

STAINLESS STEEL LIFT ASSIST HINGE



HG-JH210



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

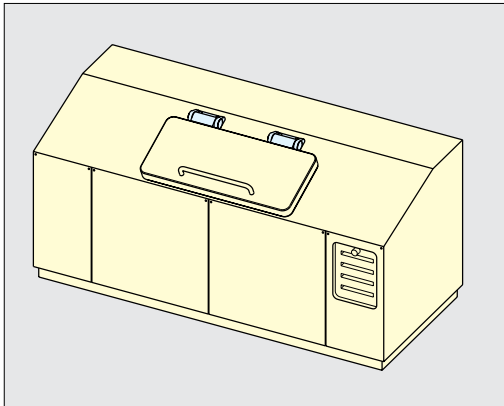
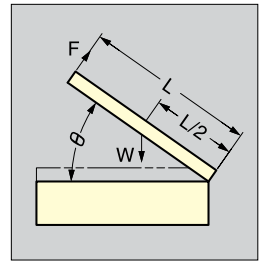
Hinge Moment $M_h = M_m \times \left(1 - \frac{\theta}{115}\right)$

Torque to lift door $M_z = M_h - M_t$

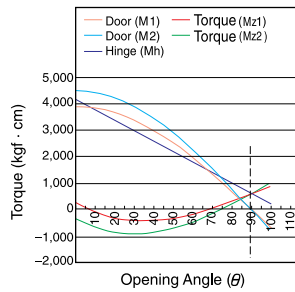
Force to lift door $F = \frac{M_t - M_h}{L}$

W : Door Weight θ : Opening Angle
 L : Door Length M_m : Torque of Assist Hinge

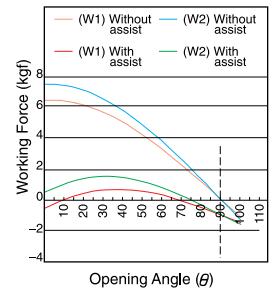
When M_z is:
 "-" shows closing force. "+" shows opening force.



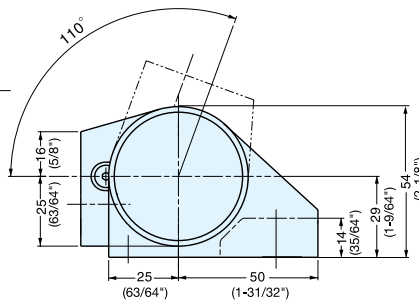
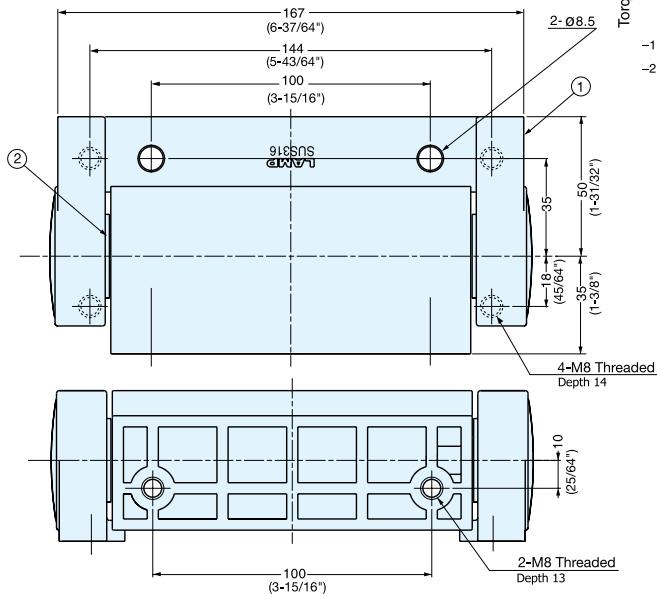
Assist Hinge Moment



Working Force at opening Angle (Compared with No Assist)



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



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