BALANCE-ADJUSTABLE LIFT-ASSIST STAY S-ATJD Back Panel Mount L=R INSTRUCTION VIDEO

Lift assist
Soft-close*
*optional damper

with damper

Opening Direction	Description	Non-handed	Maximum Door Moment*
Top-opening	Back panel mount (damper option available)	Yes	6.1~8.8 N・m/pc (62~90 kgf・cm/pc)
			8.8~11.8 N・m/pc (90~120 kgf・cm/pc)

*The max. door moment depends on the following factors:
  - Location of center of gravity
  - Installation point of stays
  - Balance adjustment

●Spring mechanism assists in lifting the top-opening lid.
●Easily holds the door at any angle.
●The balance adjustment allows for use in wider range of lids than conventional S-AT stays can be used.
●The locking hole prevents accidental close by inserting a screw driver into it.
●The optional damper S-ATD 1 provides soft closing.
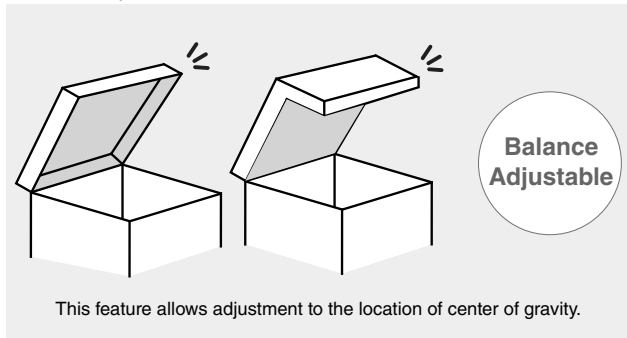
[Specifications]
●Operating temperature : 0℃~40℃
●Operating humidity : 90%RH or less
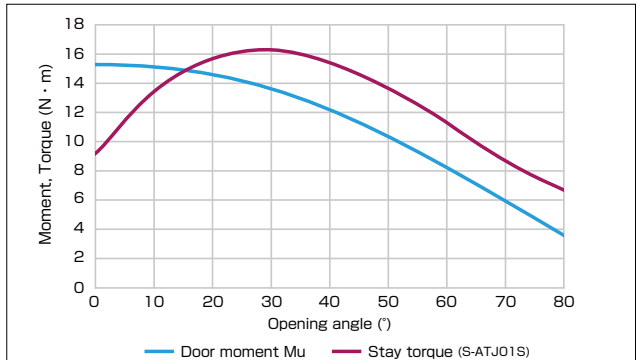●For other specifications exceeding the above range, please contact local representatives.

[Remarks]
●Be sure to read the "Cautions" 2 .
●When used for the top-opening lid, install a stopper (not included) to prevent from exceeding the opening angle.
●Material of the mounting surface should be take into consideration. Low rigidness may cause deformation or damage.
●Was not designed for continuous opening and closing .
●Do not use outdoors.
●Spring tension may vary over time.
●Do not use concealed hinges (multiaxial hinges).
●Installation points must be parallel when using more than one stay.

[Recommended Screw]
●Truss head screw M4

[Balance Adjustment]

This feature allows adjustment to the location of center of gravity.

Balance Adjustable

[Lift-assist]

Spring mechanism assists in lifting the top-opening lid. You can select hard or soft spring tension type depending on lid weight and dimension.

[Compact]

Small body maximises space inside the cabinet.

Maximum space

[Soft-close] (optional damper)

Soft-close

Damper Available

The S-ATD (optional damper) 1 provides soft-closing effect ensuring safety

[Door Moment and Stay Torque] (when using two stays, setting adjustment C)


Door moment Mu — Stay torque (S-ATJ01S)

The graph above shows a ideal example of curves.
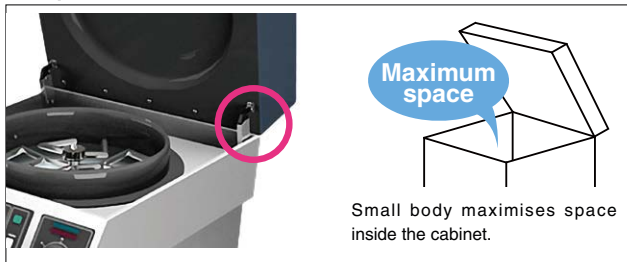The stay torque should be above the door moment from the middle of the opening.
・Door moment Mu > Stay torque : Force is applied in the closing direction of door.
・Door moment Mu < Stay torque : Force is applied in the opening direction of door.
・Door specs (example) : X=500mm Y=20mm L=500.4mm m=3kg
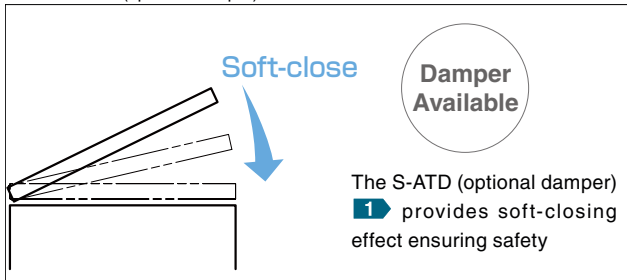*The installation point is the same as the drawings on the page of the HG-PA300-15.
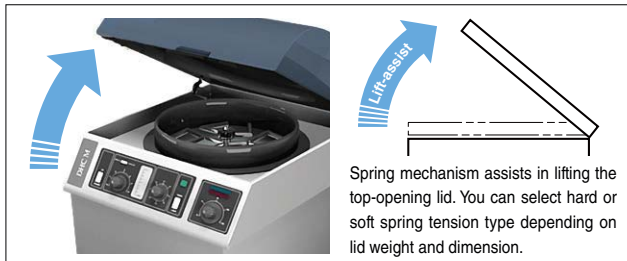
[Calculationg Door Moment]
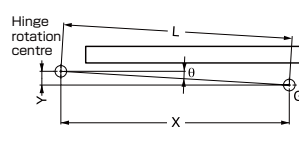
Calculation formula: $Mu = m \times L \times \cos\theta$

Hinge rotation centre

G : Centre of gravity

X	Horizontal distance from rotation centre to lid centre of gravity
Y	Vertical distance from rotation centre to lid centre of gravity
L	Distance from rotation centre to lid centre of gravity
θ	Angle from the horizontal line at the rotation centre to lid centre of gravity
m	Lid weight
G	Lid centre of gravity

[Balance Adjustment]

①Turn the balance-adjustment screw.
②The indicator's scale moves.

②
①

Balance-adjustment screw

L-shaped   Indicator   **Flat**

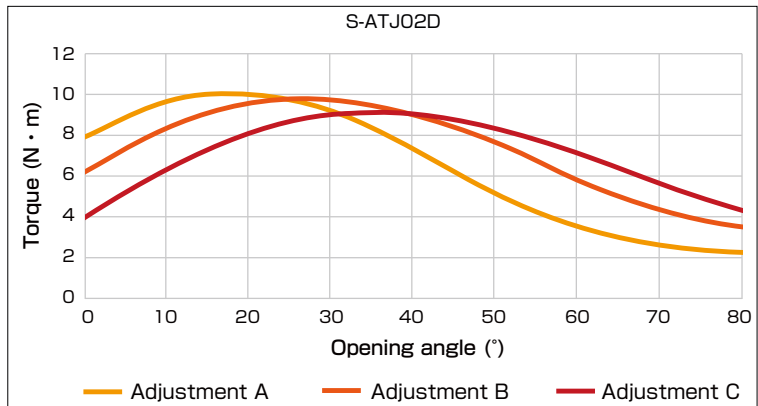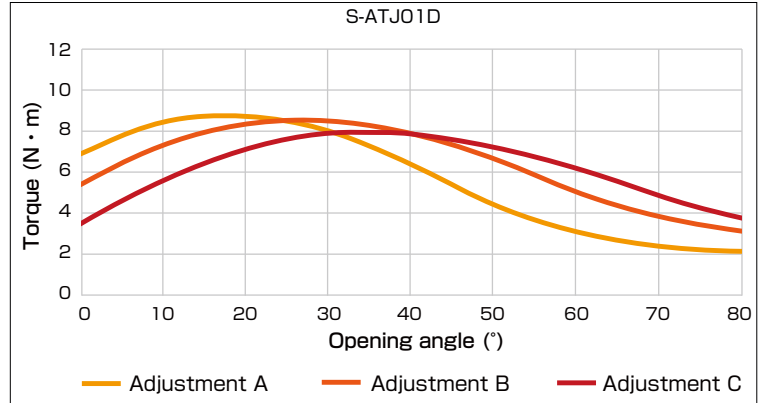Adjustment C   Adjustment B   Adjustment A (default)
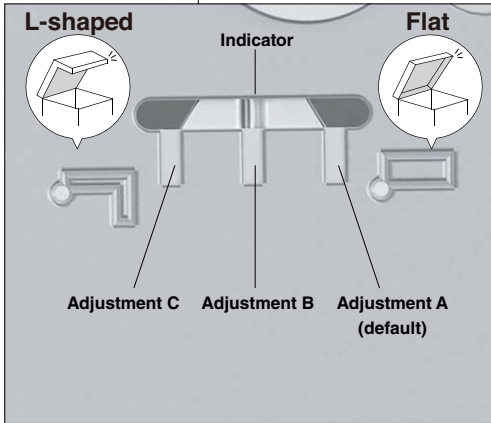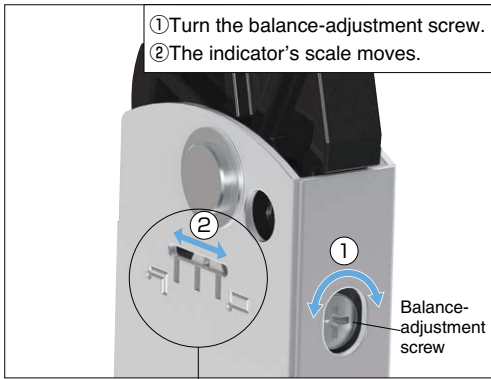
The indicator shows how much balance-adjustment is applied.
Balance-adjustment should depend on the location of the center of gravity.
When used in:
  - a flat lid,   "Adjustment A" becomes better setting.*
 - a L-shaped lid, "Adjustment C" becomes better setting.*
*A flat lid's center of gravity is higher than its rotational center.
*A L-shaped lid's center of gravity is lower than its rotational center.

[Torque-Angle Graph] showing the variation of peak torque when balance-adjusted

S-ATJ01D

Torque (N·m) vs Opening angle (°)

— Adjustment A   — Adjustment B   — Adjustment C

S-ATJ02D

Torque (N·m) vs Opening angle (°)

— Adjustment A   — Adjustment B   — Adjustment C

Video Link

Selection Tool
Sasuga-kun
Applicable Products
Used for Product Selection & Simulation.
Available online!

[Installation]

rotational centre of a door

S-ATD optinal damper
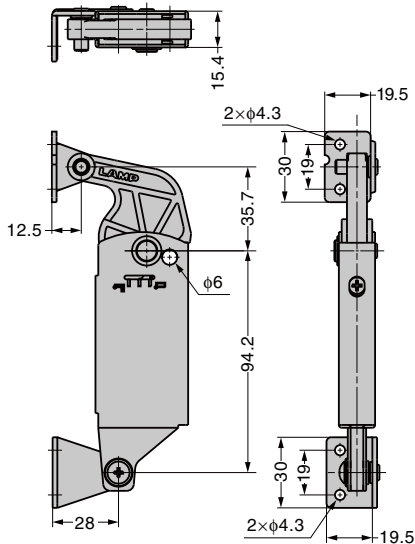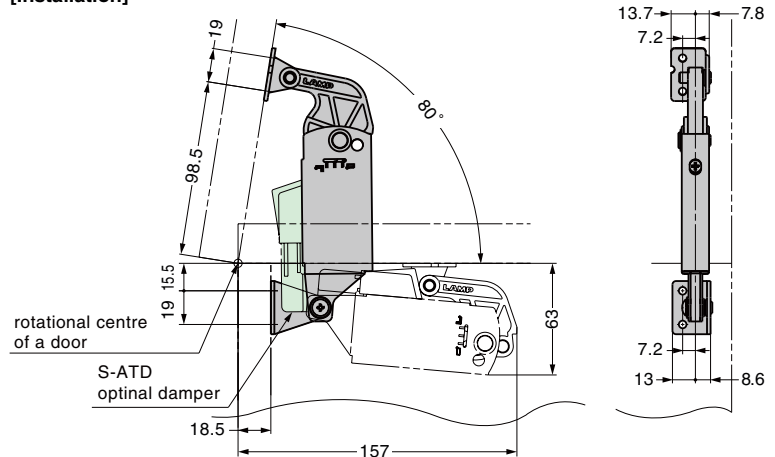
[Body]

RoHS	CAD	Item Code	Item Name	Material	Finish	Maximum Door Moment N·m/pc	Maximum Door Moment kgf·cm/pc	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	180-043-516	S-ATJ01D	Stainless Steel (SUS430) / POM	Plain	6.1~8.8	62~90	210	10	50
G	3D	180-043-519	S-ATJ02D			8.8~11.8	90~120		10	50

*The Max. door moment depends on location of center of gravity, installation point of stays, and balance adjustment.

[Damper Unit] option

RoHS	CAD	Item Code	Item Name	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	180-043-521	S-ATD-30	15	50	–