

PRODUCT FEM4700FS-LSS | FEM4500FS RSW
HIGH QUALITY WEATHER RESISTANT MINI ELECTRO MAGNETIC GATE LOCKING DEVICES



FEM4700FS-LSS | FEM4500FS-RSW

PRODUCT DESCRIPTION

The Electro Magnetic Mini Gate Lock FEM4700FS-LSS has a holding force of up to 380kg and the Electro Magnetic Micro Gate Lock FEM4500FS-RSW has a holding force of up to 200kg.

Both products are IP67 weather resistant with stainless steel body housings. The devices provide a dual fixing arrangement, a built-in varistor surge protection and accept both 12 and 24VDC. The Electro Magnetic Gate Locks also provide the monitoring feature "Lock Status Sensor" (LSS). The Electro Magnetic Gate Locks come with a lifetime warranty.

TECHNICAL DETAILS

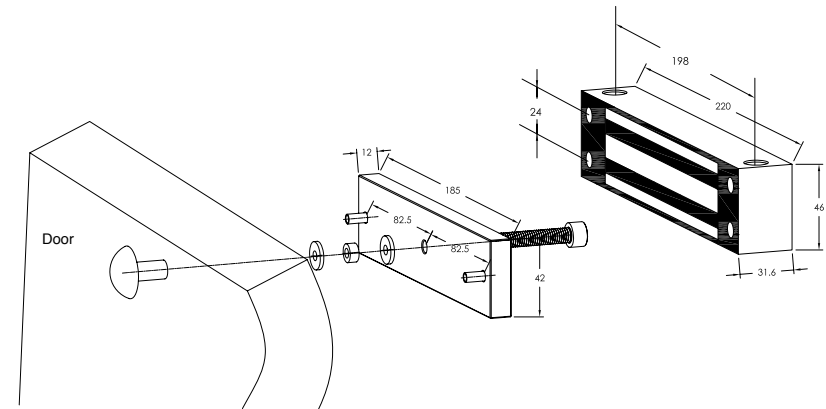
PART NO.	FEM4700FS-LSS	FEM4500FS-RSW
HOLDING STRENGTH	Up to 380kg	Up to 200kg
VOLTAGE/CURRENT	Dual Voltage 12/24VDC, 12VDC=400mA 24VDC=200mA	Dual Voltage 12/24VDC, 12VDC=360mA 24VDC=180mA
MONITORING	LSS	LSS
SIZE	Magnet size: L= 220 x W= 47 x D= 30.5mm Armature plate size: L= 185 x W= 42 x D= 12mm	Magnet size: L= 162 x W= 26 x D= 31mm Armature plate size: L= 130 x W= 30 x D= 8.7mm

PRODUCT FEATURES

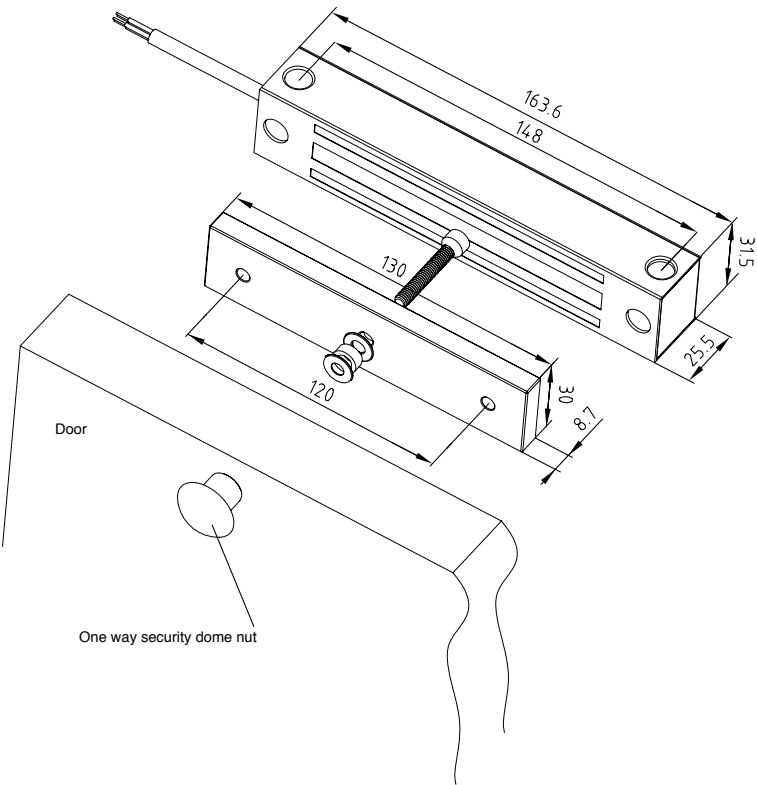
- Lock Status Monitoring Sensor (LSS)
- Stainless 304 steel body housing
- Weather resistant IP67
- Lifetime warranty
- CE/C-Tick
- Guaranteed no residual magnetism

PRODUCT DIMENSIONS AND INSTALLATION

FEM4700FS-LSS



FEM4500FS-RSW



FEM 4500FS RSW

Monitored Weather Resistant Electro-Magnetic Lock

Introduction:

The **FEM 4500FS RSW** series electromagnetic lock is designed to be used on external gates or doors that are exposed to the elements. The casing is made of stainless steel and the product is rated to IP67. Voltage spike suppressors (Varistors) are provided in the hardware kit pack, for 12 VDC used 220k and for 24 VDC used 390k.

The **FEM 4500FS RSW** series can be installed on single swing doors or sliding doors and has no residual magnetism.

The electromagnetic lock should always be mounted on the secure side of the door.

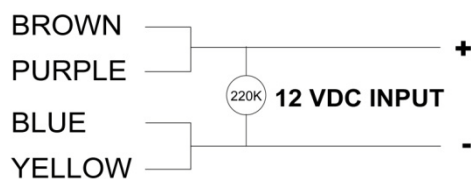
The **FEM 4500FS RSW** has a built-in REED SWITCH lock monitoring sensor indicates the lock status (open or closed). The REED SWITCH functions are generated through three output wires as following:

Red wire- Normally closed;	Green wire- Normally open;	Black wire- Common.
Reed Switch not Operated-	No Power on Magnetic Lock.	
	Power on Magnetic Lock and Door Open.	
Reed Switch Operated-	Power on Magnetic Lock and Door Closed.	

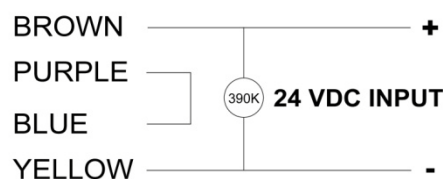
REED SWITCH CONTACT RATING:	Maximum Switching Voltage: 24VDC
	Maximum Switching Current: 50mA
	Maximum Continual Load Current: 50mA

Wiring and Power input requirements:

12 VDC/ 0.35 A



24 VDC/ 0.18 A



Warning: Wrong connection of wiring will cause the MOV surge suppression of the electromagnetic lock to fail. This is not covered under warranty.

Important Safety Requirements:

The armature plate must remain movable to allow surface alignment with the magnet face. The Magnetic Lock will lose holding force without this floating alignment.

Do not trim the rubber washer mounted on the head of the armature centre bolt.

Trimming rubber washers will adversely affect the release of the armature plate from the magnetic lock.

1. Apply thread-locker glue (i.g. Loctite) to the thread of the Armature-Plate-Fixing Screw (Allen-Screw) to prevent from becoming loose.
2. Locks have to be inspected at regular intervals to ascertain the safety functionality in conjunction with the door environment.
3. The supplied Allen screws cater for maximum door-thickness of 45mm.

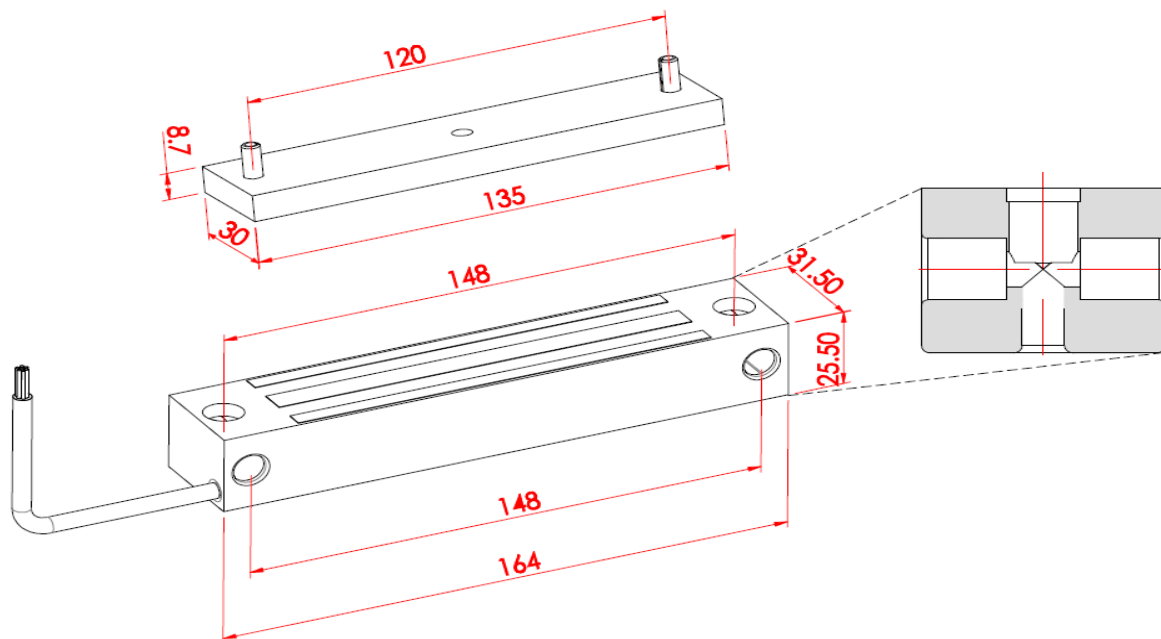
Maintenance:

Contacting surface of the electro-magnet and Armature plate must be kept free of contaminating materials. Surfaces should be cleaned periodically with a non-abrasive cleaner. Do not spray the electro-magnet and armature plate surface with any chemicals such as lacquer, etc. This will cause serious problems with the release of the magnetic lock and its armature plate resulting in serious safety problems.

Trouble Shooting:

Problem	Possible Cause	Solution
Door will not lock	No DC voltage to lock.	Check power supply and wiring to magnetic lock.
Reduced holding force	No contact between armature plate and face of magnet.	Ensure mating surfaces are clean and in proper alignment and the armature plate floats freely.
	Low voltage or wrong voltage setting	Correct to specified voltage setting and power input requirement
Reed Switch Status is incorrect	Misalignment of armature plate.	Correct armature plate alignment.

Product Dimensions:



FEM 4700FS LSS

Monitored Weather Resistant Electro-Magnetic Lock

Introduction:

The **FEM 4700FS LSS** series electromagnetic lock is designed to be used on external gates or doors that are exposed to the elements. The casing is made of stainless steel and the product is rated to IP67.

The **FEM 4700FS LSS** can be installed on single swing doors or sliding doors and has no residual magnetism.

The electromagnetic lock should always be mounted on the secure side of the door.

The **FEM 4700FS LSS** has a built-in Relay Switch. The functions are generated through three output wires as following:

Red wire- Normally closed;

Relay Switch not Operated-

Relay Switch Operated-

Green wire- Normally open;

No Power on Magnetic Lock.

Power on Magnetic Lock and Door Open.

Power on Magnetic Lock and Door Closed.

Black wire- Common.

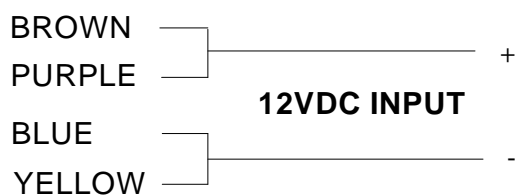
RELAY SWITCH CONTACT RATING:

Maximum Switching Voltage: 24VDC

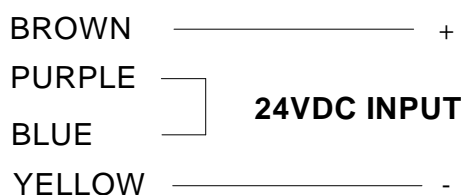
Maximum Switching Current: 1A

Wiring and Power input requirements:

12 VDC/ 0.43A



24 VDC/ 0.22A



Warning: Misconnection of wiring will cause the TVS surge suppression inside the electromagnetic lock to fail. This will not be covered under warranty.

Important Safety Requirements:

The armature plate must remain movable to allow surface alignment with the magnet face. The Magnetic Lock will lose holding force without this floating alignment.

Do not trim the rubber washer mounted on the head of the armature centre bolt.

Trimming rubber washers will adversely affect the release of the armature plate from the magnetic lock.

1. Apply thread-locker glue (i.g. Loctite) to the thread of the Armature-Plate-Fixing Screw (Allen-Screw) to prevent from becoming loose.

2. Locks have to be inspected at regular intervals to ascertain the safety functionality in conjunction with the door environment.

3. The supplied Allen screws cater for maximum door-thickness of 45mm.

Maintenance:

Contacting surface of the Electro-Magnet and Armature Plate must be kept free of contaminating materials. Surfaces should be cleaned periodically with a non-abrasive cleaner. Do not spray the Electro-magnet or Armature Plate surface with any chemicals such as lacquer, etc. This will cause serious problems with the release of the magnetic Lock and its Armature Plate resulting in serious safety problems.

Trouble Shooting:

Problem	Possible Cause	Solution
Door will not lock	No DC voltage to lock.	Check power supply and wiring to magnetic lock.
Reduced holding force	No contact between armature plate and face of magnet.	Ensure mating surfaces are clean and in proper alignment and the armature plate floats freely.
	Low voltage or wrong voltage setting	Correct to specified voltage setting and power input requirement
Reed Switch Status is incorrect	Misalignment of armature plate.	Correct armature plate alignment.

Dimensions and Mounting Options:

