

Southco® Multi-point Latching Systems

Multi-point Compression System

- Provide consistent compression along the entire edge of the door
- Drive multiple compression latches from one actuation point
- Each remote latch provides 5 mm (.2 in) of compression
- Sealed to meet NEMA 4/IP-66 water intrusion standards, and EMI applications
- Five actuator styles including hand-, tool-, and key-operated
- Security options include Bellcore Tool access, DIN 18254 style locks, and padlock features

Back View



Southco® Multi-point Latching Systems

Multi-point Compression System

The Complete System Consists of:

A: Remote Compression Latches

See page 159 to determine the number of latches required for your application

B: An Actuator

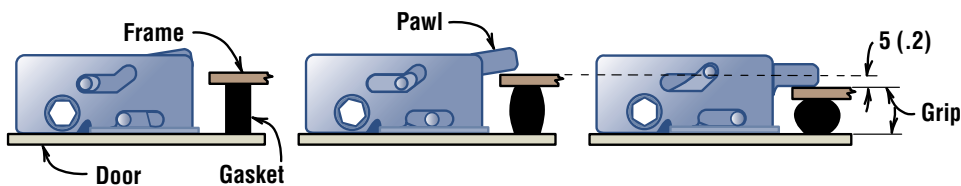
See pages 156-158 to choose from 5 actuation methods

C: Hexagonal Rod(s)

See page 158 for instructions on determining your effective rod length

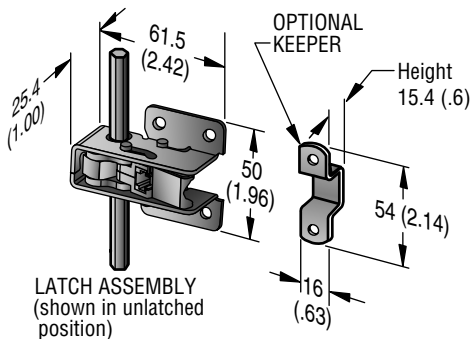
A. Remote Compression Latch

- See page 159 to calculate the number of latches required for your application
- Each Remote Compression Latch can be individually adjusted



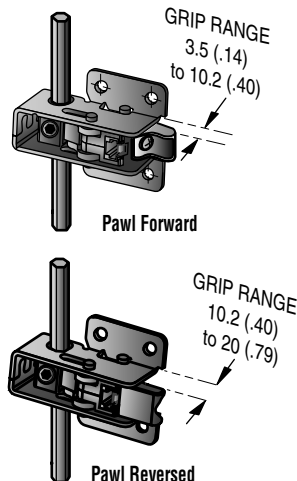
Operation

- Each remote latch is driven simultaneously when the hexagonal rod(s) are rotated 90°



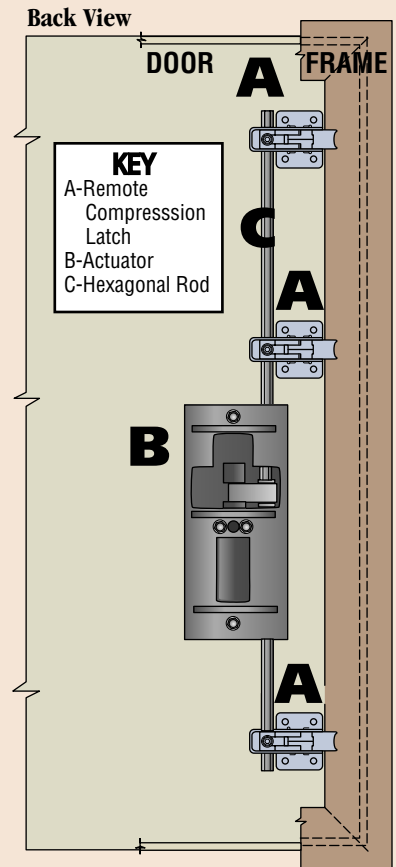
Grip

- Measure your grip from the latch mounting surface to the inside frame edge, with gasket compressed
- Use the Pawl Forward position for grip range 3.5 (.14) to 10.2 (.40)
- Use the Pawl Reversed position for grip range 10.2 (.40) to 20 (.79)



NOTE: do not exceed 20 (.79) grip range with pawl reversed.

SYSTEM COMPONENTS	GRIP RANGE	PART NUMBERS
Latch Assemblies	3.5 (.14) to 20 (.79)	M3-50 •
Keeper	—	M3-51 •

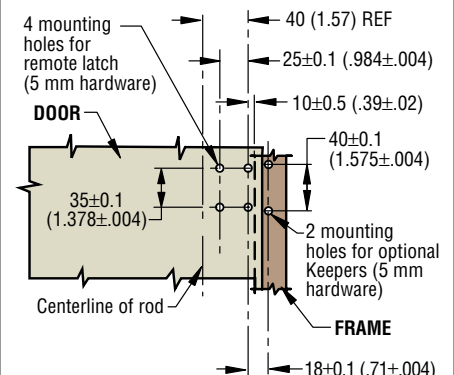


Multi-point Latching System

Optional Keepers

- Use for grip ranges from 15 (.59) to 30 (1.18)
- Measure your grip from the latch mounting surface to the keeper mounting surface
- Mount keepers on the enclosure frame

Panel Preparation



millimeter (inch)
millimeter (inch)

Dimensions without tolerances are for reference only.

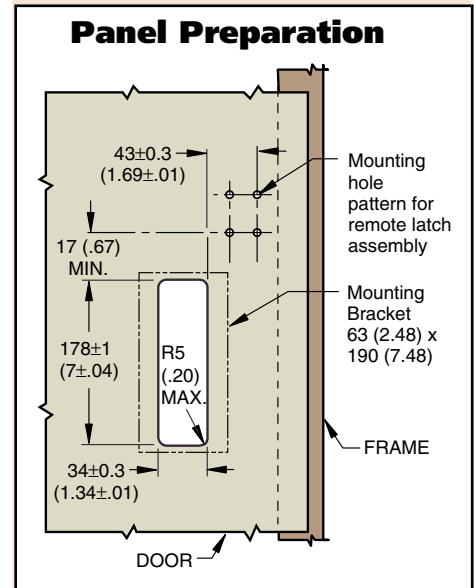
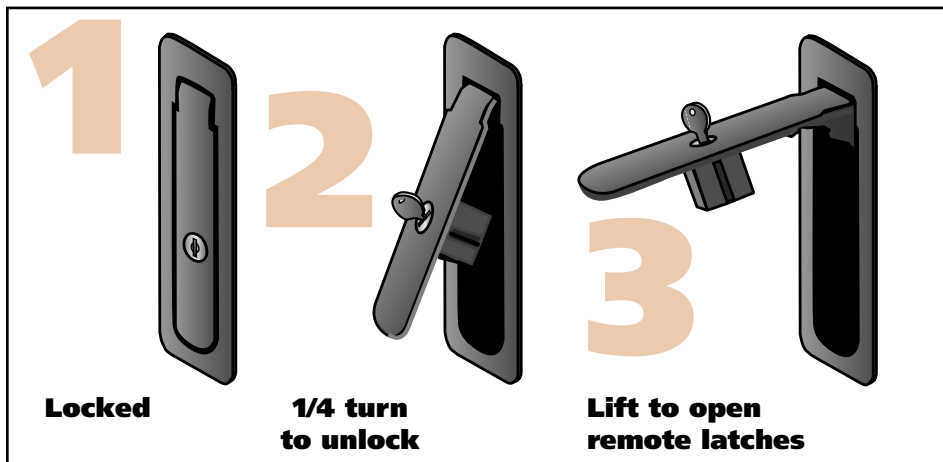
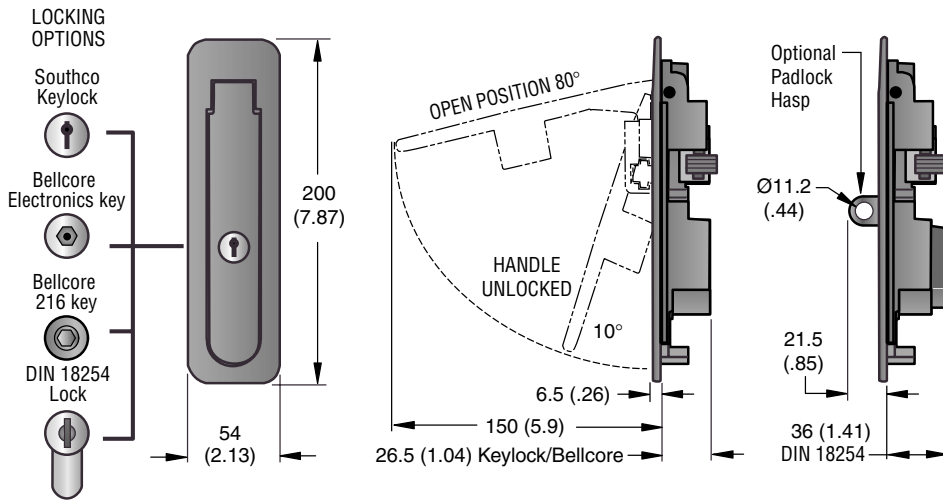
B. Actuators - Choose from 5 actuation methods

Lift Handle

- Provides key-lockable, tool-operated, and/or pad-lockable security
- Tamper resistant
- Sealed to meet NEMA 4/IP-66 water intrusion standards, and EMC applications
- Operate with a single motion
- Suitable for Left- or Right-side latching



Multi-point Latching System



SECURITY OPTIONS	PART NUMBERS					
	PANEL THICKNESS 1.5 mm (.06) - 3 mm (.12)		PANEL THICKNESS 3.0 mm (.12) - 4.5 mm (.18)		PANEL THICKNESS 24 mm (.94) - 25.5 mm (1.00)	
	NON-PADLOCK	PADLOCK	NON-PADLOCK	PADLOCK	NON-PADLOCK	PADLOCK
Southco key lock	M3-40-100-10 •	M3-40-101-10 •	M3-40-100-11 •	M3-40-101-11 •	M3-40-100-25 •	M3-40-101-25 •
DIN 18254 (Lock supplied)	M3-40-110-10	M3-40-111-10	M3-40-110-11	M3-40-111-11	M3-40-110-25	M3-40-111-25
DIN 18254 (lock not supplied)	M3-40-120-10	M3-40-121-10	M3-40-120-11	M3-40-121-11	M3-40-120-25	M3-40-121-25
Bellcore 216 Key	M3-40-160-10	M3-40-161-10	M3-40-160-11	M3-40-161-11	M3-40-160-25	M3-40-161-25
Bellcore electronics Key	M3-40-170-10	M3-40-171-10	M3-40-170-11	M3-40-171-11	M3-40-170-25	M3-40-171-25

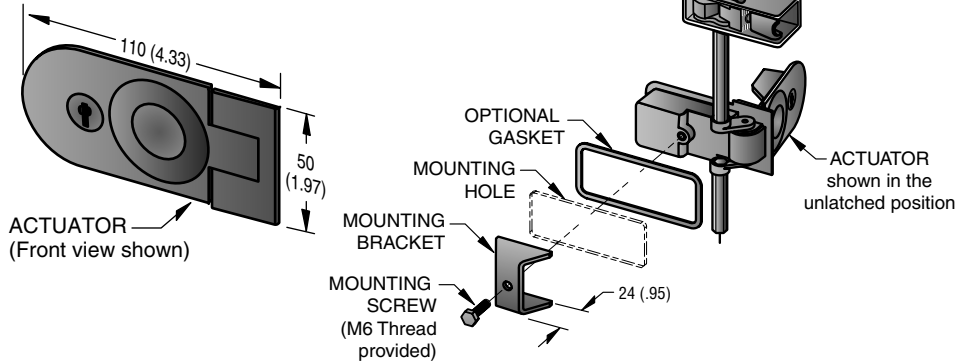
Contact Southco for information on other tool drivers, and/or panel thickness ranges. Locks are keyed alike. Different key codes are available.

millimeter (inch)
millimeter
(inch)

Dimensions without tolerances are for reference only.

Push-button Handle

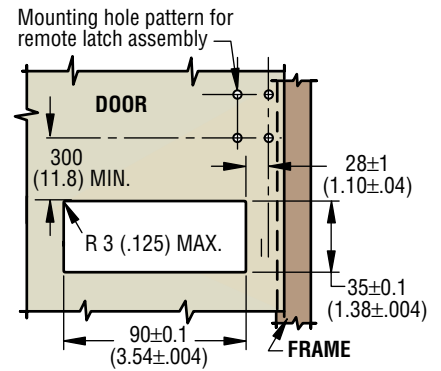
- Locking version provides security
- Non-locking version provides quick access
- Sealed to meet NEMA 4/IP-66 water intrusion standards
- Suitable for EMC applications
- Low profile



ACTUATOR	PANEL THICKNESS	PART NUMBERS
Push-Button Handle	0-5 (0-.20)	M3-90•
	5-10 (.20-.39)	M3-92
Push-Button Handle with Keylock	0-5 (0-.20)	M3-91•
	5-10 (.20-.39)	M3-93
Push-Button Handle Environmental Gasket		C5-82



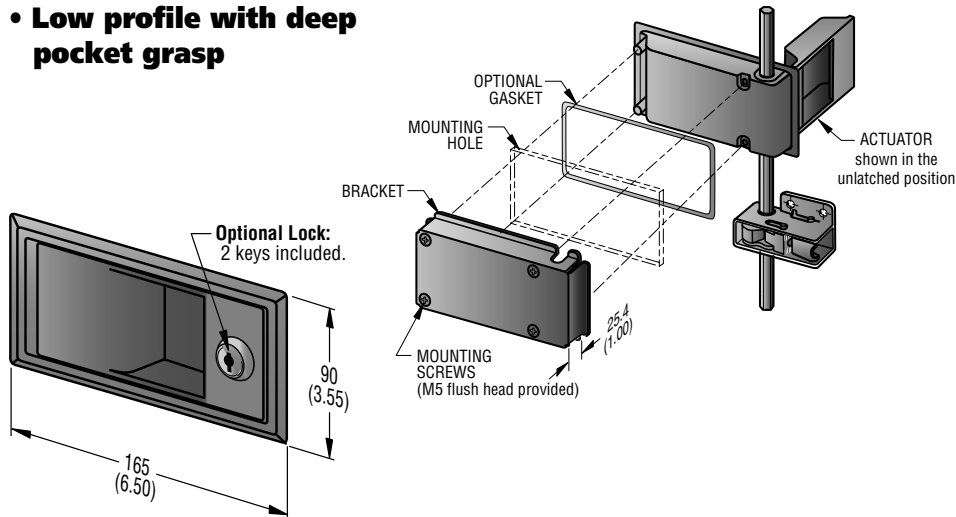
Panel Preparation



Multi-point Latching System

Paddle Handle

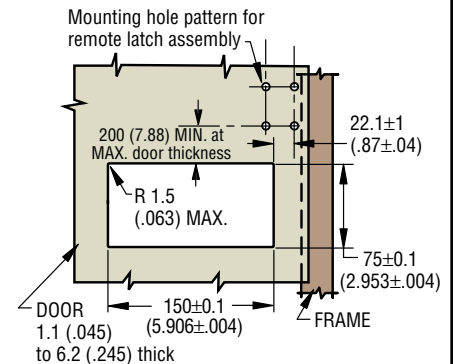
- Locking version provides security
- Non-locking version provides quick access
- Sealed to meet NEMA 4/IP-66 water intrusion standards, and EMC applications with optional gasket(s)
- Low profile with deep pocket grasp



ACTUATORS		PART NUMBERS
Paddle (includes bracket and screws)		M3-10•
Paddle with Keylock, bracket and screws		M3-17•
Paddle Gasket	Environmental	M3-12•
	EMC	M3-13•



Panel Preparation



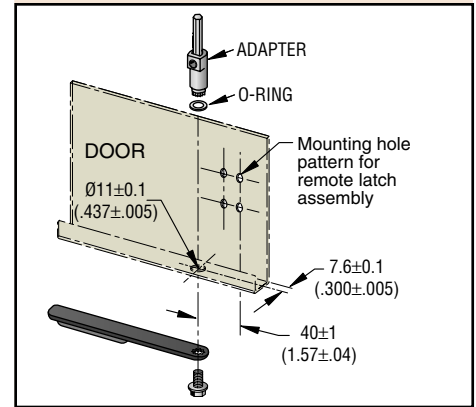
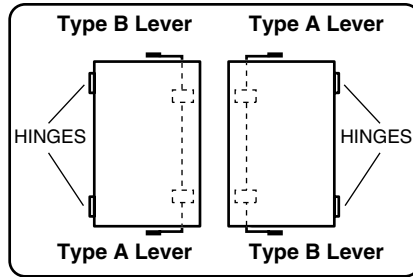
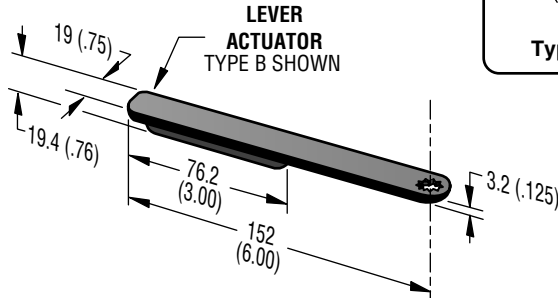
millimeter (inch)
millimeter (inch)

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B. Actuators - Continued

Door Edge Lever

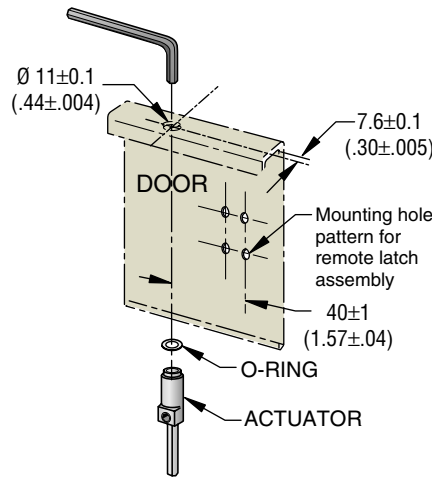
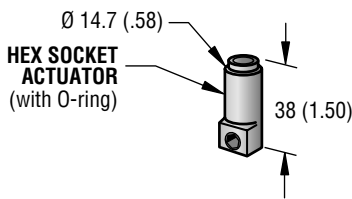
- Use at top or bottom of door; on the left or right
- Install on the door flange
- Hand-actuated for quick access



ACTUATOR	TYPE	PART NUMBERS
Lever (includes O-ring and adapter)	A	M3-31•
	B	M3-32•

Concealed 8mm Hex Socket

- Tool-operated latch provides a measure of security



ACTUATOR	PART NUMBERS
Hex socket (and O-ring seal)	M3-30•

For other tool drivers please contact Southco.

C. Hexagonal Rod

- Three standard rod lengths to accommodate most applications
- Custom rod lengths available in any length, in 1 cm increments
- If you choose to use your own rods, they should be Stainless Steel, and have no more than 1° of twist in any meter length

HEX ROD LENGTHS		PART NUMBERS
Hex Rods Length measured in centimeters	125 cm	M3-125•
	155 cm	M3-155•
	185 cm	M3-185•

NOTE: Rods are available in any length, in 1 cm increments. Order Rod part number M3-XXX, where XXX is your rod length, in centimeters

millimeter (inch)
millimeter
(inch)

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To Determine Rod Length per Actuator

For Lift and Paddle Handle	For Push-button Handle	For Door Edge Lever and 8 mm Hex Socket
<ul style="list-style-type: none"> • Use center to center distance between farthest remote latches • Add 2 cm 	<ul style="list-style-type: none"> • 2 rods are required • Use the distance from centerline of actuator to centerline of farthest latch assembly • Top and bottom rods may be different lengths 	<ul style="list-style-type: none"> • Use the distance between the door edge and the centerline of the farthest latch

To determine the 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.

Compression Latching System

Material and Finish

COMPRESSION LATCH ASSEMBLY:

HOUSING: Low carbon steel, zinc plated plus bright chromate dip. LINK: Low carbon steel, zinc plated plus bright chromate dip. SETSCREW, NUT and SCREW: Low carbon steel, zinc plated with chromate dip.

LOCKWASHER: Spring steel, zinc plated with chromate dip.

CRANK, PAWL SUPPORT and PAWL: Die-cast zinc with a chemical protective film.

PINS(3): Low carbon steel, zinc plated with bright chromate dip.

KEEPER: Low carbon steel, zinc plate, chromate plus sealer.

ROD: Stainless steel, natural.

LIFT HANDLE ACTUATOR:

HOUSING, HANDLE and MOUNTING BRACKET: Die-cast zinc, black powder coated, with silicone and urethane gaskets. LOCK PAWL and SLIDE: Die cast zinc, organic coating.

SCREWS: Steel, zinc plated. PIVOT, PIVOT SHELLS, PAWL SPRINGS, KICKOUT SPRING, CRANK, CRANK LAMINATE, CRANK RIVET and CRANK PIN: Stainless steel, passivated.

O-RINGS: EPDM, Black. LOCK PLUG: Die cast zinc and brass, black powder coated.

CAGE: Polyetherimide, black.

DIN LOCK: Brass, dull nickel plate.

OPTIONAL PADLOCK HASP: Stainless Steel, resin impregnated.

PADDLE HANDLE ACTUATOR:

PADDLE and CUP: Die-cast zinc, black powder coated. BRACKET: Low carbon steel, zinc plated plus chromate dip. SCREWS: Steel, zinc plated plus chromate dip. BUSHING: Low carbon steel, zinc plated plus chromate dip. O-RING: Buna-N rubber, natural.

PUSH-BUTTON HANDLE ACTUATOR:

HOUSING, HANDLE and BUTTON: Die-cast zinc, black powder coated. ROD DRIVERS: Die-cast zinc, chemical protective film. SPRING: Stainless steel, passivated. ROLL PIN: Stainless steel, passivated.

MOUNTING BRACKET and SCREW: Steel, zinc plated with sealed chromate. LOCK PLUG: Die cast zinc and brass, black powder coated. DUST and MOISTURE GASKET: Neoprene, black.

DOOR EDGE LEVER and

HEX SOCKET ACTUATOR:

ACTUATORS: Die-cast zinc with chemical protective film. SETSCREW: Steel, zinc plated plus chromate dip. O-RING: Buna-N rubber, natural.

Product Strength Guidelines

(To assist in your product selection; samples are available for your evaluation.)

COMPRESSION LATCH ASSEMBLY:

Maximum static load: 890N (200 lbs.)
 Average ultimate load: 1335N (300 lbs.)

NOTE: do not exceed 20 (.79) grip range with pawl reversed.

millimeter (inch)
 millimeter
 (inch)

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