

MEM2400LP Mechanical Electro Magnetic Lock For Outward Opening Doors

Introduction

The patented MEM2400LP Mechanical Electro Magnet locking device is designed for securing all types of outward opening side hung hinged doors. The MEM Lock has a holding force up to 1000Kg and is equipped with a long distance Light Panel (LP) for Secure (green) / Non Secure (red) local monitoring indication on the device. The MEM2400LP has been Fire Tested for up to 4 hours to both AS & BS Standards. The MEM2400LP locking device is capable of releasing under door back pressure (pre-load) of up to 70KG.

Monitoring

The MEM2400LP lock is provided with a number of unique monitoring features for either local or remote indication:

- i. Door Status Signal (DSS) 1 set of normally open contacts (N/O -- blue).
- ii. Lock Status Signal (LSS) 1 set of normally open contacts (N/O -- yellow).
- iii. Early Warning (EW) x 2. 2 sets of single throw double pole switches.

EW1: (N/O -- purple); (COM -- orange); (N/C -- pink).
EW2: (N/O -- gray); (COM -- brown); (N/C -- white).

Functions

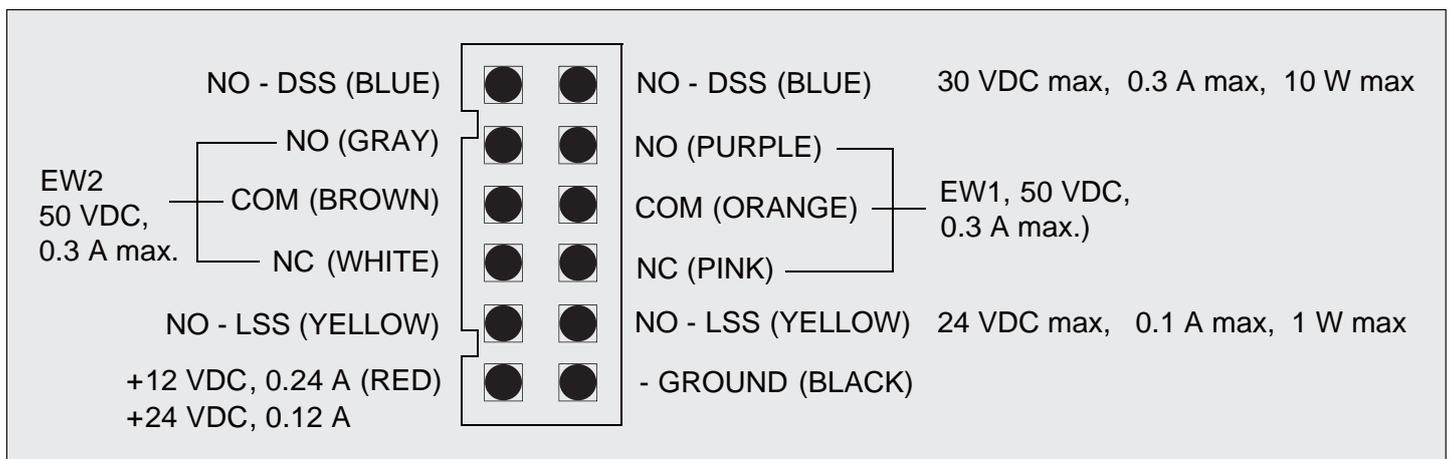
The MEM2400LP Mechanical Electro Magnetic Lock operates on either 12 or 24 VDC. It is set ex-factory on 24VDC and can be changed over to 12V DC by voltage jumper selection(see installation diagram). When power is applied to the lock and the door is in the closed position the Armature Plate is magnetically attracted to the MEM device and both the DSS & LSS switches change status to NC.

When pressure is applied to the door in an attempt to open it unauthorised, the MEM Lock provides the patented local or remote “Early Warning” (EW) security alarm indication.

Power supply

The operating switch or controlling contacts must be installed directly from the power source across the MEM Lock. The DC output of the power supply must NOT be connected to earth but floating to prevent shock and possible damage to the unit.

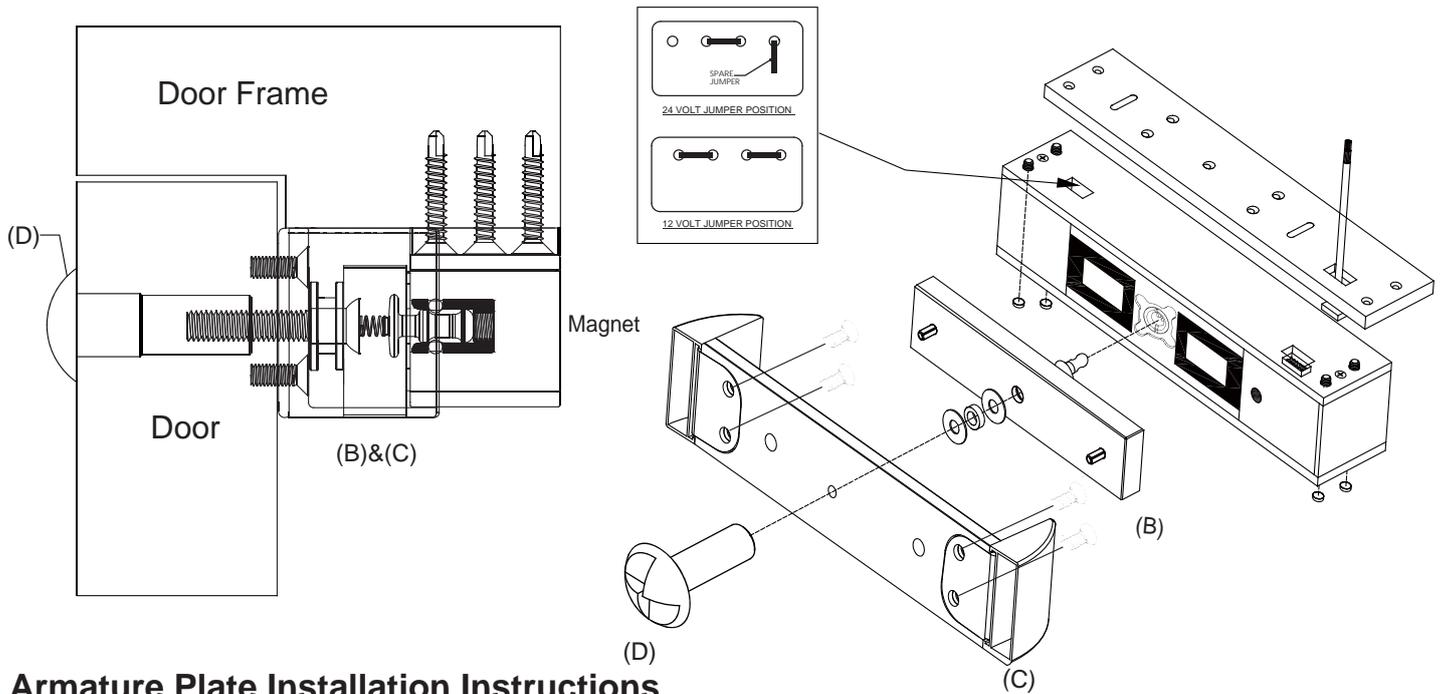
Wiring and Power Input



NOTE:

Ensure that wiring is connected correctly before supplying power to the MEM Lock to prevent damage to the unit.

Installation diagram



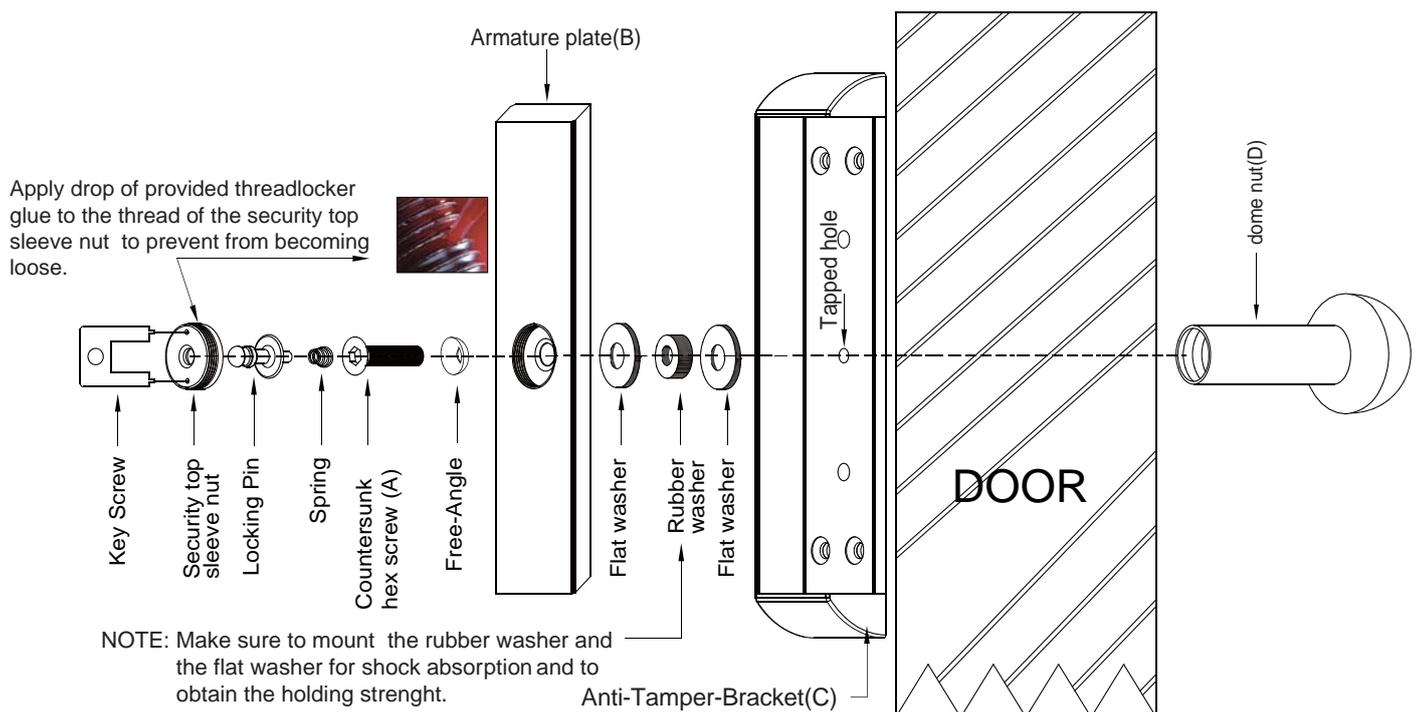
Armature Plate Installation Instructions

The armature plate (B) is screw fixed onto and through the Anti-Tamper-Bracket (C), with the countersunk hex screw (A). **The armature plate must remain flexible to allow surface alignment with the MEM magnet face.** The MEM Lock will lose holding force without this floating alignment.

1. Drill a 12mm diameter clearance hole (timber door) or 12.5mm diameter clearance hole (metal door) through the door at the armature plate center fixing location position.
2. Screw fix the Anti-Tamper Bracket (C) directly to the face of the door with the self-tapping screws provided.
3. Install armature plate (B) with countersunk hex screw (A) into and through the Anti-Tamper-Bracket (C). Ensure that the 2 flat washers and 1 rubber washer are in place and tighten the screw into the tapped hole of the Anti-Tamper-Bracket (C).

Note: The armature plate, when tightened, must remain flexible and be allowed to float as mentioned above.

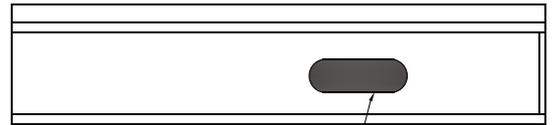
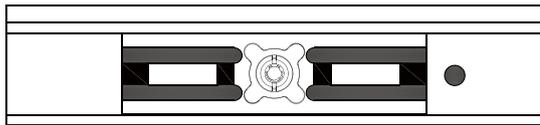
4. Install the dome nut (D) through the clearance hole in the door and tighten onto the Countersunk hex screw (A).



MEM2400LP Output and Indication Status Table

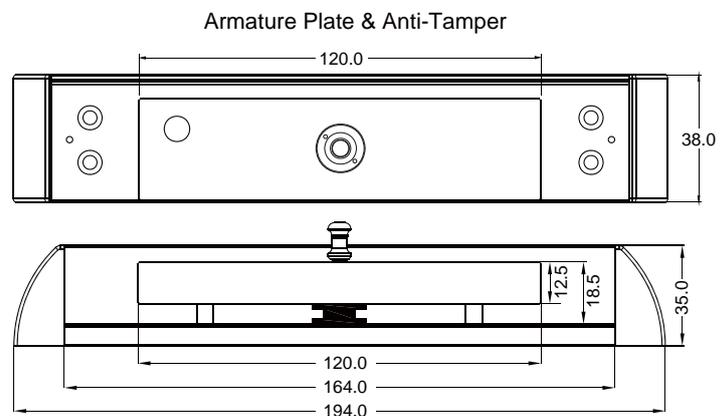
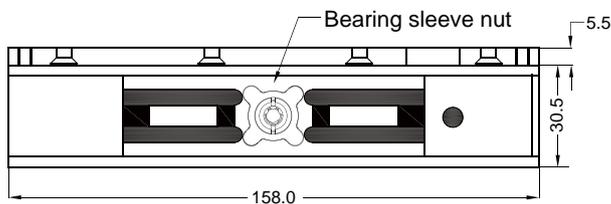
Serial number	Condition	DSS	EW1	EW2	LSS	Indication on Lock (LP)
1	Power OFF Door Open					Power Off No LP Indication
2	Power OFF Door Closed					Power Off No LP Indication
3	Power On Door Open					Red LP ON
4	Power On Door Closed					Green LP ON
5	Power On Door Closed & Tampered					Green LP ON

Light feature



MEM2400LP model (Light Panel)

Installation dimension



Important Safety Precaution

Using the template provided, secure the MEM2400LP MEM Lock firmly on the door frame with the provided screws and have it checked periodically for any possible screw loosening.

Maintenance

Contacting surfaces of the Mechanical Electro Magnetic Lock and Armature Plate must be kept free of contaminating materials. Surfaces should be cleaned periodically with a non-abrasive cleaner. Do not spray the MEM Lock or Armature Plate surface with any lacquer chemicals. This will cause serious problems with the release of the Armature plate from the Mechanical Electro Magnetic Lock leading to possible serious safety problems.

Trouble Shooting

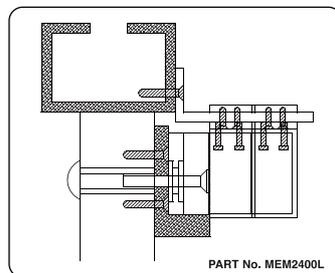
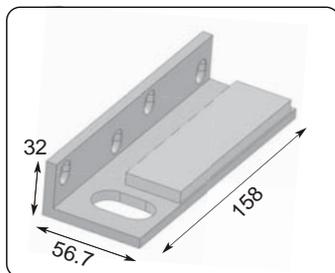
PROBLEM	POSSIBLE CAUSE	SOLUTION
Door will not lock	Incorrect voltage.	Check voltage jumper setting.
	No DC voltage to lock.	Check power and loose wiring.
	Incorrect wiring connection.	Check wiring, refer to wiring instruction.
	Security top sleeve nut higher than magnet surface.	Screw fix the security top sleeve nut level with surface with the provided key screw and apply thread-locker-glue.
Too much back pressure when power is off	Back pressure exerted on the MEM lock not allowing the magnetic lock to retract back to its original position.	Avoid applying continuous pressure on the door when closed. Realign the door.

Accessories and Applications

- **MEM2400L** (has to be ordered separately)

Adjustable L-Bracket for installation on outward opening doors with narrow header frames or in conjunction with Glass-Door-Bracket U-Profile.

Adjustable L-Bracket for narrow header door frame

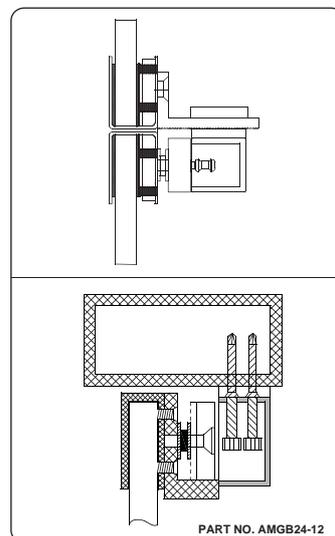
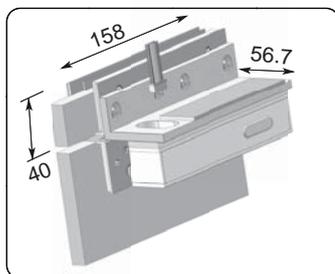


PRODUCT DESCRIPTION

The Adjustable L-Bracket is used where there is not enough space to install the MEM device directly to the door frame header. The L-Bracket acts as an extension of the door frame. The Adjustable L-Bracket is also used in combination with the Glass-Door Bracket "U-Profile" when the lock has to be installed onto a frameless glass header.

- **AMGB24-12** (has to be ordered separately)

Glass-Door U-Bracket for installation on outward opening glass doors

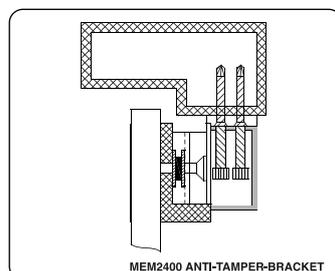
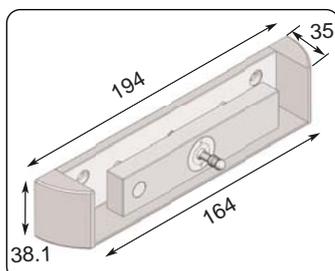


PRODUCT DESCRIPTION

The Glass-Door U-Bracket is used to clamp-on the MEM Lock as well as the Armature Plate to either a frameless glass door or a frameless glass header. As mentioned above, the adjustable L-Bracket has to be ordered separately and can be used on frameless glass headers. The product No. AMGB24-12 has one unit in the box. Frameless glass door and frameless glass frame as one door element would require 2 units of AMGB24-12 as well as 1 unit Adjustable L-Bracket MEM2400L.

- **MEM2400 Anti-Tamper-Bracket**

Glass-Door "stick-on" mounting with MEM2400 Anti-Tamper-Bracket



PRODUCT DESCRIPTION

The MEM2400 Anti-Tamper-Bracket comes with the MEM2400LP MEM Lock as a standard fitting. The bracket can be used for glass door "stick-on" mounting. We recommend 3M self adhesive tape (e.g.4910VHB or equivalent) and FSH Dress plate AMAB4-BC.