

AL4M SERIES (Motorized Lock/Unlock)

ELECTRIC DEAD LOCK

Applications: Common entrances to condominiums, office entrances, emergency exits, and more



Type U9AL4M-1 (ST)



Type U9AL4M-4E

Type U9AL4M-4EP

Note 1: Right-handed and left-handed emergency exit devices are available. Please specify right-handed or left-handed when placing an order. (See P.173 for the view of right-handed and left-handed)

Note 2: The default configuration is for steel doors. To use the product for a wooden door, please consult separately.

AL4M series is a successor model of AL3M series with full compatibility and some product improvements.

The door is locked or unlocked by an electrically powered motor.

- The side pressure should be 5kg or less.
- Locking or unlocking, by the energized polarity.

The door can also be locked and unlocked with a key or thumb-turn.

If the thumb-turn operation is difficult, because of attaching the lock case to the lower part of door end relating to the door structure and handle shape, we recommend to unlock electrically combining with switch.

Door status and lock status can be confirmed remotely

In the event of a power failure, the lock remains in the same state it was in prior to the power failure.

During a power failure, a key or the thumb-turn can be used to lock or unlock the unit.

Type AL4M-E with an emergency exit device and Type AL4M-EP with a one-touch emergency exit device are also available. (Backset of 51 and 64 mm only).

- Right / left handed must be specified at order.
- LB cylinder is not available for Type AL4M-EP.
- Types AL4M-E and AL4M-EP allow the emergency covers to be reused. Types AL4M-BE and AL4M-BP with breakable emergency covers are also available.
- Use the TEK series for conductive fittings.
- When automatic locking operation is combined with the controller, the door is automatically locked when closed, but the emergency exit device can be used repeatedly.

Type AL4MR with an R shaped front plate is also available. (See P.363)

There are also Type HD and Type HD2 strike plates with a roller that allows for unlocking with little force even if side pressure is applied to the dead bolt. (See P.362)

- Type HD allows you to adjust the strike plate opening in increments of ± 2 mm.

Water resistance complies with JIS C0920 protection class 3 (rainproof type).

Only the lock body is waterproof. Waterproofing should be applied to the 2-wire conversion adapter and wiring. In addition, installing the lock body upside down or on the top or bottom frame will affect water resistance.

Note 1: The gap between the door and the frame should be within 6 mm.

Note 2: When using a floor hinge, use hinges that only open one way.

Note 3: Installing the lock body on the top frame or bottom frame may cause malfunction.

Note 4: 9-pin harness is not included. Please order it separately if needed.

Functions			
Mountable cylinder	Model	Outside	Inside
U9 WR PR(-J) LB(-J) JN	AL4M-1	Cylinder	Thumb-turn
U9 WR PR(-J) LB(-J) JN	AL4M-2	Cylinder	None
	AL4M-3	None	Thumb-turn
U9 WR PR(-J) LB(-J) JN	AL4M-4	Cylinder	Cylinder

Note: Also available with a dummy cylinder. When purchasing as a set, add "D" to the end of the type name. Example of type: AL4M-2D

Specifications	
Backset (mm)	38, 51, 64
Case depth (mm)	57, 70, 83
Door thickness range (mm)	33-42, 42-50, 50-58, 58-66

Note 1: See P.122 for a list of cylinder materials and finishes.

Note 2: Please note that the minimum door thickness of AL4M-E is 34 mm or more.

Electrical specifications				
Name	Ratings			
Motor (Lock/unlock operation)	Voltage 24 V DC (±20%)	Current 0.3 A (±20%) Note	Energization time AL4M (2 to 3 seconds) AL4M-E(P) (3 to 5 seconds)	Energiza- tion rate 1/5
Reed-switch (Door open/close signal)	Voltage 24 V DC	Current 2 mA to 100 mA	Requisite clearance 6 mm or less (AL4M-E and AL4M-EP lock signals also equivalent to the left)	
Micro-switch (Lock/unlock signal)	Voltage 24 V DC	Current 2 mA to 100 mA	AL4M-E and AL4M-EP unlock and emergency unlock signals also equivalent to the left	
Lead wire	250 mm long (9P connector included) AWG-24 UL1061 heat-resistant vinyl wire			
Operating tem- perature range	-10°C to +50°C (with no dew condensation or freezing)			

Note: This table shows the electrical specifications at a lateral pressure of 0 kg. If lateral pressure is applied to the dead bolt, a large current may be applied and affect the controller, etc. Therefore, installation should be performed so that no lateral pressure is applied.

Inner circuits

