

# ML-450 Electric Lock Installation Instruction

## Specifications

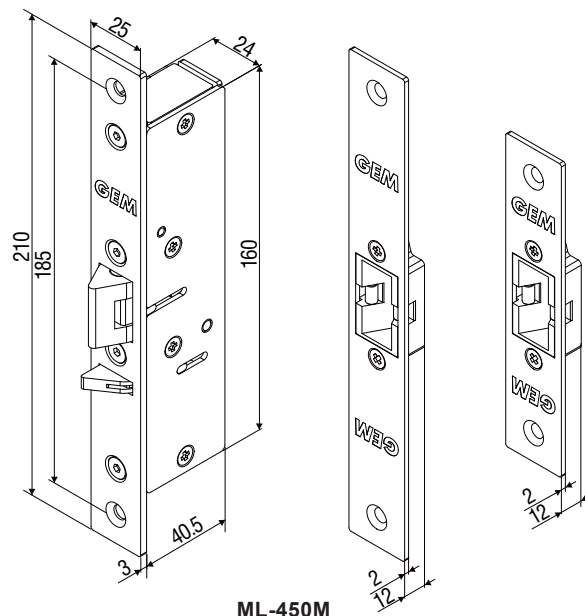
- Operating Voltage: 12 ~ 24 VDC/AC
- Current Draw: 280mA/12VDC; 180mA/24VDC
- Locking Mode: Fail-Safe
- Operating Temperature: -10°C~+49°C
- Humidity: 0~85% non-condensing
- Applicable to horizontal and vertical installation
- For single/double action swing doors
- Latch Throw: 13mm
- Endurance Rating: 250,000 cycles (Factory tested)
- Static strength: 1,500 lbs
- Preload: 500 lbs of pressure strength

## ML-450 Series Models

- ML-450M: Mortise mount
- ML-450MSMB: Surface mount
- ML-450MVGL: Surface mount (for frameless glass doors & walls)

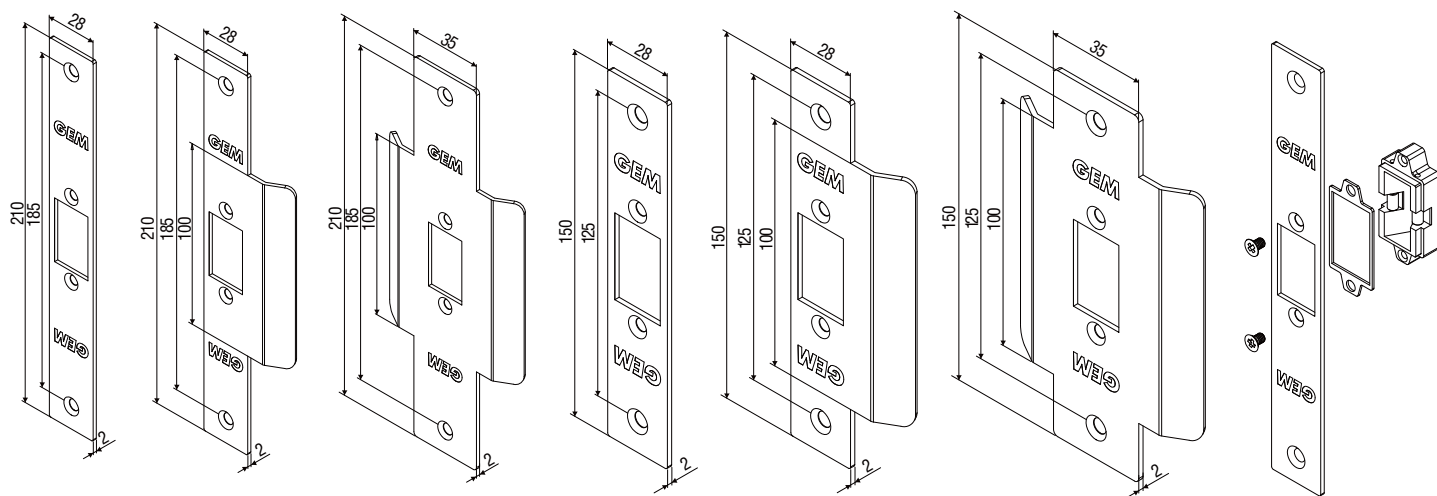
## Mortise Mount Model Dimensions

Unit:mm



ML-450M

## Strike Plate Dimensions



KP-ML-400-A

KP-ML-400-B

KP-ML-400-C

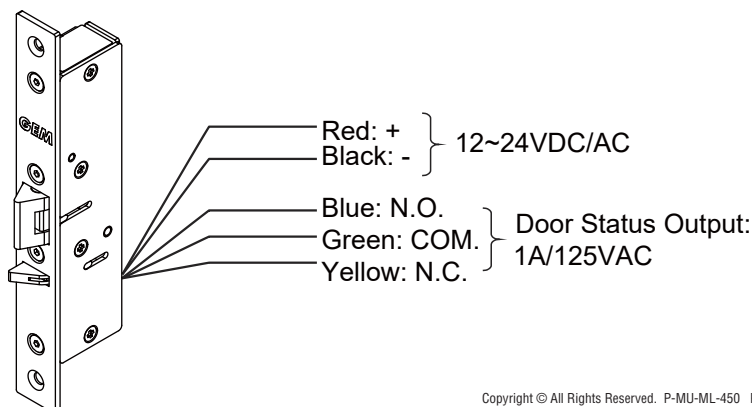
KP-ML-450-A

KP-ML-450-B

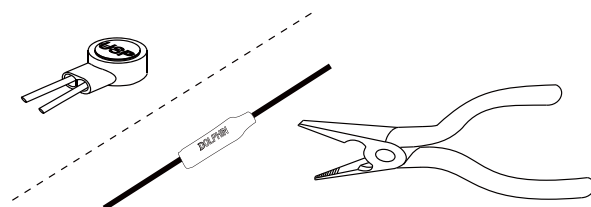
KP-ML-450-C

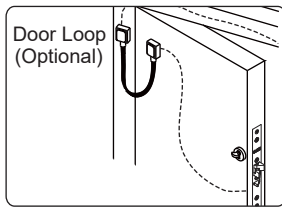
## Wiring Diagram

## Butt Splice (IDC) Connector

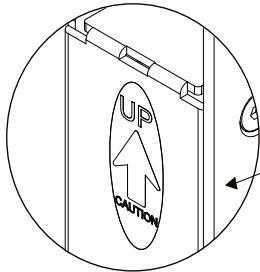


Using crimper or pliers and pressing the header of connector down to even position.

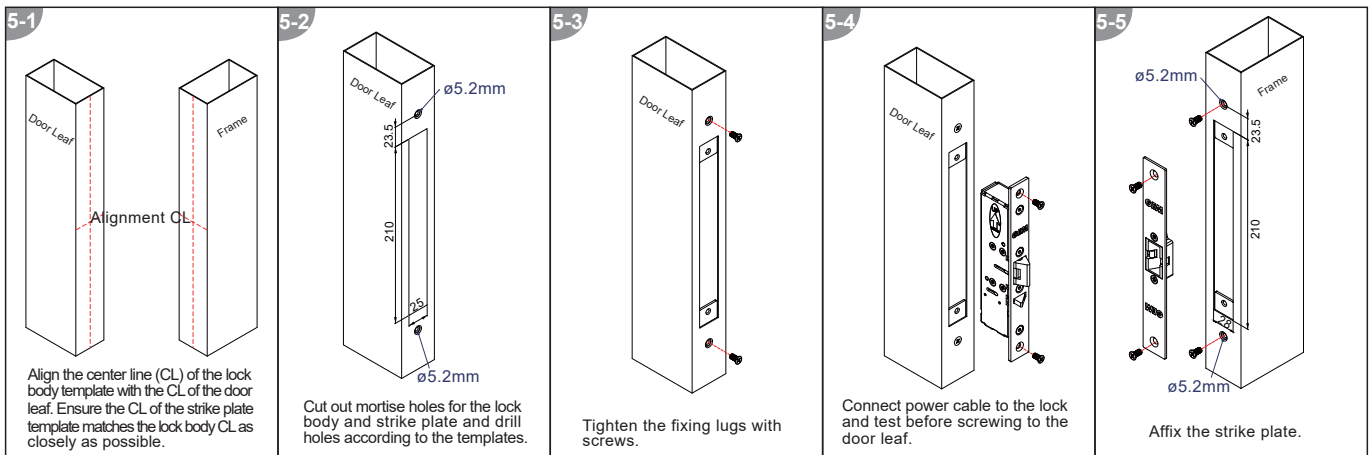
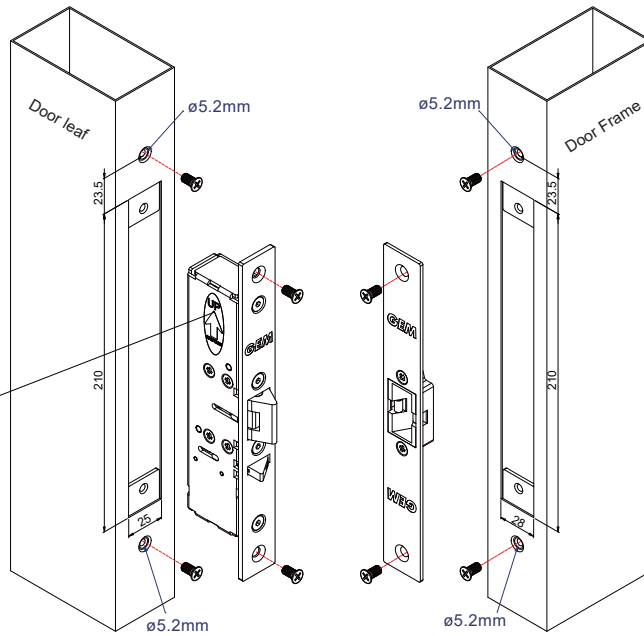




The door loop protects the wiring from damage at the door hinge.

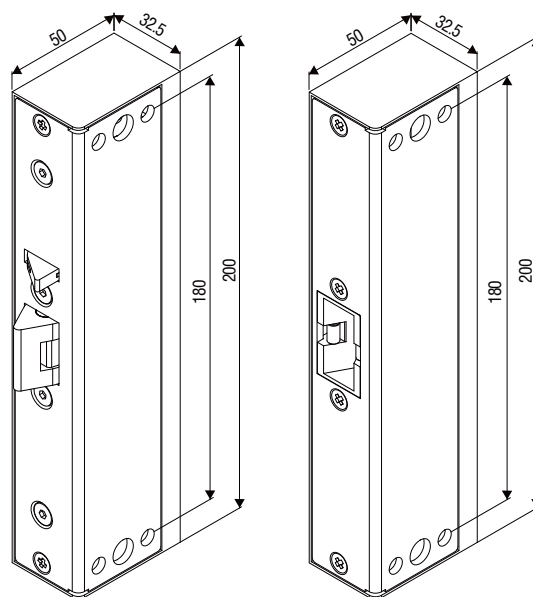


Attention! Please ensure that the template is the correct way up.



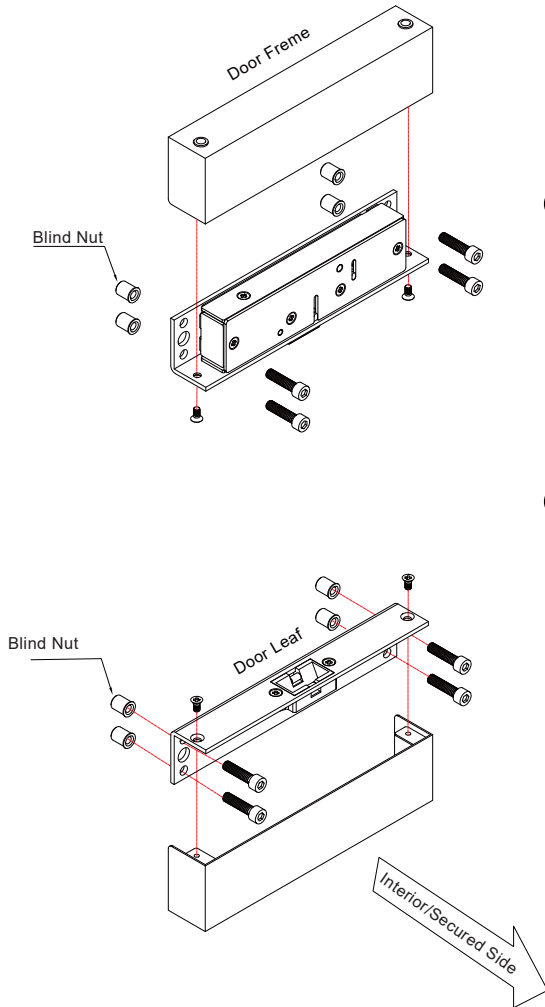
## Surface Mount Model Dimensions

Unit:mm



ML-450MSMB

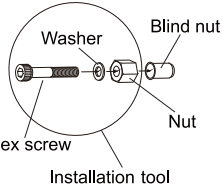
## Surface Mount Installation



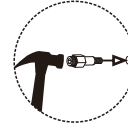
### Installing Blind Nuts

①

Blind Nut Assembly

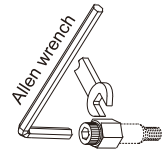


②



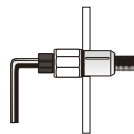
Drill a 9.4mm hole and hammer the blind nut assembly into the hole.

③



Use a wrench or vice-grip to tightly hold the nut. Then use the included Allen wrench to slowly tighten the screw until it does not turn any further.

④



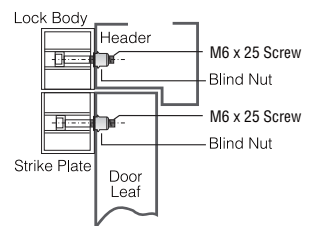
This compresses the blind nut so that it remains permanently fixed in the hole.

⑤



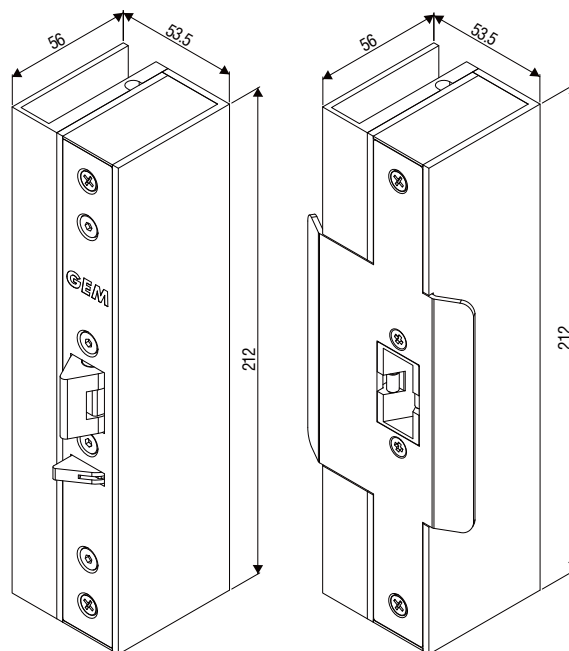
Remove the installation tool from the blind nut. Repeat step 2 through 4 for the other blind nuts.

⑥



## Glass Mount Model Dimensions

Unit:mm



ML-450MVGL

### Installation Instructions

1. Confirm the installation location and clean the surface of the glasses.
2. Take off the sticker on the back side of the spacer and attach the spacer to the glass. Add more spacers if needed per glass thickness. Use silicone sealant or other adhesives to secure the bracket firmly.
3. Tighten the set screws with an Allen wrench, secure the electric lock to the glass bracket, and then install the cover.

### Caution:

1. It is recommended to attach the spacers to the interior/secured side of the door.
2. Tighten the set screws firmly but do not overtighten to cause damage to the glass.
3. The glass thickness should be 10~13 mm. The bracket can be adjusted to properly align the position of strike plate and lock body depending on the door gap ranging from 6 to 10 mm.

