

401 Series Deadbolt

RIXSON[®]
ASSA ABLOY

Heavy-Duty Electric Deadbolts for Use
with Swinging, Sliding and Vertical Lift in
Mortise, Rim and Fence Gate Mountings



ASSA ABLOY, the global leader in door opening solutions

Introduction

Electric deadbolts are used in commercial and industrial buildings of all kinds. They are adaptable to any security system and ideal as auxiliary locks on doors where access control is desired.

Basic models of the 401 series are shown on the following pages, along with complete information about their functions and electrical characteristics. Optional features are also shown for each model, which make them adaptable to a wide variety of security requirements. The choice of some optional features, however, may increase the normal manufacturing lead time.

These electric deadbolts are solenoid actuated, to either lock (fail secure) or unlock (fail safe) with the loss of power, and to be controlled by remote switches or card-access devices. They are listed by Underwriters' Laboratories as burglary-protection devices.

Standard Features

- Jamb Mounted
- Compact, Heavy-Duty Construction
- Solenoid Actuated – Power surge, continuous-duty solenoid
- Tapered Deadbolt – Helps locate hole in keeper that may be slightly misaligned
- Door-Position Switch (DPS) – An internal switch to ensure that the deadbolt extends only when door is closed
- Listed by Underwriters' Laboratories, Inc. – Burglary Resistant Electric Deadbolt (*UL Standard No. 1034, Burglary-Resistant Electric Locking Mechanisms.*)
- Mortise Mounting
- Non-Handed – Reversible. Operates horizontally and vertically
- Housing Size – 4-1/2" H x 9" L x 1-3/4" W - designed to accommodate all optional features
- Supplied with Mortise Keeper, Wiring Diagram and Mounting Screws

Specifications

Jamb mounted solenoid activated deadbolt shall have tapered bolt that deadlocks when extended. Door position roller switch to prevent bolt extension while door is open. Spring loaded locking mechanism ensures that bolt (remains locked – [fail secure] (NFS) or becomes unlock or unlocks – fail safe (FS) upon power failure. For surface mounting, use 401-RM rim mounting and 401-90 rim keeper. Fence gate mounting 401-118 for fence gates with side post. Optional rim key cylinder mechanical operation with 401-80 series cylinder holder.

Limited Warranty

Rixson[®] 401 Deadbolts are warranted for 2 years for defect. See Rixson[®] Price Book for specific details of the limited warranty.

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401 Electric Deadbolt

Application

- For use with swinging, sliding, power operated and vertical lift doors.
- Model 401 (Fail Safe) – Locked when energized – unlocks automatically in case of power failure. Under normal operation, deadbolt extends when door is closed and control switch is in "lock" position.
- Model 401R (Fail Secure) – Unlocked when energized – locks automatically in case of power failure. Under normal operation, deadbolt extends when door is closed and control switch is in "lock" position.



Operating Voltages

- Voltage: 24VDC, 6.25 amps inrush, 0.42 amps seated.
- Solenoid Voltage: 120VAC or VDC (optional). **Note:** Junction box is supplied with 120V deadbolts (to comply with UL requirements).
- Indication Switches: Single pole, double-throw type (SPDT). Ratings: 10 amps @ 125 or 250VAC. (Optional only.)

Note: All deadbolts are actuated by DC solenoids. When primary power source is AC, the deadbolt is supplied with an internal bridge rectifier.

Product Description and Features

- **Indication Switches** – Internal switch(es) to monitor the position of the deadbolt. This feature can be used for remote door monitoring, to control alarms, indicating lights, interlocks and automatic door operators. One or two switches can be supplied, depending on circuit requirements.

Specify switch options by letters:

BL – a switch that indicates when the deadbolt is fully extended.

BUL – a switch that indicates when the deadbolt is fully retracted.

Note: When door is open, the door-position switch tripper can be manually depressed, thereby giving a false indication that the door is locked. This can be eliminated, if desired, by installing a door-position indication switch and wiring it in series with the indication switch(es) in the deadbolt. Then, a "secure" signal can be produced only after three conditions have been met: 1) door-position switch tripper is depressed 2) deadbolt is extended and deadlocked, and 3) door is closed BL/BUL.

- **Manual Release** – The deadbolt may be modified for overriding the electric operation, allowing for manual unlocking from one side only. Specify "MR". This feature may be adapted by the customer for a customized unlocking system, or by the following, factory-supplied accessory items, which must be purchased separately (see page 251 for options):

Detention or commercial rim key cylinders (by others).

Key Cylinder Holders – Holds and protects the key cylinder used for manual unlocking. They are available in three styles, depending on where the holder is located (see pages 251):

- **Hinge** – For the hinge side of a door frame, when the 401 Electric Deadbolt is mortised into either the door header or jamb.
- **Stop** – For the stop side of a door frame, when the 401 Electric Deadbolt is mortised into either the door header or jamb.
- **Rim** – For mounting to the surface of either a rim housing (401-RM) or fence-gate housing (401-118).

Finishes

606, 612, 613, 625, 626

401D Electric Deadbolt

Application

- For use with swinging, sliding, power operated and vertical lift doors.
- Double solenoid provides bolt action in both directions
- Model 401D (Fail Safe) – Locked when energized – unlocks automatically in case of power failure. Under normal operation, deadbolt extends when door is closed and control switch is in "lock" position.
- Model 401DR (Fail Secure) – Unlocked when energized – locks automatically in case of power failure. Under normal operation, deadbolt extends when door is closed and control switch is in "lock" position.



Operating Voltages

- Voltage: 24VDC, 6.25 amps inrush, 0.42 amps seated.
- Solenoid Voltage: 120VAC or VDC (optional). Note: Junction box is supplied with 120V deadbolts (to comply with UL requirements)
- Indication Switches: Single pole, double-throw type (SPDT). Ratings: 10 amps @ 125 or 250VAC. (Optional only)

Note: All deadbolts are actuated by DC solenoids. When primary power source is AC, the deadbolt is supplied with an internal bridge rectifier.

Product Description and Features

- **Indication Switches** – Internal switch(es) to monitor the positions of the deadbolt. This feature can be used for remote door monitoring, to control alarms, indicating lights, interlocks and automatic door operators. One or two switches can be supplied, depending on circuit requirements

Specify switch options by letters:

BL – a switch that indicates when the deadbolt is fully extended.

BUL – a switch that indicates when the deadbolt is fully retracted.

Note: When door is open, the door-position switch tripper can be manually depressed, thereby giving a false indication that the door is locked. This can be eliminated if desired by installing a door-position indication switch and wiring it in series with the indication switch(es) in the deadbolt. Then, a "secure" signal can be produced only after three conditions have been met: 1) door-position switch tripper is depressed 2) deadbolt is extended and deadlocked, and 3) door is closed BL/BUL.

- **Manual Release** – The deadbolt may be modified for overriding the electric operation, allowing for manual unlocking from one side only. Specify "MR". This feature may be adapted by the customer for a customized unlocking system, or by the following, factory-supplied accessory items, which must be purchased separately (see page 251 for options):

Detention or commercial rim key cylinders (by others)

Key Cylinder Holders – Holds and protects the rim key cylinder used for manual unlocking. They are available in three styles, depending on where the holder is located (see page 251):

- **Hinge** – For the hinge side of a door frame, when the 401 Electric Deadbolt is mortised into either the door header or jamb
- **Stop** – For the stop side of a door frame, when the 401 Electric Deadbolt is mortised into either the door header or jamb
- **Rim** – For mounting to the surface of either a rim housing (401-RM) or fence-gate housing (401-118)

Finishes

606, 612, 613, 625, 626

401RM Rim Housing

Application

For use when rim-mounting the 401 Electric Deadbolt.

401-RM

RIM HOUSING – A two-piece housing which encases a 401 Deadbolt for mounting on the surface of a door frame. The housing and cover are made of 10-gauge, cold-rolled steel and have a primed finish. The 401 Deadbolt must be purchased separately.

401-RM-MR

Allows mounting of manual release cylinder holders.

401-125

DOUBLE-SIZE RIM HOUSING – To accommodate two 401 Deadbolts for mounting over pairs of doors.

401-90

ADJUSTABLE RIM KEEPER – Must be purchased separately. It is adjustable from 1" to 2", from centerline of bolt to face of door. If more than 2" is required, a 2" to 3" adjustable rim keeper is available.

Standard Finish

Standard finish, 600, prime

Optional Finish

BHMA	Description
606	Satin brass
612	Satin bronze, clear coated
613	Oxidized satin bronze, oil rubbed
625	Bright chromium plated
626	Satin chromium plated



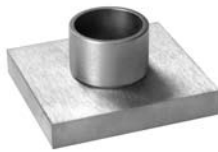
401 Manual Release

Available optionally for the manual release device is a cylinder commercial key holder. Rim key cylinder must be ordered separately by others. This unit engages directly with the manual release cam and provides key operation of the 401 Deadbolt. Different applications of the manual release feature require special cylinder holders, shown below.

Model #	Description
401-80 Rim	Commercial Cylinder Holder for rim mounted application. Attaches to 401 Deadbolt housing.
401-80 Hinge	Commercial Cylinder Holder for door header or jamb – hinge side.
401-80 Stop	Commercial Cylinder Holder for door header or jamb – stop side.

Finishes

600, 606, 612, 613, 625, 626 and galvanized



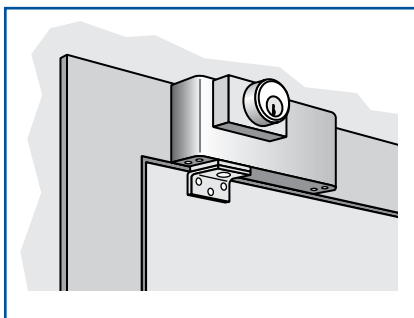
401-80 Rim



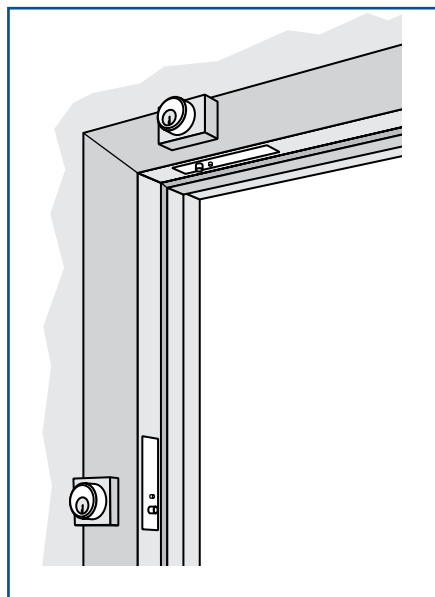
401-80 Hinge



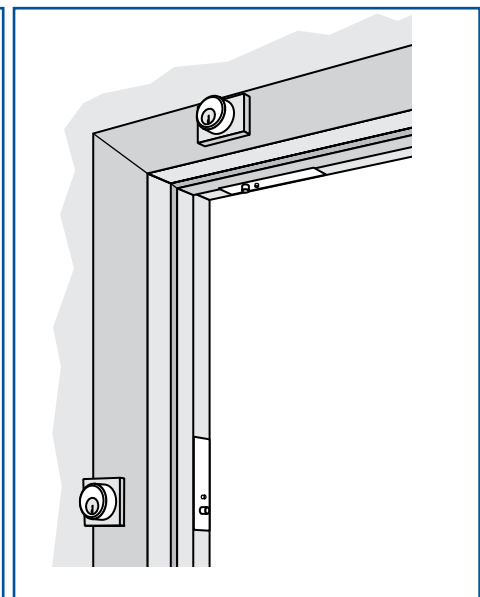
401-80 Stop



401 Rim Mounting



401 Hinge Side Mounting



401 Stop Side Mounting

401-118 Fence Gate Mounting

Application

For mounting a 401 Deadbolt on swinging fence gates.

- Remote gate control
- Emergency locking or unlocking



Note: The 401 Deadbolt and 401-110 Locking Tongue must be ordered separately. Specify hand (LH or RH) when ordering.

Product Features

401-118

FENCE GATE HOUSING—A two-piece housing which encloses a 401 Deadbolt for mounting on a fence post. The housing and mounting angle are made of 7-gauge steel, and the cover is 10-gauge steel, all having a galvanized finish. This housing is adjustable and designed to suit most conditions. (*Fence posts: 1-1/2" to 5" diameter; gap between posts when closed: 1-1/2" to 5".*)

Options

Manual Release

Key operation which overrides other controls (*see page 251*).

401-110

LOCKING TONGUE—Designed for use with above housing, and must be ordered separately. The locking tongue is made of steel with a galvanized finish. This locking tongue mounts on the gate post and is adjustable to suit most conditions. (*Gate posts: 1-1/2" to 5" diameter.*)

Specify if gap between posts is between 1.50" - 3.25" (P.N. 0120003-001) or 3.25" - 5.00" (P.N. 0120003-002)

Finishes






600, 606, 612, 613, 625, 626 and galvanized



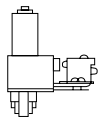


401 Deadlock

<p>Standard Case 0100379-000 (401-73) 9" x 4-3/8"</p>	<p>Standard Cover Plate 0100385-700 (401-74)</p>	<p>Cover Plate for Manual Release 0101588-700 RH 0101588-800 LH</p>	<p>Solenoid & Rectifier 24VDC 0760110-031 120VDC 0760110-032 24VAC 0760110-033 120VAC 0760110-034 (401-178)</p>

<p>Face Plate 0101297-700 600 0100386-100 606 0101297-600 602</p>	<p>Face Plate 0100386-400 613 0100386-300 605 0100386-200 626</p>	<p>Bell Crank 0100379-900 (401-5)</p>	<p>Deadlock Lever 0120119-001 (401-6M)</p>	<p>Deadlock Spring 0100379-700 (401-10)</p>

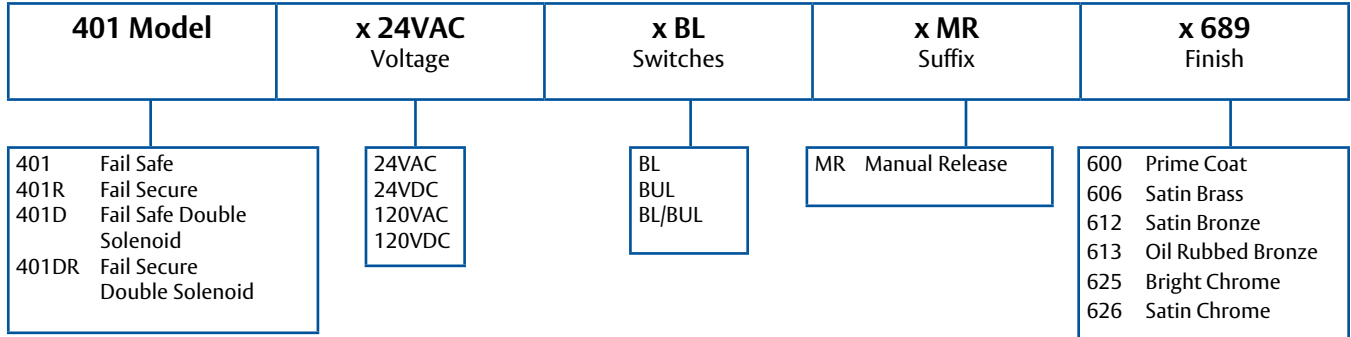
401 Deadbolt

				
Manual Release Cam Assembly 0100399-600 (401-26)	Tapered Bolt 0101299-200 (401-177)	Mortise Keeper Assembly 0761507-001PK (401-60)	Cone Compression Spring 0030002-001	Pull Spring 0030909-001 (401-9)

				
BL Limit Switch Assembly 0761205-001 (401-14)	BUL Limit Switch Assembly 0761204-001 (401-13)	"DPS" Switch Assembly 0930240-003 (401-99)	Connecting Link 0100381-600 (401-11)	Bridge Rectifier 0051902-001

	Quantity	Kind	Part #	Where Used
Screw List	20	8-32 x 1/4" Flat Head Machine Screws	0021900-482pk	Solenoid
	10	2-56 x 3/8" Round Head Machine Screws & Lock Washers	0022100-133pk	Limit Switch
	4	6-32 x 3/16" Flat Head Machine Screws	06356203-XXX	Face Plate
	20	12-24 x 1/2" Flat Head Machine Screws	0022301-375pk	Case Mounting & Covers

How to Order



Consult catalog/price book for available finishes on specific products

