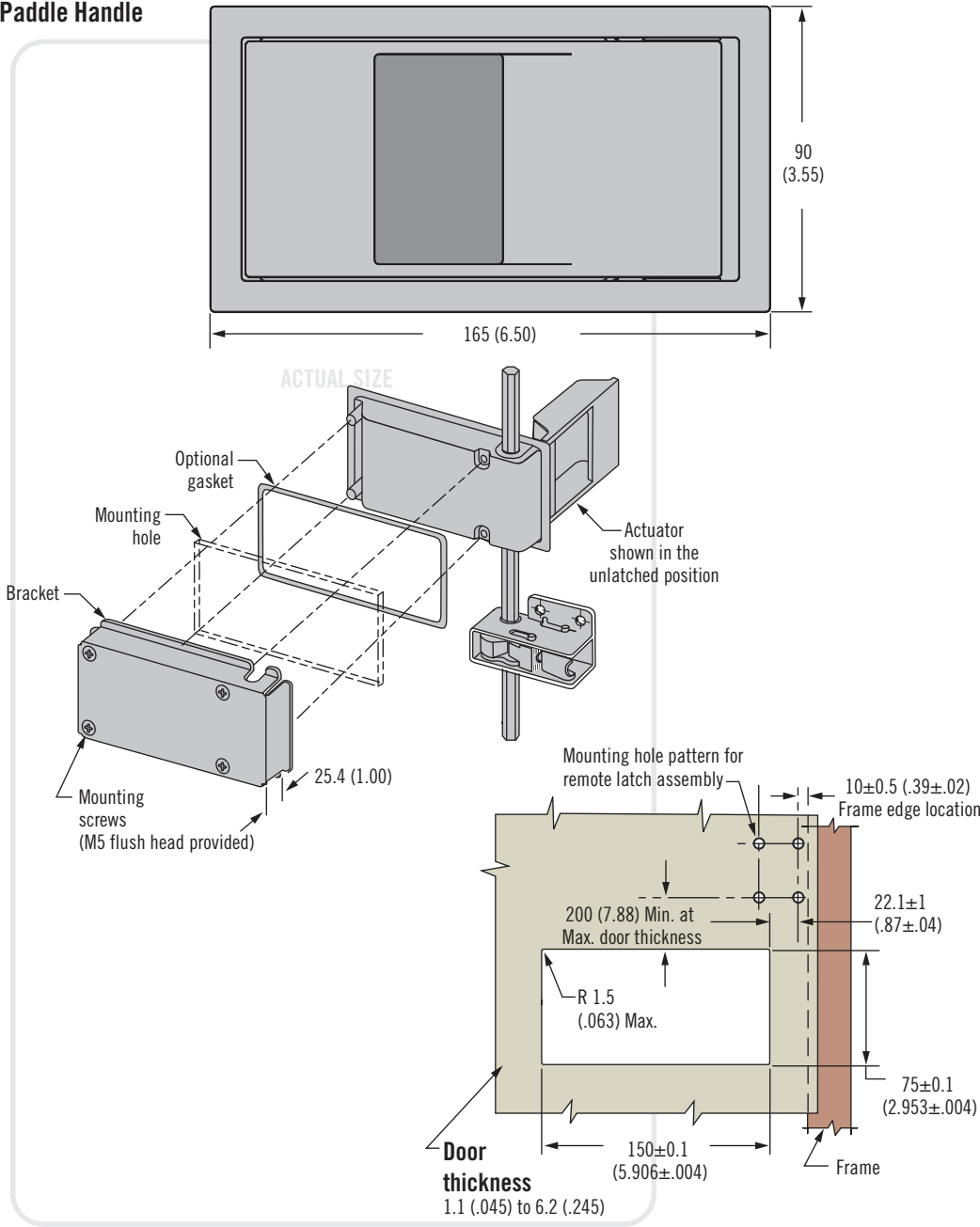
Sealing Gasket Part Number
C5-82

M3 Compression System

Actuators · Paddle handle



Paddle Handle



- Suitable for left and right side latching

Material and Finish

Zinc alloy, black powder coated and steel, zinc plated

Sealing Notes

NEMA 4 / IP66 achieved using gasket supplied

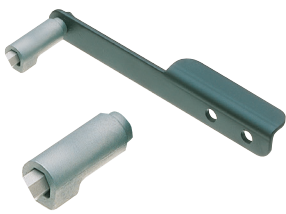


Part Number

Actuator and gaskets only see table
 The complete system consists of:
 Remote compression latch and/or optional keeper (see page 210)
 Actuator (see pages 211-214)
 Rods (see page 215)
 Order each component separately

Actuator	Part Number
Paddle (includes bracket and screws)	M3-10
Paddle with key-lock (includes bracket and screws)	M3-17

Gasket Type	Part Number
Environmental	M3-12
EMC	M3-13



M3 Compression System

Actuators · Door edge lever · Concealed

- Simple actuator for top or bottom of door

Material and Finish

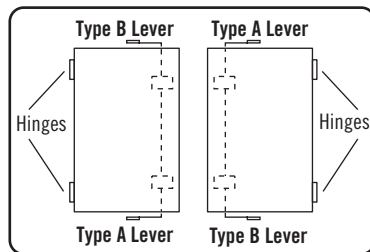
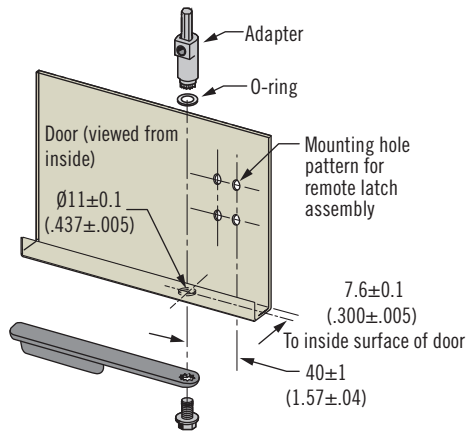
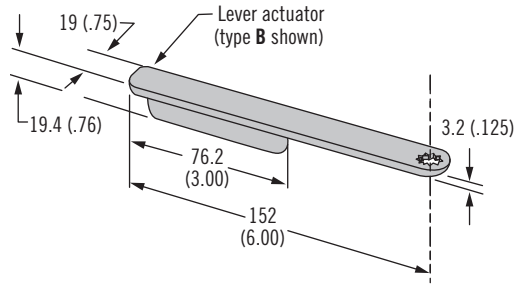
Door edge lever: Zinc alloy, black powder coated and steel, zinc plated
 Adaptor: Zinc alloy, chemical protective film

Concealed: Zinc alloy, chemical protective film

Notes

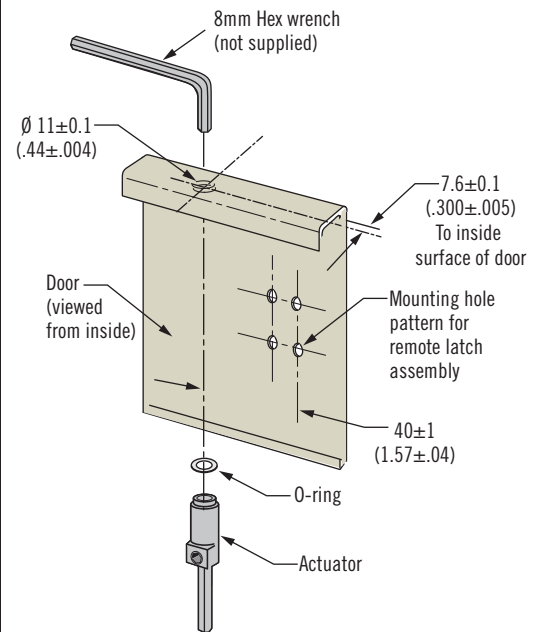
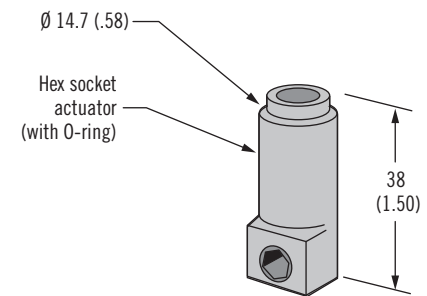
Concealed: Operated by 8mm hex wrench (not supplied)

Door Edge Lever



Viewed from outside

Concealed



Part Number

Actuator only see table

The complete system consists of:
 Remote compression latch
 Remote compression latch and/or optional keeper (see page 210)
 Actuator (see pages 211-214)
 Rods (see page 215)

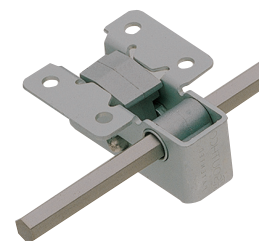
Order each component separately

Actuator	Type	Part Number
Lever (includes adapter and O-ring)	A	M3-31
	B	M3-32

Actuator	Part Number
Hex socket with O-ring seal	M3-30

M3 Compression System

Rods and Calculator



Material and Finish

Stainless steel, natural

Notes

If you choose to use your own rods, they should have no more than 1 degree of twist in any meter length

Part Number

Rod only see table

The complete system consists of:
 Remote compression latch and/or optional keeper (see page 210)
 Actuator (see pages 211-214)
 Rods (see page 215)

Order each component separately

Calculation Notes

Once you have completed the calculation please order the following parts:

- 1 x Actuator
- 1 or 2 rods to correct length
- Number of compression latches determined from calculation

Hexagonal Rod

Hex Rod Length	Part Number	
Hex rods (length measured in centimeters)	125 cm	M3-125
	155 cm	M3-155
	185 cm	M3-185

Calculator

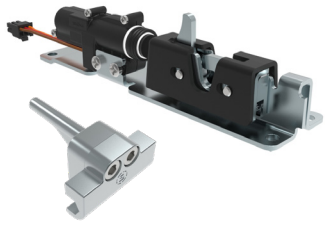
To determine the minimum number of remote compression latches you require along the door edge:

$$N = \frac{L \times R}{470}$$

N = Number of compression latches along door edge (rounded to the nearest whole number)
 L = Total length of gasketing material in millimeters
 R = Gasket compression rate in N / mm

Example: $\frac{5200 \text{ mm} \times 0.3 \text{ N / mm}}{470} = 3.28 = 3 \text{ latches}$

Remote compression latches should be evenly spaced along edge of door



M3 Compression System

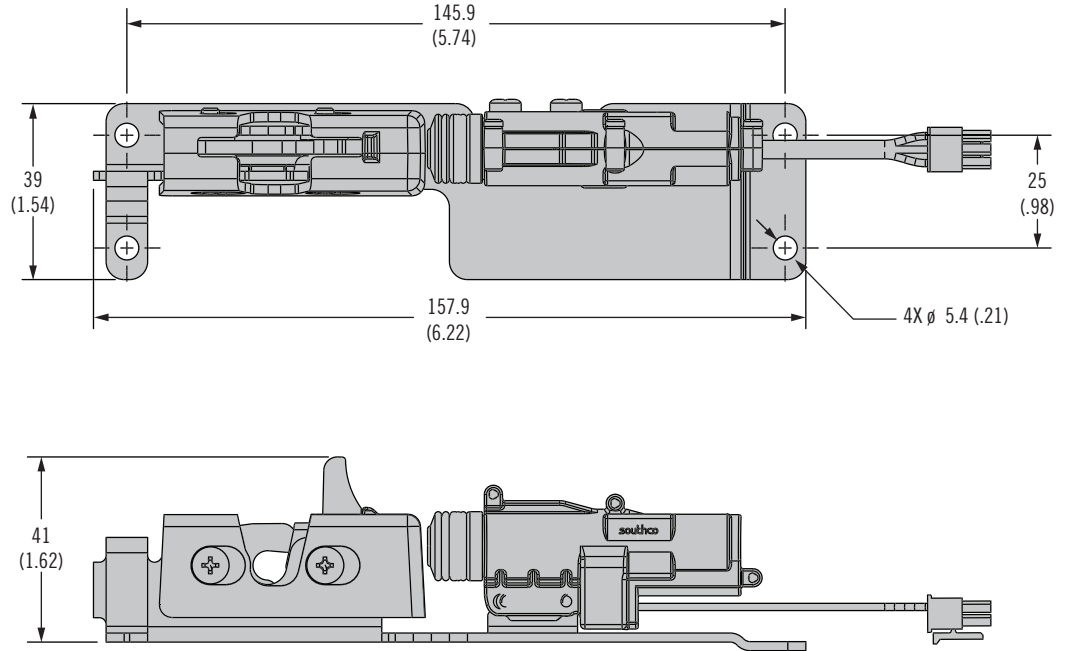
Electronic Lock

- Electronically controlled locking
- Sealed for outdoor use
- Retrofit existing M3 systems without disassembly

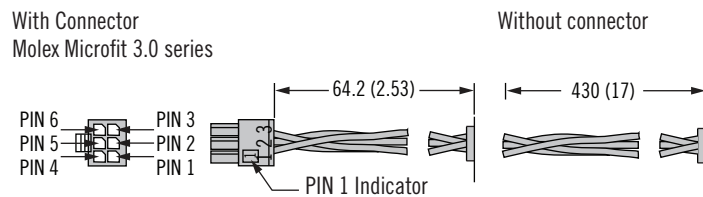
Wire Color Code / Connector Pin Assignment:

- PIN 1: Extend (+), Orange Wire
- PIN 2: Retract (+), Red Wire
- PIN 3: Ground (-), Black Wire
- PIN 4: Not used
- PIN 5: Not used
- PIN 6: Not used

Electronic Rotary Latch Mechanism



Latch Wiring Connections



Part Number

Latch Mechanism: See table
 Striker: M3-58
 Order latch and striker separately

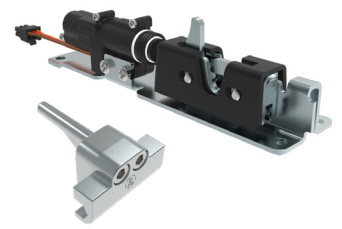
Part Number Selection

R4 - 05 - 2 B - 4E C 1 - 20

- B** Base Mounting Style
- 0 Thru holes
 - 5 Adhesive backing

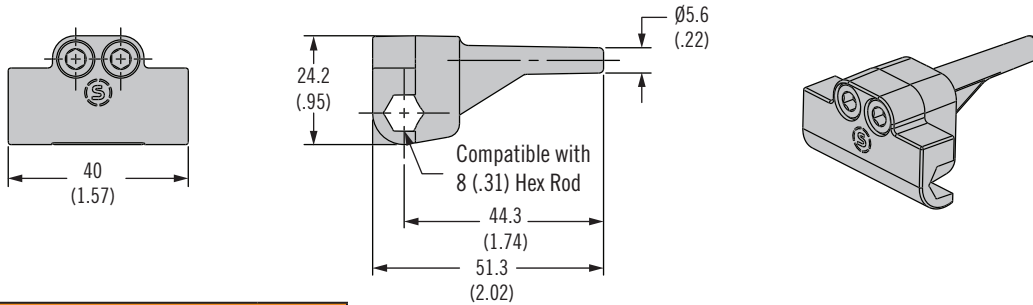
- C** Connector Options
- B 12V, with connector
 - F 5V, with connector
 - K 12V, without connector
 - P 5V, without connector

M3 Compression System Electronic Lock



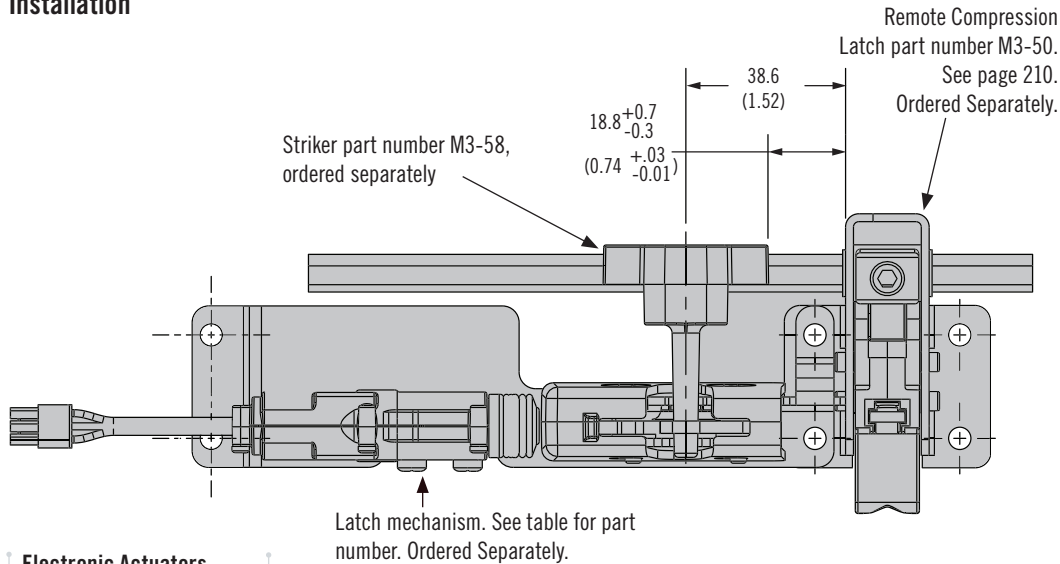
215B

Hexagonal Rod Striker



Part Number	
Hexagonal Rod Striker	M3-58

Installation



Material and Finish

- Latch Mechanism
- Housing: Stainless Steel
- Cam, trigger: Stainless Steel
- Springs: Steel, zinc plated
- Pins: Stainless Steel
- Electronic Actuator
- Enclosure, Output Cam: Nylon, Acetal
- House Assembly Screws: Stainless Steel
- Striker: Zinc, Chromate sealer

Electronic Specifications

- Supply Voltage: 5 or 12VDC
- Operating Current: Less than 300 mA
- Operating Temperature: -20°C - 60°C
- Operating Humidity: 85% max
No condensation

Notes:

- Connector version uses Molex brand Microfit 3.0
- Visit southco.com to download further installation and operation details.

Electronic Actuators

See page 48

