

SPECIFICATIONS

Parameter	Specification
Door Gap	Between 3mm to 8mm only
Lock Monitor Output	Voltage free changeover switch contacts rated for 48vDC / 100mA
Holding Force	AS4145.2 - 1993: Passed S3 (611kg for 1 minute) Capable of 1000kg if strike plate is fully supported
Release under Side Load	15kg max at bolt with motorised unlocking (3 wire control) 3kg max at bolt with Power-To-Lock (Fail Safe) unlocking and 2 wire control
Bolt Dimensions	Diameter = 11mm Projection = 20.5mm
Power Supply (12-28VDC)	Regulation better than +/- 2% 1Amp Power supply required
Current Draw	Power to Lock holding current 130mA Power to Open holding current 30mA Initial locking and unlocking current draw higher
Misalignment tolerance	+/- 3.5mm
Operating Temperature	-10°C to +50°C at 90% RH
Durability	> 300,000 cycles
Certifications	2-hour fire rating

5 Year Limited Warranty

ASSA ABLOY Australia guarantees for a period of 5 years in accordance with Trimec's Standard Warranty Conditions, against defects in manufacture, workmanship or materials, provided that all electrical and mechanical installation requirements are adhered to as per this datasheet. All third party and consequential claims are expressly excluded from this warranty.



WARRANTY
TRIMEC

ASSA ABLOY Australia
2/16 Atkinson Road
Taren Point 2229
NSW, Australia
www.assaabloyasiapacific.com

DA0076, Issue 8: 13 May 2008

ES8000 V-LOCK WITH 30MM FACEPLATE



INSTALLATION INSTRUCTIONS

DRAWINGS NOT TO SCALE. INFORMATION IN THIS DATASHEET MAY BE CHANGED WITHOUT NOTICE.

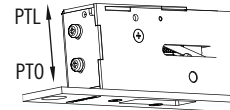
IMPORTANT NOTE:

- **V-Lock must only be used in weather protected areas.**
- V-Lock can be installed vertically or horizontally.
- For **vertical mounting**, ensure V-Lock is oriented right side up as indicated by the unit label.
- For **horizontal mounting**, ensure V-Lock is only installed above the door.
- For ideal operation, a **door gap of 3mm to 8mm** is required between lock unit and strike plate.
- Ensure strike plate is flush-mounted or recessed, well-supported and securely fastened to increase overall holding force and security of installation.

LOCK MODE CONFIGURATION

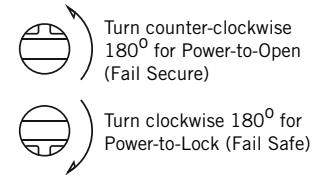
STEP 1

- Loosen both screws on side of lock body.
- Slide screws in direction required until stop at end of slot is reached.
- Hold in position and re-tighten screws.



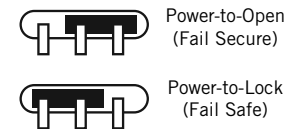
STEP 2

- Rotate Latch Plate screw beneath the red re-sealable sticker according to orientation shown below:



STEP 3

- Change jumper position on Printed Circuit Board beneath the red re-sealable sticker as shown below:



- If the lock had been installed or previously operated, the latch plate screw (STEP 3) may not be visible. To change lock mode configuration, contact your distributor for additional instructions.
- Ensure all re-sealable stickers and screws are re-attached after configuration to prevent ingress of dust.

INSTALLATION

1. Mark LINE 1 corresponding to mid-plane of door (see Fig. 1).
2. On door jamb, mark LINE 2 which will be in line with LINE 1 (see Fig. 2).
3. Mark cutout of V-Lock symmetrically about LINE 2. Cutout size must be 256mm x 30mm. Thickness of strike plate and lock faceplate are 3mm each. Prepare door jamb appropriately as shown in Fig. 2.
4. Ensure all wiring is correctly connected and not rubbing on sharp edges or interfering with any lock mechanism.
5. Install lock unit into door jamb as shown in Fig. 3.
6. On the door, mark LINE 3 corresponding to the top edge of lock faceplate (see Fig. 1). Mark and recess cutout of strike plate on door symmetrically about LINE 1, and using LINE 3 as reference.
7. Install strike plate on door, and ensure that door gap between strike plate and lock faceplate is between 3mm and 8mm only (see Fig. 3).
8. Power up lock, then let door open and close normally with door closer. When strike plate magnet comes within locking range, the V-Lock unit will lock as long as lock bolt closes within target locking range (see Detail A).

! For locking bolt on V-Lock unit to attempt locking, strike plate magnet MUST be correctly aligned and in front of the (M) mark on the lock faceplate. Lock will not operate without strike plate.

Fig. 1 - Door Preparation

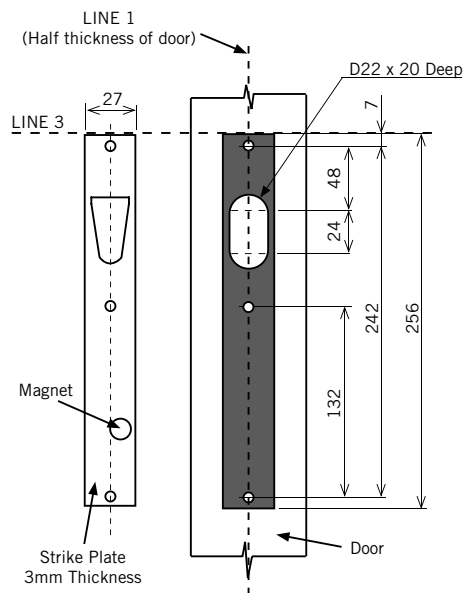
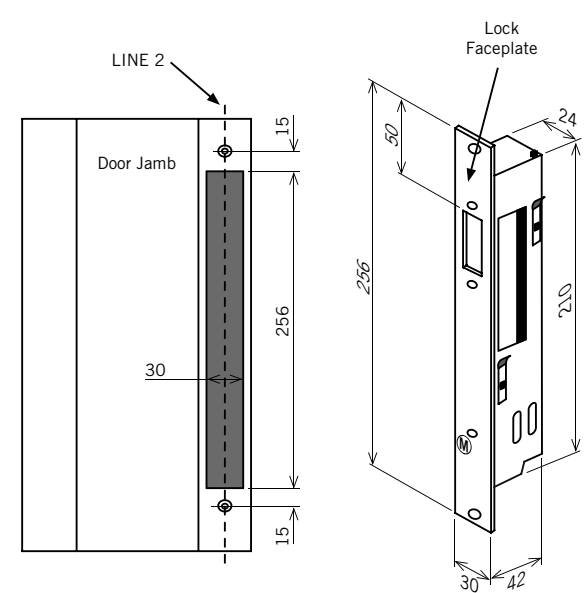
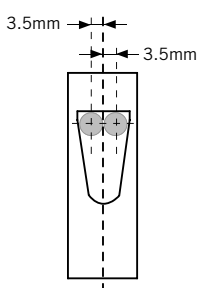


Fig. 2 - Door Jamb Preparation

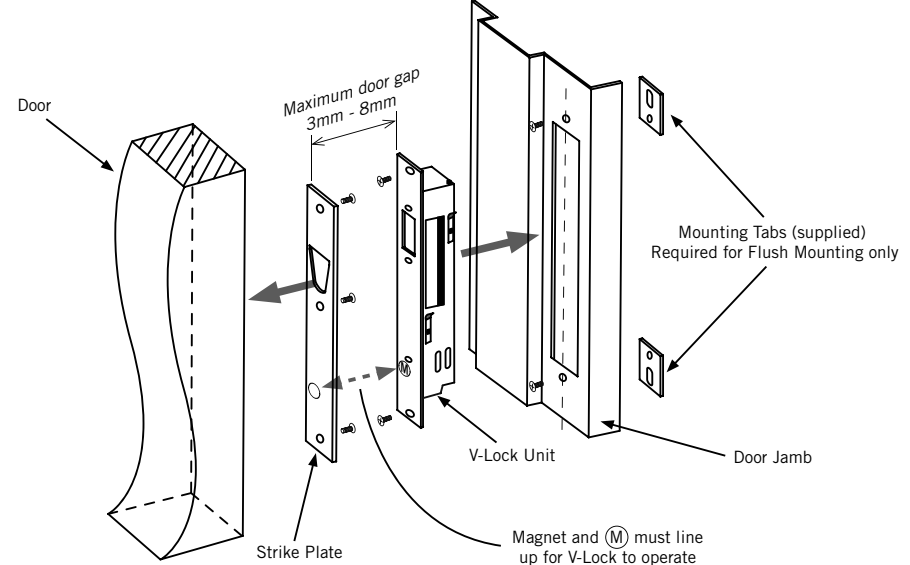


Detail A - Target Locking Range



- If door closes outside target locking range (+/- 3.5mm), V-Lock will execute 5 locking attempts.
- If lock bolt cannot enter the strike hole after 5 attempts, lock will cease operation to prevent motor burn-out.
- When this happens, adjust door closer or re-position strike plate. To restart locking sequence, send another door open/close signal to the V-Lock.

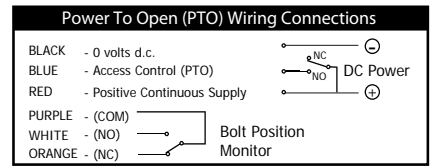
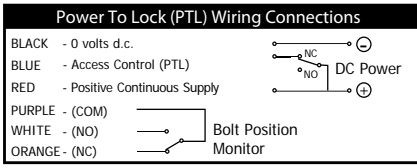
Fig. 3 - V-Lock Installation



ELECTRICAL SPECIFICATIONS

The V-Lock is designed to be controlled with a minimum of 3 wires. Positive voltage should be connected to the RED wire providing permanent power, a second negative wire connected to BLACK and a third positive voltage wire connected to BLUE providing a lock/unlock signal. When connected with 3 wires the motor will provide power assisted unlocking allowing the bolt to retract with up to 15kg of side load. Voltage-free changeover switch contacts are provided for bolt position monitoring. When locked, the monitor switch (COM - PURPLE) is connected to (NC - ORANGE).

The V-Lock is multi-voltage and operates with either 12 to 24vDC power. It has in-built Reverse Polarity Protection for installer safety. For a lock in locked position, wiring diagrams for both Power-To-Open (Fail Secure) and Power-To-Lock (Fail Safe) are found below:



In Power-To-Lock (Fail Safe) configuration, it is possible to operate the V-Lock using 2 control wires only. With 2 wire control the lock relies on the Fail Safe spring mechanism to unlock, which reduces the lock's capability to open under side load to only 3kg. Hence, 2 wire control is NOT RECOMMENDED and should be avoided wherever possible.

For retrofit applications where only 2 control wires may exist, connect the BLUE and RED wires on the lock together and join them to the positive supply voltage. Connect the negative supply voltage to the BLACK wire on the lock (see below).

