

EM1200 Compact

Shearlock - Instructions

Read all instructions before starting installation

Installation

1 FITTING AND ALIGNMENT

Ensure that

The magnet attached to the Armature lines up with the corresponding switch element on the Shearlock Body. To identify look for small rectangular blocks on the underside of Armature / Shearlock Body

The door is fitted with a quality positive centring closer to ensure the door returns to the same position every time it closes

2 DOOR GAP

Ensure that

Maximum Pull In @ 12vDC is no more than 4mm between Magnet Face and Armature Plate

Maximum Pull In @ 24vDC is no more than 5mm between Magnet Face and Armature Plate

Ensure Minimum distance between Shear Pins and Armature is 1mm

When adjusting armature ensure plate maintains flat horizontal positioning – do not over adjust either end tilting plate

3 POWER SUPPLY

Ensure that

2 amp PSU is used per Shearlock

Place the PSU as near as possible to the Shearlock

DO NOT – use AC Transformer and Rectifier due to power loss

4 CABLE

Ensure that

If extra length required following use of supplied 3m cable - Connections are made with stranded alarm cable, using suitable insulated electrical connector blocks.

Allow extra cores to double/treble the cable should reduced voltage occur at the Shearlock because of distance from Shearlock to PSU

DO NOT - use solid telephone cabling for connections

Warranty

This product is guaranteed for a period of 5 years against defects in manufacture, workmanship or materials provided that all electrical and mechanical installation requirements are adhered to as per this instruction sheet.

All third party and consequential claims are expressly excluded from this warranty.

CE Approved / SGS Tested to 500,000 cycles

The EM1200 is not designed or approved for external use where it's fully open to the weather

DO NOT lubricate this product

Dimensions

Magnet - 163mm(L) x 30mm(W) x 37mm(D)

Armature – 163mm(L) x 30mm(W) x 32mm(D)

Current Draw	Activating Current	Holding Current
12vDC	1150mA	290mA
24vDC	1550mA	160mA

Wiring Connections

EM1200 is configured to operate on 12 or 24vDC
Built in transient and reverse polarity protection

RED + Positive Power Input

BLACK - Negative Power Input

WHITE Push Button (see note – Push Button Release)

GREEN NC

YELLOW NO

BLUE COM

NOTE Monitoring

Mounting Brackets supplied are for use on metal applications. It is recommended they are used to stop Reed Switch being compromised by ferrous frame / door materials. It is further suggested to use separate independent DPS (Door Position Switch) on steel door sets.

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Push Button Release

The EM1200 has a built in push button release feature. Simply connect a volt-free normally open momentary push button between the white wire and the black wire. When the button is pressed the magnet will unlock, releasing the button will relock the magnet. To improve the function of the feature it is recommended that you also set a delayed lock time using dip switches mentioned below.

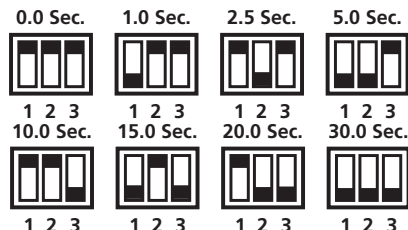
Auto Relock – 100 times

The EM 1200 will auto re lock up to 100 times in the event of misalignment. Once positioned correctly the Shearlock will engage and lock. If after 100 attempts door remains unlocked system requires to be actuated again by removing power and reapplying, use of the push button connection (white wire) will not work.

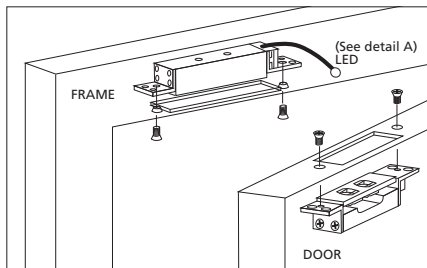
Switch Activated Timer Delay

By selection / positioning of appropriate switch – time delay of 0 – 30 seconds can be selected

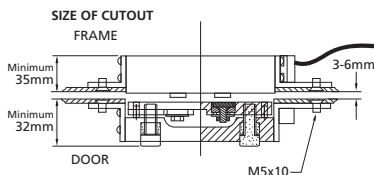
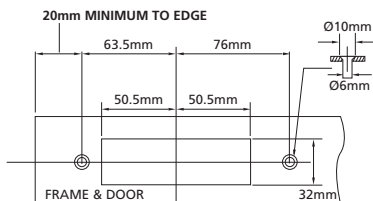
Ensure switches are fully selected and pushed to top or bottom of travel position



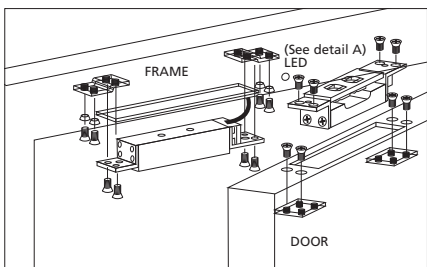
Mounting Options for Metal Applications



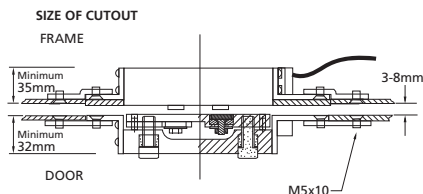
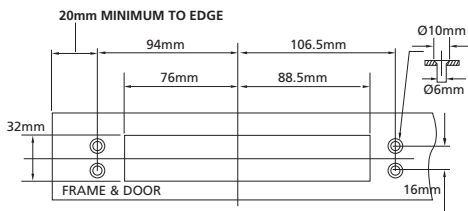
This assumes the thickness
Aluminium/UPVC are 3.2mm



Mounting instructions for Metal/UPVC with auxillary bracket



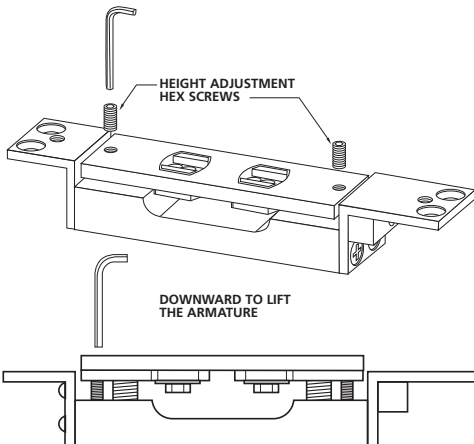
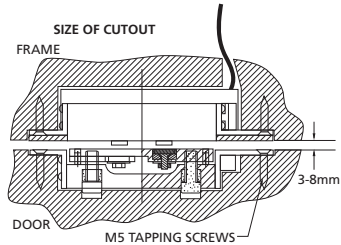
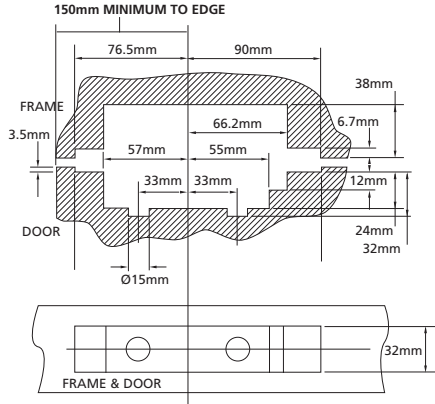
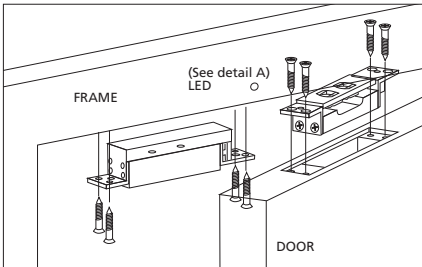
This assumes the thickness
Aluminium/UPVC are 3.2mm.
Auxillary bracket is specially used for
ferrous metal frame as the magnet to
operate door monitoring reed switch
function may be compromised.



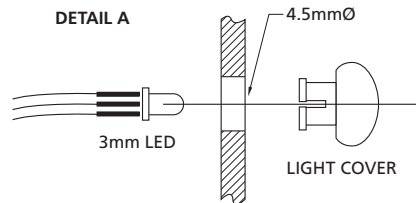
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Mounting Options for Timber Applications



DETAIL A



LED Indicator

Off = No Power

Red = Powered but not fully locked

Green = Powered and fully locked

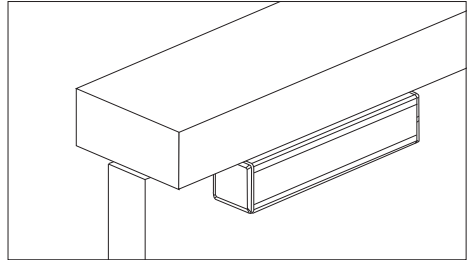
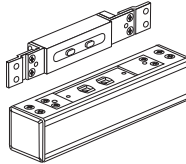
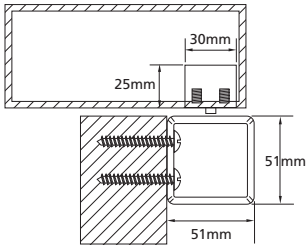
WARNING – HEIGHT ADJUSTMENT IS MADE BY HEX SCREWS IN FACE OF ARMATURE ONLY. THE BOLTS PROTRUDING THRU BASE ARE NOT FOR ADJUSTMENT

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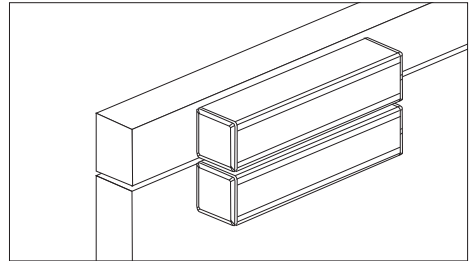
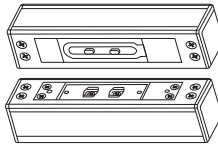
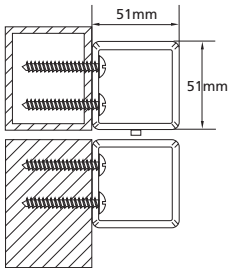
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SURFACE MOUNT INSTALLATION INSTRUCTIONS

For Aluminium/UPVC/Ferrous Metal Door
Flush Magnet & Surface Armature

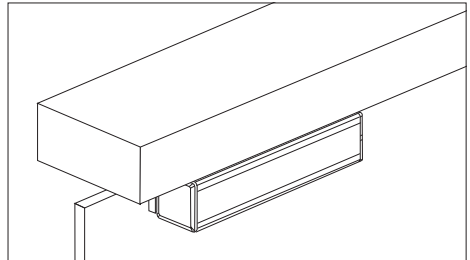
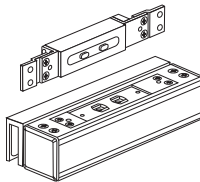
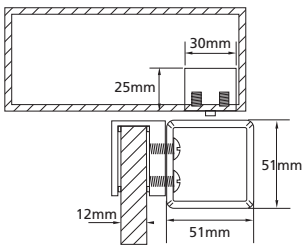


Surface Magnet & Armature

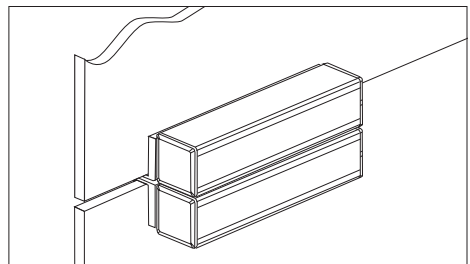
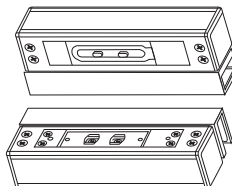
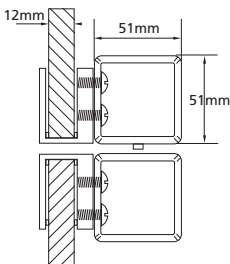


For Glass Door

Flush Magnet & Glass Fixed with Surface Armature



Glass Fixed Magnet & Armature



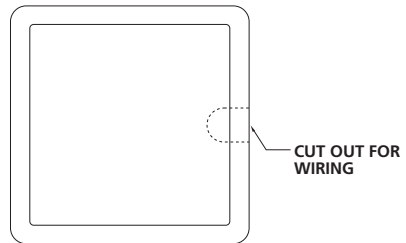
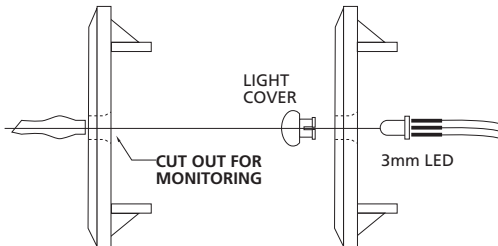
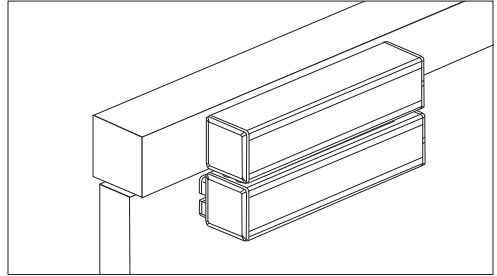
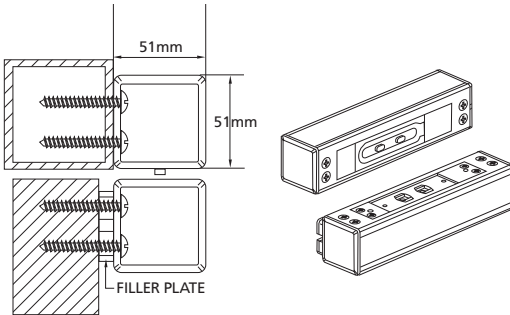
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For Aluminium/UPVC/Ferrous Metal Glass Door with Filler Plate

Surface Magnet & Surface Armature with Filler Plate

1mm/2mm/6mm Thickness filler plates available upon request. Please specify when ordering



TROUBLE SHOOTING

1. Ensure that the door is fitted with a quality positive centering closer to ensure the door returns to the same position every time it closes. Failure to ensure consistency with door closing could lead to mis-alignment of the unit, which could in turn create problems with the operation of the magnet.
2. The magnet attached to the armature must line up with the corresponding switch element on the shearlock body. To identify this look for small rectangular blocks on the underside of the armature/shearlock body.
3. Door gaps are extremely important, ensure that maximum pull in @ 12vDC is no more than 4mm between armature face and armature plate and @ 24vDC is no more than 5mm between the surfaces. minimum distance between shear pins and armature is 1mm.
4. When adjusting the armature ensure that plate maintains flat horizontal positioning and do not over adjust, either end which could result in the plate tilting.
5. The PSU should be positioned as close to the shearlock unit as possible to ensure no major voltage drops.
6. Please ensure that a good quality 2amp PSU per shearlock is used.
7. If additional length of cable is required above the 3m length supplied, connections should be made with standard alarm cable, using suitable insulated electrical connector blocks.
8. Allow extra cores to double/treble the cable should reduced voltage occur at the shearlock because of the distance of the PSU from the shearlock.
9. Do not under any circumstances use solid telephone cabling for connection.
10. Do not lubricate this produce.