

# WMG600 & WMG1200 Series

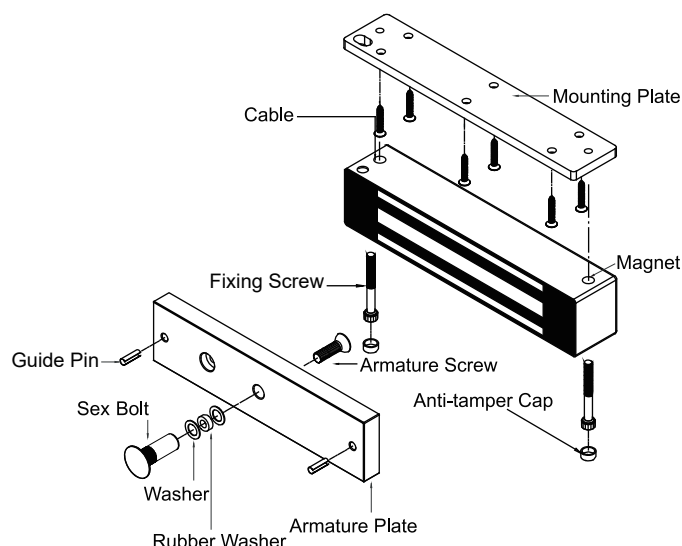
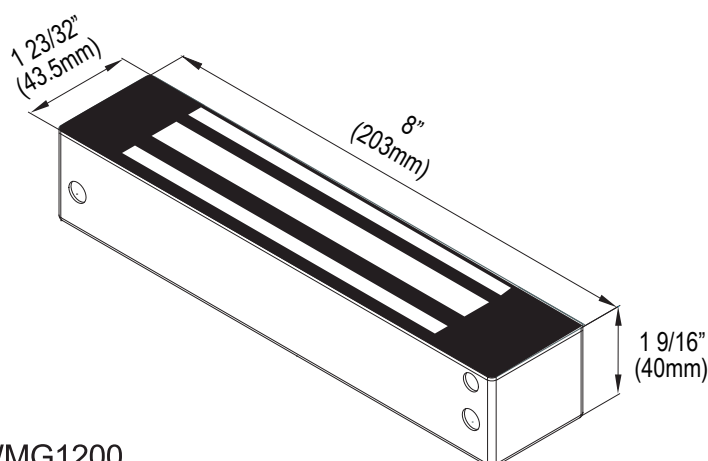
## Electromagnetic Lock Installation Instruction (Waterproof Series)

### A Technical Specification

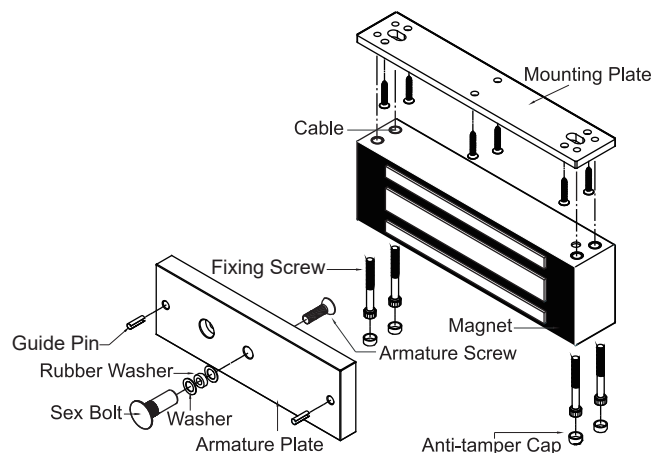
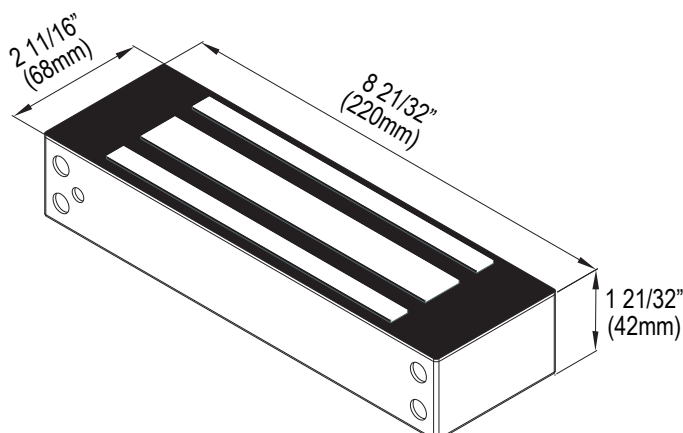
Specification			UL1034 Rating	UL294 Performance Level
Operating Voltage	12/24VDC			
Current Draw	500mA/12VDC 250mA/24VDC	WMG600	Static force: 500 lb Dynamic force: 50 ft-lb Endurance: 100,000 cycles	Destructive Attack: Level I Line Security: Level I Standby Power: Level I Endurance: Level IV
Operating Temperature	-31° to +150.8°F (-35° to + 66°C)	WMG1200	Static force: 1,000 lb Dynamic force: 70 ft-lb Endurance: 100,000 cycles	
Reed Switch Rating	0.1A/20VDC (Resistive load)			
Holding Force	600lbs & 1200lbs	UL Requirements		
Lock Surface Temperature	≤ Current temperature ± 20°C			
Lifetime Test	100,000 cycles	<ul style="list-style-type: none"><li>● UL 294 indoor use, UL 1034 indoor and outdoor use</li><li>● The power for the WMG600/WMG1200 series is to be provided by a Listed (ALVY, FULA or APHV) Class 2 power supply.</li><li>● The WMG600/WMG1200 series is intended for use with Special Locking Arrangement which are installed in accordance with the manufacturer's installation and operation instructions, the Life Safety Code, ANSI/NFPA 70 and 101, and the local authority having jurisdiction.</li></ul>		
Humidity	0 to 85% Non-condensing			
Finish	Magnet Surface: Galvanized Housing: Brushed stainless steel (US32D)			

### B Dimension & Accessories

#### WMG600



#### WMG1200



#### WARNING

Warnings indicate potentially hazardous conditions, which if not avoided or corrected, may cause death or serious injury.



#### CAUTION

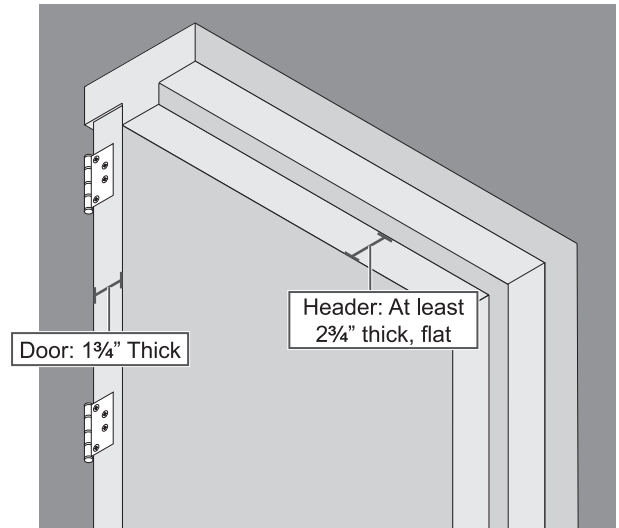
Cautions indicate potentially hazardous conditions, which if not avoided or corrected, may cause minor or moderate injury. Cautions may also warn against unsafe practices.

#### NOTICE

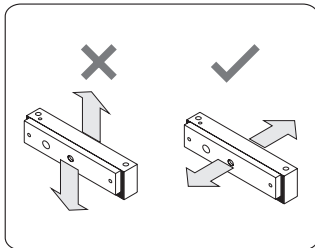
Notices indicate a condition that may cause equipment or property damage only.

## C Pre-Installation Considerations

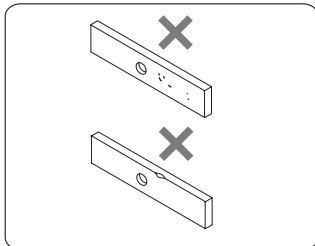
- Use **ONLY** the hardware provided for mounting this product (NOTE: Non-standard Door thickness may require different sex nut hardware - see specific instructions for required hardware).
- Follow the installation procedure as described in this manual.
- Check door thickness. If the door is not 1¾" thick, a different sex nut will be required. Contact customer service at 1-877-671-7011.
- Check door header. A minimum 2¾" thick, flat surface is needed to securely mount all screws for the magnet. If you do not have the required surface, you will need filler plates and/or angle brackets to properly mount the magnet. Contact customer service at 1-877-671-7011.



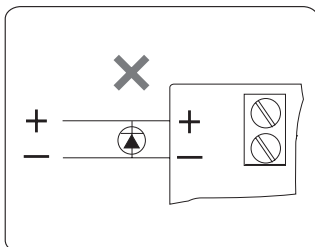
## D Important Notes



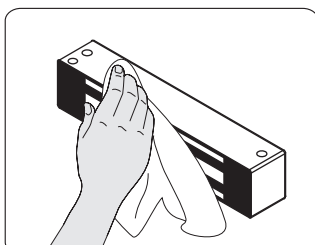
**CAUTION**  
The electromagnet lock requires a face-to-face fitting as shown in Figure otherwise, the holding force will be greatly decreased (direction of hydraulic press pull must be collinear).



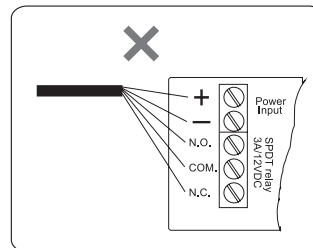
Make sure the contact area of the electromagnetic lock and the armature plate are clean or the bond sensor output function will not work.



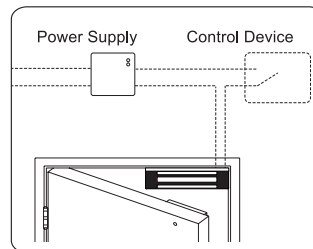
**CAUTION**  
Remove any diode installed across the magnetic lock for spike suppression. The magnet is fitted with a metal oxide varistor to prevent back EMF.



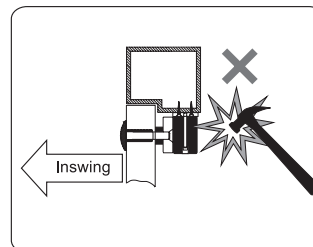
Wipe the surface of magnet lock with anti-rust oil regularly.



Do not apply power wires and signal wires in the same cable or conduit.



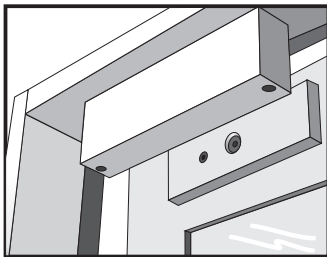
The electromagnet locks are fail-safe, therefore it may be required that the UPS remain locked during power failure.



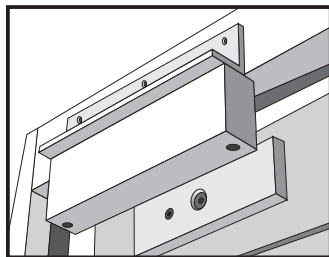
Be aware that it is better to install the electromagnet lock inside the house and hide the cable inside the door frame in order to guard against unlawful entry. With LZ for inswing doors.

## E Optional Bracket

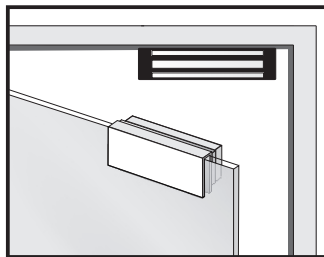
Brackets installation are according to door swing direction and door frame type , e.g. narrow frame door , frameless glass door , inswing door , etc.



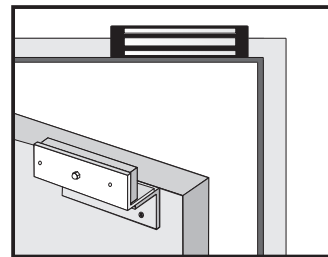
Regular Installation  
(outswing door)



L-bracket for  
narrow frames (optional)



U-bracket for frameless  
glass doors (optional)  
WMG600 only outswing  
door.



LZ-bracket for  
inswing doors (optional)

## F Regular Installation

① Fold the mounting template to form a 90 degree angle.

Template

② Place the template in the proper position on the door/frame and mark the hole positions.

③ Drill the holes according to the marks.

Frame

Door

④ Armature Plate

Please install the armature plate as illustrated here. (Dimensions of the holes are depending on the door types as illustrated below.)

Hollow Metal Door

Outdoor

12.7mm 8mm

Reinforced Door

Outdoor

6.8mm for M8-1.25 thread

Solid Door

Outdoor

12.7mm 8mm

Drill a Ø8mm hole through door, on closing side enlarge to Ø12.7mm by a sexnut bolt on the opening side.

Drill a Ø6.8mm hole and tap on closing side a M8x12.5 thread.

Drill a Ø8mm hole through door on closing side enlarge to Ø12.7mm, by a sexnut bolt on the opening side. The depth is 36mm.

⑤ 9.4mm holes for M6 Blind Nuts.  
7mm holes for M5 Blind Nuts.

⑥ Use the screws to permanently mount the mounting plate, then mount the magnet with the fixing screws provided.

Fixing screw

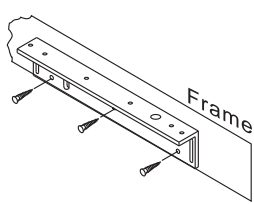
⑦ Power

Connect the power and test the unit. Insert the anti-tamper caps into the holes of mounting screws.

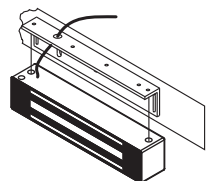
Outswing

Protected Area

## G LZ or Z Bracket for Inswing Doors

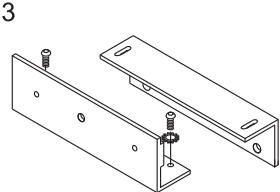
**1**


Find a mounting position on the door frame for the L bracket. Make sure that the door can still be closed.

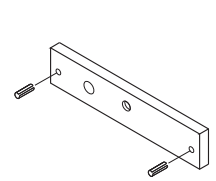
**2**


Surface Mount

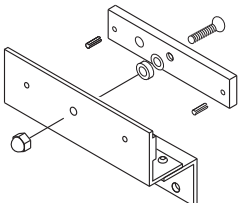
Use the fixing bolts to tighten the magnet on L bracket.

**3**


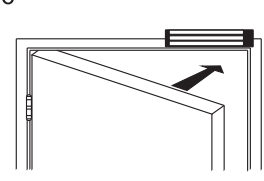
Assemble the Z bracket and make sure that the Z bracket is adjustable.

**4**


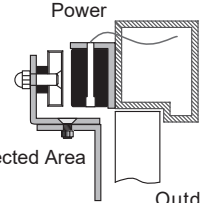
Insert the guide pins into the armature plate.

**5**


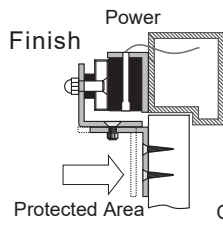
Attach the armature plate and washers to the Z bracket assembly.

**6**


Close the door and connect the power.

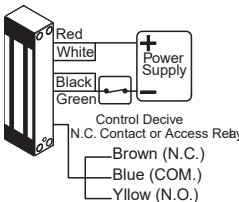
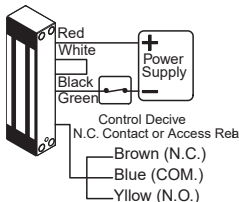
**7**


After the magnet attracts the armature plate, adjust the Z bracket to fit the door.

**Finish**


Fasten the Z bracket to the door.

## H Connecting Diagram

Wire Leads (Power input is polarity free)	Power Input	Diagram	Bond Sensor Output
7 Wire Leads	12VDC / 24VDC	<div style="display: flex; justify-content: space-around;"> <div> <p>Parallel Connection: 12VDC</p>  </div> <div> <p>Series Connection: 24VDC</p>  </div> </div>	<p>Indicates locked and unlocked status</p> <p><b>N.O.</b> - Door locked</p> <p><b>N.C.</b> - Door unlocked</p> <p>(Reed switch rated: 0.1A/20VDC)</p>

## I Trouble Shooting

Problem	Possible Cause	Solution
Door does not lock	No power	<p>Make sure the wires are connected properly</p> <p>Check that the power supply is connected and working properly</p> <p>Make sure the lock switch is wired correctly</p>
Low holding force	Poor contact between electromagnet and armature plate	<p>Check if the armature plate is deformed?</p> <p>Make sure if the rubber washer was used between magnet lock and armature plate.</p> <p>Make sure the contact surfaces of the electromagnet and armature plate are clean and free from dust and foreign material.</p>
	Low voltage or incorrect voltage setting	<p>Ensure the electromagnet lock is set for the correct voltage.</p> <p>Check for proper voltage at the electromagnet locks input. If low determine if the correct wire gauge is being used to prevent excessive voltage drop.</p>
Sensor output is not functioning	A secondary diode was installed across the electromagnet lock	Remove any diode installed across the magnet "spike" suppression. (The magnet is fitted with a metal oxide varistor to prevent back EMF)
	Misalignment between the reed switch and electromagnet lock	Make sure the armature plate and electromagnet lock are aligned correctly.

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For details regarding the limited warranty:

**Customer Service**

1-877-671-7011

[www.allegion.com/us](http://www.allegion.com/us)



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**LOCKNETICS**