



51E Solenoid Operated Deadlatch

Product Model Information

Key	Prison Paracentric
Door	Swinging
Security	Maximum

Specify Keying as Follows:

52	Keyed 1 Side
56	Keyed 2 Sides

Description

Series 51E Deadlatches are lever tumbler, solenoid operated locks for swinging doors.

Applications

51E Deadlatches are designed for door jamb installation, and provide maximum security for heavily used cell, corridor, or entrance doors. They provide the convenience of slam-locking with remote, electrical unlocking.

Operations

- Standard (1): When connected to a momentary-contact switch, the latchbolt retracts when the solenoid is energized. Once retracted, the latchbolt is held mechanically retracted until the door is opened. The latchbolt extends when the door is open.
- Standard (1a): When connected to a maintained-contact switch, the latchbolt retracts when the solenoid is energized. Once retracted, it is held electrically retracted for an extended period of time. The latchbolt extends only when the solenoid is de-energized.
- No-notch (2): Latchbolt extends when the switch is selected to lock (no-notch feature see optional features)



Standard Compliances

All 51E Series models are UL1034 listed as Burglary-Resistant Mechanisms,

and UL10B listed as Fire Door Accessories to a three-hour rating.

Standard Features

- **Solenoid voltage** - 120VAC
- **Two piece plug connector** - Simplifies wiring.
- **Instant solenoid operation** - Dependable, continuous-duty solenoid.
- **Automatic deadlocking** - When the latchbolt is extended, it automatically deadlocks on closure.
- **Full ¾" bolt throw** - Projects 0" when retracted.
- **Mechanical unlocking by key** - During power failure, or any time the lock unlocks by use of prison paracentric key. Latchbolt remains retracted until relocked by key.
- **Indication switch** - A lock status indication switch which monitors the extension of the latch bolt and the deadlocked condition is included.
- **Rugged construction** - Case and cover are 7 gauge steel.
- **Tumbler Options** - Choice of five or six tumbler models.
- **Solid steel latchbolt** - Latchbolt is galvanized steel, concealed pins resist sawing.
- **Deadlock actuator** - Roller type, galvanized steel, adjustable for variations in door-to-jamb clearance.
- **Finish** - Standard is USP

Optional Features

- Solenoid voltage - 220VAC
- Bolt projection - Standard 0" when retracted. ¾" throw. Consult factory for other projections.
- No-notch feature - The holdback lever has no notch to hold the latchbolt mechanically retracted. The latchbolt extends in the locked position regardless of the position of the door.
- Interlocking - Accomplished through the control console.
- Finish - Galvanized

Specifications

- Case and cover - 7 gauge steel
- Latchbolt - solid steel with hardened steel roller pins
- Deadlock actuator - Galvanized steel, roller type
- Lever tumblers - spring temper brass, activated by heavy phosphor bronze springs.
- Key cylinder - One piece, bronze alloy with paracentric keyway.
- Bolt size - 2" x ¾"



51M Motor Operated Deadlatch

Product Model Information

Key	Prison Paracentric
Door	Swinging
Security	Maximum

Specify Keying as Follows:

52M	Keyed 1 Side
56M	Keyed 2 Sides

Description

Series 51M Deadlatches are lever tumbler, motor operated locks for swinging doors.



Applications

These jamb mounted locks provide maximum security for cell, corridor or entryway doors. They slam lock on closure, and provide staff with the safety and convenience of remote, electric unlocking. Quiet motor operation is well suited to residence areas. (Not for use on exterior doors)

Operations

When used in conjunction with a momentary contact switch, the unit unlocks when energized. The latchbolt retracts, and once retracted, it is held mechanically retracted until the door is opened. The latchbolt extends when the door is open.

Standard Compliances

51M Series Deadlatches are UL1034 listed as Burglary-Resistant Mechanisms, and UL10B listed (except 51MC models) as Fire Door Accessories to a three-hour rating.

Standard Features

- Motor voltage - 120VAC
- Two piece plug connector - Simplifies wiring.

- Quiet operation - Unlocks by smooth motor action.
- Automatic deadlocking - All models automatically deadlock on closure.
- Rugged construction - 7 gauge steel for durability.
- Indication switch - A lock status indication switch which monitors the extension of the latch bolt and the dead locked condition is included.
- Five or six tumbler models available
- Mechanical unlocking by key - In the event of power failure, or at any time, 51M Series deadlatches may be unlocked by prison paracentric key, latchbolt remains retracted until relocked by key.
- Solid steel latchbolt - Galvanized, with two hardened steel pins to resist sawing.
- Deadlocking actuator - Roller type, galvanized steel, adjustable for variations indoor to jamb clearance.
- Full ¾" bolt throw - Projects 1" when retracted.
- Finish - Standard USP, primed

Optional Features

- Motor voltage - 220VAC, 24DC
- Bolt projection - Standard 1" when retracted. ¾" bolt throw. Consult factory for other projections.
- Continuous duty function - Using a two-position, maintained contact switch, and a two position cam on the motor, the latchbolt may be held retracted for extended periods. The latchbolt extends only when the door is open and the motor is energized a second time. The latchbolt deadlocks when extended and the door is closed.
- No-notch feature - The holdback lever has no notch to hold the latchbolt mechanically retracted. This feature may be used with Continuous Duty feature, and operates in the same manner as above, except that the latchbolt extends when the motor is energized a second time regardless of the position of the door.
- Interlock switch - An interlock switch is added which prevents electrical unlocking of other doors in a system when one is unlocked.
- Finish - Galvanized

Specifications

- Case and cover - 7 gauge steel
- Latchbolt - Solid steel with hardened steel roller pins
- Deadlock actuator - Galvanized steel, roller-type
- Lever tumblers - Spring temper brass, activated by heavy phosphor-bronze springs.
- Key cylinder - One piece, bronze alloy with paracentric keyway
- Bolt size - 2" x ¾"

- Bolt throw - æ"

Electrical Characteristics

Motor(AC): Synchronous-type with brake

Ratings (120VAC): 60HZ, 1.3 amps full load

Ratings (220VAC): 60HZ, .65 amps full load

Motor (DC): Permanent magnet gearmotor

Ratings: 24DC, 2.2 amps at full load

Indication Switches: SPDT, UL Listed, 15 amps at 125VAC or 250VAC

Specifications

Jamb Mounted Lever Tumber Electric Lock for Swing Doors



- A. 50 series jamb mounted maximum security lock set shall include:
Lock, plug connector, five lever tumbler number 10 series lock for mechanical release by paracentric key. Furnish solenoid operated locks for exterior doors and motor operated locks for interior doors.
- B. Lock functions:
 1. 50EL Lock - Solenoid operated with mechanical latchback feature, deadlock indication switch.
 2. 50ML Lock - Motor operated with mechanical latchback feature, deadlock indication switch.
 3. 50MCL Lock - Two-position motor operation with electric holdback and deadlock indication switch.
 4. Key cylinder location: Specify model 52 for key cylinder cover side and 56 for key cylinder both sides.
- C. Material and size:
 1. Lock size - 13.3 high x 9.0 wide x 3.125 inches deep.
 2. Case: Formed of 7 gauge HRS.
 3. Cover: 10 gauge HRS.
 4. Latchbolt: .5 inch thick steel with hardened inserts, galvanized.
 5. Rollerbolt: Case hardened and galvanized.
 6. Motor: UL Listed permanently lubricated gear-motor; thermally protected with positive brake. [24 VDC optional]
- D. For fire labeled door assemblies provide locks which comply with UL-10B - 3 Hour Rating. (Some locks may not qualify for fire door rating due to specific functions, consult factory.) Locks shall comply with UL-1034 Burglary Resistant Electric Locking Mechanisms.

- E. Design lock mechanism to operate a minimum of one million cycles without failure.
- F. Finish: Galvanize case and cover.

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50HBM Motor Operated Deadlatch

Product Model Information

Key	Prison Paracentric
Door	Swinging
Security	Maximum

Specify Keying as Follows:

51	Keyed Case Side
52	Keyed Cover Side
56	Keyed 2 Sides

Description

Series 50HBM Deadlatches are lever tumbler, motor operated locks for sliding doors, utilizing hookbolts.

Applications

Jamb mounted 50HBM locks should be specified for maximum security cell, corridor, sallyport, or entrance/egress sliding doors. For installation within a lock pocket, or full height column. They are designed to be part of an electrical locking/unlocking system to provide institutional staff with maximum safety and flexibility of operation. (Not for use on exterior doors)

Operations

All 50HBM locks are operated by electric motor. The choice of three motor operations provides a variety of functions:

Full-Rotation Motor (50HBM)

With latchback (1): Unlocks when the motor is energized by a momentary contact switch. Once unlocked, the hookbolt is held mechanically in the raised position until the door is opened. It then returns to normal, lowered position.

Two-Position Motor (50HBMC)

Without latchback (2): Same as above, except that the hookbolt is raised and lowered as the motor runs. A door starter should be installed in the track housing to push the door open when the motor reaches the unlocking point.

Testing

50HBM locks have been tested in Folger Adam facilities for over one million operations

Standard Features

- Motor voltage - 120VAC
- External mounting - Locks install without cover plate removal. External slotted mounting holes simplify installation, and allow for variations in door gap by permitting lateral movement.
- Two-piece plug connector - Simplifies wiring at time of installation, and allows pre-wiring at the lock pocket.
- Superior durability - Working parts are stainless steel and designed for maximum strength, and corrosion resistance.
- Hardened hookbolt and deadlock actuator - Galvanized for corrosion resistance.
- Motor operation - A choice of three operations is available.
- Choice of five or six lever tumbler models.
- Mechanical unlocking by key - Once unlocked by key, the hookbolt remains in that position until relocked by key (Models without latchback feature). Key is removable in the unlocked position.
- Indication switch - The indication switch monitors the deadlock lever a for indicating a deadlocked hookbolt.

Optional Features

- Motor voltage - 24DC
- Lock bolt keepers - Select 50H-4DB with dust box

Specifications

- Case - 7 and 10 gauge steel
- Cover - 10 gauge HRS
- Hookbolt - .5 inch steel, case hardened and galvanized
- Deadlock actuator - .5 inch square CRS, hardened and galvanized
- Deadlock and Operator levers - Stainless steel
- Springs - Stainless steel
- Motor - Synchronous-type gearmotor with break

Electrical Characteristics

Motor (AC): Synchronous-type gearmotor with break

Ratings: 120VAC, 60HZ, 1.3 amps at full load

Motor (DC): Permanent magnet gearmotor

Ratings: 24DC, 2.2 amps at full load

Ind Switch: SPDT, UL Listed

Deadlock: 15 amps 125 or 250 VAC

Auxiliary: 10 amps 125 or 250 VAC

Specifications

Jamb Mounted Lever Tumber Electric Lock for Sliding Doors

- A. 50HBM series jamb mounted maximum security lock set shall include: Lock, plug connector, keeper, five lever tumbler number 10 series lock for mechanical release by key.
- B. Lock functions:
 1. 50HBM-1-01 Lock - Motor operated, with mechanical latchback feature, and deadlock indication switch.
 2. 50HBMC-1-04 Lock - Two-position motor operation, with electric holdback, and deadlock indication switch.
 3. Key cylinder location: Specify 52HBM for key cylinder cover side only, 56HBM for key cylinder both sides.
- C. Material and size:
 1. Lock size - 14.5 high x 8.5 wide x 3.375 inches deep.
 2. Case: Formed of 7 and 10 gauge HRS.
 3. Cover: 10 gauge HRS.
 4. Hook-bolt: .5 inch steel, case hardened and galvanized.
 5. Deadlock actuator: .5 inch square case hardened and galvanized.
 6. Deadlock and operating levers: Stainless steel type 304.
 7. Motor cam and pull link: Stainless steel type 304.
 8. Springs: Stainless steel type 304.
 9. Motor: UL Listed permanently lubricated gear-motor; thermally protected with positive brake. [24 VDC optional]
- D. Design lock mechanism to operate a minimum of one million cycles without failure.
- E. Finish: Galvanize case and cover.



120E Solenoid Operated Deadlatch

Product Model Information

KeyMogul
DoorSwinging
SecurityMaximum / Medium

Specify Keying as Follows:

121 Keyed Case Side
122 Keyed Cover Side
126 Keyed Both Sides

Description

Series 120E Deadlatches are pin tumbler, solenoid-operated locks for swinging doors.

Applications

Series 120E Deadlatches are suited for virtually any medium or maximum security application including cell doors, corridor or entrance doors. Sensitive administration areas of an institution may also warrant 120 Series Locks. These jamb-mounted locks are designed to be part of an electrical system with remote operation and monitoring to provide supervisory personnel with optimum protection and flexibility.



Operations

All 50HBM locks are operated by electric motor. The choice of three motor operations provides a variety of functions:

Standard (1): Series 120E locks unlock when the solenoid is energized by a momentary-contact switch. Once unlocked, the latchbolt is held mechanically retracted until the door is opened. It then extends automatically. Two additional variations on the operation are offered in 120E Series locks.

Without latchback (1a), 04,05: Once unlocked, the latchbolt is held retracted as long as the solenoid is energized. A maintained-contact switch

may be used to keep the latchbolt retracted for an extended period of time.

Electric Holdback (1b), 07: Once unlocked, the latchbolt is held electrically retracted until the door is opened. It then extends automatically. This operation requires an additional control wire, and may be cancelled by adding an additional control switch.

Knob release(2): 120E Deadlatches may be specified with knob release on one side, where the knob is always active. Knob may be mounted on the case side, or the cover side.

Key holdback (3): When unlocked by key, the deadlatch remains retracted until relocked by turning the key in the opposite direction. Available one side only. Note: Key cylinders for locks with key holdback feature must be installed at the factory.

Testing

120E Series Deadlatches and Maxi-Mogul Key Cylinders have been tested to 1,000,000 operations.

Standard Compliance

All series 120E locks are UL1034: Burglary-Resistant Mechanisms, and some are UL10B listed as Fire Door Accessories to a three-hour rating. Key holdback models are not UL10B listed. Maxi-Mogul Key Cylinders meet UL437 requirements.

Standard Features

- **Solenoid voltage** -120 VAC
- **Superior durability** - Working parts of stainless steel afford greater strength, and corrossions resistance.
- **Standard lock size** - All models use the same size case, cover and mounting holes for simplified installation and frame preparation.
- **External two** -piece plug connector- All models install without cover removal. Simple plug-in connection to field wiring.
- **External mounting holes** - Ease installation, and the need for cover removal.
- **Standard lock** - Mounts behind frame and does not require a faceplate.
- **1" throw latchbolt** - Offers greater security. Each has inserts to resist sawing. When latchbolt is engaged in strike, bevel is concealed to prevent picking.
- **Mechanical unlocking by key** - Specify Folger Adam Mogul cylinders, Maxi-Mogul high security cylinders, or builders hardware cylinders to match other locks.
- **Investment cast stainless steel strike** - Furnished with four Torx

tamper-resistant screws.

- **Continuous-duty solenoid** - For instant action.
- **Finish** - USP primed for paint.

Optional Features

- **Motor voltage** - 24DC
- **Faceplate** - For applications requiring a finished faceplate, specify US4, US10, US10B, US32, or US32D
- **Indication/auxiliary switches** - An indication switch monitors the deadlock lever indicating a deadlocked latchbolt. The auxiliary switch monitors the latchbolt for extended or retracted position.
- **Local electric key (LEK)**- A unique function which uses two types of keys. One key turns in one direction only, and operates the lock electrically. The supervisory key turns in both directions to operate the lock electrically or mechanically. The electric operation may be cancelled from a central console or control point at any time via a three-position switch. For applications where inmates carry their own keys, but supervision is necessary. The Maxi-Mogul Key Cylinder is uniquely suited for this high frequency operation, shown by cycle test of 1,000,000 operations.
- **Galvanized case and cover** - For exterior applications.
- **Key Cylinder Extension** - When the lock is keyed on the stop side of the jamb, an extension eliminates the need for a special, recessed frame pocket.
- **Optional solenoid voltage** - 230 VAC, 60Hz.

Specifications

- Case and cover: 10 gauge steel
- Latchbolt: Investment cast stainless steel with hardened inserts, 1" throw.
- Deadlock lever: Stainless steel, adjustable for door gap variations.
- Bolt opening does not allow access to mechanism.
- Roller Bolt: Investment cast stainless steel with stainless steel roller.
- Operating lever: Stainless steel to operate with solenoid.
- Strike: Investment cast stainless steel, attached with screws in two directions.
- Solenoid: 120 VAC continuous duty with stainless steel guides, 230VAC optional.
- Springs: Stainless Steel.

Electrical Characteristics

Solenoid Voltages (120 VAC): 13 amps inrush - .75 amps seated
Solenoid Voltages (240 VAC): 6.6 amps inrush - .38 amps seated
Switches: SPDT, UL Listed, 15 amps @ 125 or 250 VAC

Model Number	Operation	Latchback		Operational Switches			Indication Switches		LEK Available YES/NO
		With	Without	Holdback	Relock	Int.	Deadlatch	Aux	
120E-1-01	Standard (1)	X					X		Yes
120E-1-02	Standard (1)	X					X	X	Yes
120E-1-04	Standard (1a)		X				X		Yes
120E-1-05	Standard (1a)		X				X	X	Yes
120E-1-07	Standard (1b)		X	X			X		Yes
120E-2-01	Knob Release (2)	X					X		Yes
120E-2-02	Knob Release (2)	X					X	X	Yes
120E-2-04	Knob Release (2a)		X				X		Yes
120E-2-05	Knob Release (2a)		X				X	X	Yes
120E-2-07	Knob Release (2b)		X	X			X		Yes
120E-3-01	Key Holdback(3)	X					X		No
120E-3-02	Key Holdback(3)	X					X	X	No
120E-3-04	Key Holdback(3a)		X				X		No
120E-3-05	Key Holdback(3a)		X				X	X	No
120E-3-07	Key Holdback(3b)		X	X			X		No

Specifications

Jamb Mounted Pin Tumber Electric Lock for Swinging Doors

- A. 120 series jamb mounted medium security electric lock set shall include: Lock, plug connector, strike, and Maxi-mogul cylinder for mechanical release.
- B. Lock Functions:
 1. 120E-1-01 Lock - Solenoid operated deadlatch with latchback and deadlock indication switch.
 2. 120M-1-01 Lock - Motor operated deadlatch with latchback and deadlock indication switch.
 3. 120MC-1-04 Lock - Two position motor operated deadlatch with holdback and deadlock indication switch.
 4. 120ED-3-01 Lock - Solenoid retracted deadbolt, relocked only by key, with indication switch.
- C. Series of Operation:
 1. Remote electrical control of operation with local mechanical operation by key cylinder.
 2. Remote electrical control of operation with local mechanical

operation by key cylinder one side and knob operation other side.

3. LEK - Provide local electric key option for operational modes 1 and 2. Key shall electrically operate the lock when selected at the control console.

D. MATERIAL

1. Case and Cover: 10 Gauge steel
2. Bolt: Investment cast stainless steel with hardened inserts, 1 inch throw deadlatch or deadbolt.
3. Bolt opening in case shall not allow access to internal mechanism.
4. Deadlock Lever: Stainless steel, adjustable for variations in door gap.
5. Roller Bolt: Investment cast stainless steel with stainless steel roller.
6. Operating Lever: Stainless steel to operate with solenoid, motor, deadlatch or deadbolt.
7. Strike: Investment cast stainless steel attached with screws in two locations.
8. Solenoid: 115VAC continuous duty with stainless steel guides.
9. 115VAC Permanently lubricated fractional HP with thermal overload and positive brake. UL listed.
10. Springs: Stainless steel.
11. Cylinder: Maxi Mogul cylinder - refer to 2.10

E. PERFORMANCE

1. Locks shall comply with UL 1034 Burglary Resistant Electric Locking Mechanisms.
2. Deadlatch model -1, shall comply with UL 10B Fire Tests of Door Assemblies, Class A - 3 Hour Rating. (Some models may not qualify for fire rating due to specific functions, consult factory.)
3. Cylinder shall comply with UL 437 Key Locks.
4. Design lock mechanism to operate a minimum of one million cycles with out failure.



120M Motor Operated Deadlatch

Product Model Information

KeyMogul
DoorSwinging
SecurityMaximum / Medium

Specify Keying as Follows:

121MKeyed Case Side
122MKeyed Cover Side
126MKeyed Both Sides

Description

Series 120M Deadlatches are pin tumbler, motor-operated electro-mechanical locks for swinging doors.

Applications

Series 120M Deadlatches are jamb-mounted and designed for use in medium or maximum security applications to secure cell doors, sallyports, corridors or entrance doors. The motor provides smooth, quiet operation, and positive locking. 120M locks are designed to be part of an electrical system with remote operation and monitoring. They afford flexibility and safety to institution staff. (For indoor use only.)



Operations

Standard (1): Series 120M locks unlock when the motor is energized by a momentary-contact switch. Once unlocked, the latchbolt is held mechanically retracted until the door is opened. It then extends automatically. **Knob release (2):** 120M Deadlatches may be specified with knob release on one side, where the knob is always active. Knob may be mounted on the case side, or the cover side. **Key holdback (3):** When unlocked by key, the deadlatch remains retracted until relocked by turning the key in the opposite direction. Available one side only.

Note: Key cylinders for locks with key holdback feature must be installed at

the factory.

Testing

120M Series Deadlatches and Maxi-Mogul Key Cylinders have been tested to 1,000,000 operations.

Standard Compliance

All series 120M locks are UL1034: Burglary-Resistant Mechanisms, and some are UL10B listed as Fire Door Accessories to a three-hour rating.

Key holdback models are not UL10B listed.

Maxi-Mogul Key Cylinders meet UL437 requirements.

Standard Features

- **Motor voltage** - 120 VAC
- **Superior durability** - Working parts of stainless steel afford greater strength, and corrossions resistance.
- **Standard lock size** - All models use the same size case, cover and mounting holes for simplified installation and frame preparation.
- **External two** -piece plug connector- All models install without cover removal. Simple plug-in connection to field wiring.
- **External mounting holes** - Ease installation, and elimanate the need for cover removal.
- **Standard lock** - Mounts behind frame and does not require a faceplate.
- **1" throw latchbolt** - Offers greater security. Each has inserts to resist sawing. When latchbolt is engaged in strike, bevel is concealed to prevent picking.
- **Mechanical unlocking by key** - Specify Folger Adam Mogul cylinders, Maxi-Mogul high security cylinders, or builders hardware cylinders to match other locks.
- **Investment cast stainless steel strike** - Furnished with four Torx tamper-resistant screws.
- **Fractional HP Motor** -Permanently lubricated for smooth quiet operation with thermal overload protection and a brake for accurate locking position.
- **Finish** - USP primed for paint.

Optional Features

- **Faceplate** - For applications requiring a finished faceplate, specify US4, US10, US10B, US32, or US32D
- **Indication/auxiliary switches** - An indication switch monitors the deadlock lever indicating a deadlocked latchbolt. The auxiliary switch monitors the latchbolt for extended or retracted postion.

- **Local electric key (LEK)** - A unique function which uses two types of keys. One key turns in one direction only, and operates the lock electrically. The supervisory key turns in both directions to operate the lock electrically or mechanically. The electric operation may be cancelled from a central console or control point at any time via a three-position switch. For applications where inmates carry their own keys, but supervision is necessary. The Maxi-Mogul Key Cylinder is uniquely suited for this high frequency operation, shown by cycle test of 1,000,000 operations.
- **Galvanized case and cover** - For exterior applications.
- **Key Cylinder Extension** - When the lock is keyed on the stop side of the jamb, an extension eliminates the need for a special, recessed frame pocket.
- **Optional solenoid voltage** - 24 VAC or 24 VDC.

Specifications

- **Case and cover** - 10 gauge steel
- **Latchbolt** - Investment cast stainless steel with hardened inserts, 1" throw.
- **Deadlock lever** - Stainless steel, adjustable for door gap variations.
- **Bolt opening** - does not allow access to mechanism.
- **Roller Bolt** - Investment cast stainless steel with stainless steel roller.
- **Operating lever** - Stainless steel to operate with solenoid.
- **Strike** - Investment cast stainless steel, attached with screws in two directions.
- **Motor** - 120 VAC continuous duty, 24 VAC or 24 VDC optional, synchronous-type gearmotor.
- **Springs** - Stainless Steel.

Electrical Characteristics

AC Motors: Synchronous-type gearmotor with break.

Ratings 120 VAC: 60 Hz, 1.3 amps at full load.

Ratings 240 VAC: 60 Hz, 6.1 amps at full load.

DC Motors: Permanent-magnet gearmotor.

Ratings: 24 VDC, 2.2 amps at full load.

Switches: SPDT, UL Listed, 15 amps @ 125 or 250 VAC

Model Number	Operation	Latchback		Indication Switches		LEK Available YES/NO
		With	Without	Deadlatch	Aux	
120M-1-01	Standard(1)	X		X		Yes
120M-1-02	Standard(1)	X		X	X	Yes

120M-2-01	Knob Rel. (2)	X		X		Yes
120M-2-02	Knob Rel. (2)	X		X	X	Yes
120M-3-01	Key Holdback(3)	X		X		No
120M-3-02	Key Holdback(3)	X		X	X	No

Specifications

Jamb Mounted Pin Tumber Electric Lock for Swinging Doors

- A. 120 series jamb mounted medium security electric lock set shall include: Lock, plug connector, strike, and Maxi-mogul cylinder for mechanical release.
- B. Lock Functions:
1. 120E-1-01 Lock - Solenoid operated deadlatch with latchback and deadlock indication switch.
 2. 120M-1-01 Lock - Motor operated deadlatch with latchback and deadlock indication switch.
 3. 120MC-1-04 Lock - Two position motor operated deadlatch with holdback and deadlock indication switch.
 4. 120ED-3-01 Lock - Solenoid retracted deadbolt, relocked only by key, with indication switch.
- C. Series of Operation:
1. Remote electrical control of operation with local mechanical operation by key cylinder.
 2. Remote electrical control of operation with local mechanical operation by key cylinder one side and knob operation other side.
 3. LEK - Provide local electric key option for operational modes 1 and 2. Key shall electrically operate the lock when selected at the control console.
- D. MATERIAL
1. Case and Cover: 10 Gauge steel
 2. Bolt: Investment cast stainless steel with hardened inserts, 1 inch throw deadlatch or deadbolt.
 3. Bolt opening in case shall not allow access to internal mechanism.
 4. Deadlock Lever: Stainless steel, adjustable for variations in door gap.
 5. Roller Bolt: Investment cast stainless steel with stainless steel roller.
 6. Operating Lever: Stainless steel to operate with solenoid, motor, deadlatch or deadbolt.
 7. Strike: Investment cast stainless steel attached with screws

in two locations.

8. Solenoid: 115VAC continuous duty with stainless steel guides.
9. Motor: 115VAC Permanently lubricated fractional HP with thermal overload and positive brake. UL listed.
10. 10. Springs: Stainless steel.
11. Cylinder: Maxi Mogul cylinder - refer to 2.10

E. PERFORMANCE

1. Locks shall comply with UL 1034 Burglary Resistant Electric Locking Mechanisms.
2. Deadlatch model -1, shall comply with UL 10B Fire Tests of Door Assemblies, Class A - 3 Hour Rating. (Some models may not qualify for fire rating due to specific functions, consult factory.)
3. Cylinder shall comply with UL 437 Key Locks.
4. Design lock mechanism to operate a minimum of one million cycles with out failure.

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120MC Motor Operated Deadlatch

Product Model Information

KeyMogul
DoorSwinging
SecurityMaximum / Medium

Specify Keying as Follows:

121MCKeyed Case Side
122MCKeyed Cover Side
126MCKeyed Both Sides

Description

Series 120MC Deadlatches are pin tumbler, motor-operated locks utilizing a two-position motor cam.

Applications

Series 120MC Deadlatches are suitable for use in medium or maximum security situations to lock cell, corridor or entrance doors. Especially appropriate for areas requiring the latchbolt to remain retracted until it is selected to lock again.

Like all Series 120 locks, the jamb-mounted 120MC Deadlatch is designed for use as part of an electrical system with remote operation and monitoring. (For indoor use only.)



Operations

Standard (1): Unlocks when the motor is energized by either a two or three position, maintained contact switch, or a three position momentary contact switch. Once unlocked, the latchbolt remains retracted until it is selected to lock. Opening and closing the door has no effect on the lock when selected to unlock. The latchbolt extends only when the door is opened and the motor is selected to lock. If the door is closed, it must be opened to extend the latchbolt. Two additional variations on this feature are offered:

Without latchback (1a): Once unlocked, the latchbolt is held retracted only

as long as the motor remains in the unlocked position. A maintained-contact switch may be used to keep the latchbolt retracted for an extended period of time.

Relock (1b) 09: Once unlocked, the latchbolt is held retracted until the door is opened. It then extends automatically. This operation requires an additional control wire, and may be cancelled by adding an additional control switch. A momentary-contact switch is used for unlocking, and the auxiliary switch is used for relocking. When the door is opened, the auxiliary switch repositions the motor to a locked position so that the lock will deadlatch on closure.

Knob release(2): 120MC Deadlatches may be specified with knob release on one side, where the knob is always active. Knob may be mounted on the case side, or the cover side.

Key holdback (3): When unlocked by key, the deadlatch remains retracted until relocked by turning the key in the opposite direction. Available one side only.

Note: Key cylinders for locks with key holdback feature must be installed at the factory.

Testing

120MC Series Deadlatches and Maxi-Mogul Key Cylinders have been tested to 1,000,000 operations.

Standard Compliance

All series 120MC locks are UL1034: Burglary-Resistant Mechanisms, and some are UL10B listed as Fire Door Accessories to a three-hour rating. Key holdback models are not UL10B listed.

Maxi-Mogul Key Cylinders meet UL437 requirements.

Standard Features

- **Motor voltage** - 120 VAC
- **Superior durability** - Working parts of stainless steel afford greater strength, and corrossions resistance.
- **Standard lock size** - All models use the same size case, cover and mounting holes for simplified installation and frame preparation.
- **External two** -piece plug connector- All models install without cover removal. Simple plug-in connection to field wiring.
- **External mounting holes** - Ease installation, and elimanate the need for cover removal.
- **Standard lock** - Mounts behind frame and does not require a faceplate.

- **1" throw latchbolt** - Offers greater security. Each has inserts to resist sawing. When latchbolt is engaged in strike, bevel is concealed to prevent picking.
- **Mechanical unlocking by key** - Specify Folger Adam Mogul cylinders, Maxi-Mogul high security cylinders, or builders hardware cylinders to match other locks.
- **Investment cast stainless steel strike** - Furnished with four Torx tamper-resistant screws.
- **Fractional HP Motor** - Permanently lubricated for smooth quiet operation with thermal overload protection and a brake for accurate locking position.
- **Finish** - USP primed for paint.

Optional Features

- **Faceplate** - For applications requiring a finished faceplate, specify US4, US10, US10B, US32, or US32D
- **Indication/auxiliary switches** - An indication switch monitors the deadlock lever indicating a deadlocked latchbolt. The auxiliary switch monitors the latchbolt for extended or retracted position.
- **Local electric key (LEK)** - A unique function which uses two types of keys. One key turns in one direction only, and operates the lock electrically. The supervisory key turns in both directions to operate the lock electrically or mechanically. The electric operation may be cancelled from a central console or control point at any time via a three-position switch. For applications where inmates carry their own keys, but supervision is necessary. The Maxi-Mogul Key Cylinder is uniquely suited for this high frequency operation, shown by cycle test of 1,000,000 operations.
- **Galvanized case and cover** - For exterior applications.
- **Key Cylinder Extension** - When the lock is keyed on the stop side of the jamb, an extension eliminates the need for a special, recessed frame pocket.
- **Optional solenoid voltage** - 24 VAC or 24 VDC.

Specifications

- **Case and cover** - 10 gauge steel
- **Latchbolt** - Investment cast stainless steel with hardened inserts, 1" throw.
- **Deadlock lever** - Stainless steel, adjustable for door gap variations.
- **Bolt opening** - does not allow access to mechanism.
- **Roller Bolt** - Investment cast stainless steel with stainless steel roller.
- **Operating lever** - Stainless steel to operate with solenoid.
- **Strike** - Investment cast stainless steel, attached with screws in two

directions.

- **Motor** - 120 VAC continuous duty, 24 VAC or 24 VDC optional, synchronous-type gearmotor.
- **Springs** - Stainless Steel.

Electrical Characteristics

AC Motors: Synchronous-type gearmotor with break.

Ratings 120 VAC: 60 Hz, 1.3 amps at full load.

Ratings 240 VAC: 60 Hz, 6.1 amps at full load.

DC Motors: Permanent-magnet gearmotor.

Ratings: 24 VDC, 2.2 amps at full load.

Switches: SPDT, UL Listed, 15 amps @ 125 or 250 VAC

Model Number	Operation	Latchback		Relock Switch	Indication Switches		LEK Available YES/NO
		With	Without		Deadlatch	Aux	
120MC-1-01	Standard(1)	X			X		Yes
120MC-1-02	Standard(1)	X			X	X	Yes
120MC-1-04	Standard(1a)		X		X		Yes
120MC-1-05	Standard(1a)		X		X	X	Yes
120MC-1-09	Standard(1b)		X	X	X		Yes
120MC-2-01	Knob Release (2)	X			X		Yes
120MC-2-02	Knob Release (2)	X			X	X	Yes
120MC-2-04	Knob Release (2)		X		X		Yes
120MC-2-05	Knob Release (2)		X		X	X	Yes
120MC-2-09	Knob Release (2)		X	X	X		Yes
120MC-3-01	Key Holdback (3)	X			X		No
120MC-3-02	Key Holdback (3)	X			X	X	No
120MC-3-04	Key Holdback (3)		X		X		No
120MC-3-05	Key Holdback (3)		X		X	X	No
120MC-3-09	Key Holdback (3)		X	X	X		No

Specifications

Jamb Mounted Pin Tumber Electric Lock for Swinging Doors

- A. 120 series jamb mounted medium security electric lock set shall include: Lock, plug connector, strike, and Maxi-mogul cylinder for mechanical release.
- B. Lock Functions:
 - 1. 120E-1-01 Lock - Solenoid operated deadlatch with latchback and deadlock indication switch.
 - 2. 120M-1-01 Lock - Motor operated deadlatch with latchback and deadlock indication switch.
 - 3. 120MC-1-04 Lock - Two position motor operated deadlatch with holdback and deadlock indication switch.
 - 4. 120ED-3-01 Lock - Solenoid retracted deadbolt, relocked only by key, with indication switch.
- C. Series of Operation:
 - 1. Remote electrical control of operation with local mechanical operation by key cylinder.
 - 2. Remote electrical control of operation with local mechanical operation by key cylinder one side and knob operation other side.
 - 3. LEK - Provide local electric key option for operational modes 1 and 2. Key shall electrically operate the lock when selected at the control console.
- D. MATERIAL
 - 1. Case and Cover: 10 Gauge steel
 - 2. Bolt: Investment cast stainless steel with hardened inserts, 1 inch throw deadlatch or deadbolt.
 - 3. Bolt opening in case shall not allow access to internal mechanism.
 - 4. Deadlock Lever: Stainless steel, adjustable for variations in door gap.
 - 5. Roller Bolt: Investment cast stainless steel with stainless steel roller.
 - 6. Operating Lever: Stainless steel to operate with solenoid, motor, deadlatch or deadbolt.
 - 7. Strike: Investment cast stainless steel attached with screws in two locations.
 - 8. Solenoid: 115VAC continuous duty with stainless steel guides.
 - 9. Motor: 115VAC Permanently lubricated fractional HP with thermal overload and positive brake. UL listed.
 - 10. 10. Springs: Stainless steel.
 - 11. Cylinder: Maxi Mogul cylinder - refer to 2.10
- E. PERFORMANCE
 - 1. Locks shall comply with UL 1034 Burglary Resistant Electric



Locking Mechanisms.

2. Deadlatch model -1, shall comply with UL 10B Fire Tests of Door Assemblies, Class A - 3 Hour Rating. (Some models may not qualify for fire rating due to specific functions, consult factory.)
3. Cylinder shall comply with UL 437 Key Locks.
4. Design lock mechanism to operate a minimum of one million cycles with out failure.

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· [home](#) > [products](#) > [electro-mechanical locks](#) > [NS400E series](#)

NS400E Series

Solenoid Operated Electro-Mechanical Deadlatches

Product Model Information

KeyBuilders Hardware
DoorSwinging
SecurityMedium / Minimum

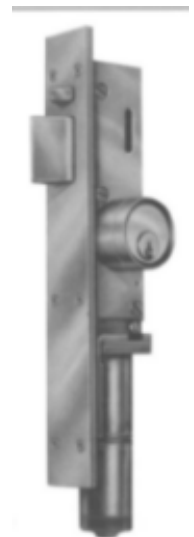
Specify Keying as Follows:

NS402EKeyed 1 Side
NS402EFSKeyed 1 Side
NS406EKeyed 2 Sides
NS406EFSKeyed 2 Sides

Note: See optional features for factory or customer-supplied key cylinders. Models NS400E and NS400EFS, no cylinders are supplied

Description

NS400E Series Deadlatches are pin tumbler, solenoid-operated locks for swinging doors. Specify builders' hardware cylinders and keying.



Applications

Specify for minimum/medium security swinging cell, corridor or administration areas of institutions with 2" wide hollow metal jamb construction.

Operations

A remote switch is used to control the lock electrically, or it may be operated mechanically by builders' hardware cylinder. These locks offer the convenience of remote, electric unlocking or locking and automatic

deadlocking when the door is closed.

Fail-Safe Models

Unlock when solenoid is de-energized (1): by switch or power failure, and the latch remains retracted while the door is open. Upon closure, with power restored, the latchbolt extends and deadlocks.

Non-Fail-Safe Models

Unlock when solenoid is energized (1): by a momentary contact switch. Latchbolt remains retracted mechanically until the door is opened. Upon closure, the latchbolt extends automatically. (Mechanical Latchback)

Unlock when solenoid is energized (2): by a momentary-contact switch. Latchbolt is electrically held retracted only as long as control switch is tripped. (No mechanical latchback) The door must be opened while control switch is in the unlocked position. Upon closure, the latchbolt deadlocks automatically. Continuous duty feature is available to hold bolt retracted for extended periods. (No latchback, continuous-duty power modulator)

Unlock when solenoid is energized (3): by a momentary contact switch. Latchbolt is held electrically retracted until door is opened, then it extends automatically. (Electric holdback)

Standard Compliance

All deadlatch models UL1034: Burglary-Resistant Electric deadbolts.
Non-Fail-Safe models, UL10B: Electrically controlled single point locks or latches, three-hour rating, A label.

Standard Features

- **Instant solenoid actuation** - Heavy duty solenoid provides fast, audible latchbolt operation.
- **Fail-Safe model operation** - Solenoid holds latchbolt extended and deadlocked.
- **Compact size** - Designed for hollow metal frames with standard 2" face.
- **Power modulator** - Allows solenoid models to operate on either 24VAC or 24VDC, reduces power consumption. Optional on models with no latchback. UL listed and patented (Pat. No. 4,797,779).
- **Two-piece, twelve-pin plug connector** - Simplifies wiring, allows pre-wiring of the lock opening.
- **Heavy duty lock mechanism** - Designed with heavy duty, corrosion-resistant working parts tested over 1,000,000 cycles.
- **Stainless steel strike** - Angled lip-type, furnished with Torx tamper-resistant screws. Requires less force to close and lock the door.
- **Mechanical latchback (Model NS400E-00 and NS400E-01)** -

Holds latchbolt retracted until door opens. Not available in fail-safe models.

- Mechanical unlocking

Specifications

Narrow Style Electric Lock for Swinging Doors

- A. NS400 series jamb mounted institutional security electric lock set shall include lock, plug connector, strike, and high security builders hardware cylinder for mechanical release.
- B. Lock Functions:
 - 1. NS400E-01 - Solenoid operated deadlatch with latchback and deadlock indication switch.
 - 2. NS400M-01 - Motor operated deadlatch with latchback and deadlock indication switch.
 - 3. NS400MC-04 - Two-position motor operated deadlatch with holdback and deadlock indication switch.
 - 4. NS400MCD-04 - Two-position motor operated deadbolt with holdback and deadlock indication switch.
- C. Operational Control:
 - 1. Provide remote electrical control of lock operation and local mechanical operation by key cylinder.
 - 2. Locks keyed one side are designated 402, keyed both sides are 406. Supply cylinder extensions for locks keyed out the stop side of the jamb.
 - 3. LEK - Provide local electric key option. Keys shall electrically operate the lock when selected from the control console.
 - 4. IPB-1: Provide local inmate push button option. Push button shall electrically operate the lock when selected at the control console.
- D. MATERIAL
 - 1. Case: Investment cast stainless steel.
 - 2. Bolt: Investment cast stainless steel with hardened inserts, 3/4" throw deadlatch or deadbolt.
 - 3. Bolt opening in case shall not allow access to internal mechanism.
 - 4. Deadlock Lever: Stainless steel.
 - 5. Trigger Bolt: Investment cast stainless steel.
 - 6. Operating Lever: Stainless steel to operate with solenoid , motor, deadlatch or deadbolt.
 - 7. Strike: Stainless steel stamping with curved lip, attached with Torx tamper resistant screws.
 - 8. Solenoid: 24VDC continuous duty with stainless steel guides.

9. Motor: Permanently lubricated high-torque fractional HP with thermal overload. UL listed.
10. Springs: Stainless steel.
11. Cylinder: High security 6 pin tumbler type.

E. PERFORMANCE

1. Locks shall comply with UL 1034 Burglary Resistant Electric Locking Mechanisms.
2. Deadlatch models shall comply with UL 10B Fire Tests of Door Assemblies, Class A - 3 Hour Rating. (Some models may not qualify for fire rating due to specific functions, consult factory.)
3. Cylinder shall comply with UL 437 Key Locks.
4. Design locks to operate one million operations with out failure.
5. High-torque motor operated locks shall retract the lockbolt with side pressure of 300 pounds applied directly to the edge of the bolt.

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NS400M Series

Motor Operated Electro-Mechanical Deadlatch

Product Model Information

KeyBuilders Hardware
DoorSwinging
SecurityMedium / Minimum

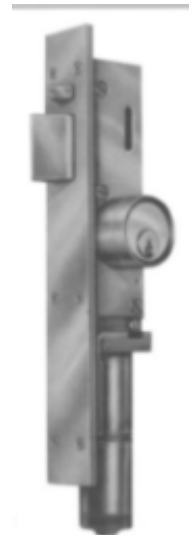
Specify Keying as Follows:

NS402MKeyed 1 Side
NS402MCKeyed 1 Side
NS406MKeyed 2 Sides
NS406MCKeyed 2 Sides

Note: See optional features for factory or customer-supplied key cylinders. Models NS400M and NS400MC, no cylinders are supplied

Description

NS400M and NS400MC Series Deadlatches are pin tumbler, motor-operated locks for swinging doors. Specify builders hardware cylinders and keying.



Applications

Specify for minimum/medium security swinging cell, corridor or administration areas of institutions, with 2" wide hollow metal jamb construction.

A remote switch is used to control the lock electrically, or may be operated mechanically by a builders hardware key cylinder. These locks offer the convenience of remote, electric unlocking or locking and automatic deadlocking when the door is closed.

Operations

Motor Actuated Models

Unlocks when the motor is energized (1): by a momentary contact switch. Latchbolt is held mechanically retracted until the door is opened. It then extends automatically. (Mechanical Latchback)

Two-Position Motor Actuated Models

Lock or unlock when the motor is energized (1): by either a two or three position maintained contact switch, or three position, momentary contact switch. When unlocked by control switch, latchbolt remains retracted by motor position until control switch is set to lock. Latchbolt is held mechanically retracted until the door is opened. It will then extend automatically, if the control switch is set to the lock position. (Mechanical Latchback)

Lock or unlock when the motor is energized (2): by either a two or three position maintained contact switch, or a three position momentary contact switch. Latchbolt then remains retracted until selected to lock. Opening and closing the door has no effect on the lock. (No Latchback)

Unlocks when the motor is energized (3): by a momentary contact switch. A relock switch energizes the motor to relock once the door is open. On closure, the latchbolt deadlocks automatically. (No latchback with relock)

Standard Compliance

All deadlatch models, UL1034: Burglary-Resistant Mechanisms.

All models (except two-position motor actuated), UL10B: Electrically controlled single point locks or latches, three-hour rating, A label.

Standard Features

- **300 lb. Rated side load motor operation (Models NS400M, NS400MC)** - Preclude jamming by applying side pressure on the door.
- **Compact size** - Designed for hollow metal frames with standard 2" face.
- **Two-piece, twelve-pin plug connector** - Simplifies wiring, allows pre-wiring of the lock opening.
- **Heavy duty lock mechanism** - Designed to complement the high-torque motor. Corrosion resistant working parts tested over 1,000,000 cycles.
- **Stainless steel strike** - Angled lip type, furnished with Torx tamper resistant screws. Requires less force to close and lock the door.
- **Mechanical latchback (Models NS400M, NS400MC)** - Holds latchbolt retracted until door opens.

- **Mechanical unlocking by key** - Offers manual control at the door in event of power failure, or at any other time.
- **Stainless steel latchbolt** - ¾" throw, with hardened steel inserts to prevent sawing.
- **Relock switch (Model NS400MC)** - Repositions motor to relock when door is opened.
- **Finish** - US32D, satin stainless steel.

Optional Features

- **Indication switch** - An internal switch to monitor the positions of the deadlock actuator. Signals deadlocked condition.
Note: When door is open, deadlock actuator may be manually depressed, thereby giving a false indication that the door is locked. This can be eliminated by installing a door position switch and wiring it in series with the indication switch in the lock. A "secure" signal can then be produced only after three conditions have been met:
 1. deadlock actuator is depressed
 2. deadbolt is extended and deadlocked, and
 3. door is closed.
- Interlocking of doors requires special wiring and/or adaptations in control consoles.
- **Builders hardware key cylinders** - High security six pin tumbler cylinder may be specified. Special keying requests will be accommodated, if possible.
Note: Customer supplied key cylinders may be used to adapt NS400 Series locks to a specific keying system. These cylinders must have:
 1. 1-5/32" diameter, full bar stock bodies,
 2. 1-1/8" length, including cam,
 3. Standard, removable Yale-type cam.
- Cylinders and all keys should be sent to Folger Adam Security Inc. in any case, but are required with LEK feature and cylinder extensions.
- **Local electric key (LEK)** - Inmate key operates lock electrically, staff keys always operate the lock manually, and can operate it electrically. Feature is enabled or canceled from a remote control console.
- **Inmate push button** - Allows operation of the lock from inside the room or cell, may be canceled from central control console. A double

pole, double throw switch is available for additional functions.

- **Key cylinder extension** - Required when lock is keyed on the stop side of the door frame. Five standard lengths are offered:

Jamb size :: Cylinder extension

- 4.5"-5" :: 4.75"
- 5"-6" :: 5.75"
- 6"-7" :: 6.75"
- 7"-8" :: 7.75"
- 8"-9" :: 8.75"

Note: Please specify appropriate cylinder extension length when ordering. Special lengths may be provided for other jamb thickness', please contact factory for pricing and availability.

Specifications

- **Lock Case:** Investment cast stainless steel
- **Latchbolt:** Investment-cast stainless steel, with hardened inserts.
- **Latchbolt Throw:** æ"
- **Operating Lever:** Stainless steel
- **Deadlock Lever/Trigger Bolt:** Investment-cast stainless steel
- **Strike:** Stainless steel stamping, angled lip

Electrical Characteristics

Motor: High-torque, permanently lubricated, permanent magnet, planetary gearmotor

Voltage: 24VDC, Operates on 24VAC via rectifier, 0.12 running, 1.29 amps stalled

Indication Switch: SPDT, UL Listed, 5 amp @ 125 or 250VAC

Specifications

Narrow Style Electric Lock for Swinging Doors

- A. NS400 series jamb mounted institutional security electric lock set shall include lock, plug connector, strike, and high security builders hardware cylinder for mechanical release.
- B. Lock Functions:
 1. NS400E-01 - Solenoid operated deadlatch with latchback and deadlock indication switch.
 2. NS400M-01 - Motor operated deadlatch with latchback and deadlock indication switch.
 3. NS400MC-04 - Two-position motor operated deadlatch with

holdback and deadlock indication switch.

4. NS400MCD-04 - Two-position motor operated deadbolt with holdback and deadlock indication switch.

C. Operational Control:

1. Provide remote electrical control of lock operation and local mechanical operation by key cylinder.
2. Locks keyed one side are designated 402, keyed both sides are 406. Supply cylinder extensions for locks keyed out the stop side of the jamb.
3. LEK - Provide local electric key option. Keys shall electrically operate the lock when selected from the control console.
4. IPB-1: Provide local inmate push button option. Push button shall electrically operate the lock when selected at the control console.

D. MATERIAL

1. Case: Investment cast stainless steel.
2. Bolt: Investment cast stainless steel with hardened inserts, 3/4" throw deadlatch or deadbolt.
3. Bolt opening in case shall not allow access to internal mechanism.
4. Deadlock Lever: Stainless steel.
5. Trigger Bolt: Investment cast stainless steel.
6. Operating Lever: Stainless steel to operate with solenoid , motor, deadlatch or deadbolt.
7. Strike: Stainless steel stamping with curved lip, attached with Torx tamper resistant screws.
8. Solenoid: 24VDC continuous duty with stainless steel guides.
9. Motor: Permanently lubricated high-torque fractional HP with thermal overload. UL listed.
10. Springs: Stainless steel.
11. Cylinder: High security 6 pin tumbler type.

E. PERFORMANCE

1. Locks shall comply with UL 1034 Burglary Resistant Electric Locking Mechanisms.
2. Deadlatch models shall comply with UL 10B Fire Tests of Door Assemblies, Class A - 3 Hour Rating. (Some models may not qualify for fire rating due to specific functions, consult factory.)
3. Cylinder shall comply with UL 437 Key Locks.
4. Design locks to operate one million operations with out failure.
5. High-torque motor operated locks shall retract the lockbolt with side pressure of 300 pounds applied directly to the edge of the bolt.



NS400MCD Series

Motor Operated Electro-Mechanical Deadlatch

Product Model Information

KeyBuilders Hardware

DoorSwinging

SecurityMedium / Minimum

Specify Keying as Follows:

NS402MCDKeyed 1 Side

NS406MCDKeyed 2 Sides

Note: See optional features for either factory or customer-supplied key cylinders. Model NS400MCD, no cylinder supplied.

Description

NS400MCD is a pin tumbler, two position motor-operated deadbolt for swinging doors. Specify builders hardware cylinders and keying.

Applications

Specify for minimum to medium security swinging cell or office areas of institutions requiring deadbolt locks for use in 2" hollow metal jamb construction.

Operations

Locks or unlocks when motor is energized by either a two or three position maintained contact switch. Once unlocked, the deadbolt remains retracted until selected to lock. Opening and closing the door have no effect on the lock. Non-fail-safe only. Holdback switch prevents the deadbolt from extending while the door is open. Deadbolt is deadlocked upon closure of the door.

Standard Compliance

UL1034: Burglary-Resistant Mechanisms.

Standard Features

- **300 lb. Rated side load motor operation** - Precludes jamming by

applying side pressure on the door.

- **Heavy duty lock mechanism** - Designed to complement the high-torque motor. Corrosion resistant working parts tested over 1,000,000 cycles.
- **Compact size** - Specifically for hollow metal frames with standard 2" face.
- **Two-piece, twelve-pin plug connector** - Simplifies wiring, allows pre-wiring of the lock opening.
- **Stainless steel strike** - Furnished with Torx tamper resistant screws.
- **Holdback switch** - Does not allow deadbolt to extend while door is open.
- **Mechanical unlocking by key** - Offers manual control at the door in event of power failure, or at any other time.
- **Stainless steel deadbolt** - 1/2" throw, with hardened inserts to prevent sawing.
- **Faceplate finish** - US32D, satin stainless steel.

Optional Features

- **Indication switch** - An internal switch to monitor the positions of the deadlock actuator. Signals deadlocked condition.
Note: When door is open, deadlock actuator may be manually depressed, thereby giving a false indication that the door is locked. This can be eliminated by installing a door position switch and wiring it in series with the indication switch in the lock. A "secure" signal can then be produced only after three conditions have been met:

1. deadlock actuator is depressed
2. deadbolt is extended and deadlocked, and
3. door is closed.

- Interlocking of doors requires special wiring and/or adaptations in control consoles.

- **Builders hardware key cylinders** - High security six pin tumbler cylinder may be specified. Special keying requests will be accommodated, if possible.

Note: Customer supplied key cylinders may be used to adapt NS400 Series locks to a specific keying system. These cylinders must have:

1. 1-5/32" diameter, full bar stock bodies,
2. 1-1/8" length, including cam,
3. Standard, removable Yale-type cam.

- Cylinders and all keys should be sent to Folger Adam Security Inc. in any case, but are required with LEK feature and cylinder extensions.
- **Local electric key (LEK)** - Inmate key operates lock electrically, staff keys always operate the lock manually, and can operate it electrically. Feature is enabled or canceled from a remote control console.
- **Inmate push button** - Allows operation of the lock from inside the room or cell, may be canceled from central control console. A double pole, double throw switch is available for additional functions.
- **Key cylinder extension** - Required when lock is keyed on the stop side of the door frame. Five standard lengths are offered:

Jamb size :: Cylinder extension

- 4.5"-5" :: 4.75"
- 5"-6" :: 5.75"
- 6"-7" :: 6.75"
- 7"-8" :: 7.75"
- 8"-9" :: 8.75"

Note: Please specify appropriate cylinder extension length when ordering. Special lengths may be provided for other jamb thickness', please contact factory for pricing and availability.

Specifications

- **Lock case:** Investment cast stainless steel
- **Deadbolt:** Investment cast stainless steel with hardened inserts.
- **Deadbolt throw:** æ"
- **Deadlock lever/Operating lever:** Stainless Steel
- **Strike:** Stainless Steel stamping

Electrical Characteristics

Motor: High-torque, permanently lubricated, permanent magnet, planetary gearmotor, UL Listed

Voltage: 24VDC, Operates on 24VAC via rectifier, 0.12 running, 1.29 amps stalled

Indication Switch: SPDT, UL listed

Switch Rating: 5 amp @ 125 or 250 VAC

Specifications

Narrow Style Electric Lock for Swinging Doors

A. NS400 series jamb mounted institutional security electric lock set shall

include lock, plug connector, strike, and high security builders hardware cylinder for mechanical release.

B. Lock Functions:

1. NS400E-01 - Solenoid operated deadlatch with latchback and deadlock indication switch.
2. NS400M-01 - Motor operated deadlatch with latchback and deadlock indication switch.
3. NS400MC-04 - Two-position motor operated deadlatch with holdback and deadlock indication switch.
4. NS400MCD-04 - Two-position motor operated deadbolt with holdback and deadlock indication switch.

C. Operational Control:

1. Provide remote electrical control of lock operation and local mechanical operation by key cylinder.
2. Locks keyed one side are designated 402, keyed both sides are 406. Supply cylinder extensions for locks keyed out the stop side of the jamb.
3. LEK - Provide local electric key option. Keys shall electrically operate the lock when selected from the control console.
4. IPB-1: Provide local inmate push button option. Push button shall electrically operate the lock when selected at the control console.

D. MATERIAL

1. Case: Investment cast stainless steel.
2. Bolt: Investment cast stainless steel with hardened inserts, 3/4" throw deadlatch or deadbolt.
3. Bolt opening in case shall not allow access to internal mechanism.
4. Deadlock Lever: Stainless steel.
5. Trigger Bolt: Investment cast stainless steel.
6. Operating Lever: Stainless steel to operate with solenoid , motor, deadlatch or deadbolt.
7. Strike: Stainless steel stamping with curved lip, attached with Torx tamper resistant screws.
8. Solenoid: 24VDC continuous duty with stainless steel guides.
9. Motor: Permanently lubricated high-torque fractional HP with thermal overload. UL listed.
10. Springs: Stainless steel.
11. Cylinder: High security 6 pin tumbler type.

E. PERFORMANCE


1. Locks shall comply with UL 1034 Burglary Resistant Electric Locking Mechanisms.
2. Deadlatch models shall comply with UL 10B Fire Tests of Door Assemblies, Class A - 3 Hour Rating. (Some models may not

- qualify for fire rating due to specific functions, consult factory.
3. Cylinder shall comply with UL 437 Key Locks.
 4. Design locks to operate one million operations with out failure.
 5. High-torque motor operated locks shall retract the lockbolt with side pressure of 300 pounds applied directly to the edge of the bolt.

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800 Series

Solenoid Operated Electro-Mechanical Gate Locks

Product Model Information
KeyBuilders Hardware
DoorSwinging
SecurityMedium / Minimum

Specify Keying as Follows
For Swinging Gates
802ESKeyed Cover Side
806ESKeyed Both Sides
For Sliding Gates
802ERKeyed Cover Side
806ERKeyed Both Sides

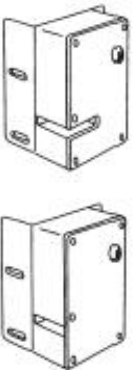
Description

Series 800 Deadlatches are lever tumbler, solenoid operated locks for swinging or sliding chain-link fence gates.

Applications

For use on sliding or swinging chain-link fence gates. Provide automatic deadlocking with flexibility of remote unlocking.

This lock is electrically operated for unlocking. The deadbolt retracts when solenoid is energized. Once retracted, deadbolt is held electrically retracted until gate is closed. (Deadbolt extends automatically in case of power failure.) Emergency mechanical operation by paracentric key.



Testing

The 800 Series Electric Gate locks have electrically tested for over 1,000,000 operating cycles.

Standard Features

- **Solenoid actuated** - 120VAC, 60hz, continuous-duty type.
- **Unlocking by prison paracentric key** - In case of power failure, or for local control. When unlocked by key, deadbolt remains retracted until relocked by key.

- **Deadlocks automatically** - When gate is closed.
- **Adjustable mounting and locking tongue** - Fits fence posts between 2-3/8" and 8-5/8" diameter; gate posts between 1-5/16" and 4-1/2" diameter.
- **Push-in type terminal strip** - For easy field wiring.
- **Case and cover** - 7 gauge steel
- Corrosion resistant working parts
- **Stainless steel deadbolt** - æ" diameter
- Hardened-steel deadlock lever
- **Five lever tumblers** - Made of spring-temper brass, activated by heavy phosphor-bronze springs.
- **One piece key cylinder** - Investment cast, bronze alloy with paracentric keyway. (Paracentric, lever tumbler keys must be purchased separately.)
- **Break-off security screws** - For attaching cover.
- **Finish** - Galvanized, for corrosion resistance.
- **Supplied** - With mounting brackets, locking tongue and mounting screws.
- **Indication Switch** - A lock status switch monitors the deadbolt and its deadlocked condition.

Optional Features

- Six lever tumblers
- Solenoid voltage - 220VAC, 60hz

Note: When gate is open, the switch actuator for the locking tongue can be manually depressed, thereby giving a false indication that the gate is locked. This can be eliminated, if desired, by installing a gate-position indication switch and wiring it in series with the indication switch in the lock. A "secure" signal can be produced only after three conditions have been met:

1. locking tongue switch actuator is depressed;
2. deadbolt is extended and deadlocked, and
3. gate is closed.

Note: Electrical interlocking of gates requires special wiring and/or adaptations for control consoles.

Specifications

- **Case and cover** - 7 gauge steel

- **Finish** - Galvanized
- **Working parts** - Galvanized steel
- **Springs** - Stainless Steel
- **Deadbolt size** - $\frac{1}{2}$ " diameter

Electrical Characteristics

Actuator: Continuous-duty solenoid

Voltage: 120VAC, 60HZ, 13.0 amps inrush, 0.75 amps seated. 220VAC, 60HZ, 6.5 amps inrush, 0.3 amps seated.

Indication Switch(es): SPDT, UL listed

Ratings: 15 amps @ 125 or 250 VAC

Specifications

Jamb Mounted Lever Tumbler Electric Lock for Exterior Gates

- A. 800 series fence post mounted maximum security electric lock set shall include: Lock, adjustable fence gate mounting and gate tongue, and a five lever tumbler number 16 lock for mechanical release. Furnish solenoid operated locks, galvanized for use on exterior gates.
- B. Lock Functions:
 1. 806 ESL Lock- Solenoid operated deadbolt for swinging gates with deadlock indication switch.
 2. 806 ERL Lock - Solenoid operated deadbolt for sliding gates with deadlock indication switch.
 3. Lock bolt shall automatically deadlock in the locked position.
- C. Material:
 1. Case and Cover: 7 Gauge steel, galvanized for exterior use.
 2. Bolt: 3/4 inch diameter stainless steel, with automatic deadlocking
 3. Solenoid: 115VAC continuous duty with stainless steel guides.
 3. Terminal Strip: Pre-wire lock to terminal strip. Provide push in type quick connect terminal strip for field wiring.e.
- D. Design lock mechanism to operate a minimum of one million cycles without failure