

### Foreword

One of the following locking devices will be required as part of any electronic access control system, except Emit.

**Solenoid locks** are highly sophisticated electronic versions of the standard Allgood Hardware Redlocks. Offering many features unique to Allgood Secure, their benefits over electric strikes include greater strength and minimal door frame cutaway. Solenoid locks are far less obtrusive than electric strikes and direct pull electromagnets; once fitted they look identical to conventional mortice locks. This is not only an aesthetic benefit but also means that there is no evidence to a potential intruder that a door is electronically controlled.

**Electric strikes** are fitted in place of standard striking plates to achieve simple electronic locking. On a single leaf door they have an advantage over solenoid locks where there is difficulty getting wires through the door, since they are fitted on the static door frame. There is also no need to have lever furniture on both sides of the door; as long as a request-to-exit button is installed, a pull handle and push plate will suffice. Both solenoid locks and electric strikes are available either fail secure or fail safe.

**Gravity shearlocks** provide the ultimate combination of strong holding force and concealed fixing. Shearlocks are ideally suited for heavy-duty high traffic areas where pull handles would normally be specified.

**Face to face electromagnetic locks** provide a strong holding force using very little power. They are intrinsically fail safe and as such are particularly suitable for emergency escape doors; as soon as a magnet is de-energised, the door automatically allows free egress. Electromagnets are the ideal solution for electronically locking a pair of doors as each leaf is independently locked into the frame.

Please note that double action doors are not suitable for electronic locking as they cannot be guaranteed to return to the centre line after each operation.

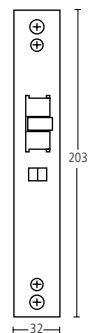
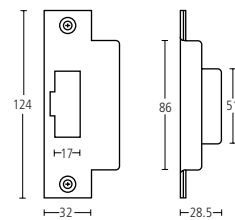
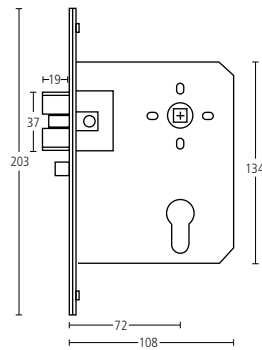
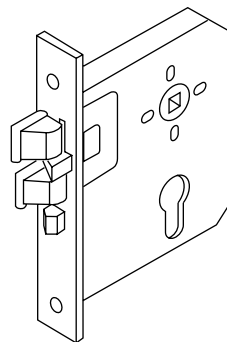
Care should also be taken over the selection of appropriate electronic locking devices on final exit doors. They may require a mechanical deadlock for extra out-of-hours security.

Please refer to each sub-section for further details and, as always, please contact Allgood Secure for any technical assistance or specification advice.

### Contents

- Foreword
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The Allgood Secure solenoid lock is a heavy duty solenoid controlled mortice nightlatch, for use with electronically operated access and exit control systems. It is an ideal locking device for restricting access/egress to laboratories, office areas, computer rooms and other commercial and industrial security areas.



The solenoid lock is based on the well proven Allgood Hardware Redlock. The lock has a very secure three part, 19mm stainless steel anti-friction and anti-thrust latchbolt. It is reversible for inward or outward opening doors and is 'guided' for reduced wear.

The lock allows for the external lever to be controlled by the continuously rated solenoid with the internal lever always being free to provide means of escape.

Where restricted access and egress is required, both the external and internal levers can be controlled by the solenoid, although consideration must be given to the means of escape requirements – see fail secure/fail safe operation.

Allgood Secure solenoid locks are UL listed and comply with ANSI 115.1 and PSA performance requirements. The locks are only warranted when used in conjunction with Allgood door furniture. Please refer to Section 3, for details of available lever furniture.

#### **Fail secure/fail safe operation**

Solenoid locks are available either fail secure (fail locked) or fail safe (fail unlocked) in operation.

**Fail secure** locks are the most frequently used, fitted generally where entry is regulated by some form of access control and egress is always provided by the free inside lever.

**Fail safe** is when the controlled lever(s) is in the insecure or unlocked condition when electrical power is not being applied to the lock.

Fail safe devices are normally installed where egress from or access into an area is required for means of escape but where an uncontrolled lever would be inappropriate. The most commonly used application is where the fail safe devices are released, to allow the lever or knob to retract the bolt of the lock, in the event of a fire alarm being activated. When using fail safe devices, consideration should be given to the use of battery stand-by units to maintain security in the event of a mains power failure. A method of removing power will also be required (e.g. fire alarm relay or break-glass).

#### **Request to exit function**

When using the externally controlled lever/knob solenoid lock with an access control system, having a printer facility or with a centrally processed 'on-line' system, it will be necessary to use the 'request to exit function'. The operation of this function is to indicate to the access system that the use of the internal 'free' lever is an authorised exit and to prevent 'forced door' and 'unauthorised exit' alarms being generated.

#### **Mechanical override**

A single or double sided cylinder key override can be provided using the Allgood Hardware Advanced cylinders (Section 5.2). Where a high degree of security is required or where an area has only one entrance, the use of the Allgood Hardware Advanced High Security cylinders is recommended (Section 5.2).

#### **Monitoring operations**

Three types of monitoring are available in the form of bolt, cylinder and anti-thrust monitoring.

**Bolt monitoring** provides for a micro-switch to indicate whether the bolt of the lock is projected or retracted.

**Cylinder monitoring** provides for a momentary contact micro-switch to indicate the use of the cylinder to retract the bolt or the lock.

**Anti-thrust bolt monitoring** provides for a microswitch to indicate door open/close status.

A typical situation would be that, after normal working hours, the security department require to know if the lever was used to gain access or egress and/or whether an authorised keyholder has passed through the door. Where a high degree of security monitoring is required, a micro-switched striking plate and a separate door position switch should be considered. Please contact Allgood Secure for help with specification.

#### **Rebate components**

Rebate conversion set 9952 is available when fitting the locks to pairs of doors with rebated meeting stiles. Specify 13mm, 19mm or 25mm. Rebate components are only suitable for minimum 50mm thick doors. Components are available for 44mm thick doors to order.

#### **Voltages**

Allgood Secure solenoid locks are available with either 12v DC (250mA) or 24v DC (125mA) solenoids.

#### **Power transfer devices**

As the lock is fitted to the door, there is a need to transfer the power from the door frame onto the door; this can be achieved by the use of a surface or concealed door loop or a power transfer hinge (Section 5.5).

# Functions & handing

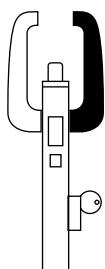
9941P Fail secure

9942P Fail safe

One 'controlled' lever withdraws latchbolt when solenoid is activated.

One 'free' lever always withdraws latchbolt.

Free    Controlled



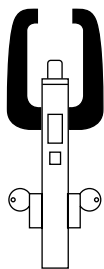
Right hand shown

9943P Fail secure

9944P Fail safe

Both 'controlled' levers withdraw latchbolt when solenoid is activated.

Controlled    Controlled



Not handed

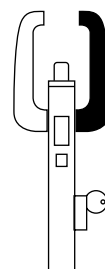
9945P Fail secure

9946P Fail safe

One 'controlled' lever withdraws latchbolt when solenoid is activated.

One 'free' lever always withdraws latchbolt. Includes 'request to exit function' to indicate authorised exit to on-line access control system.

Free    Controlled



Right hand shown

## Specification guide

The facing page shows the 'root' product numbers which identify the main solenoid lock features.

The guide below shows the prefixes and suffixes to add on to the main product number.

**Finishes:**

MA, TA, PB, DZ, LZ, SS, PS.  
See Section 2 for guide.

**Root Number:**

Root product number as described on the facing page.

**Handing:**

For controlled levers  
L: Left hand  
R: Right hand

SS9941 P6L\*

**Cylinder Profile:**

Euro profile cylinder cut-out is supplied as standard; for UK oval profile, delete the letter 'P' here.

**Monitoring Options:**

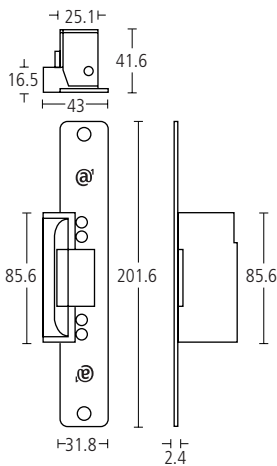
1: Non-monitored	12v DC
2: Non-monitored	24v DC
3: Single monitored	12v DC
4: Single monitored	24v DC
5: Twin monitored	12v DC
6: Twin monitored	24v DC

★ Example shown is:

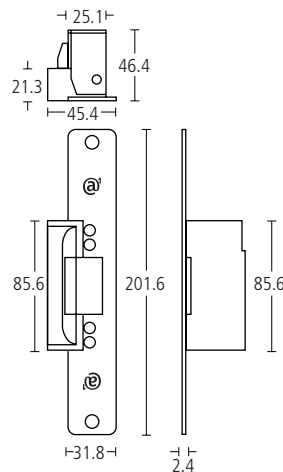
Fail secure, twin monitored, 24v DC lock, pierced for Euro profile cylinder with left hand lever controlled. Satin stainless steel finish.

## 75019NC

Electric strike for timber frames with locks with 13mm bolt projection.



For locks with 19mm bolt projection.



Electric strikes are fitted in place of standard striking plates to allow electrically controlled access and egress without the need to operate the mechanical lock fitted to the door.

### Specification

Select your strike according to the following criteria.

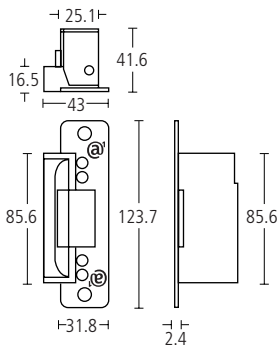
- Door type – timber or metal
- Lock bolt projection – 13mm or 19mm
- Voltage – 12v DC or 24v DC
- Fail secure (fail locked) or fail safe (fail unlocked)
- Monitoring
  - single monitoring indicates that the lock bolt is within the cam of the electric strike
  - twin monitoring also indicates the position of the solenoid and whether the cam is locked or unlocked.

### Specification table

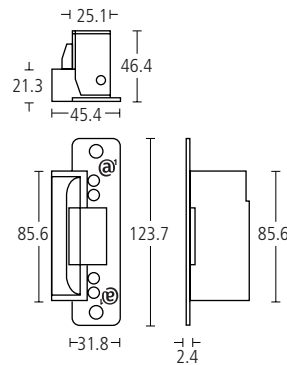
		13mm bolt	19mm bolt
12v DC Fail Secure	Non Monitored	75019NC	75055NC
	Single Monitored	75025NC	75061NC
	Twin Monitored	75027NC	75063NC
12v DC Fail Safe	Non Monitored	75021NC	75057NC
	Single Monitored	75029NC	75065NC
	Twin Monitored	75033NC	75069NC
24v DC Fail Secure	Non Monitored	75020NC	75058NC
	Single Monitored	75026NC	75062NC
	Twin Monitored	75028NC	75064NC
24v DC Fail Safe	Non Monitored	75023NC	75059NC
	Single Monitored	75031NC	75067NC
	Twin Monitored	75035NC	75071NC

75001NC

Electric strike for metal frames with locks with 13mm bolt projection.



For locks with 19mm bolt projection.



Electric strikes are fitted in place of standard striking plates to allow electrically controlled access and egress without the need to operate the mechanical lock fitted to the door.

**Specification**

Select your strike according to the following criteria.

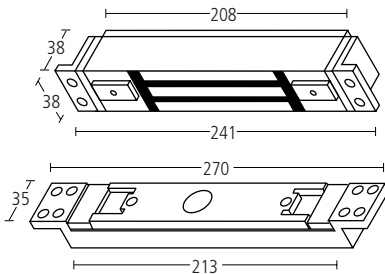
- Door type – timber or metal
- Lock bolt projection – 13mm or 19mm
- Voltage – 12v DC or 24v DC
- Fail secure (fail locked) or fail safe (fail unlocked)
- Monitoring
  - single monitoring indicates that the lock bolt is within the cam of the electric strike
  - twin monitoring also indicates the position of the solenoid and whether the cam is locked or unlocked.

**Specification table**

		13mm bolt	19mm bolt
12v DC Fail Secure	Non Monitored	75001NC	75037NC
	Single Monitored	75007NC	75043NC
	Twin Monitored	75009NC	75045NC
12v DC Fail Safe	Non Monitored	75003NC	75039NC
	Single Monitored	75011NC	75047NC
	Twin Monitored	75015NC	75051NC
24v DC Fail Secure	Non Monitored	75002NC	75038NC
	Single Monitored	75008NC	75044NC
	Twin Monitored	75010NC	75046NC
24v DC Fail Safe	Non Monitored	75005NC	75041NC
	Single Monitored	75013NC	75049NC
	Twin Monitored	75017NC	75053NC

## 75401

Mortice gravity shearlock electromagnet with armature.



- 1225kg holding force.
- BS 476pt22 for 30 minutes.
- Built-in auto-relock switch with adjustable time delay and cool temperature regulator.
- Automatic 12/24v DC voltage selection.
- Current draw: 900mA @ 12v or 450mA @ 24v.



## 75403

As above, but with magnetic bond sensing (MBS).

With Allgood Secure 75000 range of shearlocks, both armature and magnet are sprung, allowing gaps of up to 6mm between door and frame to be overcome. Once engaged, they provide over 1200kg holding force, achieved without the high operating temperatures associated with other shearlocks.

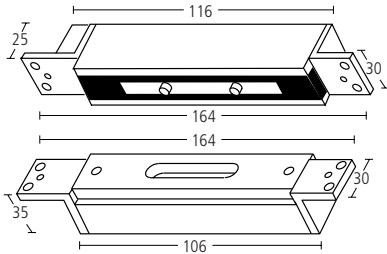
Being fully concealed within the door and frame, mortice shearlocks also provide superior security and aesthetics. Allgood Secure gravity shearlocks are fire tested to BS 476 Part 22 for 30 minutes. Shearlocks can be supplied for surface mounting, flush door and frame application, or semi-concealed for doors in recessed frames.

For shearlocks to function correctly, the armature and magnet must align exactly. As such, Allgood Secure does not recommend their use on double action doors.

Certain locks incorporate magnetic bond sensing (MBS). This is a self-monitoring device incorporated within the magnet which detects the holding force of the armature and magnet when the door is closed. If the full holding force has not been achieved it can signal a visual alarm, either locally or at a remote console, to indicate the magnet is not operating at its maximum holding capacity.

75580

Mortice mini shearlock electromagnet with armature.



- 1500kg holding force.
- BS EN 1634-1 for 60 minutes in 54mm thick doors and 30 minutes in 44mm thick doors.
- For use in single action door applications.
- Dual 12/24v DC voltage.
- Current draw @ 12/24v: current surge of 1.6 Amps reducing to 450mA at normal operation.

When using with Emit systems, please add suffix 'E'.



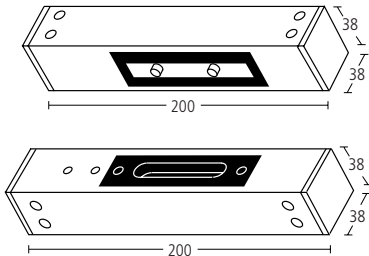
Allgood mini-shearlocks are ideal for fitting into narrow frames and doors. The slimline style of the shearlock is achieved by having a separate PCB, which can be fixed either in the PSU or mounted separately inside a protective box, which is supplied with the shearlock. (The PCB must be fitted within 20 metres of the shearlock). Being fully concealed within the door and frame, the shearlock provides enhanced aesthetics and security. Allgood Secure mini-shearlocks have been tested to independently meet BS EN 1634-1 fire tests for 60 minutes in 54mm thick doors and for 30 minutes in 44mm thick doors.

By combining magnetic field force and physical interference between lock body and armature, the mini-shearlock can overcome gaps of 5mm between door and frame, creating a shear holding force of 1500kg.

Mini-shearlocks can also be supplied for surface mounting or fixing to glass doors with the use of the glass door fixing pack (75582). For mini-shearlocks to function correctly, the armature and magnet must align exactly. As such, Allgood Secure does not recommend their use on double action doors.

## 75581

Surface mounted mini shearlock electromagnet with armature.



- 1500kg holding force.
- For flush door and frame applications.
- BS EN 1634-1 for 60 minutes in 54mm thick doors and 30 minutes in 44mm thick doors.
- Suitable for timber door and frame, metal door and frame or glass door with top rail and frame.
- Dual 12/24v DC voltage.
- Current draw @ 12/24v: current surge of 1.6 Amps reducing to 450mA at normal operation.

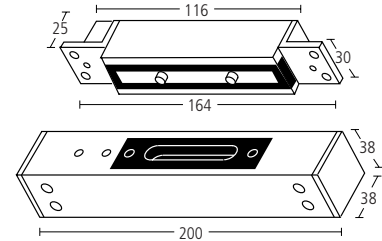
When using with Emit systems, please add suffix 'E'.

## 75582

Glass door bracket to be used in conjunction with 75581 and 75583. To be used in single action door applications and on 10mm or 12mm thick doors. One bracket required for each housing, i.e. one for door and one for transom if required. Adhesive not supplied. Recommended adhesive is Loctite™ 317 adhesive with Loctite™ 734 activator.

## 75583

Semi-concealed mini shearlock electromagnet.



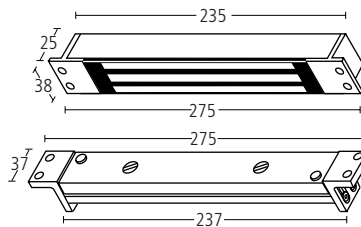
- Consists of morticed magnet housing and surface mount armature.
- 1500kg holding force.
- BS EN 1634-1 for 60 minutes in 54mm thick doors and 30 minutes in 44mm thick doors.
- For doors in recessed frame situations.
- Suitable for timber door and frame, metal door and frame and glass doors in conjunction with the 75582 glass mounting bracket.
- Dual 12/24v DC voltage.
- Current draw @ 12/24v: current surge of 1.6 Amps reducing to 450mA at normal operation.

When using with Emit systems, please add suffix 'E'.

Allgood's self-aligning shearlocks are ideal for use with panic devices. A feature of the shearlock is that it can release under side load conditions, once activated. The shearlock self-aligns to secure the door when it closes and may be mounted horizontally on the top of the door or vertically on the side. Their strength in the shear direction comes from a combination of magnetic force coupled with mechanical interference. This is achieved through conical buttons located on the strike plate fitting into machined holes located at each end of the magnet body. All Allgood Secure self-aligning shearlocks have been tested to BS EN 1634-1 for 30 minutes. Self-aligning shearlocks are not suitable for use on double-action or external doors.

### 75442

Mortise self-aligning shearlock electromagnet with armature.



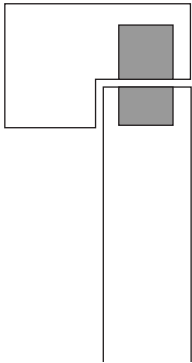
- 550kg holding force.
- BS EN 1634-1 for 30 minutes.
- For use in single action door applications.
- Automatic 12/24v DC voltage selection.
- Current draw: 350mA @ 12v or 175mA @ 24v.

### 75443

As above, but with monitoring.

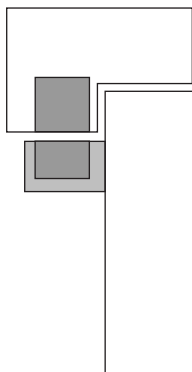
## 1. Concealed fixing into frame & door

Recommended installation for 75401, 75403 or 75580 locks.



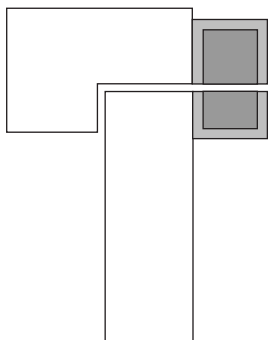
## 2. Concealed fixing into frame, face fixed to door

Recommended installation for 75583 locks.



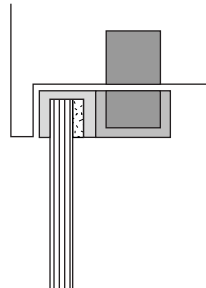
## 3. Face fixed to frame & door

Recommended installation for 75405, 75406 or 75581 locks.



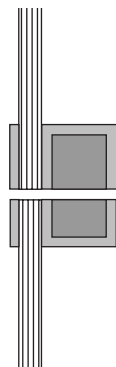
## 4. Concealed fixing into frame, face fixed to door

Recommended installation for 75407, 75408 or 75583 locks in conjunction with 1x 75582.



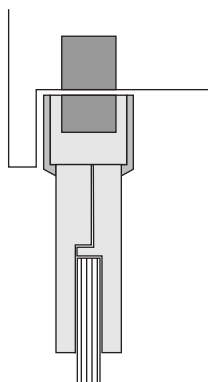
## 5. 'Patch' face fixed to door & overpanel

Recommended installation for 75401 or 75403 with bespoke 'patch' fitting and 75581 with 2x 75582 glass door bracket kit.



## 6. Concealed fixing into frame, adaptor bracket for aluminium top rail

Recommended installation for 75401 or 75403 and 75404 top rail converter.

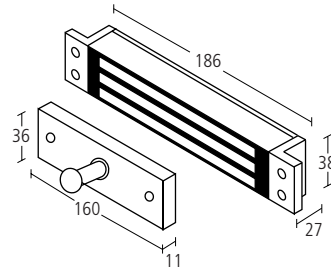


Direct pull electromagnetic locks combine holding strength, durability and ease of installation. They offer a low-maintenance locking system which can be interfaced with electronic access control, automatic door operators and fire or other hazard sensing systems. With a range of holding forces, they provide an excellent solution for both security and safety. The low current draw ensures highly energy efficient operation. Special brackets are available to suit most non-standard installations. Custom made housings are also available in a range of finishes, extending the full width or height of the frame, into which a magnet can be incorporated, providing clean lines and pleasing aesthetics.

Certain locks incorporate magnetic bond sensing (MBS). This is a self-monitoring device incorporated within the magnet which detects the holding force of the armature and magnet when the door is closed. If the full holding force has not been achieved it can signal a visual alarm, either locally or at a remote console, to indicate that the magnet is not operating at its maximum holding capacity. All Allgood Secure direct pull electromagnetic locks have been tested to BS EN 1634-1 for 30 minutes.

### 75525ND

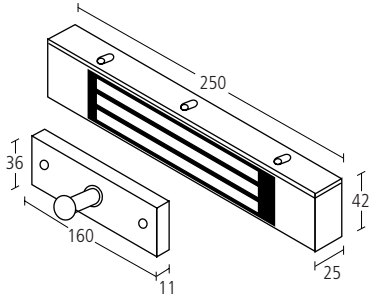
Mortise direct pull electromagnet with armature.



- 250kg holding force.
- BS EN 1634-1 for 30 minutes.
- Due to specific installation requirements, this lock should not be specified without first consulting Allgood Secure.
- Suitable for internal sliding doors.
- Can also be used on conventional hinged doors, subject to frame detail.
- Door status monitor: fully concealed switch to indicate door status at a remote location.
- Selectable 12/24v DC voltage input.
- Current draw: 480mA @ 12v or 240mA @ 24v.

## 75575

Slim profile direct pull electromagnet with armature.



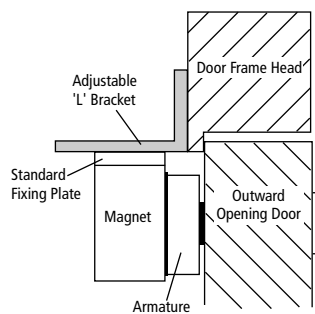
- 250kg holding force.
- BS EN 1634-1 for 30 minutes.
- For internal doors only.
- This mini-magnet is especially suitable where aesthetics are a primary concern.
- Suitable for single leaf, single action doors; two units required for double doors.
- Selectable 12/24v DC voltage input.
- Current draw: 480mA @ 12v or 240mA @ 24v. Magnetic bond sensing (MBS) as standard.

### Finishes

XX75575MA – Modric anodised  
XX75575ASS – Satin stainless steel

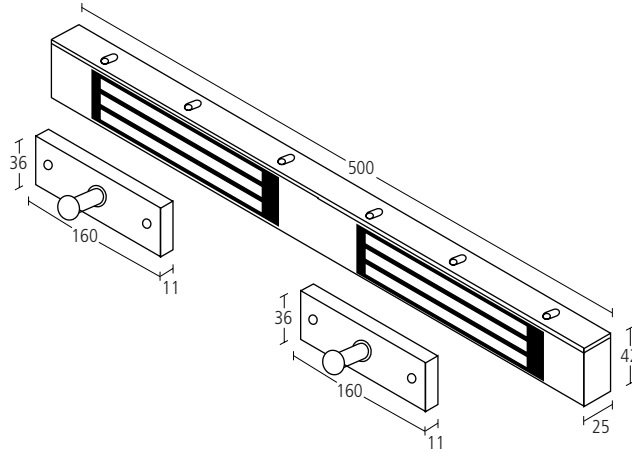
## 75555NA

Adjustable angle support bracket for 75575 electromagnetic lock, to suit outward opening door applications.



## 75576

Double lock version of 75575 with two armatures.



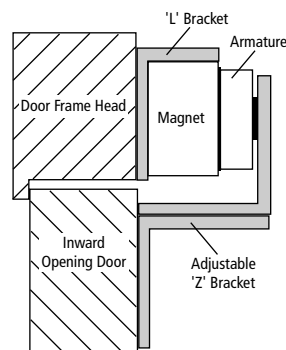
- Suitable for double leaf single action doors.

### Finishes

XX75576MA – Modric anodised  
XX75576ASS – Satin stainless steel

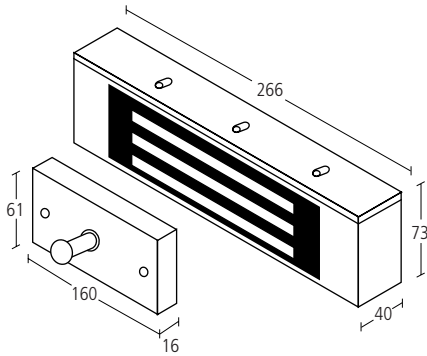
## 75556N

Top jamb mounting for 75575 electromagnetic lock, to suit inward opening door applications.



**75529ND**

Direct pull grain anodised electromagnet with armature.



- 500kg holding force.
- BS EN 1634-1 for 30 minutes.
- Suitable for single leaf, single action doors.
- Selectable 12/24v DC voltage input.
- Current draw: 480mA @ 12v or 240mA @ 24v.

Finishes

XX75529MA – Modric anodised  
XX75529ASS – Satin stainless steel

**75535ND**

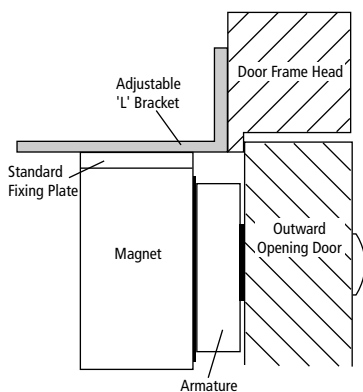
As 75529ND, but with magnetic bond sensing (MBS).

Finishes

XX75535MA – Modric anodised  
XX75535ASS – Satin stainless steel

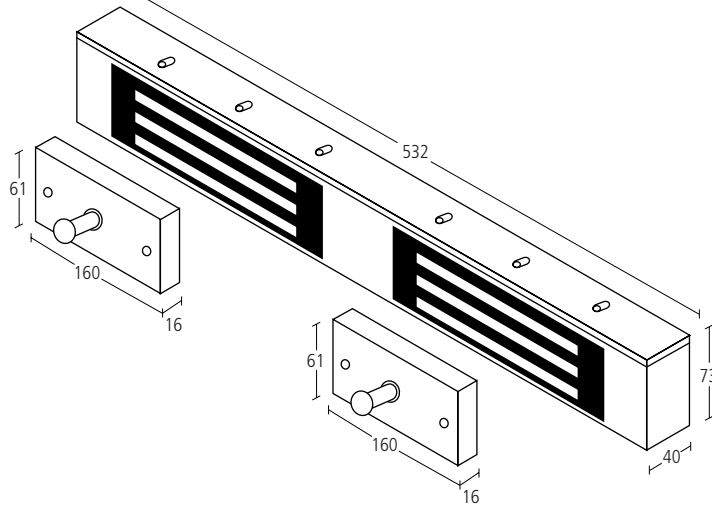
**75519NA**

Adjustable angle support bracket for 75529ND–75545ND electromagnetic locks, to suit outward opening door applications. Two 75519NA are required for mounting double locks.



**75539ND**

Double lock version of 75529ND with two armatures.



- Suitable for double leaf, single action doors.

Finishes

XX75539MA – Modric anodised  
XX75539ASS – Satin stainless steel

**75545ND**

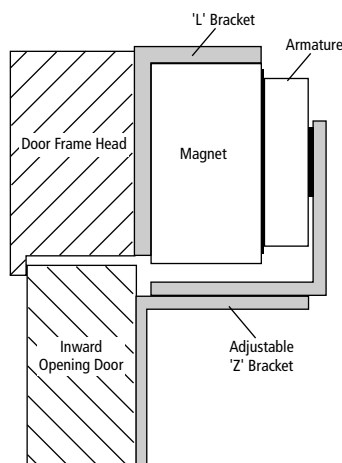
As 75539ND, but with magnetic bond sensing (MBS).

Finishes

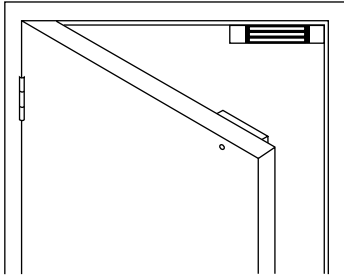
XX75545MA – Modric anodised  
XX75545ASS – Satin stainless steel

**75523N**

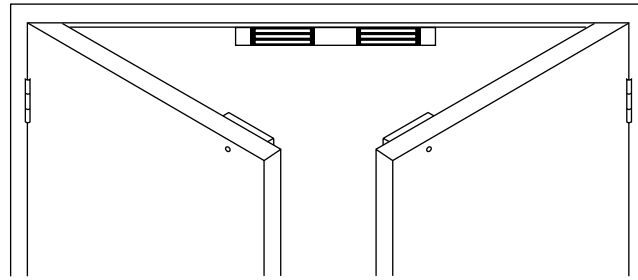
Top jamb mounting kit for 75529ND–75545ND locks, to suit inward opening door applications. Two 75523N are required for mounting double locks.



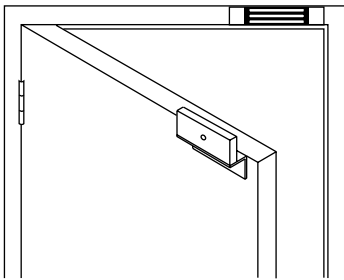
1. Single electromagnetic lock, standard fixing application.



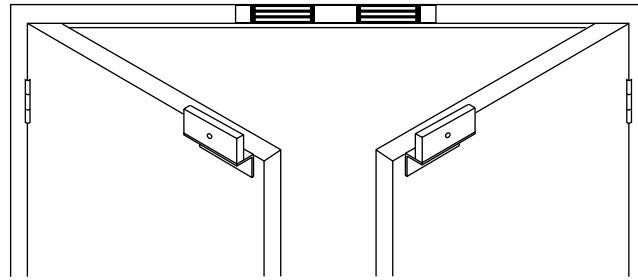
4. Double electromagnetic lock, standard fixing application.



2. Single electromagnetic lock with mounting kit for siting magnet above door opening.



5. Double electromagnetic lock with mounting kit for siting magnet above door opening.



3. Double electromagnetic lock with vertical housing.

