

JH-210 LIFT ASSIST HINGE - INSTALLATION MANUAL

WARNING

The expression at below is to show the warning to prevent the fortuitous accident.

WARNING - Showing the case, which may cause the people being died or serious injury by not proper use.

CAUTION - Showing the case, which may cause the people being disabled or the material being damaged.

The expression warns/cautions in particular situation.

The expression prohibits the particular situation.

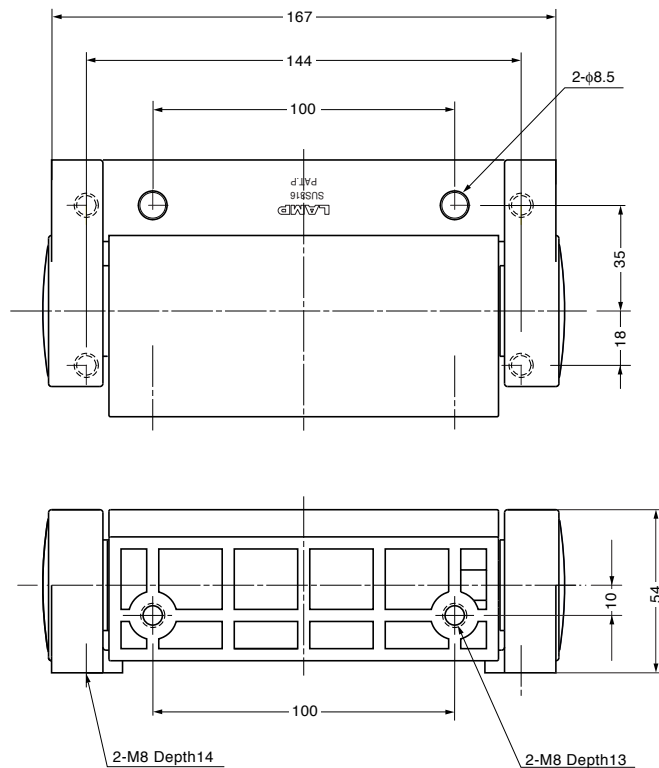
The expression obeys the particular use/situation.

- Do not use at high - low temperature situation e.g. at incinerator
- The screw used is at limitation of depth or this may cause the damper being damaged.

- Be sure the durability at installation point.
- Keep "remaining moment [+]" at door opening angle [0 degree] for safety reason.

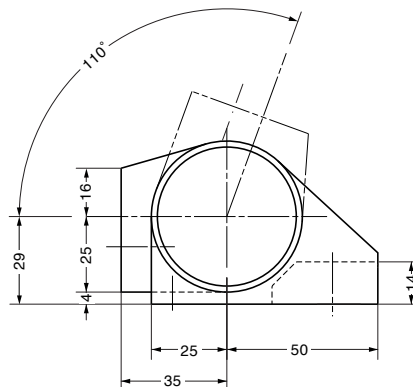
- Do not force the door over the working-angle limitation or it may cause serious damage.
- The damper may not properly work at less door opening.
- Be sure to install the JH-210 (more than 2 ps) at parallel position.

INSTALLATION



SPECIFICATION

- Max. torque moment : 2,058N·cm (210kgf·cm)
- Max. torque (built-in damper) : 700N·cm(71.4kgf·cm)
- Temperature range (built-in damper) : 0-40°C
- Opening Angle : 0 - 110 degrees
- Open/Close cycle : 30,000 times



WARNING Screws not included.
Recommended screws and washers: M8, washer 8 mm

CALCULATION

$$\text{Door Moment: } M_t = W \times \frac{L}{2} \times \cos \theta \text{ [N} \cdot \text{cm]}$$

$$\text{Hinge Moment: } M_h = M_m \times \left(1 - \frac{\theta}{115}\right) \text{ [N} \cdot \text{cm]}$$

$$\text{Remain Moment: } M_z = M_h - M_t \text{ [N} \cdot \text{cm]}$$

$$\text{Working Force: } F = \frac{M_t - M_h}{L} \text{ [N]}$$

W : Door Weight at the Gravity Point [kg]

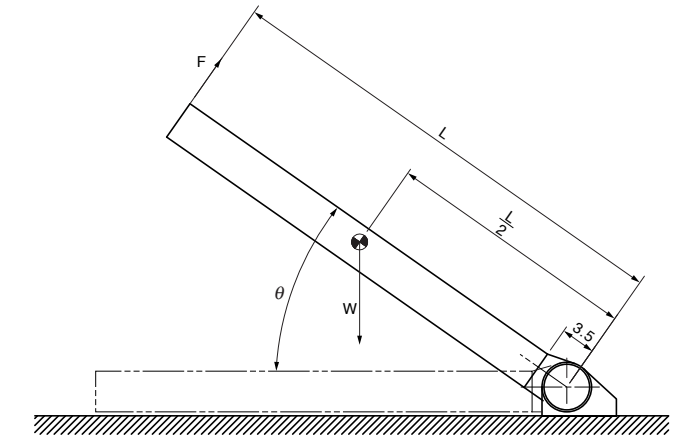
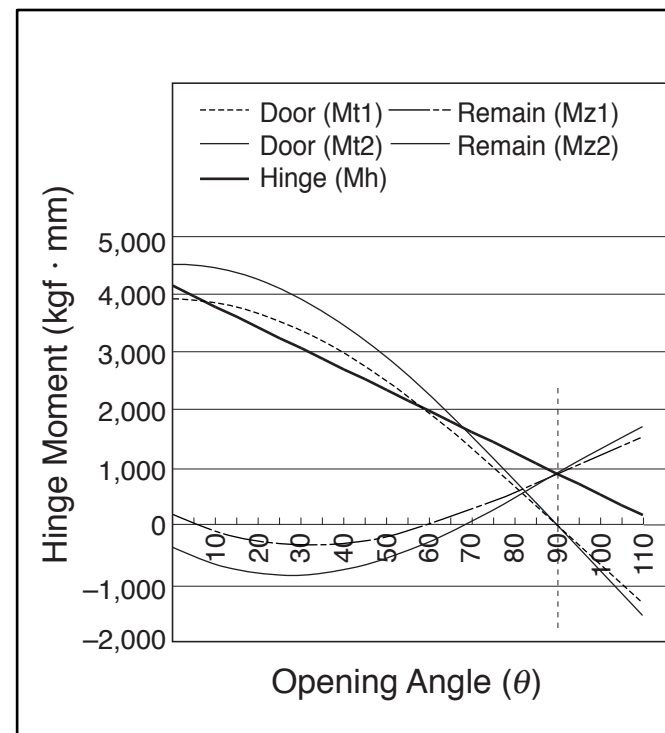
θ : Door Opening Angle [°]

L : Door Length [cm]

$\frac{L}{2}$: Distance from center of rotation to center of gravity [cm]

Mm: Hinge Moment at Door Closing (Maximum Moment) [N·cm]

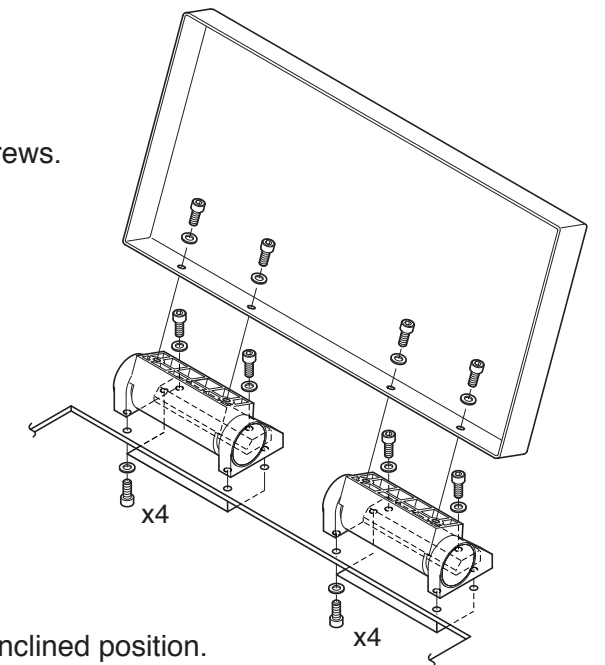
Assist Hinge Moment



- Remain Moment (Mh-Mt)
[-] Forcing in closing direction
[+] Forcing in opening direction
- Left graph shown at L = 60cm, W1 = 12kg, W2 = 14kg / JH-210 × 2 pcs use
- In case of below 1400N·cm(142.8kgf·cm), Damper can be warkble

INSTALLATION (In 2 pcs use)

1. Install JH-210 Lift Assist Hinge to application body part with screws.
(2 screws from top or 4 screws from bottom).
2. Mount the door at hinge opening position (packed style).
3. Upon completion of installation, make sure the door open and close properly.



** Please contact customer service if they will be installed at inclined position.



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