

## LIFT ASSIST HINGE



HG-JH210



PAT.P

- Spring assists in opening heavy doors.
- Built-in damper keeps lid from slamming shut.
- Passed private 30,000 open/close cycle tests.
- Maximum torque: 210 kgf-cm (182 lbs-in) per piece.

## ■ Moment Formula and Graph

Door Moment

$$M_t = W \times \frac{L}{2} \times \cos \theta$$

Hinge Moment

$$M_h = M_m \times \left(1 - \frac{\theta}{115}\right)$$

Torque to lift door

$$M_z = M_h - M_t$$

Force to lift door

$$F = \frac{M_t - M_h}{L}$$

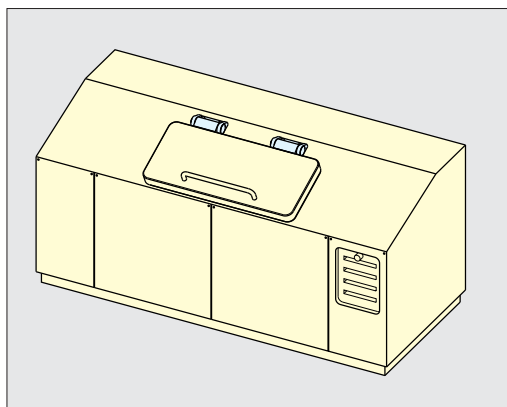
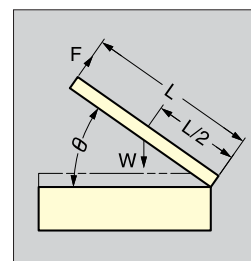
W : Door Weight

 $\theta$  : Opening Angle

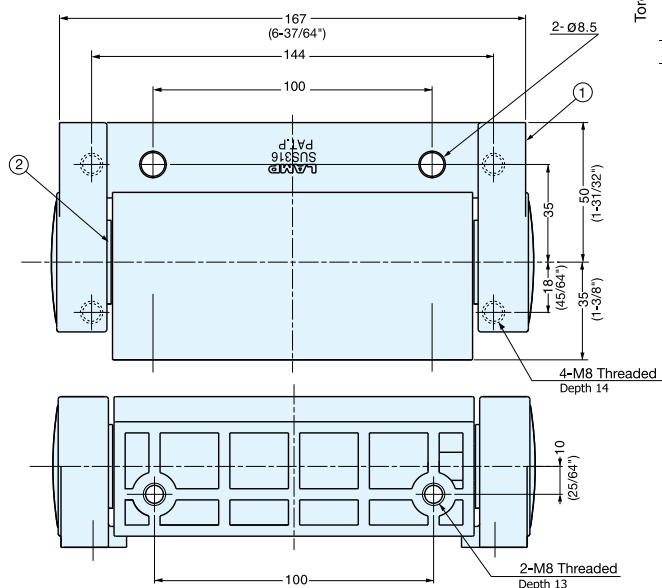
L : Door Length

M<sub>m</sub> : Torque of Assist HingeWhen M<sub>z</sub> is:

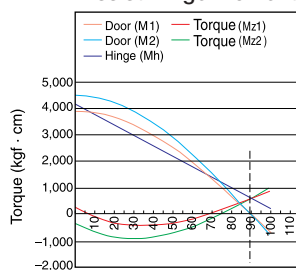
"-" shows closing force. "+" shows opening force.



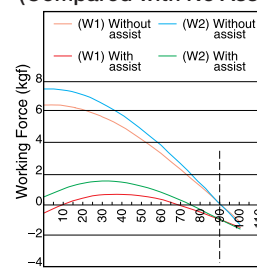
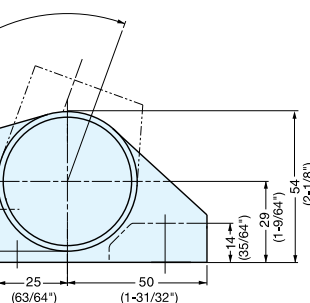
Installation



## Assist Hinge Moment

Opening Angle ( $\theta$ )

\*In case of HG-JH210 used in pair. (L: 60cm, W1: 13kg, W2:15kg)

Working Force at opening Angle  
(Compared with No Assist)Opening Angle ( $\theta$ )

Item No.	Torque per piece (kgf-cm)	Weight (kg)	Box (pcs)	Carton (pcs)
HG-JH210	210 (182lbs-in)	2.4	1	10

No.	Part Name	Material	Finish
①	Body	316 Stainless Steel	Mirror
②	Built-In Damper	304 Stainless Steel + PBT Plastic	-