
New Products

Industrial Components

Introducing new products
not included in 280 catalogue

A technical wireframe drawing of industrial components, including a rectangular housing with a cylindrical protrusion labeled 'LAMP', and a tray containing three cylindrical rollers. The drawing is overlaid on a yellow background with a grid pattern.

■ ■
SUGATSUNE
■ ■

GLASS DOOR BRACKET



HES3D-G90BKT



■ Features

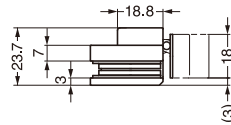
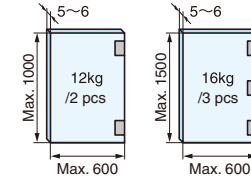
- Glass door bracket for HES3D-90 series.
- Screw covers match the bracket with the finish. For the black type, please use the covers which are included with the HES3D-90 hinge.

■ Parts Included

- Hexagon socket countersunk head screw M5 x 12
- Countersunk head screw M4 x 12
- Hex key size 3

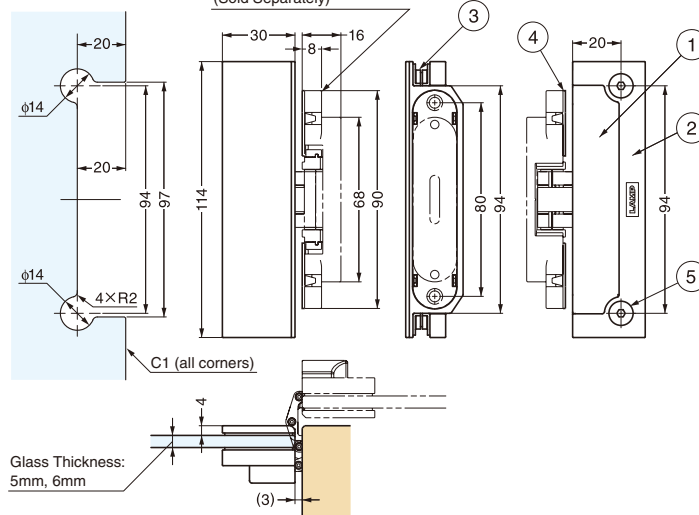


■ Door Dimensions and Number of Hinges



■ Cut Out Dimensions

Concealed Hinge HES3D-90
(Sold Separately)



No.	Part Name	Material	Finish		
			CR	GP	BL
①	Body	Zinc Alloy (ZDC)	Chrome	24K Gold plating	Black Enamel Finish
②	Back Plate				
③	Gasket	Chloroprene Rubber (CR)	—	—	—
④	Screw Cover	ABS	Chrome	24K Gold plating	—
⑤	Hexagon Socket Countersunk Head Screw M5 x 12	Steel			—

RcHS	CAD	Item Code	Item Name	Colour	Weight g	Box pcs	Carton pcs
		170-035-802	HES3D-G90BKT-CR	Silver	245	2	24
		170-035-803	HES3D-G90BKT-GP	Gold	245	2	24
		170-035-804	HES3D-G90BKT-BL	Black	245	2	24

DUAL AXIS TORQUE HINGE HG-TMH



Chrome

Satin Nickel

Black



- Can be opened 180°.
- Shafts do not protrude when the hinge is fully open or closed.
- Different torque of two shafts provides easy operation.

[Applications]

- Folding tables in shops, trains, caravans, etc.

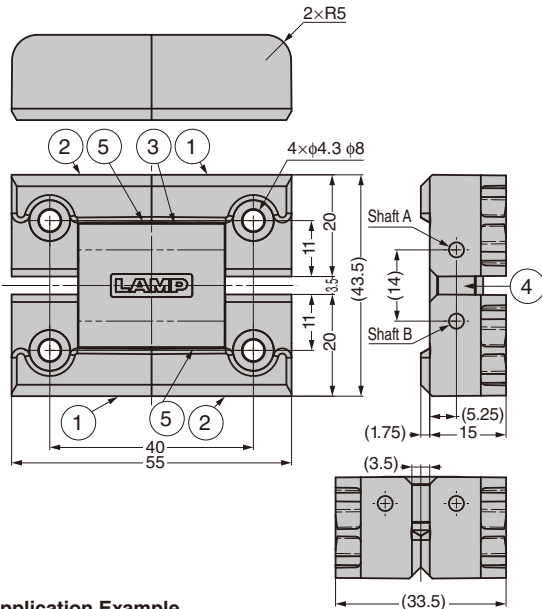
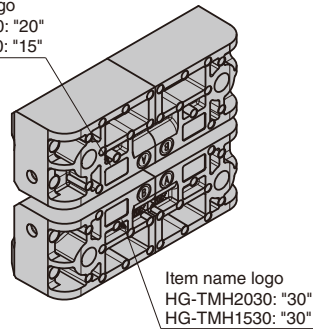
[Remarks]

- Swivel use only. Ensure that both hinge shafts are aligned when installing.
- Use hard wood or similar strong material and make sure to tighten the screw.

[Recommended Screws]

- Countersunk head screw M4 (for sheet metal)
- Countersunk head tapping screw 4 (for wood)

Item name logo
 HG-TMH2030: "20"
 HG-TMH1530: "15"



Hinge Motions

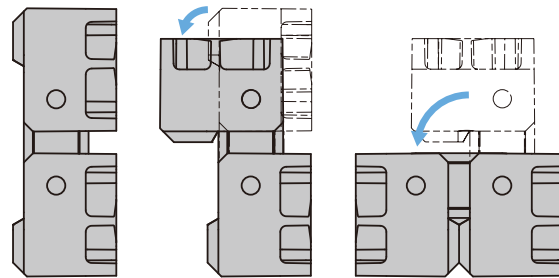
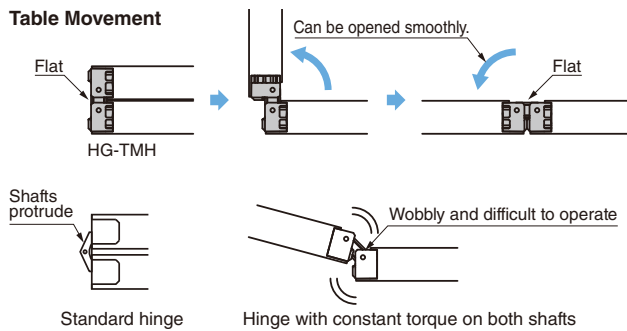
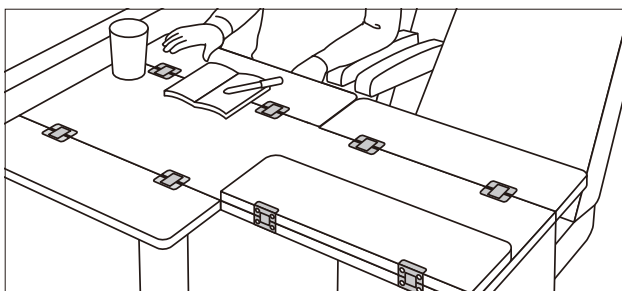


Table Movement



Application Example



No.	Part name	Material	Finish/Colour
①	Body A	Zinc Alloy (ZDC)	As below
②	Body B		
③	Intermediate Body		
④	Sleeve	PBT	Black
⑤	Bumper		

Video Link



RoHS	CAD	Item Code	Item Name	Old Item Name	Finish/Colour	Shaft A		Shaft B		Weight (g)	Box (pcs)	Carton (pcs)
						Torque (N-m)	Torque (kgf-cm)	Torque (N-m)	Torque (kgf-cm)			
☑	3D	170-034-907	※HG-TMH1530-CR	HG-TMH1530	Chrome	1.5±20%	15.3±20%	3.0±20%	30.6±20%	165	10	50
☑	3D	170-034-908	※HG-TMH2030-CR	HG-TMH2030		2.0±20%	20.4±20%				10	50
☑	3D	170-045-006	HG-TMH1530-SN	—	Satin Nickel	1.5±20%	15.3±20%	3.0±20%	30.6±20%	165	10	50
☑	3D	170-045-007	HG-TMH2030-SN	—		2.0±20%	20.4±20%				10	50
☑	3D	170-045-008	HG-TMH1530-BL	—	Plain/Black	1.5±20%	15.3±20%	3.0±20%	30.6±20%	165	10	50
☑	3D	170-045-009	HG-TMH2030-BL	—		2.0±20%	20.4±20%				10	50

※The item names have been revised.

DAMPER HINGE

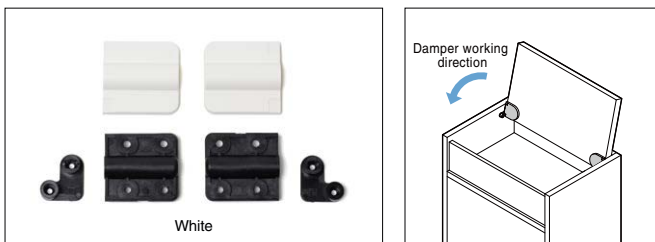


INSTRUCTION

HG-JHM11



Black



White

- Hinge with built-in damper.
- Damper unit works to close door softly. Smooth movement in opening direction.
- Mounted in sideboard and installed in inset door.
- Applicable into surface mount with Bracket UTZ11-BL.
- Cover hides mounting screws for clean appearance.
- Easy to cut out with a router.

Specification

- Operation temperature: 0-40°C

Application

- Small covers for machine or wire manager.

Remarks

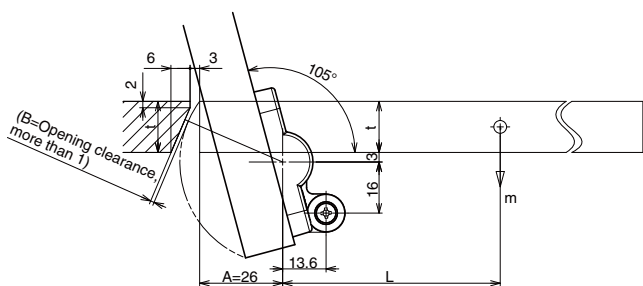
- Applicable moment of door: 0.05-0.4N·m. Use a pair/door.
- When installing, ensure that both hinge shafts are levelled and alighted.
- Damper mechanism works when opening the lid by about 60° or more. Otherwise, damper may not work.
- Prepare stopper separately to keep the lid closed.
- Closing speed may change depending on operating temperature.

Sold Separately

- Bracket for Surface Mount UKZ11-BL

Recommended Screw

- Countersunk tapping screw 3, bind tapping screw 4

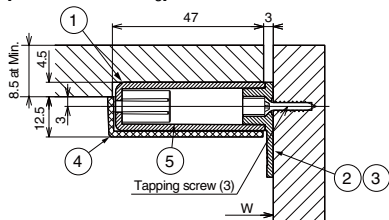


*t=16. Prepare more than 1 for Gap B of Opening clearance.

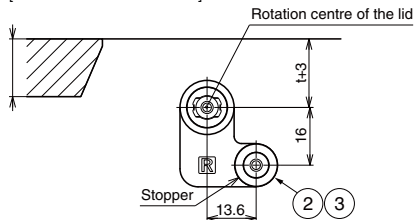
Selection Tool
Sasuga-kun
 Applicable Products
 Used for Product Selection & Simulation.
 Available on Web!

Installation

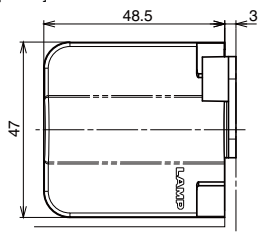
[Cross-section Drawing]



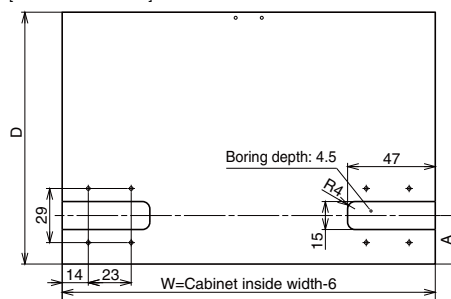
[Installed Position of Bracket]



[Top View] When closed door



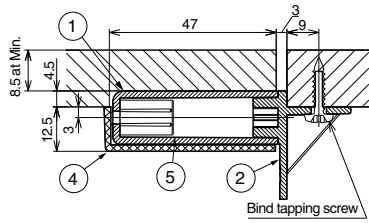
[Cut Out Dimensions]



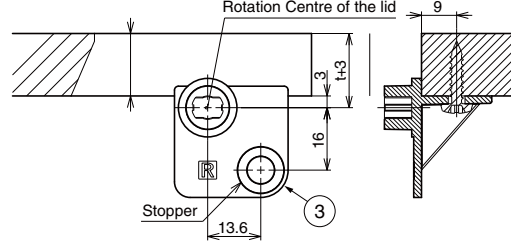
No.	Part Name	Material	Colour
①	Body	Polyacetal (POM)	Black
②	Bracket for side mount R	PBT	
③	Bracket for side mount L		
④	Cover	ABS	Black/White
⑤	Damper	-	-

Surface Mount Type (optional bracket UKZ11-BL for surface mount is required)

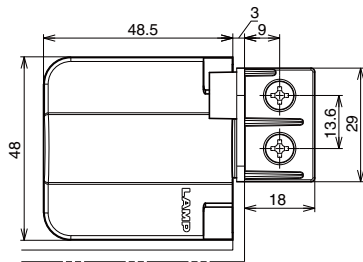
[Cross-section Drawing]



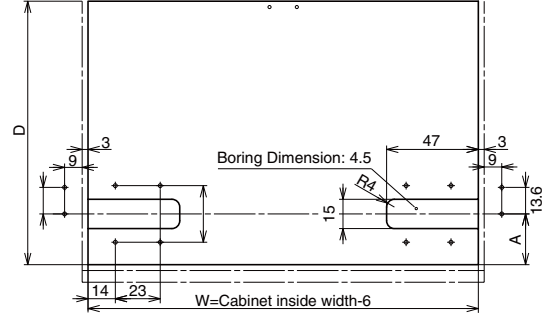
[Installation Position of Bracket]



[Top View]



[Cut Out Dimensions]



No.	Part Name	Material	Colour
①	Body	Polyacetal (POM)	
②	Bracket for side mount R	PBT	Black
③	Bracket for side mount L		
④	Cover	ABS	Black/White
⑤	Damper	-	-

Hinge

Sold by set.

RoHS	CAD	Item Code	Item Name	Colour	Torque N-m/pair	Torque kgf-cm/pair	Opening Angle	Weight (g)	Box	Carton
✓	2D/3D	170-041-206	HG-JHM11-1BL	Black	0.05-0.1	0.51-1.02	105°	43.9	25 set	275 set
✓	2D/3D	170-041-207	HG-JHM11-1WT	White						
✓	2D/3D	170-041-208	HG-JHM11-2BL	Black	0.1-0.2	1.02-2.04				
✓	2D/3D	170-041-209	HG-JHM11-2WT	White						
✓	2D/3D	170-041-210	HG-JHM11-3BL	Black	0.2-0.29	2.04-2.96		46.8		
✓	2D/3D	170-041-211	HG-JHM11-3WT	White						
✓	2D/3D	170-041-212	HG-JHM11-4BL	Black	0.29-0.4	2.96-4.08				
✓	2D/3D	170-041-213	HG-JHM11-4WT	White						



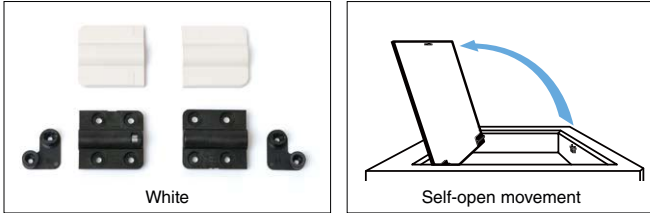
[Bracket for Surface Mount]

RoHS	CAD	Item Code	Item Name	Colour	Box	Carton
✓	2D/3D	170-041-218	UKZ11-BL	Black	50 set	500 set

SELF-OPEN DAMPER HINGE



HG-JHS11



Features

- Small damper hinge with self-opening function for top-opening lids. Using with a touch latch enables pop-up function of the lid.
- Inset type.
- Opening speed is adjustable with a hex key.
- Applicable into surface mount with Bracket UKZ11-BL (sold separately).
- Cover hides mounting screws for clean appearance.
- Easy to cut out with a router.

Specification

- Operation temperature: 0 – 40°C

Application

- Small covers for machine or wire manager, etc.

Remarks

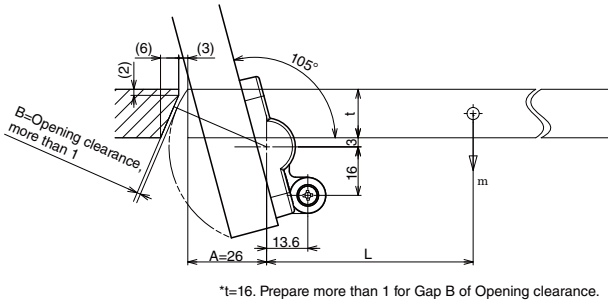
- Applicable moment of door: 0.25 – 0.4N·m. Use a pair/door.
- Install Spring unit on left side and damper unit for right side of the door.
- When installing, ensure that both hinge shafts are levelled and aligned.
- Please install with touch latch separately to keep the door closed.

Sold Separately

- Bracket for HG-JHS11 Surface Mount UKZ11-BL

Recommended Screws

- Countersunk tapping screw3, blind tapping screw 4



Calculation of maximum door moment

$$T = m \times 9.80665 \times L$$

T:Max. door torque (N/mm)

m:Door weight (kg)

L:Disrance from rotation centre to door centre of gravity (mm)

$$L = \frac{D}{2} - A \quad (\text{Formula for assuming that the centre of gravity is in the centre of door})$$

D:Door length (mm)

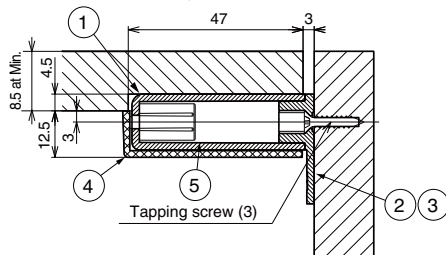
A:Bracket installation dimension (mm)

[Example] D=180 mm, A=26 mm, m=0.63kg

$$T = 0.63 \times 9.80665 \times \left(\frac{180}{2} - 26 \right) = 395 (\text{mN}\cdot\text{m}) = 0.395 (\text{N}\cdot\text{m})$$

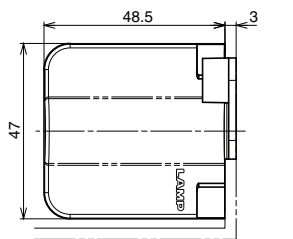
Installation

Cross-section Drawing



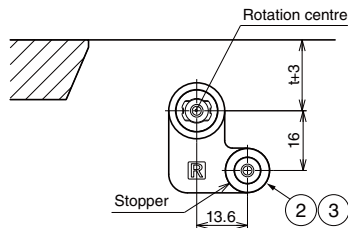
Top View

When closed door

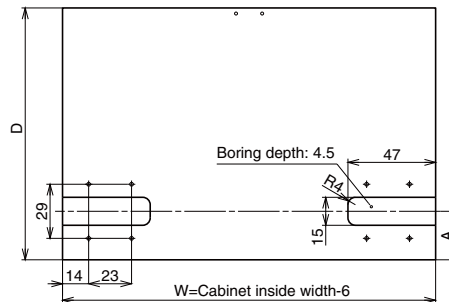


Installation

Bracket

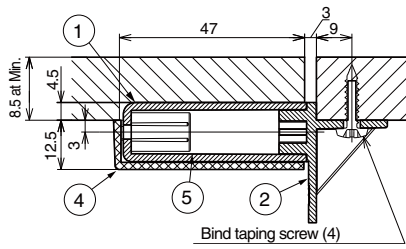


Cut Out Dimensions

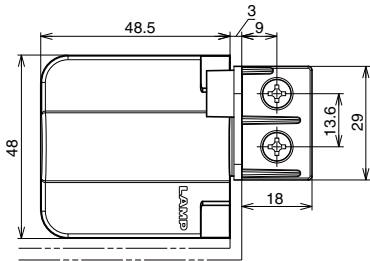


No.	Part Name	Material	Colour
①	Body	Polyacetal (POM)	Black
②	Bracket for side mount R	PBT	
③	Bracket for side mount L		Black/White
④	Cover	ABS	Black/White
⑤	Damper	-	-

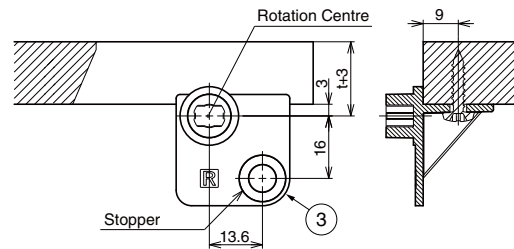
Surface Mount Type
(Installed with Bracket for Surface Mount UKZ11-BL)
Cross-section Drawing



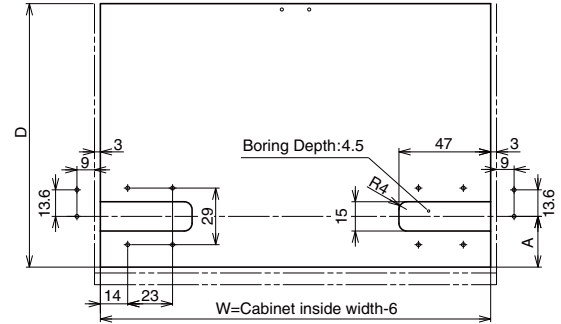
Top View



Installation
Bracket



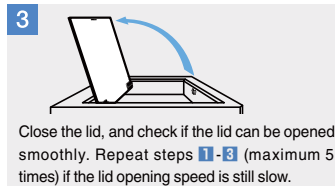
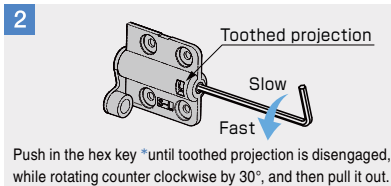
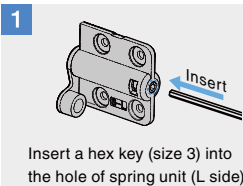
Cut Out Dimensions



No.	Part Name	Material	Colour
①	Body	Polycetal (POM)	Black
②	Bracket for side mount R	PBT	
③	Bracket for side mount L		
④	Cover	ABS	Black / White
⑤	Damper	-	-

Adjustment of Lid Opening Speed

When increasing lid opening speed



When decreasing lid opening speed (returning to the speed before adjustment)

Loosen the force following the hex key rotating clockwise.

*Make sure to rotate counter clockwise following pushing in the hex key and disengaging the projection. Forced rotation may cause damage.

Body

Sold by set.

RoHS	CAD	Item Code	Item Name	Colour	Torque N-m/pair	Torque kgf/pair	Opening Angle	Weight	Box	Carton
-	2020	170-041-214	HG-JHS11-2BL	Black	0.1 – 0.25	1.02 – 2.55	105°	56 g	12 set	50 set
-	2020	170-041-215	HG-JHS11-2WT	White					12 set	50 set
-	2020	170-041-216	HG-JHS11-4BL	Black	0.25 – 0.4	2.55 – 4.08			12 set	50 set
-	2020	170-041-217	HG-JHS11-4WT	White			12 set	50 set		

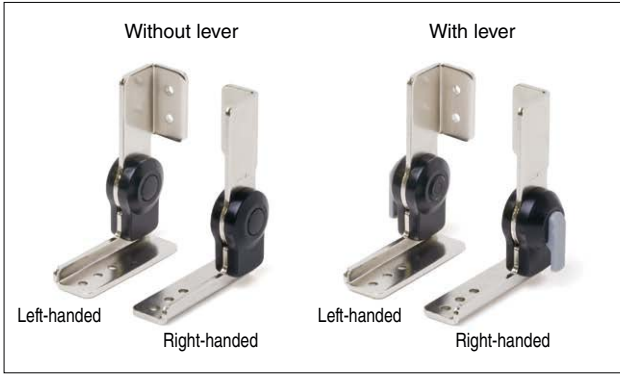


Bracket for Surface Mount

Sold by set.

RoHS	CAD	Item Code	Item Name	Colour	Weight	Box	Carton
G	2020	170-041-218	UKZ11-BL	Black	12 g	50 set	500 set

LAMP® MULTI ANGLE LOCKING HINGE HG-MA95A



- Easily adjusts the flap angle by toggling the lever.
- Lock allows the hinge to be held in position from 0° to 180° in 10° increments.
- The flap is temporarily unlocked while the lever is pushed.
- The flap stays unlocked when the lever is lifted.
- Both hinge types can be used together.

[Applications]

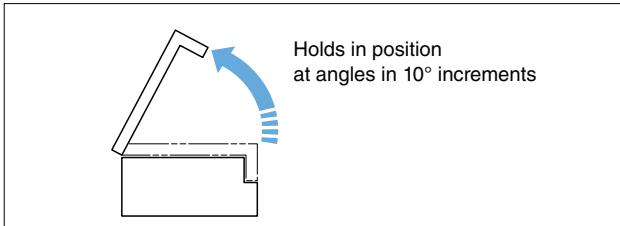
- Medical equipment, analytical instruments, semiconductor equipment.

[Remarks]

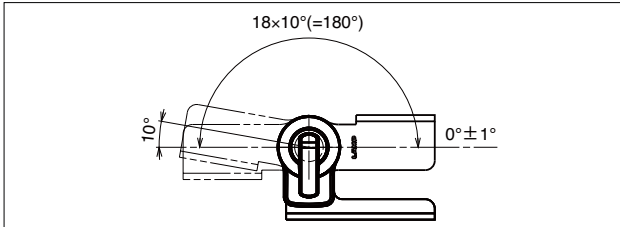
- Be sure to read the "Cautions" 1.

[Recommended screws]

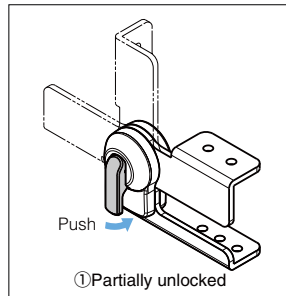
- M5 screw



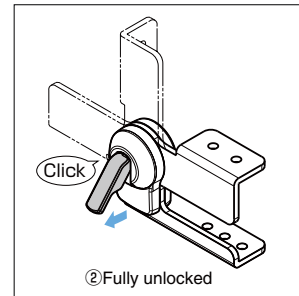
[Locus chart]



[Two ways to unlock]

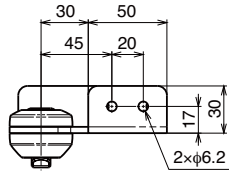


The flap is temporarily unlocked while the lever is pushed.

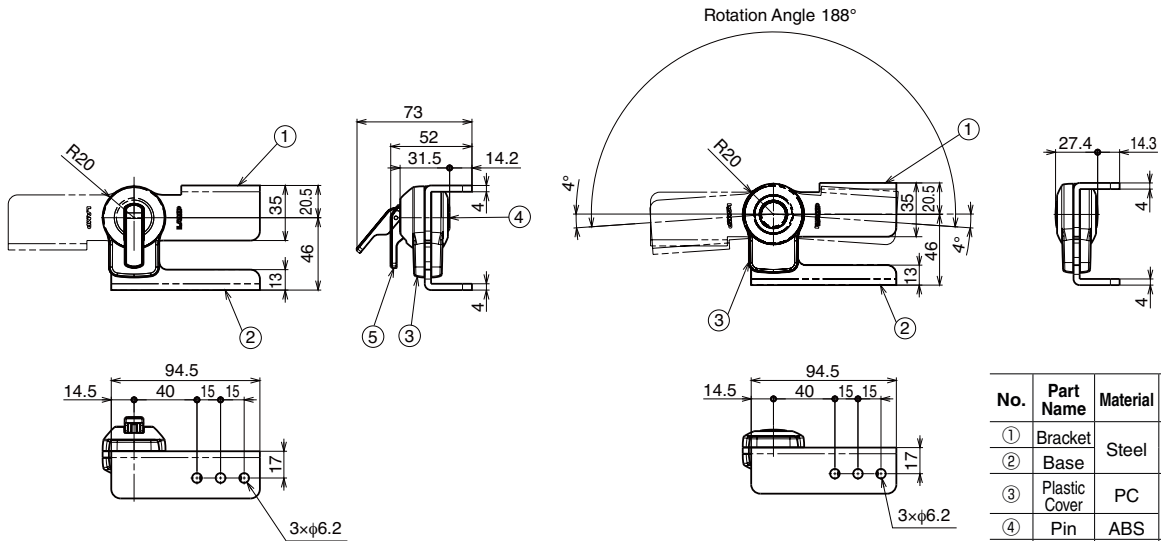
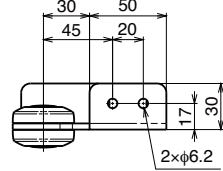


The flap stays unlocked when the lever is lifted.

[HG-MA95A-L]



[HG-MA95AF-L]



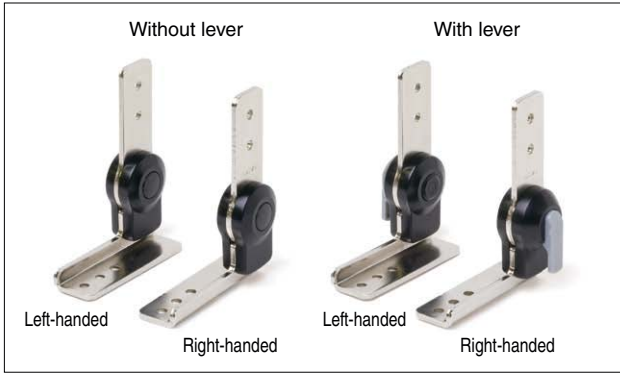
No.	Part Name	Material	Surface Finish
①	Bracket	Steel	Nickel
②	Base		
③	Plastic Cover	PC	-
④	Pin	ABS	-
⑤	Lever	PA	-

Left-handed shown. Right-handed is symmetrical.

RoHS	CAD	Item Code	Item Name	Position	Type	Max Torque N-m / pc	Max Torque kgf.cm/pc	Weight (g)	Box (pc)	Carton (pc)
✓	3D	170-043-818	HG-MA95A-R	Right-handed	With lever	45	459	351.4	5	20
✓	3D	170-043-819	HG-MA95A-L	Left-handed				351.4	5	20
✓	3D	170-043-822	HG-MA95AF-R	Right-handed	Without lever	-	-	350.7	5	20
✓	3D	170-043-823	HG-MA95AF-L	Left-handed				350.7	5	20

Refer to 1 : No.280 P.15

LAMP® MULTI ANGLE LOCKING HINGE HG-MA95B



- Easily adjusts the flap angle by toggling the lever.
- Lock allows the hinge to be held in position from 0° to 180° in 10° increments.
- The flap is temporarily unlocked while the lever is pushed.
- The flap stays unlocked when the lever is lifted.
- Both hinge types can be used together.

[Applications]

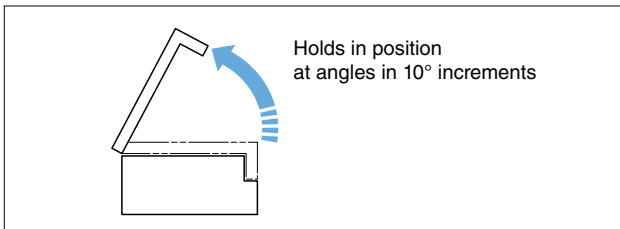
- Medical equipment, analytical instruments, semiconductor equipment.

[Remarks]

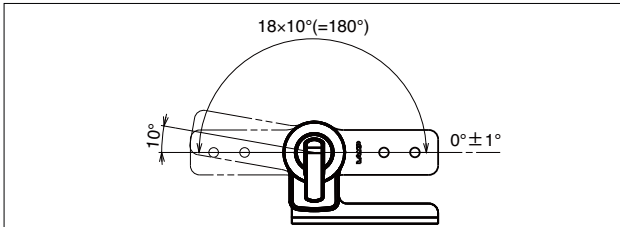
- Be sure to read the "Cautions" **1**.

[Recommended screws]

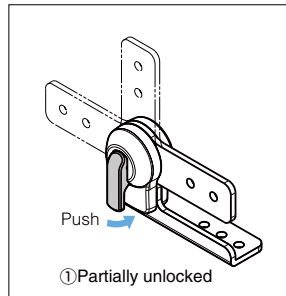
- M5 screw



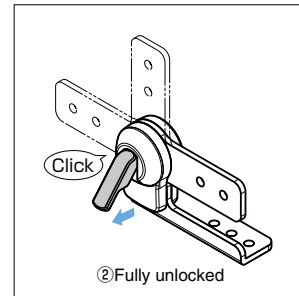
[Locus chart]



[Two ways to unlock]

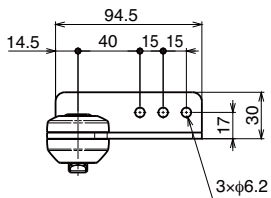


The flap is temporarily unlocked while the lever is pushed.

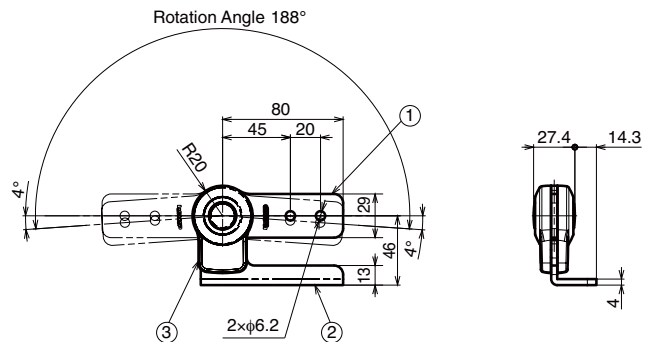
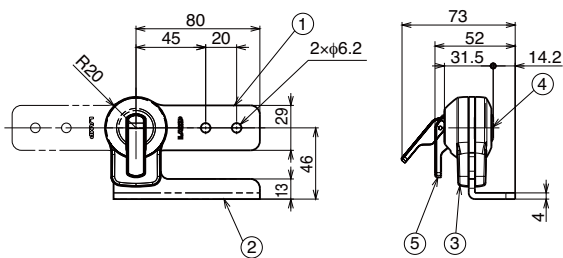
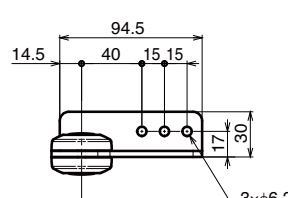


The flap stays unlocked when the lever is lifted.

[HG-MA95B-L]



[HG-MA95BF-L]



No.	Part Name	Material	Surface Finish
①	Bracket	Steel	Nickel
②	Base		
③	Plastic Cover	PC	
④	Pin	ABS	-
⑤	Lever	PA	-

Left-handed shown. Right-handed is symmetrical.

RoHS	CAD	Item Code	Item Name	Position	Type	Max Torque N-m / pc	Max Torque kgf-cm/pc	Weight (g)	Box (pc)	Carton (pc)
✓	3D	170-043-820	HG-MA95B-R	Right-handed	With lever	45	459	305	5	20
✓	3D	170-043-821	HG-MA95B-L	Left-handed				305	5	20
✓	3D	170-043-824	HG-MA95BF-R	Right-handed	Without lever	-	-	304.8	5	20
✓	3D	170-043-825	HG-MA95BF-L	Left-handed				304.8	5	20

Refer to **1** : No.280 P.15

TORQUE HINGE HG-TP



- A combination of plastic and metal is used for friction in order to prevent metallic dust caused by metal to metal contact.

[Specifications]

- Operating temperature: -10°C~40°C
- Can be used in both vertical and horizontal directions.

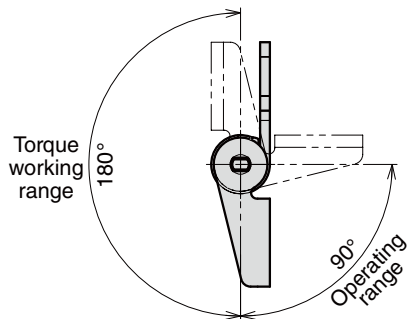
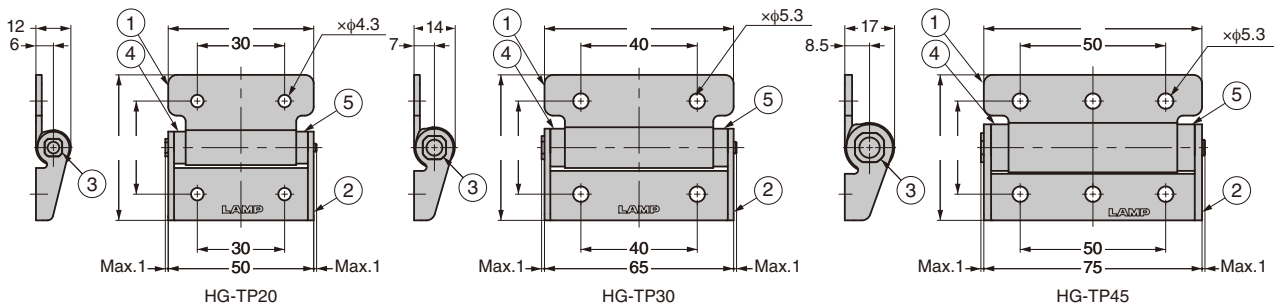
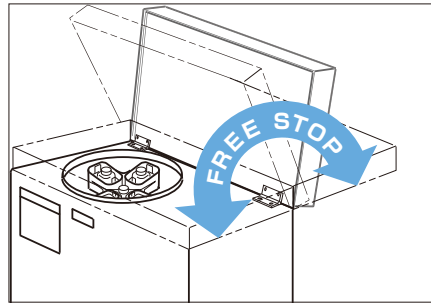
[Applications]

- Stereo equipment, FA equipment, and various automatic equipment

[Remarks]

- Be sure to read the "Cautions" **1**.
- Ensure that hinge shafts are leveled and aligned.
- Install a lid to the bracket A.

[Application Example]



No.	Part Name	Material	Finish / Colour
①	Bracket A	Stainless Steel (SUS304)	Barrel Polished
②	Bracket B		
③	Shaft	Stainless Steel (SUS303)	—
④	Plug	POM	Black
⑤	Washer		

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

RoHS	CAD	Item Code	Item Name	Torque N.m/pc	Torque kgf.cm/pc	Weight (g)	Box (pc)	Carton (pc)
		170-043-653	HG-TP20	2 ^{±25%}	20.3 ^{±25%}	60	50	200
		170-043-654	HG-TP30	3 ^{±25%}	30.5 ^{±25%}	90	25	100
		170-043-655	HG-TP45	4.5 ^{±25%}	45.8 ^{±25%}	150	25	100

Refer to **1** : No.280 P.15

HG-JHM Damper hinges series - Supported lid digest

- This table gives a general guideline of the different lid weight and measurements that can be used with HG-JHM series.
- Lid measurements have been calculated using the maximum torque available for the product model. (for example, for HG-JHM16 series we used HG-JHM16-50)

- The lid measurements are just an example of the various possible combinations of length, width and thickness.
- The torque value is calculated using one pair of HG-JHM installed on one lid.

Model	Torque force	Lid size (example)
HG-JHM9-S4(U4) 1 	0.027 ~ 0.043 N · m (0.275 ~ 0.44 kgf · cm)	
HG-JHM9-S(U) 2 	0.054 ~ 0.086 N · m (0.55 ~ 0.88 kgf · cm)	
HG-JHM11 3 	0.05 ~ 0.4 N · m (0.51 ~ 4.08 kgf · cm)	
HG-JHM14 4 	0.5 ~ 2 N · m (5.1 ~ 20.4 kgf · cm)	 Lid with internal mirror
HG-JHM16 5 	2 ~ 5 N · m (20.4 ~ 51 kgf · cm)	 Lid with internal mirror
HG-JHM20 6 	6 ~ 8 N · m (61.2 ~ 81.6 kgf · cm)	 Lid with internal mirror
HG-JHM20T 7 		

Refer to **1** **2** : No.240 P.422, **3** : No.328 P.8, **4** : No.240 P.424, **5** : No.240 P.426, **6** : No.240 P.427, **7** : No.328 P.3

[How to calculate the maximum torque moment]

$$T = m \times 9.80665 \times L \times \frac{1}{1000}$$

T = Maximum moment of the lid

m = Lid weight [kg]

L = Distance from the rotation point to the centre of gravity of the lid (mm)
(In case the centre of gravity is situated in the middle of the lid)

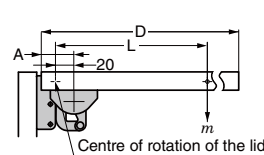
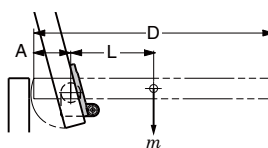
$$L = \frac{D}{2} - A \quad (\text{For HG-JHM20T, } L = \frac{D}{2} - A + 20)$$

D = Lid length [mm]

A = Distance from the rotation point to the back edge of the lid [mm]
(For HG-JHM20T, A : Installation measurements of the bracket)

Calculation example (for HG-JHM14)

If D = 180mm, A = 26mm, m = 0.96kg... $T = 0.96 \times 9.80665 \times (\frac{180}{2} - 26) \times \frac{1}{1000} = 0.6 \text{ [N·m]}$



Material	Specific gravity
Acrylic	1.2
MDF	0.6
Mirror	2.5

Model	A
HG-JHM9	18
HG-JHM11	26
HG-JHM14	26
HG-JHM16	32
HG-JHM20	36

Model	A
HG-JHM20T	36 ~ 38

STAINLESS STEEL HEAVY-DUTY BUTT HINGE HG-LSC210

SUS



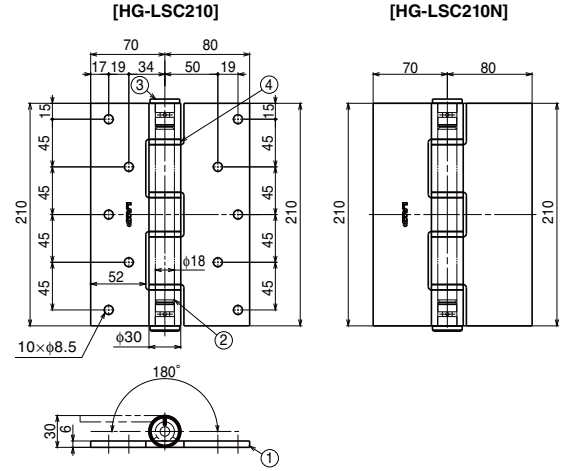
- 6mm thick stainless steel makes the hinge very strong.
- Made with special rings (oil-impregnated bearings) for smooth movement.
- Head caps hide shaft for clean appearance.

[Applications]

- Large doors, gate doors, and other heavy objects.

[Remarks]

- Be sure to read the "Cautions" 1.



No.	Part Name	Material	Finish
①	Body	Stainless Steel (SUS304)	Satin
②	Shaft		Plain
③	Head Cap		-
④	Ring		Plain

*Open/close test is under the following conditions:

- Hinge: Using three hinges vertically
- Door size: W900 × H2000
- Door weight: 250kg

RoHS	CAD	Item Code	Item Name	Type	Load Capacity N / 2pcs	Load Capacity kgf / 2pcs	Weight (g)	Box (pc)	Carton (pcs)
		170-043-696	HG-LSC210	With screw holes	1960	200	2275	1	6
		170-043-697	HG-LSC210N	Without screw holes			2300	1	6

Refer to 1 : No.280 P.15

ANGLE-ADJUSTABLE DETENT HINGE HG-CHJ70

INSTRUCTION



HG-CHJ70WT

HG-CHJ70BL

- Holds at 4 angles: -3°, -90°, 90°, and 177°. (Factory setting)
- The holding angle of 90° can be switched to 45° or 135°.
- Can be used both vertically and horizontally.

[Applications]

- Environmental test equipment, laboratory equipment.

[Remarks]

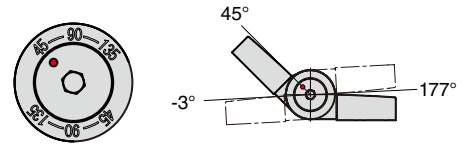
- Adjustment of detent angles must be done when the hinge is open.
- The retaining torque may vary.

[Recommended Screw]

- Hexagon socket head bolt M5

[Available Detent Angles]

- 45°



[Without Covers]

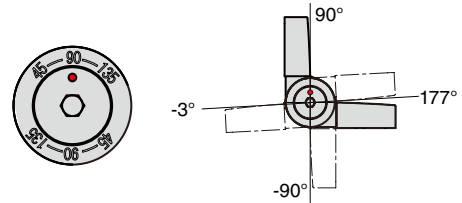


[Application Example]

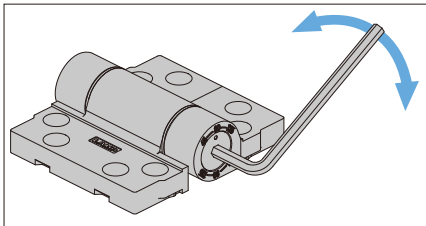


Detent angle: 45°

- 90° (factory setting)

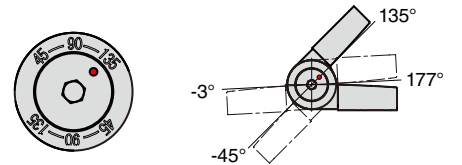


[Switching 45° ↔ 90° ↔ 135°]



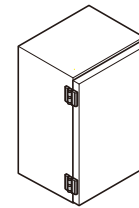
Can be adjusted by a hex key.

- 135°



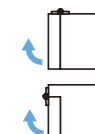
[Available Door Specs] When using two hinges

- Lateral opening



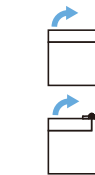
- Weight: Max. 8kg
- Width: Max. 500mm
- Height: Max. 1,000mm

- Upward opening

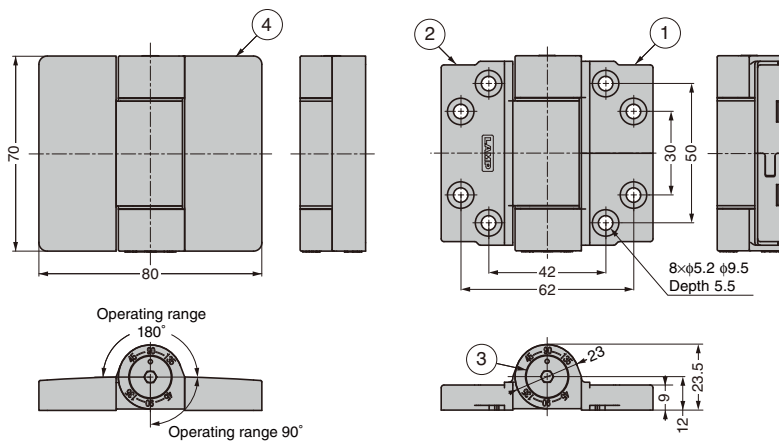


- Moment: Max. 1.7N·m
- Height: Max. 250mm

- Top opening



- Moment: Max. 2.4N·m
- Height: Max. 300mm



Video Link



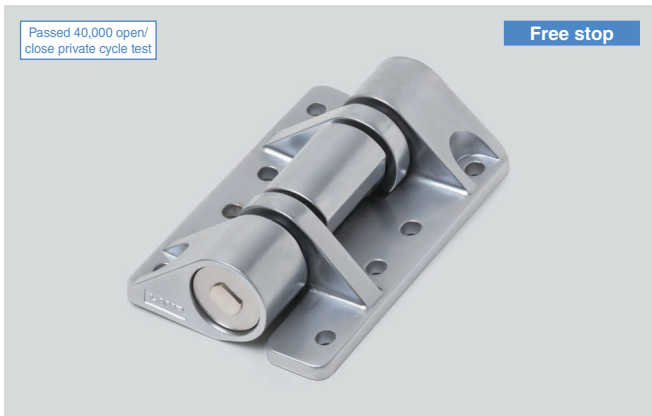
No.	Part Name	Material
①	Fixed Bracket	POM
②	Movable Bracket	
③	Shaft	Stainless Steel
④	Cover	ABS

RoHS	CAD	Item Code	Item Name	Colour	Retaining Torque N·m / pc	Retaining Torque kgf·cm / pc	Weight (g)	Box (pcs)	Carton (pcs)
		170-043-659	HG-CHJ70BL	Black	2	20.4	115	10	80
		170-043-660	HG-CHJ70WT	White				10	80

TWO STEPS ONE WAY TORQUE HINGE



HG-TQW8080



Features

- Generates torque in downward direction only. (Operation range: 0 - 180°)
- The torque direction reverses when the hinge opens at over 90°. This allows a flap to hold in position at all angles of 180° with smooth and light operation.

Specifications

Operating temperature: 0°C - 40°C

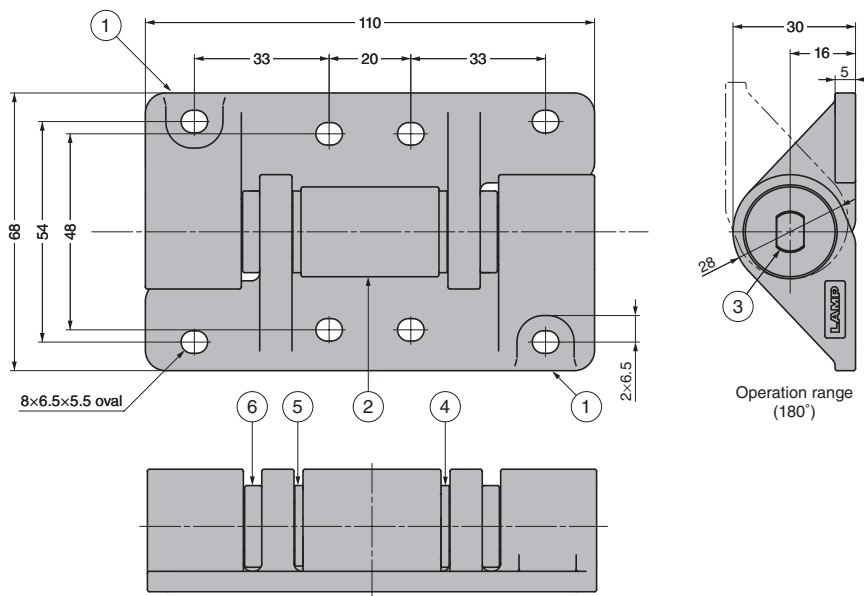
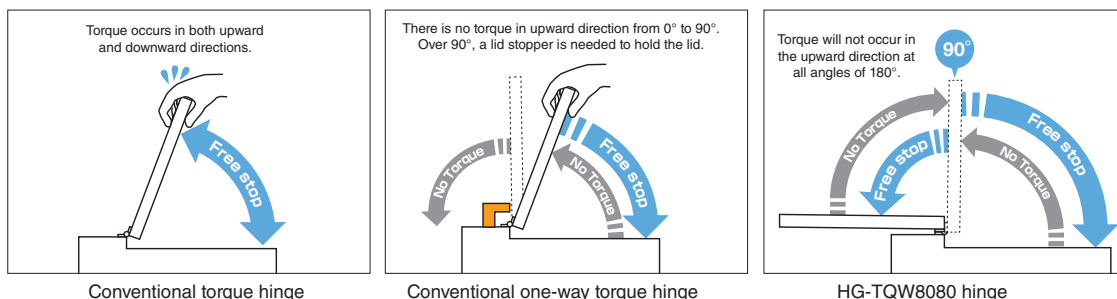
Application

Doors that should not be subjected to impact when opening and closing.
Medical equipment, FA equipment, OA equipment, etc.

Remarks

- Use all installation holes.
- Keep the centre of the hinge shafts level to prevent misalignment during installation.

[Video Link](#)



No.	Part Name	Material	Finish/Colour
①	Base	Zinc Alloy	Satin
②	Bracket		Chrome
③	Shaft	Stainless Steel (SUS)	—
④	Plug	Polyacetal (POM)	Black
⑤	Washer A		
⑥	Washer B		

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

CAD	Item Code	Item Name	Torque (N·m)	Torque (kgf·cm)	Weight (g)	Box (pcs)	Carton (pcs)
2D/3D	170-041-284	HG-TQW8080	8.0±20%	81.6±20%	625	8	16

HEAVY-DUTY STAINLESS STEEL BUTT HINGE (INSTALLATION HOLE TYPE) SUS HG-LSW



Features

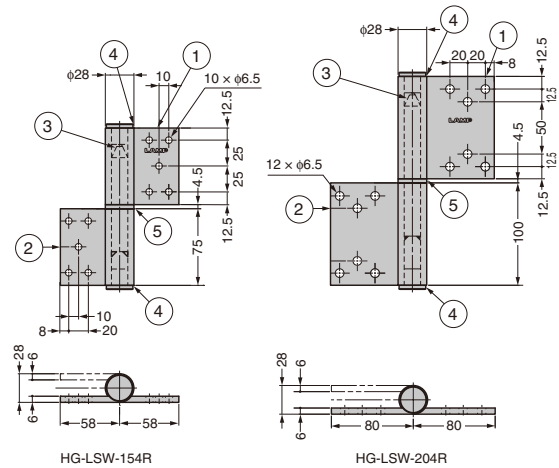
- Made from 6 mm thick stainless steel.
- Made with special rings (oiled bearings) for smooth movement.
- Outstanding design with head cap.

Application

Rotating mechanisms for large doors, gates and other heavy objects.

Remarks

The load capacity is the value when two hinges are used. See the selection guide for details on calculation conditions.



No.	Part Name	Material	Finish
①	Door Side Hinge Plate	Stainless Steel (SUS304)	Satin
②	Frame Side Hinge Plate		
③	Pin		Plain
④	Head Cap		
⑤	Ring		Barrel Polished

CAD	Item Code	Item Name	Type	Load Capacity N/2 pcs	Load Capacity kgf/2 pcs	Box (pcs)	Carton (pcs)
203D	170-041-019	HG-LSW-154L	Left Side	1960	200	6	12
203D	170-041-020	HG-LSW-154R	Right Side			6	12
203D	170-041-021	HG-LSW-204L	Left Side	2180	222	–	6
203D	170-041-022	HG-LSW-204R	Right Side			–	6

BALANCE-ADJUSTABLE LIFT-ASSIST HINGE HG-PA300-15 OUTSIDE MOUNT



- Easy to lift heavy top-opening lids due to spring tension (lift-assist).
- Balance adjustment allows for use in a wider range of lids than conventional lift-assist hinges.
- The built-in damper prevents lids from slamming shut (soft-close).
- Torque is adjustable by turning the adjustment screw ($\pm 10\%$).
- Comes with a plastic cover for clean appearance.

[Applications]

- Medical equipment, analytical instruments, semiconductor equipment.

[Remarks]

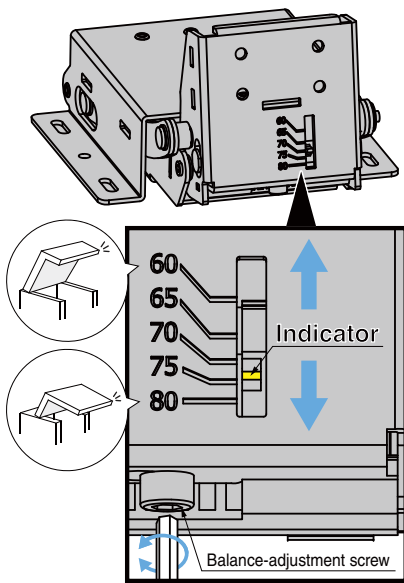
- Be sure to read the "Cautions" 1.

Video Link



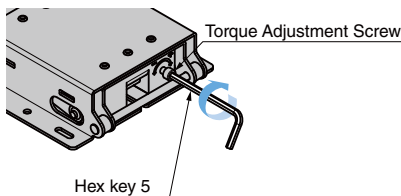
Selection Tool
Sasuga-kun
Applicable Products
Used for Product Selection & Simulation.
Available online!

[Balance Adjustment]

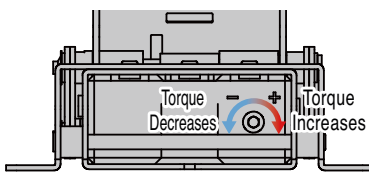


Angle of peak torque is adjustable with hex key 5. This feature allows adjustment to the location of center of gravity

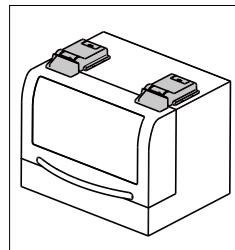
[How to Adjust Torque]



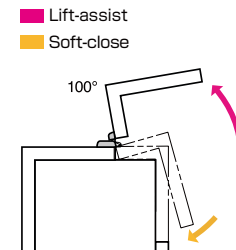
Turn the screw with a hex key



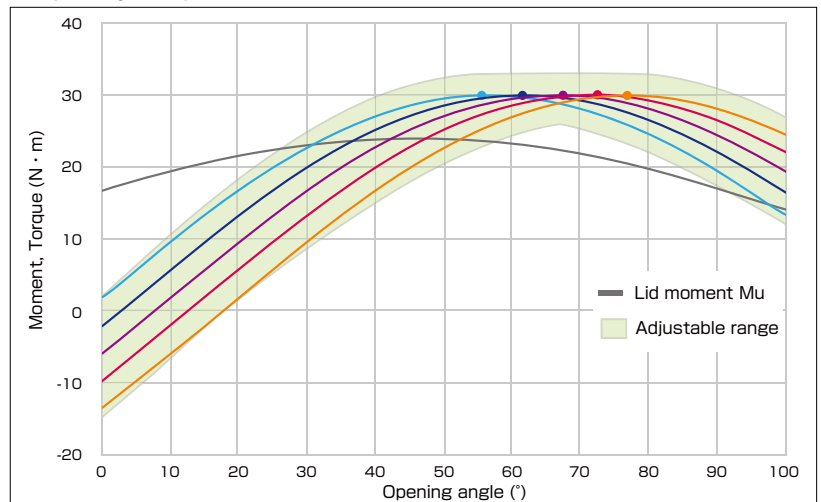
[Installation]



[Working range]



[Torque-Angle Graph] showing the adjustable range of peak torque's angle



[Indicator's Scale]

- 60 — 65 — 70 (default) — 75 — 80 ● Angle of peak torque

Lid moment $\mu >$ Hinge torque . . . Force is applied in the closing direction of lid.

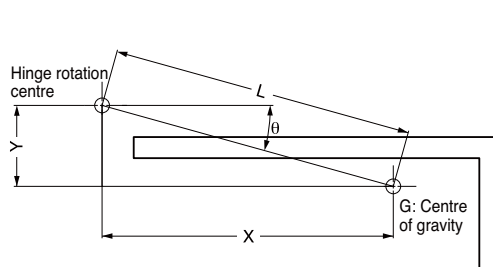
Lid moment $\mu <$ Hinge torque . . . Force is applied in the opening direction of lid.

Lid specs (example) : X=170mm Y=175mm L=244mm m=8.6kg

(Setting the indicator to 60 is the right adjustment in this case.)

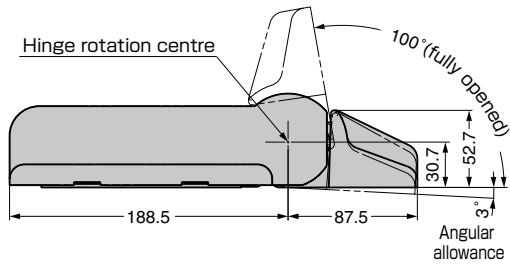
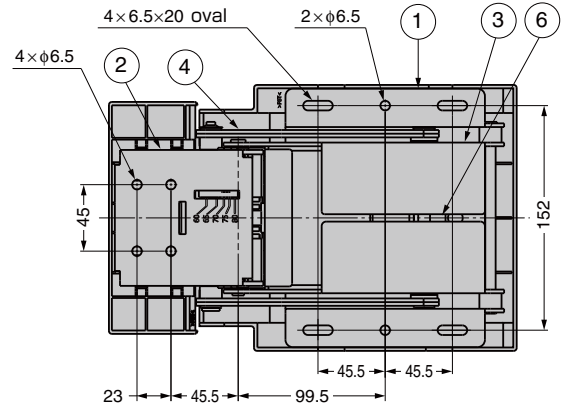
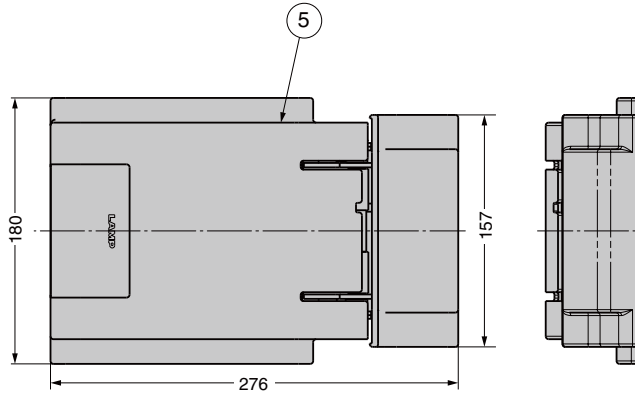
[Calculating Lid Moment]

Calculation formula $\mu = m \times L \times \cos \theta$



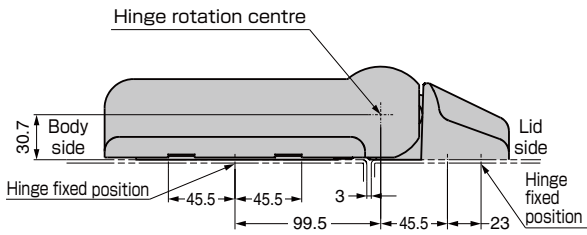
X	Horizontal distance from rotation centre to lid centre of gravity
Y	Vertical distance from rotation centre to lid centre of gravity
L	Distance from rotation centre to lid centre of gravity
θ	Angle from the horizontal line at the rotation centre to lid centre of gravity
m	Lid weight
G	Lid centre of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

Refer to 1 : No.280 P.15

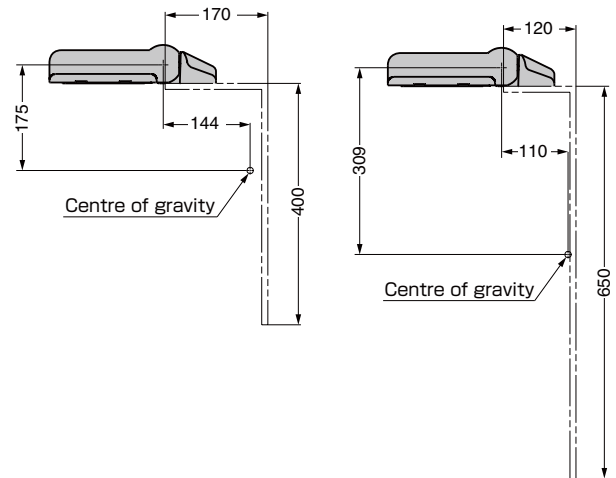


No.	Part Name	Material / Colour
①	Base A	Stainless Steel (SUS430)
②	Base B	
③	Case	PBT / Light Grey
④	Link Arm	
⑤	Plastic Cover	POM
⑥	Slider	
⑦	Spring	Steel (SWO)

[Installation]



[Installation Example]



RdHS	CAD	Item Code	Item Name	Description	Torque N·m/pc	Torque kgf·cm/pc	Weight (g)	Box (pcs)	Carton (pcs)
		170-044-367	HG-PA300-15	Peak torque 60°-80°	15±10%	153±10%	3400	1	-

19 mm overlay / 105° opening, 85° opening

LAMP.

With damper function (5 levels)



Damper power adjustment lever

The picture above shows a combination of a concealed hinge (with damper) and a mounting plate (sold separately).

Overlay
15-19mm (when bore distance is 5mm)

Cup size $\phi 35$
Bore Depth 11mm Door Thickness 15-20mm

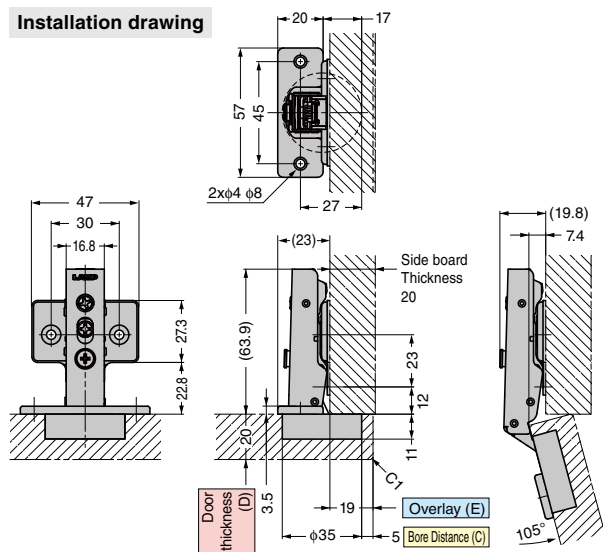
3D adjustment
Depth: +1.5, -2.5mm, Vertical: ± 2.5 mm,
Overlay: +0, -4mm

Sold separately:

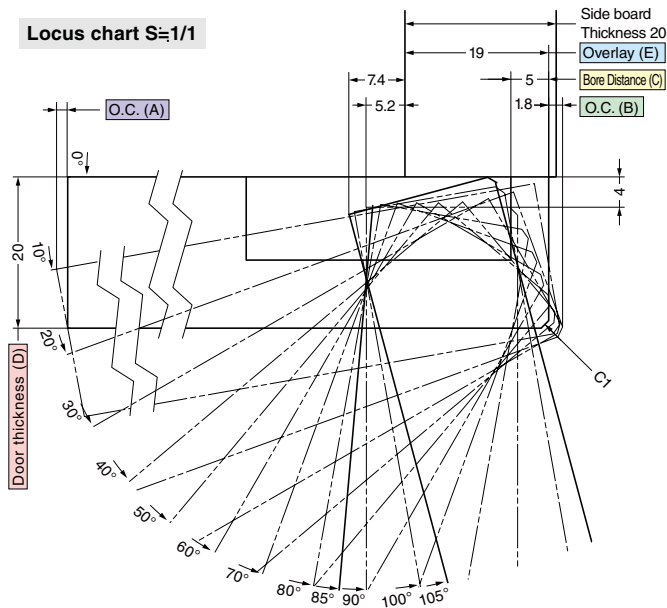
- Mounting plates Glass door face plate
- Countersunk head tapping screw 3.5 x 15NI Other
- Recommended screws: (Countersunk head wood/tapping screw 3.5)

► The installation drawing and locus chart shown are for a 20 mm thick door and side board, 19mm overlay and a 5mm bore distance. Opening angle is 105°.

Installation drawing



Locus chart $S \approx 1/1$



Drawings show a hinge, face plate and 360-P4W-30T mounting plate (sold separately).

Opening Clearance (O.C.)

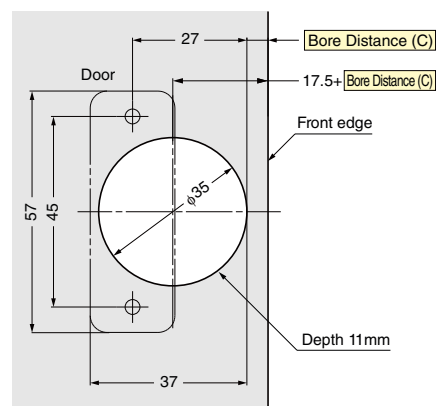
Clearances for door edge O.C. (A) and hinge side O.C. (B) are necessary. O.C. (A) and (B) change depending on door thickness and bore distance (C). Refer to locus chart and tables below when designing cabinets.

Opening clearance (B), door thickness (D) and bore distance (C) relationship

Door Thickness (D)	Bore Distance (C)		
	3	4	5
15	0.6	0.6	0.5
16	0.8	0.8	0.7
17	1.0	1.0	1.0
18	1.3	1.3	1.2
19	1.6	1.6	1.5
20	2	1.9	1.8
21*	2.4	2.3	2.2
22*	2.8	2.7	2.6
O.C. (B)			

* The table above shows O.C. (B) for C1 chamfering (chamfer plane).
* Please refer to the locus chart if door thickness is over 20mm. O.C. (B) can be made smaller by R chamfering (round chamfer) and C chamfering (chamfer plane) on the door.

Cut out dimensions (wooden doors)



Bore distance (C) and overlay (E) relationship

Bore Distance (C)	3	4	5
Overlay (E)	17	18	19

Overlay can be decreased by up to 4mm by turning the overlay adjustment screw.

Opening clearance (A) and door width relationship (for 20mm thick door)

Door Width	300	400	500	600
O.C. (A)	0.13	0.09	0.07	0.06

Item code	Item name	Opening angle	Type	Material	Finish	Carton
160-026-840	360-D26-19T	105°	With damper (5 levels)	Steel	Nickel	100pcs
160-026-836	360-26-19T		Without catch			
160-026-832	360-C26-19T		With catch			
160-042-389	360-U26-19T	85°	Sprung-open			100pcs
160-034-889	360-D26-19T85		With damper (5 levels)			
160-034-886	360-26-19T85		Without catch			200pcs
160-034-883	360-C26-19T85		With catch			

14mm overlay / 105° opening, 85° opening

LAMP

With damper function (5 levels)



Damper power adjustment lever

The picture above shows a combination of a concealed hinge (with damper) and a mounting plate (sold separately).

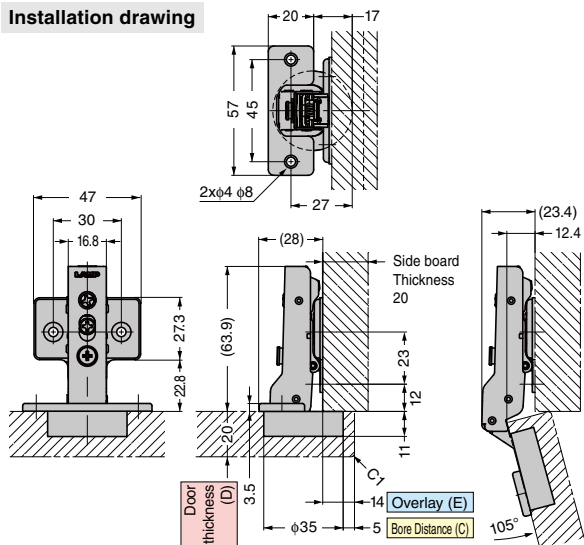
Overlay 10-14mm (when bore distance is 5mm)
Cup size $\phi 35$ Bore Depth 11mm Door Thickness 15-20mm
3D adjustment Depth: +1.5, -2.5mm, Vertical: ± 2.5 mm, Overlay: +0, -4mm

Sold separately:

- Mounting plates Glass door face plate
- Countersunk head tapping screw 3.5 x 15NI Other
- Recommended screws: (Countersunk head wood/tapping screw 3.5)

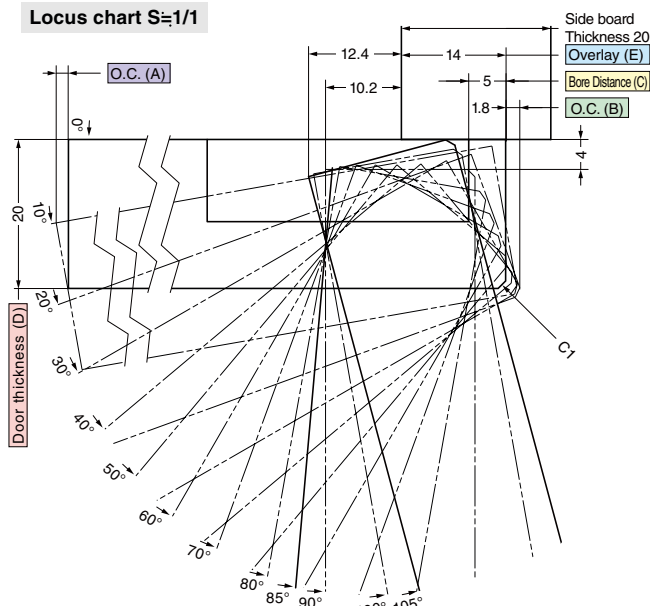
► The installation drawing and locus chart shown are for a 20 mm thick door and side board, 14mm overlay and a 5mm bore distance. Opening angle is 105°.

Installation drawing

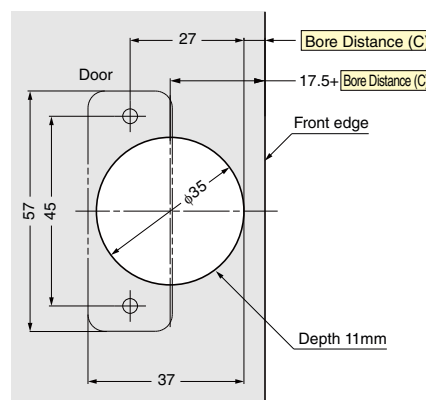


Drawings show a hinge, face plate and 360-P4W-30T mounting plate (sold separately).

Locus chart S=1/1



Cut out dimensions (wooden doors)



Opening Clearance (O.C.)

Clearances for door edge O.C. (A) and hinge side O.C. (B) are necessary. O.C. (A) and (B) change depending on door thickness and bore distance (C). Refer to locus chart and tables below when designing cabinets.

Opening clearance (B), door thickness (D) and bore distance (C) relationship

Door Thickness (D)	Bore Distance (C)		
	3	4	5
15	0.6	0.6	0.5
16	0.8	0.8	0.7
17	1.0	1.0	1.0
18	1.3	1.3	1.2
19	1.6	1.6	1.5
20	2	1.9	1.8
21*	2.4	2.3	2.2
22*	2.8	2.7	2.6
O.C. (B)			

* The table above shows O.C. (B) for C1 chamfering (chamfer plane).
* Please refer to the locus chart if door thickness is over 20mm. O.C. (B) can be made smaller by R chamfering (round chamfer) and C chamfering (chamfer plane) on the door.

Bore distance (C) and overlay (E) relationship

Bore Distance (C)	3	4	5
Overlay (E)	12	13	14

Overlay can be decreased by up to 4mm by turning the overlay adjustment screw.

Opening clearance (A) and door width relationship (for 20mm thick door)

Door Width	300	400	500	600
O.C. (A)	0.13	0.09	0.07	0.06

Item code	Item name	Opening angle	Type	Material	Finish	Carton
160-026-841	360-D26-14T	105°	With damper (5 levels)	Steel	Nickel	100pcs
160-026-837	360-26-14T		Without catch			200pcs
160-026-833	360-C26-14T		With catch			
160-042-390	360-U26-14T	85°	Sprung-open			100pcs
160-034-890	360-D26-14T85		With damper (5 levels)			200pcs
160-034-887	360-26-14T85		Without catch			
160-034-884	360-C26-14T85		With catch			

9 mm overlay / 105° opening, 85° opening

LAMP®

With damper function (5 levels)



Damper power adjustment lever

The picture above shows a combination of a concealed hinge (with damper) and a mounting plate (sold separately).

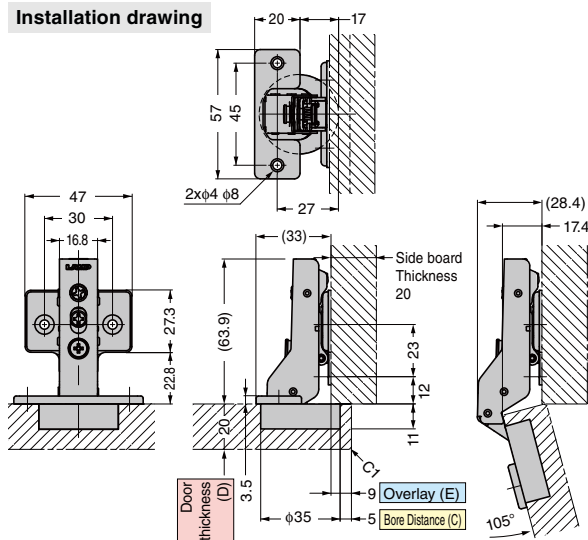
Overlay 5-9mm (when bore distance is 5mm)
Cup size $\phi 35$ Bore Depth 11mm Door Thickness 15-20mm
3D adjustment Depth: +1.5, -2.5mm, Vertical: ± 2.5 mm, Overlay: +0, -4mm

Sold separately:

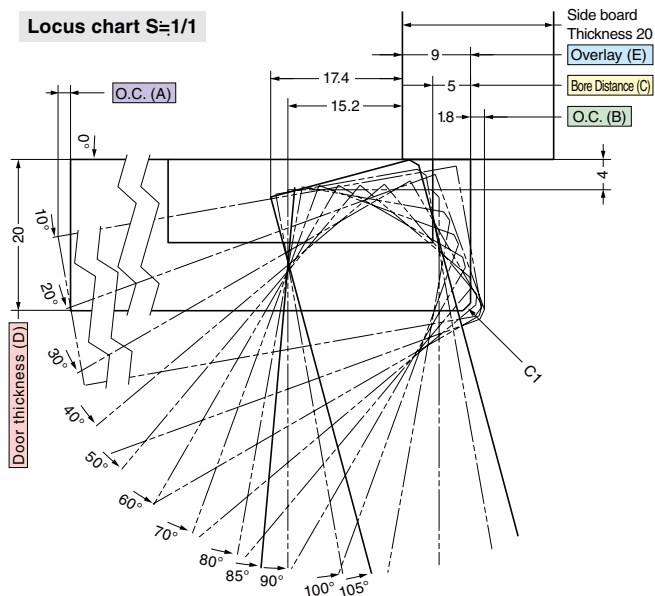
- Mounting plates Glass door face plate
- Countersank head tapping screw 3.5 x 15NI Other
- Recommended screws: (Countersank head wood/tapping screw 3.5)

► The installation drawing and locus chart shown are for a 20 mm thick door and side board, 9mm overlay and a 5mm bore distance. Opening angle is 105°.

Installation drawing



Locus chart S=1/1



Drawings show a hinge, face plate and 360-P4W-30T mounting plate (sold separately).

Opening Clearance (O.C.)

Clearances for door edge O.C. (A) and hinge side O.C. (B) are necessary. O.C. (A) and (B) change depending on door thickness and bore distance (C). Refer to locus chart and tables below when designing cabinets.

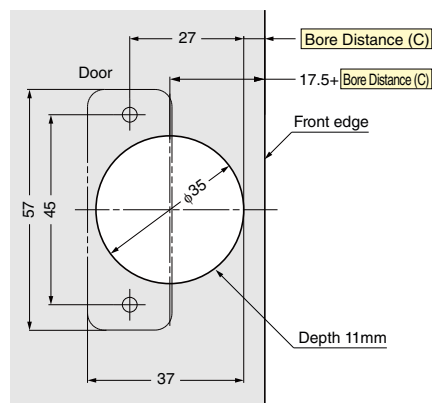
Opening clearance (B), door thickness (D) and bore distance (C) relationship

Door Thickness (D)	Bore Distance (C)		
	3	4	5
15	0.6	0.6	0.5
16	0.8	0.8	0.7
17	1.0	1.0	1.0
18	1.3	1.3	1.2
19	1.6	1.6	1.5
20	2	1.9	1.8
21*	2.4	2.3	2.2
22*	2.8	2.7	2.6
O.C. (B)			

* The table above shows O.C. (B) for C1 chamfering (chamfer plane).

* Please refer to the locus chart if door thickness is over 20mm. O.C. (B) can be made smaller by R chamfering (round chamfer) and C chamfering (chamfer plane) on the door.

Cut out dimensions (wooden doors)



Bore distance (C) and overlay (E) relationship

Bore Distance (C)	3	4	5
Overlay (E)	7	8	9

Overlay can be decreased by up to 4mm by turning the overlay adjustment screw.

Opening clearance (A) and door width relationship (for 20mm thick door)

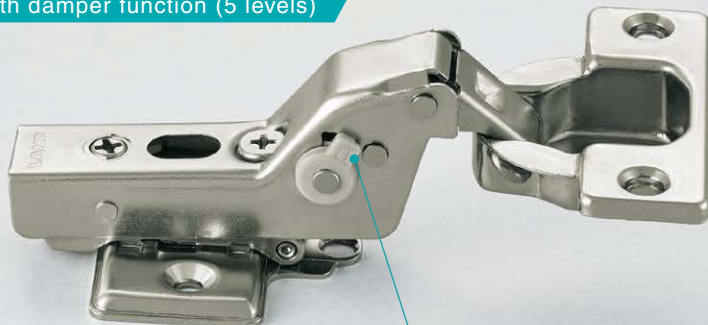
Door Width	300	400	500	600
O.C. (A)	0.13	0.09	0.07	0.06

Item code	Item name	Opening angle	Type	Material	Finish	Carton
160-026-842	360-D26-9T	105°	With damper (5 levels)	Steel	Nickel	100pcs
160-026-838	360-26-9T		Without catch			
160-026-834	360-C26-9T		With catch			200pcs
160-042-391	360-U26-9T	85°	Sprung-open			100pcs
160-034-891	360-D26-9T85		With damper (5 levels)			
160-034-888	360-26-9T85		Without catch			
160-034-885	360-C26-9T85		With catch	200pcs		

Inset / 93° opening



With damper function (5 levels)



Damper power adjustment lever

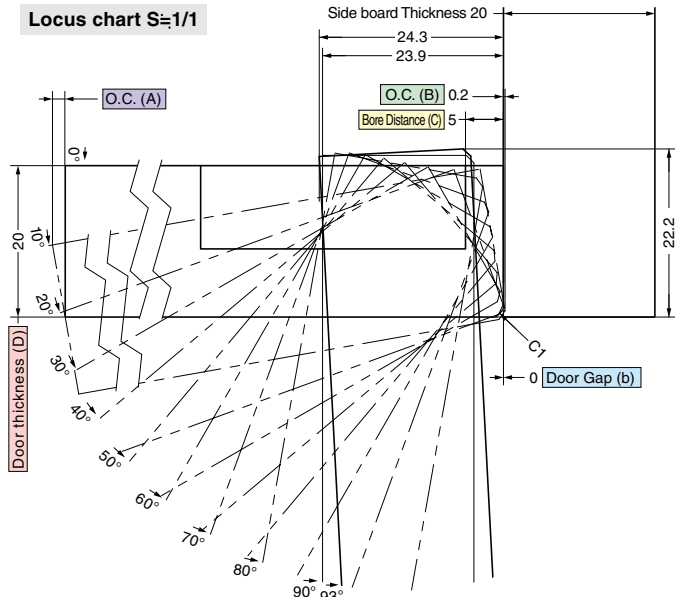
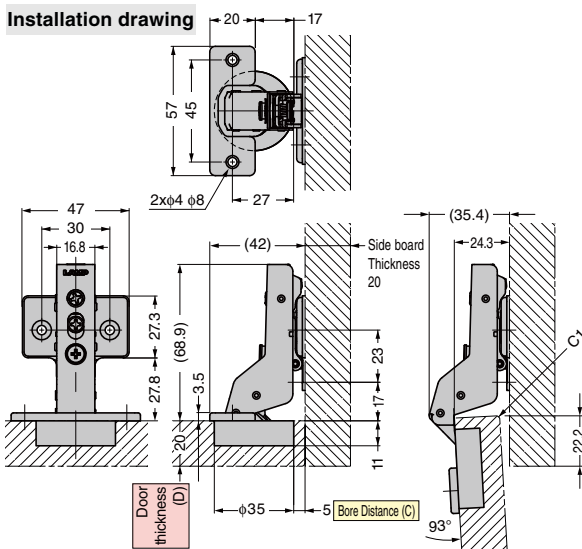
The picture above shows a combination of a concealed hinge (with damper) and a mounting plate (sold separately).

- Cup size $\phi 35$
Bore Depth 11mm Door Thickness 15-20mm
- 3D adjustment
Depth: +1.5, -2.5mm, Vertical: ± 2.5 mm,
Overlay: +0, -4mm

Sold separately:

- Mounting plates Glass door face plate
- Countersank head tapping screw 3.5 x 15NI Other
- Recommended screws: (Countersank head wood/tapping screw 3.5)

► The installation drawing and locus chart shown are for a 20 mm thick door and side board, a 5mm bore distance and inset installation.



Drawings show a hinge, face plate and 360-P4W-30T mounting plate (sold separately).

Opening Clearance (O.C.)

Clearances for door edge O.C. (A) and hinge side O.C. (B) are necessary. O.C. (A) and (B) change depending on door thickness and bore distance (C). Refer to locus chart and tables below when designing cabinets.

Opening clearance (B), door thickness (D) and bore distance (C) relationship

Door Thickness (D)	Bore Distance (C)		
	3	4	5
15	0	0	0
16	0	0	0
17	0	0	0
18	0	0	0
19	0.1	0.1	0.1
20	0.3	0.3	0.2
21*	0.5	0.4	0.4
22*	1.0	0.7	0.7

O.C. (B)

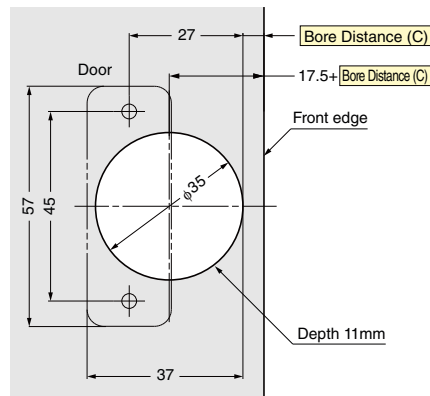
* The table above shows O.C. (B) for C1 chamfering (chamfer plane).
* Please refer to the locus chart if door thickness is over 20mm. O.C. (B) can be made smaller by R chamfering (round chamfer) and C chamfering (chamfer plane) on the door.

Bore distance (C) and Door Gap (b) relationship

Bore Distance (C)	3	4	5
Door Gap (b)	2	1	0

Door Gap (b) adjustment (+4mm) by turning the overlay adjustment screw. Please check required O.C. (B) at the table below.

Cut out dimensions (wooden doors)



Opening clearance (A) and door width relationship (for 20mm thick door)

Door Width	300	400	500	600
O.C. (A)	0.44	0.32	0.25	0.21

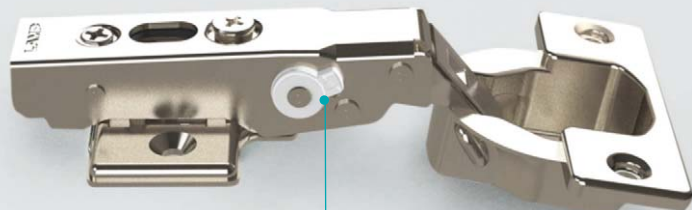
	Item code	Item name	Opening angle	Type	Material	Finish	Carton
CAD	160-026-843	360-D26-0T	93°	With damper (5 levels)	Steel	Nickel	100pcs
CAD	160-026-839	360-26-0T		Without catch			
CAD	160-026-835	360-C26-0T		With catch			
NEW	160-042-392	360-U26-0T		Sprung-open			



Thick doors 26mm overlay / 100° opening

LAMP

With damper function (5 levels)



Damper power adjustment lever

The picture above shows a combination of a concealed hinge (with damper) and a mounting plate (sold separately).

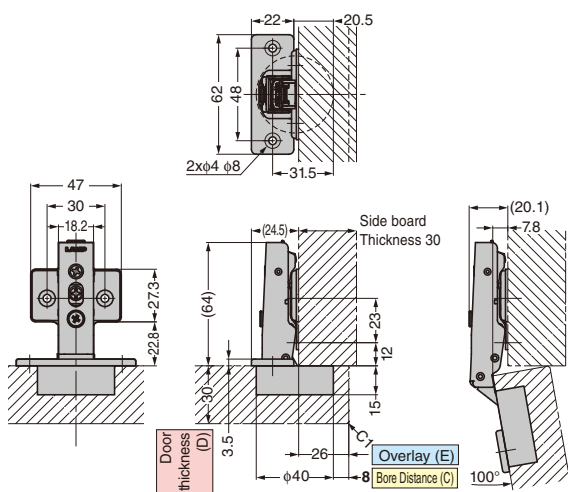
Overlay 22-26mm (when bore distance is 8mm)
Cup size $\phi 40$ Bore Depth 15mm Door Thickness 18-30mm
3D adjustment Depth: +1.7, -2.8mm, Vertical: ± 2.5 mm, Overlay: +0, -4mm

Sold separately:

- Mounting plates
- Countersank head tapping screw 3.5 x 15NI
- Recommended screws: (Countersank head wood/tapping screw 3.5)

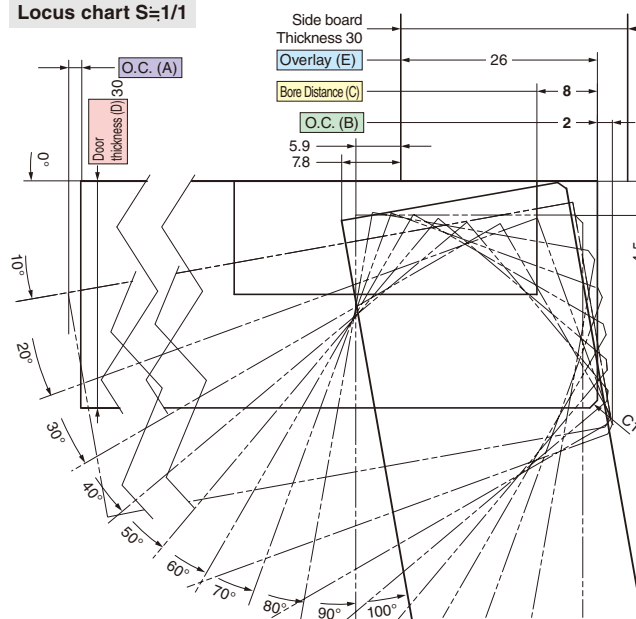
► The installation drawing and locus chart shown are for a 30 mm thick door and side board, 26mm overlay and a 8mm bore distance.

Installation drawing



Drawings show a hinge, face plate and 360-P4W-30T mounting plate (sold separately).

Locus chart $S=1/1$



Opening Clearance (O.C.)

Clearances for door edge O.C. (A) and hinge side O.C. (B) are necessary. O.C. (A) and (B) change depending on door thickness and bore distance (C). Refer to locus chart and tables below when designing cabinets.

Opening clearance (B), door thickness (D) and bore distance (C) relationship

Door Thickness (D)	Bore Distance (C)					
	3	4	5	6	7	8
18	0.1	0.1	0.1	0.1	0.1	0.1
20	0.3	0.3	0.3	0.3	0.3	0.3
22	0.5	0.5	0.5	0.5	0.5	0.5
24	0.8	0.8	0.8	0.8	0.8	0.8
26	1.3	1.2	1.2	1.1	1.1	1.1
28	3.6	2.6	1.6	1.6	1.5	1.5
30	6.0	5.0	4.0	3.0	2.1	2.0
32*	8.4	7.4	6.4	5.4	4.4	3.4
34*	10.8	9.8	8.8	7.8	6.8	5.8

O.C. (B)

* The table above shows O.C. (B) for C1 chamfering (chamfer plane).

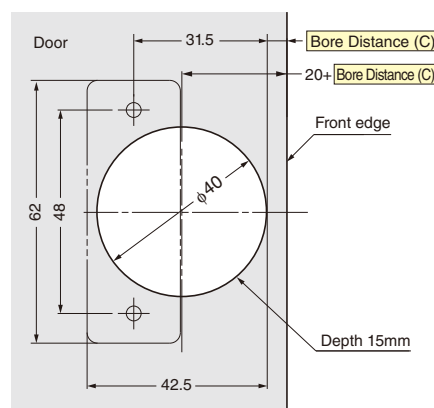
* Please refer to the locus chart if door thickness is over 30mm. O.C. (B) can be made smaller by R chamfering (round chamfer) and C chamfering (chamfer plane) on the door.

Bore distance (C) and overlay (E) relationship

Bore Distance (C)	3	4	5	6	7	8
Overlay (E)	21	22	23	24	25	26

Overlay can be decreased by up to 4mm by turning the overlay adjustment screw.

Cut out dimensions (wooden doors)



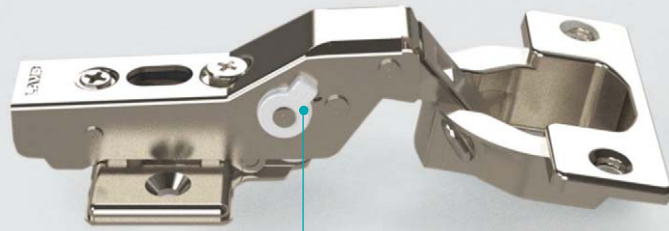
Opening clearance (A) and door width relationship (for 30mm thick door)

Door Width	300	400	500	600
O.C. (A)	0.35	0.25	0.19	0.16

Item code	Item name	Opening angle	Type	Material	Finish	Carton
160-029-084	H360-D26-26T	100°	With damper (5 levels)	Steel	Nickel	100pcs
160-029-081	H360-26-26T		Without catch			
160-029-078	H360-C26-26T		With catch			

Thick doors 16 mm overlay / 100° opening

With damper function (5 levels)



Damper power adjustment lever

The picture above shows a combination of a concealed hinge (with damper) and a mounting plate (sold separately).

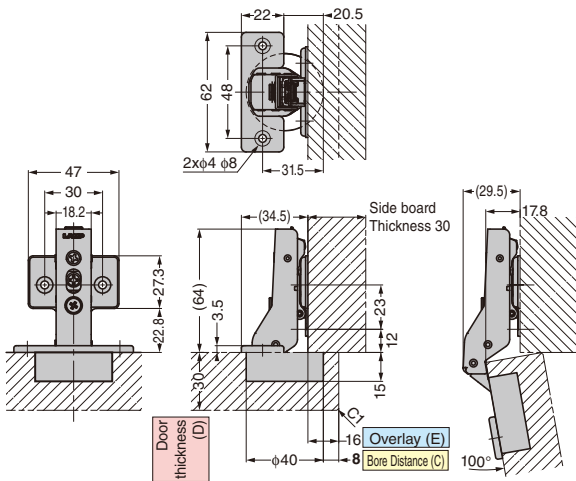
Overlay 12-16mm (when bore distance is 8mm)
Cup size $\phi 40$ Bore Depth 15mm Door Thickness 18-30mm
3D adjustment Depth: +1.7, -2.8mm, Vertical: ± 2.5 mm, Overlay: +0, -4mm

Sold separately:

- Mounting plates
- Countersank head tapping screw 3.5 x 15N1
- Recommended screws: (Countersank head wood/tapping screw 3.5)

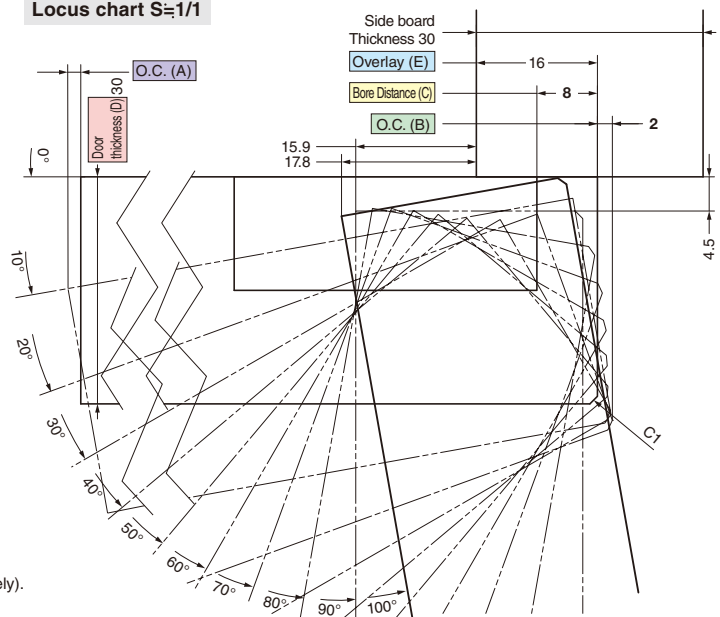
The installation drawing and locus chart shown are for a 30 mm thick door and side board, 16mm overlay and a 8mm bore distance.

Installation drawing



Drawings show a hinge, face plate and 360-P4W-30T mounting plate (sold separately).

Locus chart $S=1/1$



Opening Clearance (O.C.)

Clearances for door edge O.C. (A) and hinge side O.C. (B) are necessary. O.C. (A) and (B) change depending on door thickness and bore distance (C). Refer to locus chart and tables below when designing cabinets.

Opening clearance (B), door thickness (D) and bore distance (C) relationship

Door Thickness (D)	Bore Distance (C)					
	3	4	5	6	7	8
18	0.1	0.1	0.1	0.1	0.1	0.1
20	0.3	0.3	0.3	0.3	0.3	0.3
22	0.5	0.5	0.5	0.5	0.5	0.5
24	0.8	0.8	0.8	0.8	0.8	0.8
26	1.3	1.2	1.2	1.1	1.1	1.1
28	3.6	2.6	1.6	1.6	1.5	1.5
30	6.0	5.0	4.0	3.0	2.1	2.0
32*	8.4	7.4	6.4	5.4	4.4	3.4
34*	10.8	9.8	8.8	7.8	6.8	5.8

O.C. (B)

* The table above shows O.C. (B) for C1 chamfering (chamfer plane).

* Please refer to the locus chart if door thickness is over 30mm. O.C. (B) can be made smaller by R chamfering (round chamfer) and C chamfering (chamfer plane) on the door.

Bore distance (C) and overlay (E) relationship

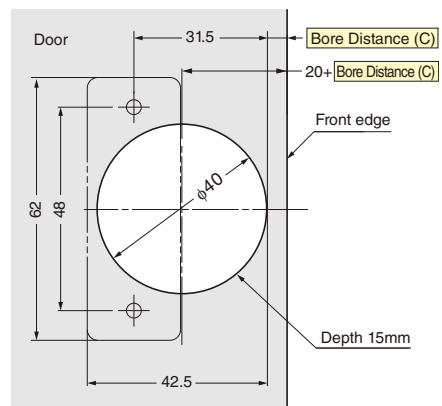
Bore Distance (C)	3	4	5	6	7	8
Overlay (E)	11	12	13	14	15	16

Overlay can be decreased by up to 4mm by turning the overlay adjustment screw.

Opening clearance (A) and door width relationship (for 30mm thick door)

Door Width	300	400	500	600
O.C. (A)	0.35	0.25	0.19	0.16

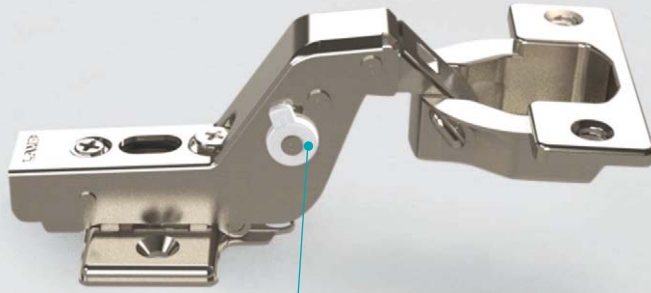
Cut out dimensions (wooden doors)



Item code	Item name	Opening angle	Type	Material	Finish	Carton
NEW CAD G 160-029-085	H360-D26-16T	100°	With damper (5 levels)	Steel	Nickel	100pcs
NEW CAD G 160-029-082	H360-26-16T		Without catch			
NEW CAD G 160-029-079	H360-C26-16T		With catch			

Thick doors Inset / 93° opening

With damper function (5 levels)



Damper power adjustment lever

The picture above shows a combination of a concealed hinge (with damper) and a mounting plate (sold separately).

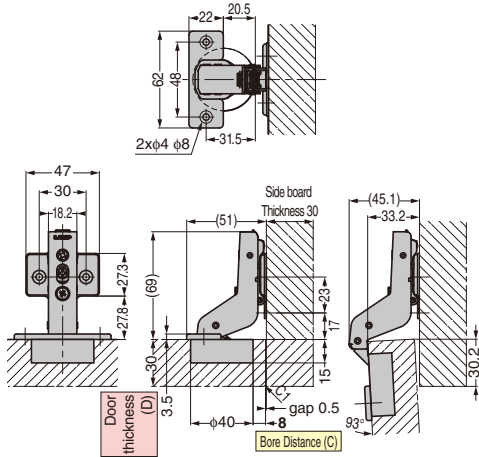
- Cup size $\phi 40$
Bore Depth 15mm Door Thickness 18-30mm
- 3D adjustment
Depth: +1.7, -2.8mm, Vertical: ± 2.5 mm,
Overlay: +0, -4mm

Sold separately:

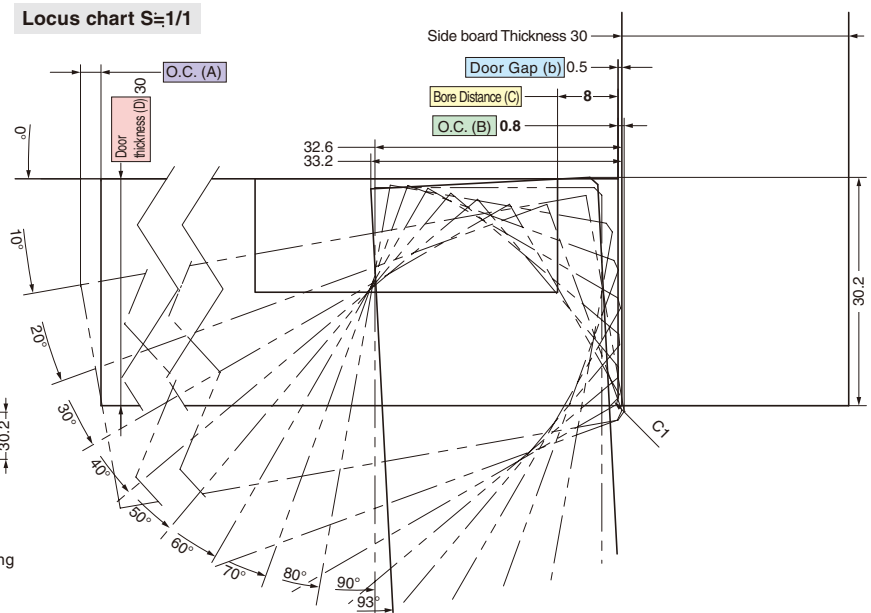
- Mounting plates
- Countersunk head tapping screw 3.5 x 15NI
- Recommended screws: (Countersunk head wood/tapping screw 3.5)

► The installation drawing and locus chart shown are for a 30 mm thick door and side board, a 8mm bore distance and inset installation.

Installation drawing



Locus chart S=1/1



Drawings show a hinge, face plate and 360-P4W-30T mounting plate (sold separately).

Opening Clearance (O.C.)

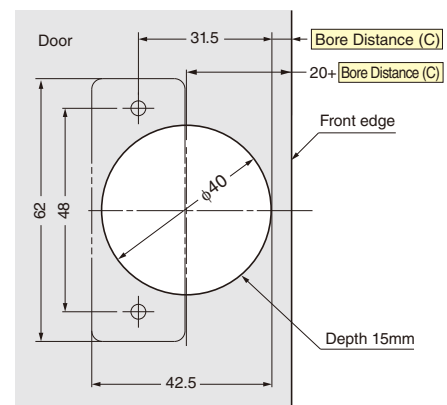
Clearances for door edge O.C. (A) and hinge side O.C. (B) are necessary. O.C. (A) and (B) change depending on door thickness and bore distance (C). Refer to locus chart and tables below when designing cabinets.

Opening clearance (B), door thickness (D) and bore distance (C) relationship

Door Thickness (D)	Bore Distance (C)						
	3	4	5	6	7	8	
18	0	0	0	0	0	0	
20	0	0	0	0	0	0	
22	0	0	0	0	0	0	
24	0.1	0.1	0.1	0.1	0.1	0.1	
26	0.3	0.3	0.3	0.3	0.3	0.3	
28	1.7	0.7	0.5	0.5	0.5	0.5	
30	3.9	2.9	2.0	1.4	0.8	0.8	
32*	5.9	4.9	3.9	3.3	2.6	2.1	
34*	8.1	7.1	6.1	5.1	4.5	3.9	

O.C. (B)

Cut out dimensions (wooden doors)



* The table above shows O.C. (B) for C1 chamfering (chamfer plane).
* Please refer to the locus chart if door thickness is over 30mm. O.C. (B) can be made smaller by R chamfering (round chamfer) and C chamfering (chamfer plane) on the door.

Bore distance (C) and Door Gap (b) relationship

Bore Distance (C)	3	4	5	6	7	8
Door Gap (b)	5.5	4.5	3.5	2.5	1.5	0.5

Door Gap (b) adjustment (+4mm) by turning the overlay adjustment screw. Please check required O.C. (B) at the table below.

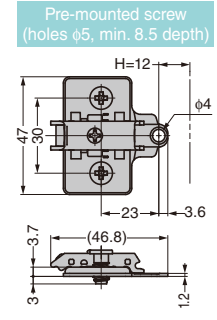
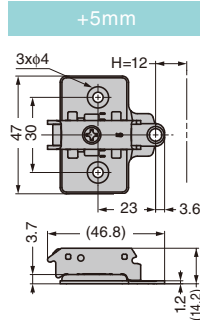
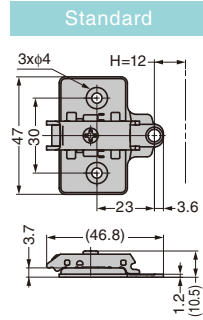
Opening clearance (A) and door width relationship (for 30mm thick door)

Door Width	300	400	500	600
O.C. (A)	0.78	0.55	0.43	0.35

Item code	Item name	Opening angle	Type	Material	Finish	Carton
160-029-086	H360-D26-0T	93°	With damper (5 levels)	Steel	Nickel	100pcs
160-029-083	H360-26-0T		Without catch			
160-029-080	H360-C26-0T		With catch			

LAMP Mounting plates **360-P4W-30T**

System 30

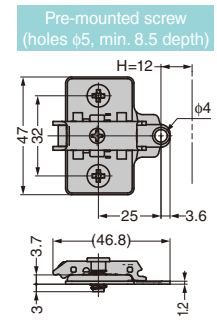
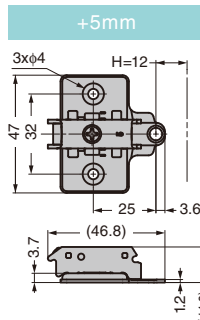
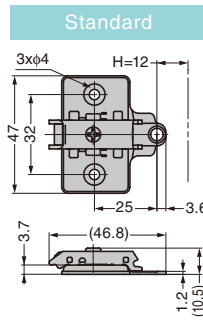


- Value of H for inset installation is "door thickness + 17 mm".
- When using with the GH-360FP, value of H is "door thickness + 19 mm".

Item code	Item name	Type	Height adjustment	Material	Finish	Carton
160-026-844	360-P4W-30T	Standard				
160-035-077	360-P4W-30T+5	+5mm	±2.5mm	Steel	Nickel	400pcs
160-042-394	360-P4W-30T-DS	Pre-mounted screw				

LAMP Mounting plates **360-P4W-32T**

System 32

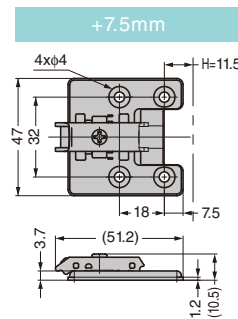
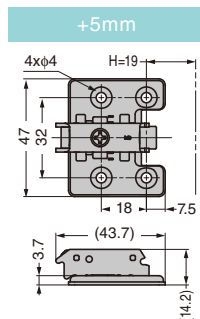
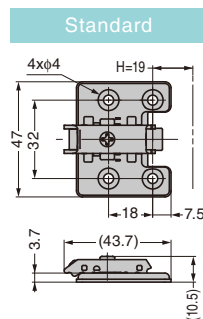


- Value of H for inset installation is "door thickness + 17 mm".
- When using with the GH-360FP, value of H is "door thickness + 19 mm".

Item code	Item name	Type	Height adjustment	Material	Finish	Carton
160-026-845	360-P4W-32T	Standard				
160-035-078	360-P4W-32T+5	+5mm	±2.5mm	Steel	Nickel	400pcs
160-042-395	360-P4W-32T-DS	Pre-mounted screw				

LAMP Mounting plates **360-P6WT**

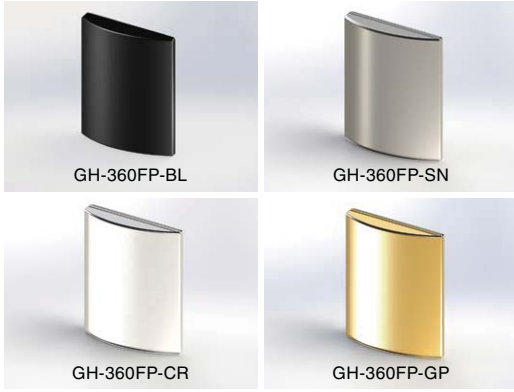
System 32 with 4 holes



- For the standard and +5mm types:
 - Value of H for inset installation is "door thickness + 24 mm".
 - When using with the GH-360FP, value of H is "door thickness + 26 mm".
- For the +7.5mm type:
 - Value of H for inset installation is "door thickness + 16.5 mm".
 - When using with the GH-360FP, value of H is "door thickness + 18.5 mm".

Item code	Item name	Type	Height adjustment	Material	Finish	Carton
160-026-846	360-P6WT	Standard				
160-035-079	360-P6WT+5	+5mm	±2.5mm	Steel	Nickel	400pcs
160-042-393	360-P6W-30-32T	+7.5mm				

LAMP[®] Glass door face plate GH-360FP

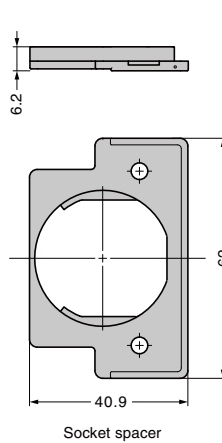
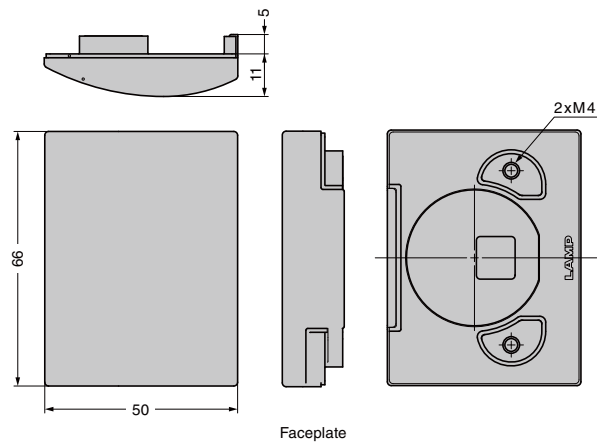


- Glass door face plate designed specifically for the Olympia hinge.
(Not suitable for the H360 hinge).
- For tempered glass doors.
- Use the screws supplied and tighten to 0.75~1.5N.m

<Accessory>

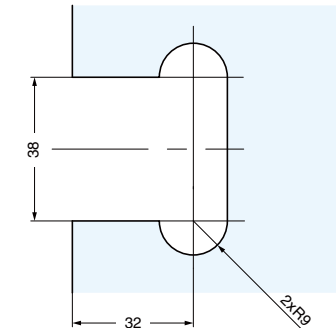
- Cross Recessed Flat Head Machine Screw M4 x 14

	Item code	Item name	Finish / Colour	Material
NEW CAD	160-043-631	GH-360FP-CR	Chrome plating	Zinc Alloy (ZDC) Polyacetal (POM)
NEW CAD	160-043-632	GH-360FP-SN	Satin nickel	
NEW CAD	160-043-724	GH-360FP-GP	24K Gold plating	
NEW CAD	160-043-633	GH-360FP-BL	Black	



Cut Out Dimensions

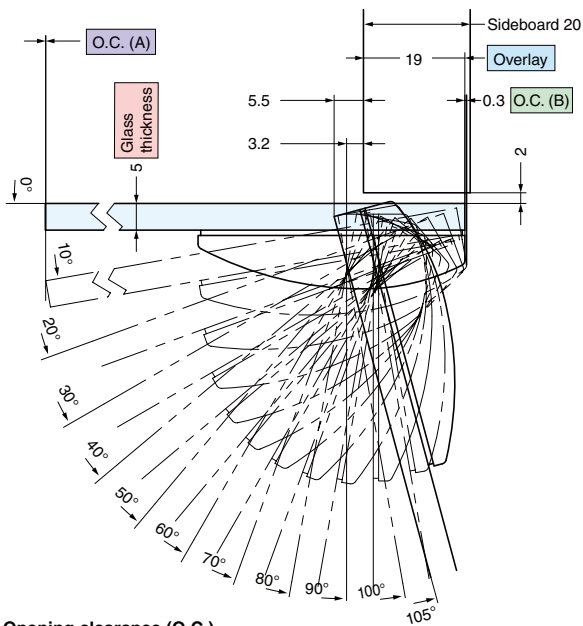
- Please use 4 - 6mm tempered glass.
- Use of shatterproof film is recommended.



Side board and face plate relationship

► For a 5mm door, 20mm sideboard and 19mm overlay.

Locus chart S=7/10 Overlay (19mm)



Opening clearance (O.C.)

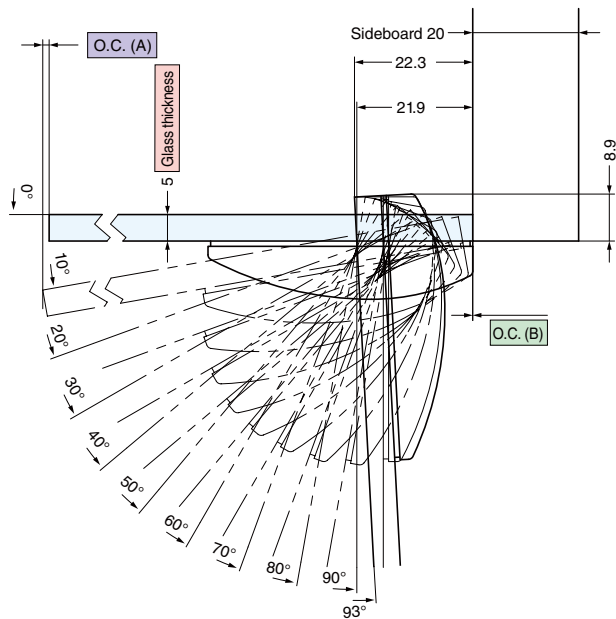
Glass thickness	4	5	6
O.C. (B)	0.2	0.3	0.5

Opening clearance (A) and door width relationship (for 5mm door)

Glass width	300	400	500	600
O.C. (A)	0.07	0.05	0.04	0.03

► For a 5mm door, 20mm sideboard and inset installation.

Locus chart S=7/10 Inset



Opening clearance (O.C.)

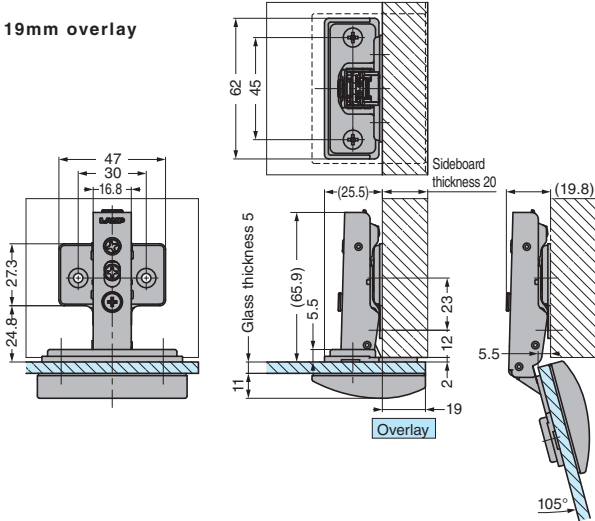
Glass thickness	4	5	6
O.C. (B)	0	0	0

Opening clearance (A) and door width relationship (for 5mm door)

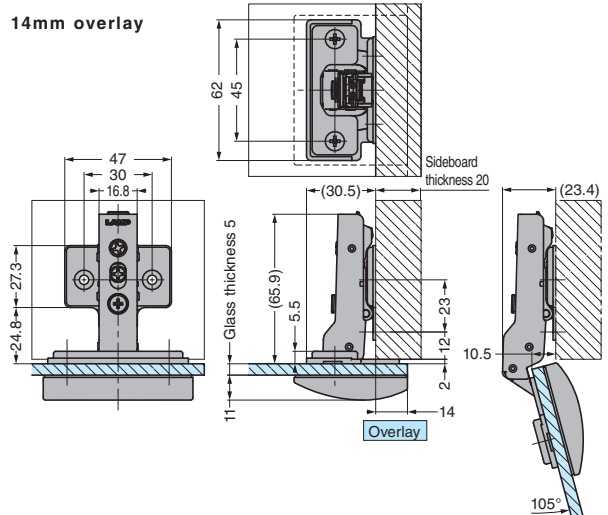
Glass width	300	400	500	600
O.C. (A)	0.34	0.25	0.19	0.16

Installation drawing

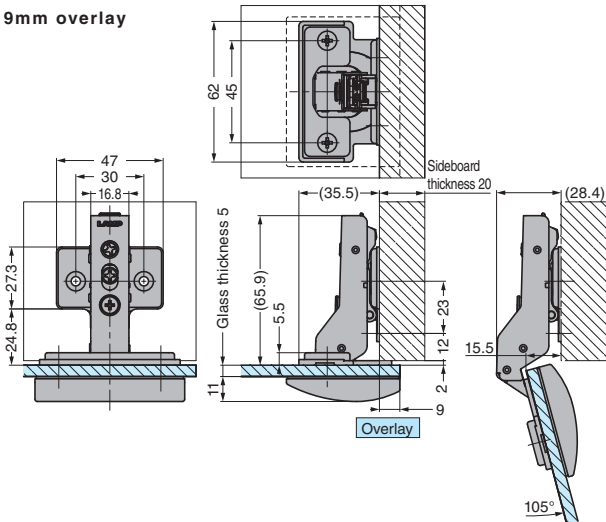
19mm overlay



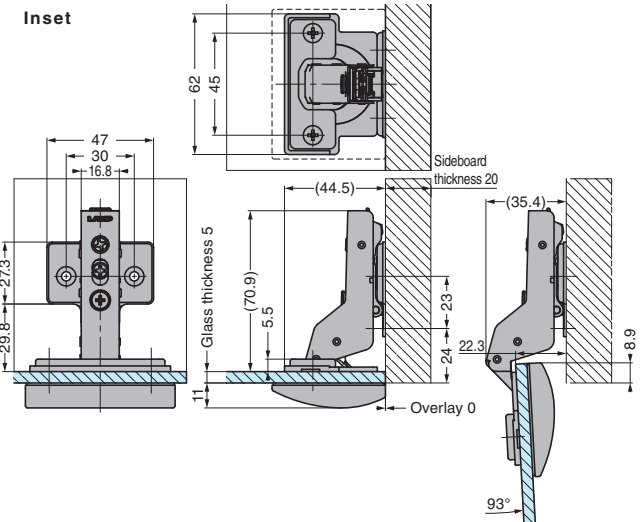
14mm overlay



9mm overlay

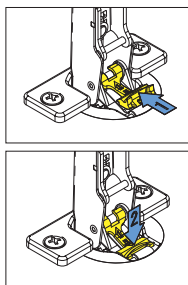
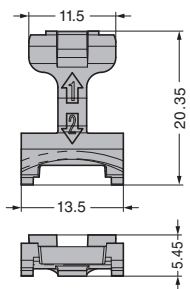


Inset



Drawings show a hinge, face plate and 360-P4W-30T mounting plate (sold separately).

LAMP® 85° angle limiter 360-85



○ Can be retrofitted to a 105° opening Olympia hinge (standard door) to limit the opening angle to 85°.

[Remarks]

● Not available for inset use.

Item code	Item name
NEW CAD G 160-042-335	360-85

LAMP® Installation jig 360-JIG overlay installation

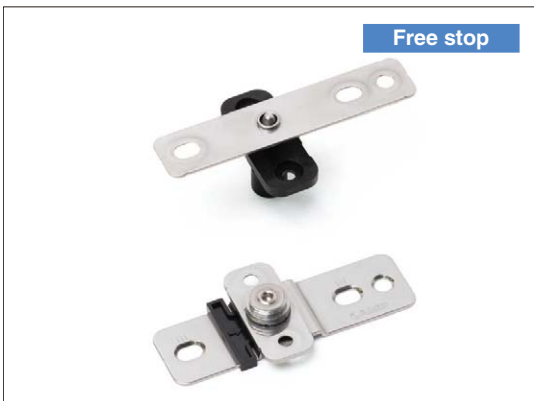


○ For easy installation and alignment of the Olympia hinge mounting plate.

○ Cannot be used in combination with 360-P6W32-32T and pre-mounted screw mounting plates.

Item code	Item name	Box	Carton
NEW CAD G 160-042-396	360-JIG	50pc	500pcs

PIVOT TORQUE HINGE HG-PTH30



- No tools are needed to attach and detach doors, allowing for easy maintenance.
- The safety retainer prevents doors and windows from falling off.

[Remarks]

- Be sure to read the "Cautions" **1**.
- When installing, ensure that both hinge shafts are leveled and aligned.
- Force for operation varies depending on use environment, including air temperature and wind.
- Do not use with a door and window enduring strong wind pressure.

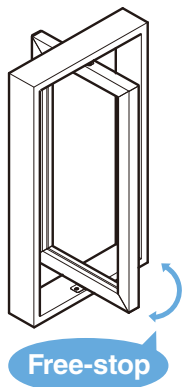
[Parts Included]

- Binding head tapping screw 4×20 (for the pivot hinge)
- Countersunk head tapping screw 4×20 (for the mounting plates and torque hinge)

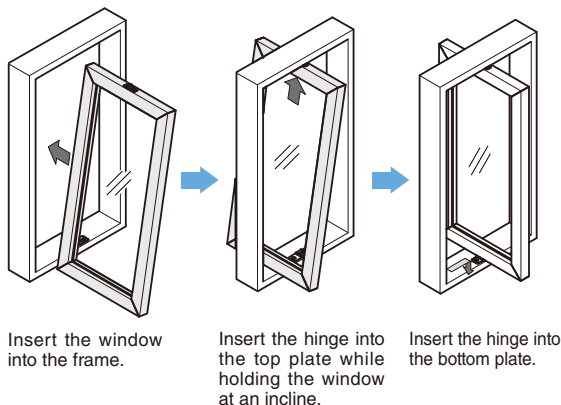
Video Link



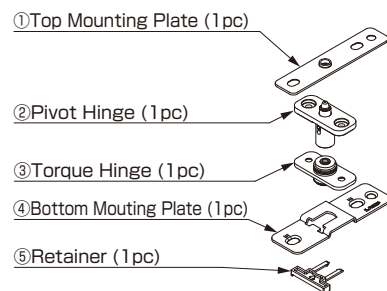
[Holds in any position]



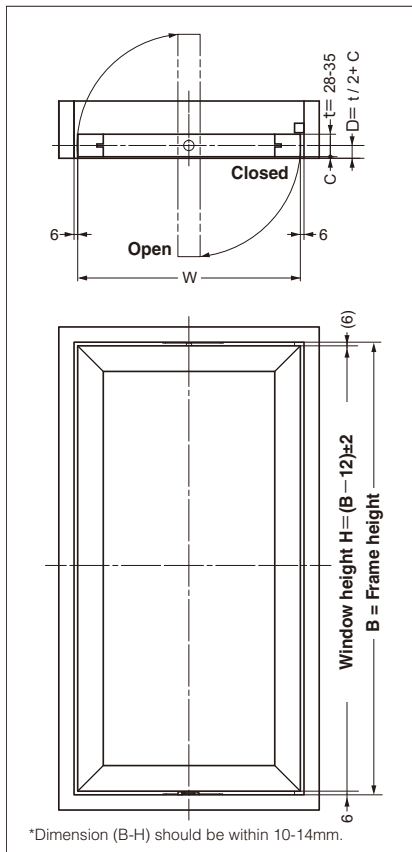
[Easy Installation]



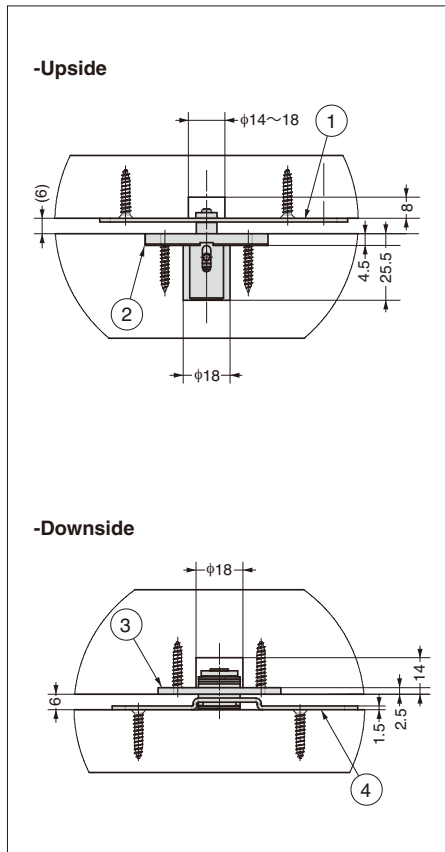
[Component Parts]



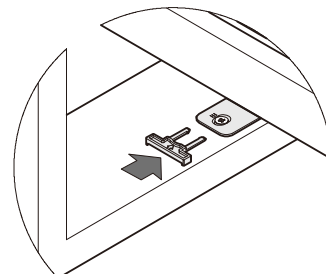
[Installation]



[Detailed Drawings]

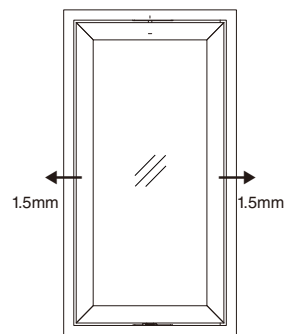


[Prevents Doors From Falling Off]



The retainer prevents doors from falling off. It only needs to be inserted into the bottom plate.

[Adjustable Side Spaces]



Can be adjusted horizontally after installation.

Sold in sets of two hinges.

RoHS	CAD	Item Code	Item Name	Material	Door Width	Door Height	Door Thickness	Door Weight kg/set	Weight (g)	Box (set)	Carton (set)
G	3D	170-043-673	HG-PTH30	Stainless Steel	350-500	700-1200	28-35	Max. 10	95	15	120

Refer to **1** : No.280 P.15



MONITOR ARM KA-TLG Tilt Angle Adjustment by Button



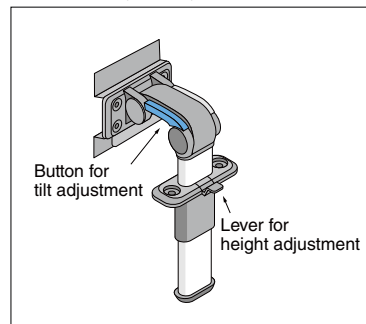
- The tilt angle can be adjusted in 10° increments while the button is pressed.
- The back lever allows for height adjustment in 25 mm increments. It has a friction mechanism which prevents against accidental release.
- The monitor-mounting holes are compliant with the VESA standard. (75 x 75 mm, 100 x 100mm)
- Available monitor size: 12 - 22.9 inches (Weight: Max. 10 kg)

[Remarks]

- Please support the monitor with a hand when adjusting the angle and height.

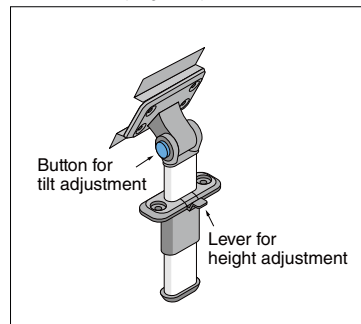
[Tilt and Height Adjustments]

● KA-TLG2-100 (Dual axis)

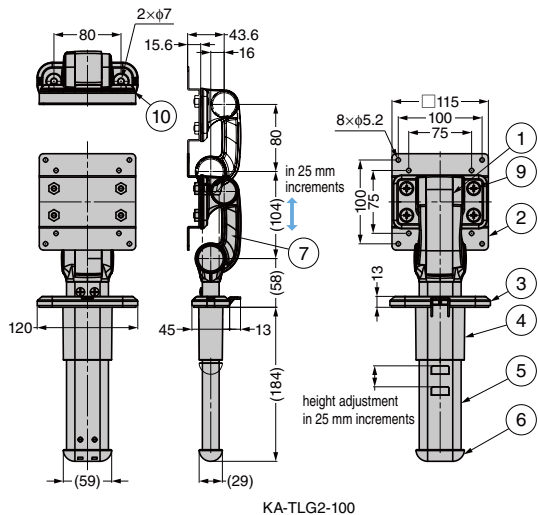


The tilt adjustment of both axes unlocks while the button is pushed.

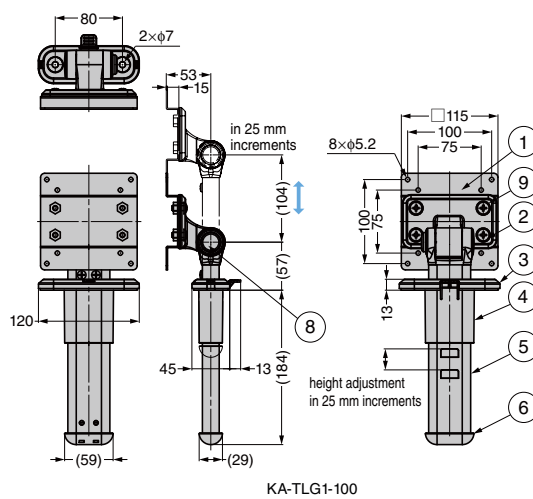
● KA-TLG1-100 (Single axis)



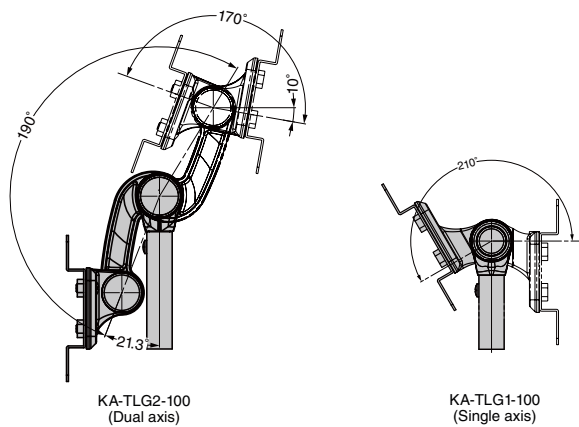
The tilt adjustment unlocks while the button is pushed.



KA-TLG2-100



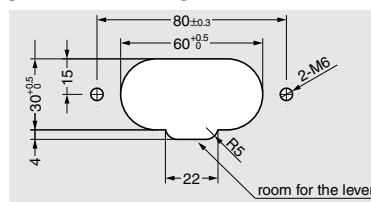
KA-TLG1-100



KA-TLG2-100 (Dual axis)

KA-TLG1-100 (Single axis)

[Cut Out Dimensions]



No.	Part Name	Material	Finish/Colour
①	Bracket	Polyamide (PA)	Black
②	Mounting Plate	Steel (SPHC)	
③	Cover	Polycarbonate	
④	Outer Pipe	ABS	Anodized
⑤	Aluminium Pipe	Aluminium Alloy	
⑥	End Cap	ABS	Black
⑦	Button	Polyamide (PA)	Grey
⑧	Button	ABS	
⑨	Cross-recessed trus head screw	Steel	Black Chromate
⑩	Packing	Nitrile Rubber (NBR)	Black

RoHS	CAD	Item Code	Item Name	Axis	Vertical Load Capacity		Allowable Moment		Weight (g)	Box (pc)
					N	kgf	N.m	kgf.cm		
		210-044-071	KA-TLG2-100	Dual	100	10.2	15	153	705	1
		210-044-070	KA-TLG1-100	Single					545	1

3-WAY ADJUSTABLE CONCEALED HINGE HES3D-120-A100 100° Opening



- Can limit opening angle when used in combination with door restrictors.
- The small bore depth (21 mm) allows for easy mortising of doors and frames.
- Vertical, horizontal, and depth adjustments are available even post installation.
- Easy and quick installation features:
 - Can separate into two parts during installation. (One is for doors. The other is for frames.)
 - Can be provisionally hung on doors before fixing the screws.

[Remarks]

- Please use with door restrictors or door stoppers to prevent doors from opening over 100°.
- When using with door dampers or door closers, please chose from the LDD-S, LDD-V, and LDC-N2. Please note that the door weight should meet moment conditions of both door closers and door dampers.
- Please note that there is a possibility that the hinge will be damaged or will not close fully depending on the door closers used. Please confirm in advance
- When using a concealed door closers, the HES3D-160 is recommended.

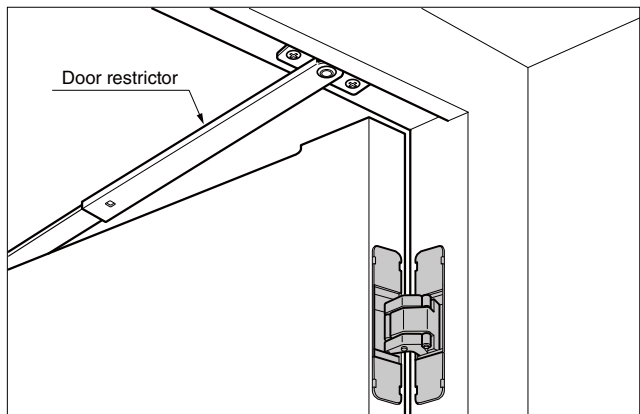
[Parts Included]

- Cross-recessed countersunk tapping screw 5×20 4 pcs (made of stainless steel)
- Hex key spanner 3

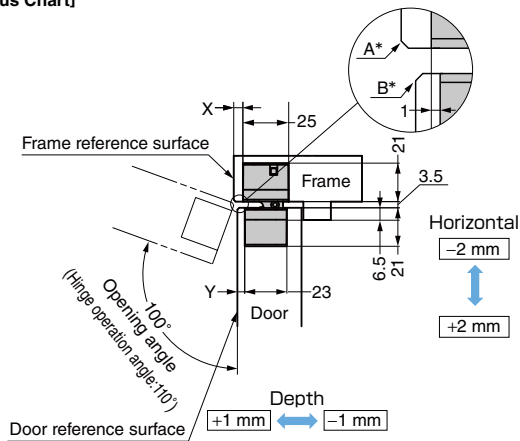
[Optional Parts]

- HES3D-120TMP, installation template **1**
(This reusable jig allows for easy mortising of doors and frames using routers.)
- HES3D-120BKT, bracket for sheet metal **2**

[Using with a Door Restrictor]

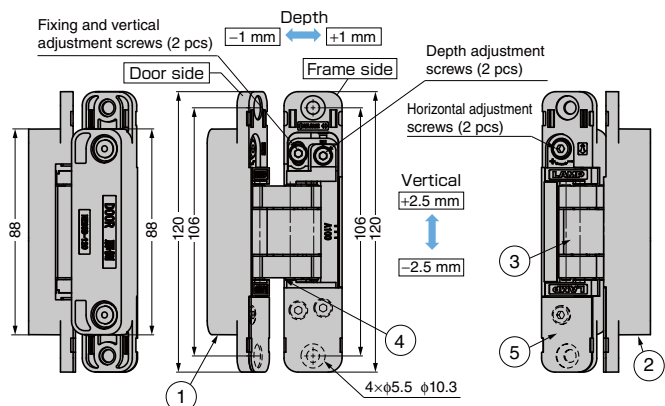


[Locus Chart]



Y : Door Clearance	B : Door Chamfering	X : Frame Clearance	A : Frame Chamfering
4	1	5	1
	2	6	2
5	3	7	3
		5	

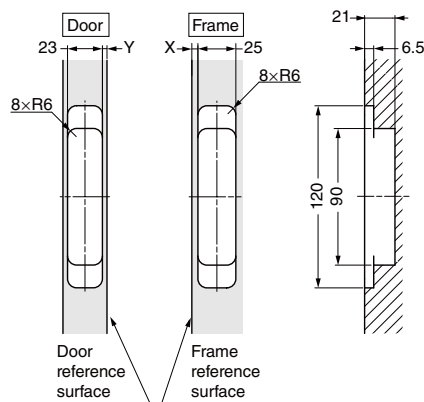
The table above shows the clearance and chamfering required for the door to open properly.



*The upper screw covers are removed in the drawing above.

No.	Part Name	Material	Finish/Colour		
			DC	DN	BL
①	Body	Zinc Alloy (ZDC)	Satin Chrome	Satin Nickel	Black
②	Base Frame				
③	Arm				
④	Shaft	Stainless Steel	-	-	-
⑤	Screw Cover (Door side: 2 pcs) (Frame side: 2 pcs)	ABS	Satin Chrome	Satin Nickel	Black

[Cut Out Dimensions]



RoHS	CAD	Item Code	Item Name	Finish	Door Specs			Load Capacity				Opening Angle	Box (pcs)	Carton (pcs)
					Width	Height	Thickness	N / 2 pcs	kgf / 2 pcs	N / 3 pcs	kgf / 3 pcs			
		170-044-569	HES3D-120-A100DC	Silver	Max. 900	Max. 2400	Min. 29	294	30	392	40	100°	2	24
		170-044-570	HES3D-120-A100DN	Champagne Gold										
		170-044-571	HES3D-120-A100BL	Black										

Refer to **1**: No.280 P.99 **2**: No.280 P.98

160° Opening	Overlay: 25 mm	Overlay Range: 21 - 25 mm <small>(when the bore distance is 8 mm)</small>	Recommended Door Thickness: 18 - 36 mm
---------------------	-----------------------	---	---

WIDE-ANGLE HEAVY-DUTY CONCEALED HINGE J160 Built-in Damper



- The built-in damper allows doors to close slowly providing premium door motion.
- Comes with a mounting plate and screw covers.

[Specification]

- 3-way adjustment of door position is available as below:
 - Depth : +1.5 mm / -2.5 mm
 - Vertical : ±3 mm
 - Overlay (horizontal) : +0 mm / -4 mm

[Remarks]

- Comes with a red holding pin which holds the hinge angle. Please do not detach it until the hinge is installed
- Please do not open and close the hinge while the holding pin is attached.

[Parts Included]

- Cross-recessed raised countersunk tapping screw 5×18

RcHS	CAD	Item Code	Item Name	Specification	Material	Finish	Weight (g)	Carton (pcs)
		160-044-973	J160-D22-25T-NI	Built-in Damper	Steel, Zinc Alloy (ZDC), Glass Filled Polyamide (PA)	Nickel	710	50
		160-044-974	J160-D22-25T-BN			Black Nickel	710	50

[Drawing]

[Locus Chart]
(How to use the locus chart 1)

[Bore Distance (C)] Table-1

Bore Distance (C)	3	4	5	6	7	8
Overlay (E)	20	21	22	23	24	25

Overlay adjustment (Max. -4mm) by turning the overlay adjustment screw.

[Opening Clearance (O.C.)]

Clearances for door edge O.C. (A) and hinge side O.C. (B) are necessary. O.C. (A) and (B) change depending on door thickness and bore distance (C). Refer to locus chart and tables below when designing cabinets.

[O.C. (B)] Table-2

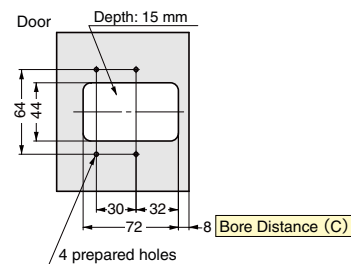
Door Thickness (D)	Bore Distance (C)					
	3	4	5	6	7	8
34 and under	0.1 and under					
36	0.2	0.2	0.2	0.2	0.2	0.2
38*	0.5	0.5	0.5	0.5	0.6	0.6
40*	1.0	1.0	1.1	1.2	1.3	1.4
O.C. (B)						

*Please refer to the locus chart if door thickness is over 36 mm. (O.C. (B) can be made smaller by R chamfering (round chamfer) or C chamfering (chamfer plane) on the door)

[O.C. (A)] Table-3

Door Thickness (D)	Door Width						
	300	400	500	600	700	800	900
20	1.6	1.2	1.0	0.8	0.7	0.6	0.5
30	1.9	1.4	1.2	1.0	0.8	0.7	0.7
36	1.9	1.5	1.2	1.0	0.8	0.7	0.7
O.C. (A)							

[Cut Out Dimensions]



[Door Dimensions and Number of Hinges] 2

Refer to 1: No.280 P.111 2: No.280 P.100

LIFT-ASSIST HINGE HG-PA202 Outside Back Mount

INSTRUCTION

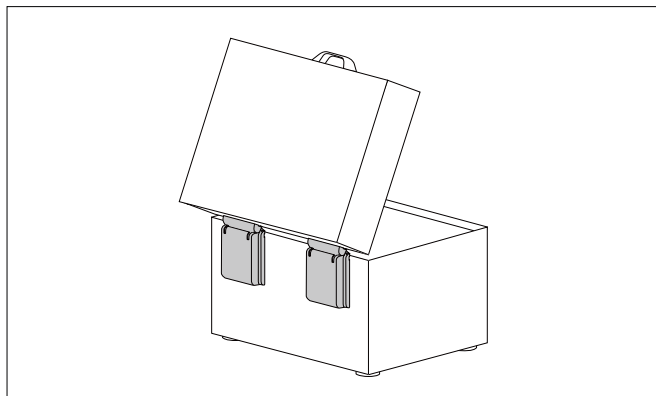


- Easy to lift heavy top-opening lids due to spring tension. (Lift-assist)
- The built-in damper prevents lids from slamming shut. (Soft-close)
- Torque is adjustable by turning the adjustment screw. ($\pm 5\%$)
- Comes with a cover to hide the mounting screws.
- Designed for use under the condition that lid's centre of gravity is at a higher position than the rotational centre. (The angle of torque peak is about 20° .)

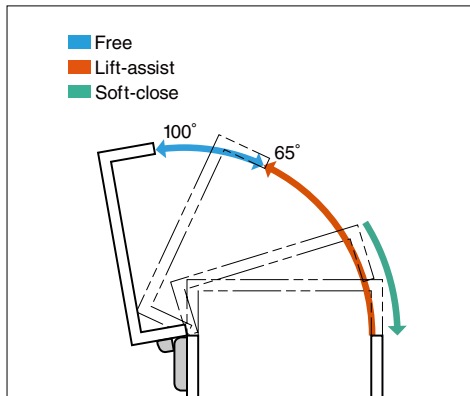
[Remarks]

- Be sure to read the "Cautions" **1**.
- Please make sure that the lid will not fall backward when fully opened.

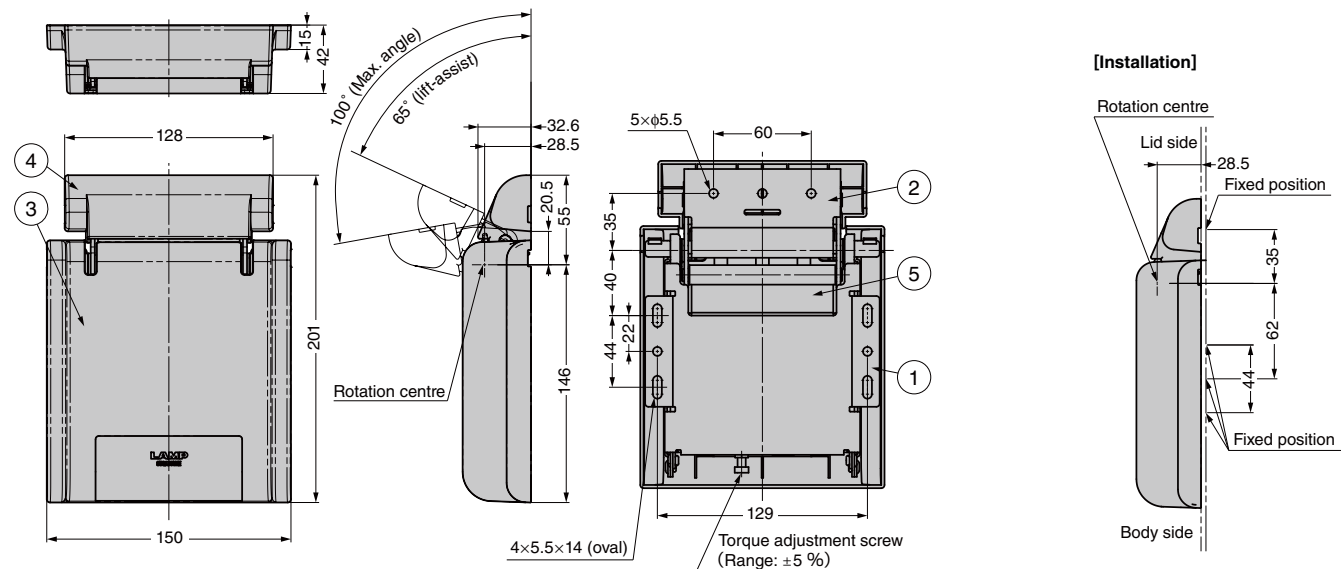
[Outside Back Mount]



[Operating Range]



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



No.	Part Name	Material/Colour
①	Base A	Stainless Steel (SUS430)
②	Base B	Stainless Steel (SUS430)
③	Cover A	PBT/
④	Cover B	Light Grey
-	Slider	POM
-	Spring	Steel (SWO)

RoHS	CAD	Item Code	Item Name	Torque N·m	Torque kgf·cm	Weight (g)	Box (pcs)	Carton (pcs)
		170-045-365	HG-PA202-15	15 $\pm 10\%$	153 $\pm 10\%$	1385	1	8
		170-045-366	HG-PA202-20	20 $\pm 10\%$	204 $\pm 10\%$		1	8
		170-045-367	HG-PA202-25	25 $\pm 10\%$	255 $\pm 10\%$		1	8

Refer to **1** : No.280 P.15

LIFT-ASSIST HINGE HG-PA182-9 Outside Back Mount

INSTRUCTION

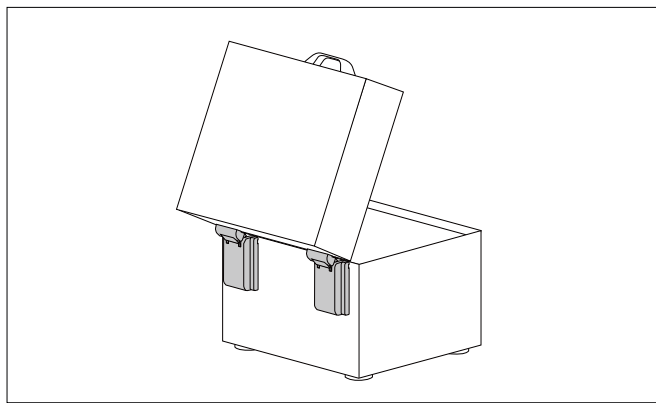


- Easy to lift heavy top-opening lids due to spring tension. (Lift-assist)
- The built-in damper prevents lids from slamming shut. (Soft-close)
- Torque is adjustable by turning the adjustment screw. ($\pm 11\%$)
- Comes with a cover to hide the mounting screws.
- Designed for use under the condition that lid's centre of gravity is at a higher position than the rotational centre. (The angle of torque peak is about 20° .)

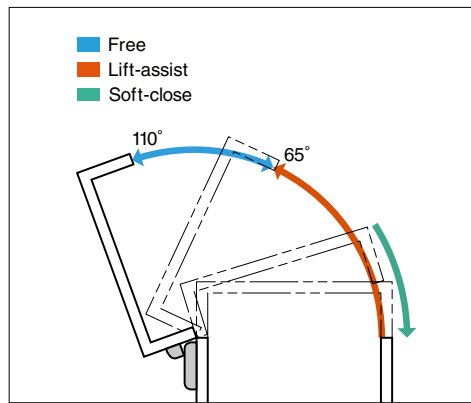
[Remarks]

- Be sure to read the "Cautions" **1**.
- Please make sure that the lid will not fall backward when fully opened.

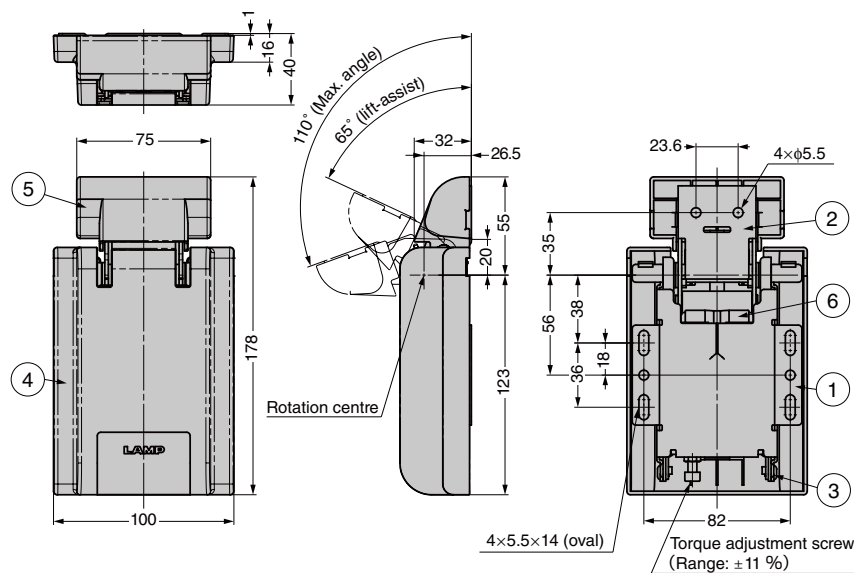
[Outside Back Mount]



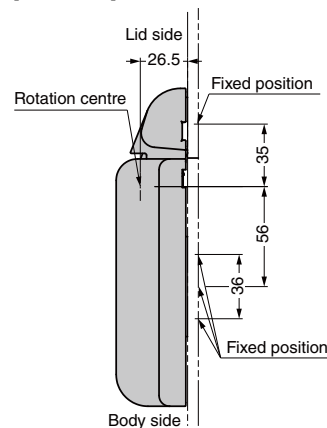
[Operating Range]



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



[Installation]



No.	Part Name	Material/Colour
①	Base A	Stainless Steel (SUS430)
②	Base B	
③	Cover A	PBT/
④	Cover B	Light Grey
-	Slider	POM
-	Spring	Steel (SWO)

RoHS	CAD	Item Code	Item Name	Torque N·m	Torque kgf·cm	Weight (g)	Box (pcs)	Carton (pcs)
		170-045-364	HG-PA182-9	$9 \pm 10\%$	$91 \pm 10\%$	800	1	12

Refer to **1** : No.280 P.15

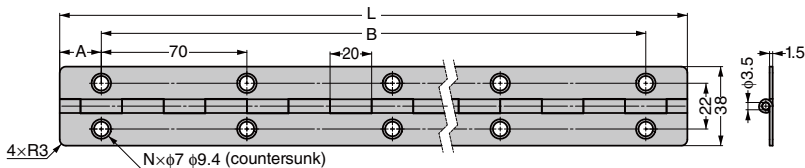
STAINLESS STEEL PIANO HINGE LSN-C

SUS

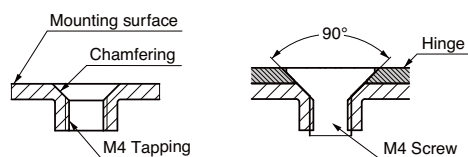


[Remarks]

- The load capacity is the value when using one hinge. For calculation conditions, please refer to the "Concept of Load-bearing" 1.
- Please note this product is designed for use on wood. Hole positioning on wood should be done by aligning the actual hinge. This product is not suitable for sheet metal or installations with hole pitch limitations.
- When installing to sheet metal, be sure to perform thread relief processing (chamfering) on the mounting surface side. In this way, the screw head will not protrude when the hinge is fixed.



[Processing and Installation]



RoHS	CAD	Item Code	Item Name	Material	Finish	L	A	B	Number of Holes (N)	Load Capacity		Weight (g)	Box (pcs)	Carton (pcs)
										N/pc	kgf/pc			
		170-045-408	LSN15-38-450C	Stainless Steel (SUS304)	Polished	450	15	420	14	392	40	270	10	40
		170-045-409	LSN15-38-600C			600	20	560	18	519	53	360	10	40

Refer to 1 : No.280 P.15

Recommended Series LIFT-ASSIST DAMPERS



- Ideal damper system for counter flaps.
- Slowly close flaps near closing radius.
- The soft-close mechanism works even if the flap is only opened slightly.
- Lightly open flaps with the lift-assist mechanism
- Can be attached to already installed counters without extra processing.
- Come with an installation template for easy alignment.

[Recommended Hinge]

Stainless Steel Piano Hinge LSN-C

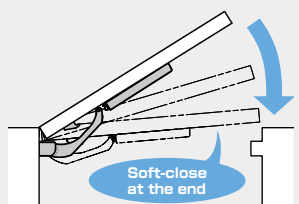


Firmly fixes flaps with M4 screws

Video Link

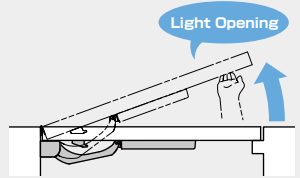


[Soft-close]



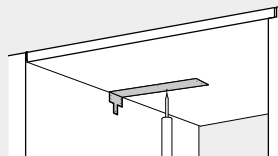
Prevents from slamming shut

[Lift-assist]



Helps you open flaps lightly

[Easy Installation]



- Can be attached to already installed counters without extra processing.
- Come with an installation template for easy alignment.

[Lift-assist Dampers]

	Model	Required Quantity	Angle Stopper	Max. Moment of Flap
	LAD 1	1 pc / 2 pcs	Without	8.0-16.0 N·m (81.6-163.2 kgf·cm)
	LAD-ST 2	1 pc	With (Stop at 95°)	8.0-16.0 N·m (81.6-163.2 kgf·cm)
	LADH 3	1 pc	With (Stop at 95°)	25.0-50.0 N·m (254.9-509.9 kgf·cm)

Refer to 1 : No.280 P.232 2 : No.280 P.230 3 : No.280 P.234

CUP COVER J95CC For J95 Concealed Hinges



RoHS	CAD	Item Code	Item Name	Material	Finish/Colour	Weight (g)	Box (pcs)
●	●	160-045-369	J95CC-GR	ABS	Gray	3.2	50
●	●	160-045-370	J95CC-NI		Nickel		50
●	●	160-045-371	J95CC-BC		Black Nickel		50

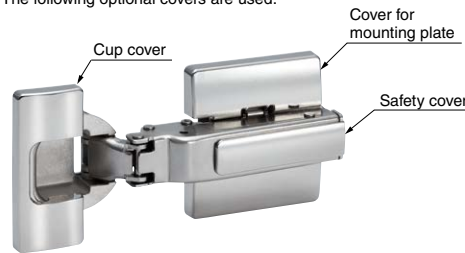
- Special cover for J95 hinges to hide the screws.
- Comes with a double-sided tape to bond the cover and hinge.

[Remarks]

- Please make sure that the surface is clean before taping.

[No Visible Screws]

The following optional covers are used:

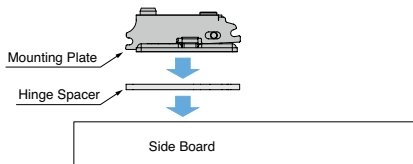


The J95 hinge above is the 25 mm overlay model. (Nickel colour)

HINGE SPACER J95-DP2 2 mm Thickness / For J95 Concealed Hinges



[How to Use]



Set the spacer between the mounting plate and side board.

- Decreases overlay of outset doors by 2 mm.
- Increases clearance of inset doors by 2 mm.
- Can be doubled for 4 mm thickness.

[Available Mounting Plate]

- J96-P9T

[Sold Separately]

- Raised Countersunk Head Tapping Screw 5 x 25

[Recommended Screw]

- Countersunk Screw 5 x 25 / Raised Countersunk Head Tapping Screw / Wood Screw (nominal dia. 5.1)

RoHS	CAD	Item Code	Item Name	Material	Colour	Weight (g)	Pack (pcs)	Carton (pcs)
●	●	160-048-095	J95-DP2	POM	Grey	5	100	600

[Tapping Screw 5 x 25] Sold Separately

RoHS	CAD	Item Code	Item Name	Material	Finish
●	—	160-048-096	TAP525NI	Steel	Nickel
●	—	160-048-097	TAP525BN		Black Nickel

Recommended Series HEAVY-DUTY CONCEALED HINGES J95

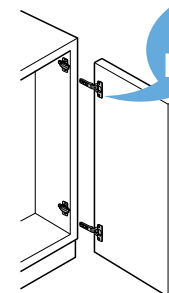
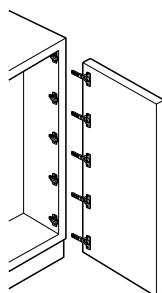
Toughness for Heavy Doors: Max. 25 kg with 2 pcs, Max. 40 kg* with 3 pcs * Max. 35 kg on glass doors

[Application Example] Chemical storage cabinets
Operating temperature of J95: -10°C ~ 40°C



[Normal Hinges]

[J95 Hinges]

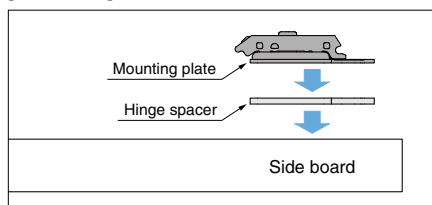


Reduce installation time and provide clean appearance

HINGE SPACER 360-DP2-P4 2 mm Thick / 2 Holes / OLYMPIA Series



[How to Use]



Set the spacer between the mounting plate and side board.

- Decreases overlay of outset doors by 2 mm.
- Increases clearance of inset doors by 2 mm.
- Can be doubled for 4 mm thickness.

[Available Mounting Plate]

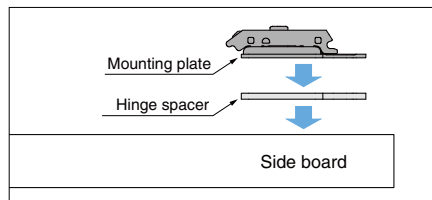
- 360-P4W-30T
- 360-P4W-30T+5
- 360-P4W-32T
- 360-P4W-32T+5

RoHS	CAD	Item Code	Item Name	Material	Colour	Weight (g)	Box (pcs)	Carton (pcs)
●	●	160-046-075	360-DP2-P4	POM	Grey	2.6	50	500

HINGE SPACER 360-DP2-P6 2 mm Thick / 4 Holes / OLYMPIA Series



[How to Use]



Set the spacer between the mounting plate and side board.

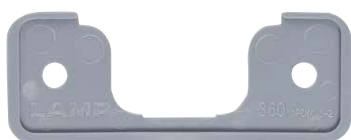
- Decreases overlay of outset doors by 2 mm.
- Increases clearance of inset doors by 2 mm.
- Can be doubled for 4 mm thickness.

[Available Mounting Plate]

- 360-P6WT
- 360-P6WT+5

RoHS	CAD	Item Code	Item Name	Material	Colour	Weight (g)	Box (pcs)	Carton (pcs)
●	●	160-046-076	360-DP2-P6	POM	Grey	2.9	50	500

HINGE SPACER FOR SHEET METAL 360-BCS OLYMPIA Series

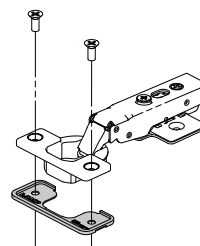


- Allows for easier mount on sheet metal of the Olympia hinges. (Cup diameter: 35 mm)

[Specification]

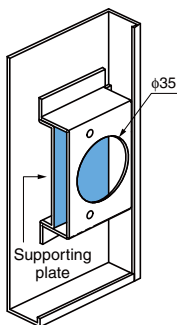
- The thickness is 0.7 mm.

[How to Use]



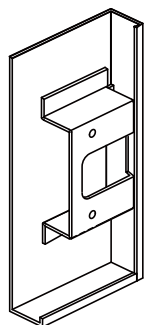
[Easier Mount on Sheet Metal Door]

- Without the spacer



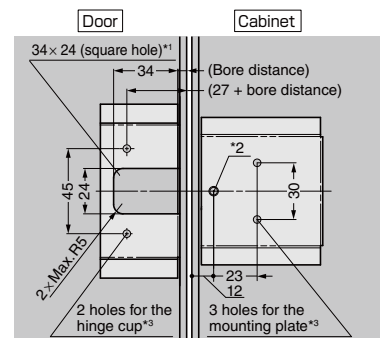
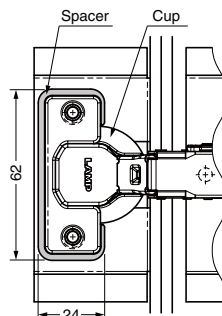
Supporting plates are required at the depth of 11 mm below the hinge cup.

- With the spacer



No supporting plates are needed.

[Installation]



*1: No supporting plates for hinge cups are needed.
*2: Please process chamfering on the holes. (φ 5.1)
*3: Female threading is required including nut welding and burring process. (Recommended size: M4)

RoHS	CAD	Item Code	Item Name	Material	Box (pcs)
●	●	160-045-368	360-BCS	POM	500



SOFT-CLOSE HINGE HG-JV65 For Vertical Use

Passed 50,000 open/close private cycle test



HG-JV65-S-BL



HG-JV65-S-LGR



Comes with screw covers

- Closing speed of doors is adjustable with a hex key.
- Comes with self-close function which can hold doors closed.

[Specification]

- Temperature: 0 - 40 °C

[Remarks]

- Please use with stoppers to prevent doors from opening over 180°.

[Parts Included]

- Screw cover

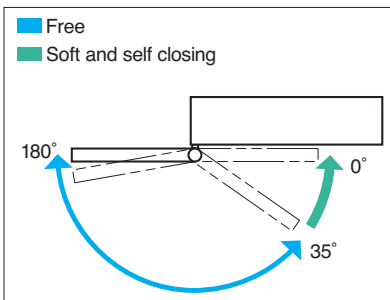
[Recommended Screw]

- For wood:
 - Binding head tapping screw M5
 - Pan head tapping screw M5
- For sheet metal:
 - Binding head screw M5
 - Pan head screw M5
 - Button bolt M5

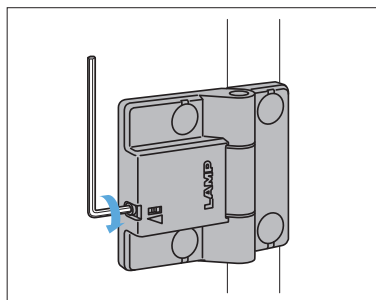
Video Link



[Operating Range]

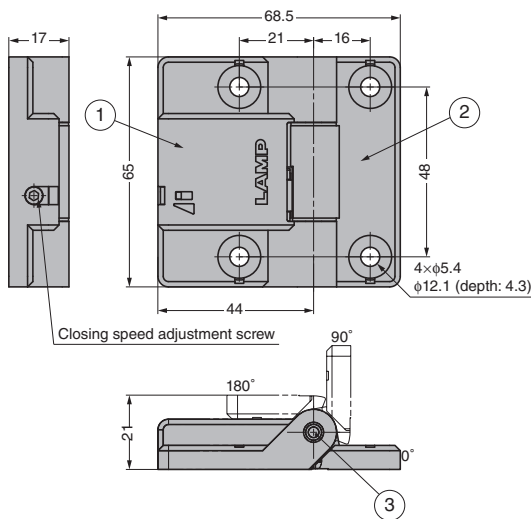
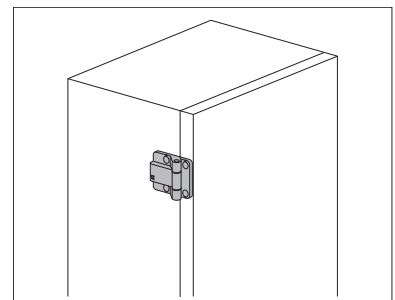


[Closing Speed Adjustment]



Closing speed of doors is adjustable with a hex key (size: 2.5).

[Installation]



No.	Part Name	Material	Finish/Colour
①	Body A	Polyamide (PA)	Black, Light Grey
②	Body B	Steel	
③	Shaft	Brass	Nickel
-	Screw Cover	Elastomer (SPE)	Black, Light Grey

RoHS	CAD	Item Code	Item Name	Finish	Available Door Specs				Weight (g)	Box (pc)	Carton (pcs)
					Width (mm)	Height (mm)	Weight/2pc (kg)	Weight/3pc (kg)			
●	●	170-046-272	HG-JV65-S-BL	Black	Max. 700	Max. 2400	1.0 - 7.0	7.0 - 12.0	85	1	60
●	●	170-046-273	HG-JV65-S-LGR	Light Grey							

GLASS DOOR BRACKET HES3D-G120BKT

INSTRUCTION

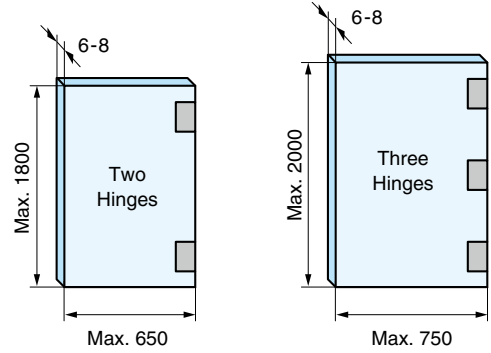


- Allows the HES3D-120 hinge 1 to be installed on glass doors.
- The silver and gold types come with screw covers in the same colours. For the black type, please use the ones included with HES3D-120BL.

[Parts Included]

- Hexagon socket countersunk head screw M5 × 12
- Countersunk head screw M4 × 12
- Hex key (size: 3)

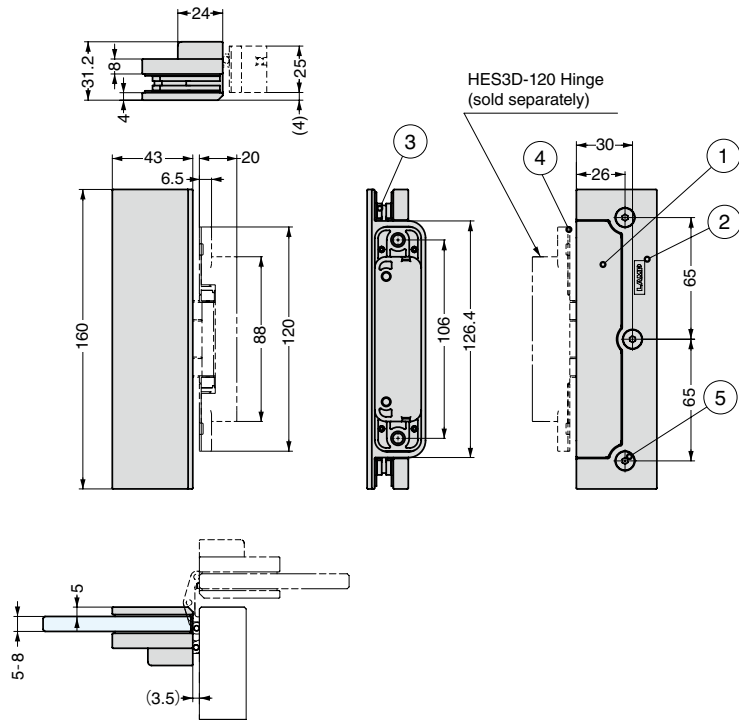
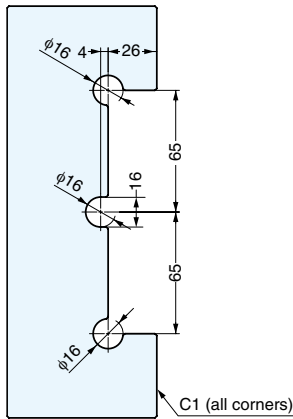
[Door Sizes and Number of Hinges]



[Component Parts]



[Cut Out Dimensions]



No.	Part Name	Material	Finish		
			CR	GP	BL
①	Body	Zinc Alloy (ZDC)	Chrome	24K Gold Plating	Black Enamel
②	Back Plate				
③	Gasket	Chloroprene Rubber (CR)	-	-	-
④	Screw Cover	ABS			
⑤	Hexagon Socket Countersunk Head Screw M5 x 14	Steel	Chrome	24K Gold Plating	Black Paint

ReHS	CAD	Item Code	Item Name	Colour	Glass Thickness	Box (pcs)	Carton (pcs)
●	●	170-043-469	HES3D-G120BKT-CR	Silver	6-8	2	12
●	●	170-043-470	HES3D-G120BKT-GP	Gold		2	12
●	●	170-043-471	HES3D-G120BKT-BL	Black		2	12

Refer to 1: No.280 P.94

3-WAY ADJUSTABLE CONCEALED HINGE HES3D-W190 Wide Throw



Silver

Champagne Gold



Black

Nickel

- Has a long arm for a wider throw. This allows for use on clad and thick doors.
- The small bore depth allows for easy mortising of doors and frames.
- Vertical, horizontal and depth adjustments are available.
- Easy and quick installation features:
 - Can separate into two parts during installation.
 - Can be provisionally hung on doors before fixing screws.
- Custom colours are available.
- Replacement screw covers are also available. Please contact us.

[Parts Included]

- Cross-recessed countersunk tapping screw 5 × 30 (8 pcs / hinge) stainless steel
- Hex key 4
- Cutout template

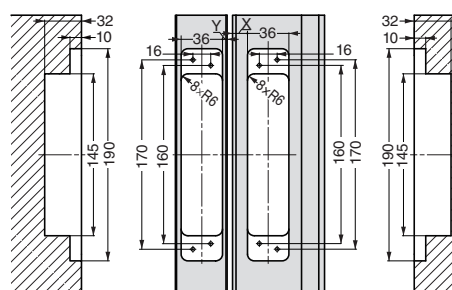
[Optional Parts]

- Installation jig HES3D-W190-TMP
- Stainless steel screw cover (made to order)

Video Link

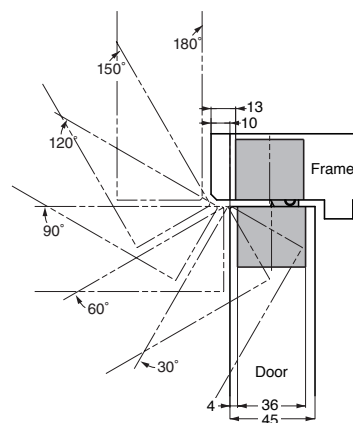


[Cut Out Dimension]

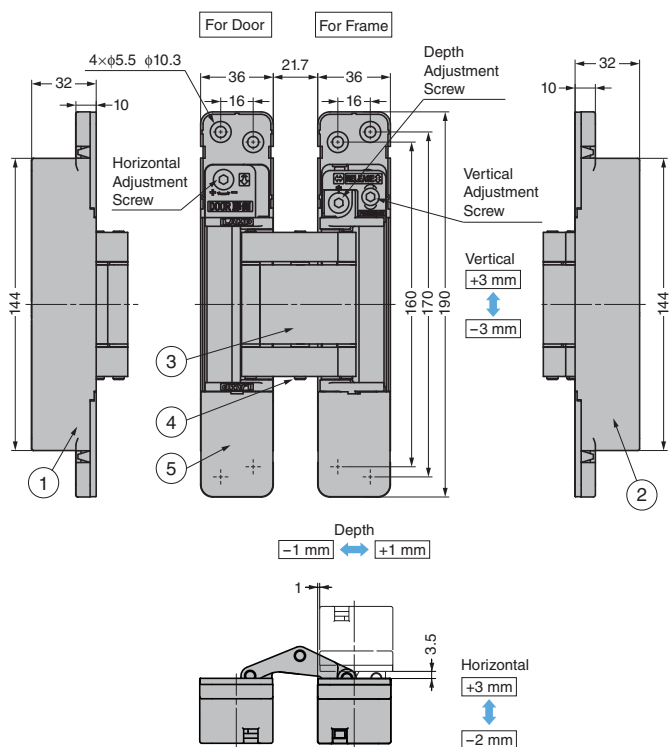


Please drill prepared holes for the tapping screws if the optional jig (HES3D-W190-TMP) is not used.

[Locus Chart]



The example drawing shows the case that there is a step of 10 mm between the door and the frame.



No.	Part Name	Material	Finish/Colour			
			DC	DN	BL	PN
①	Body	Zinc Alloy (ZDC)				
②	Base Frame		Satin	Nickel	Enamel Black	Polished Nickel
③	Arm	Aluminium Alloy				
④	Shaft	Stainless Steel	Plain	Plain	Plain	Plain
⑤	Screw Cover	ABS	Silver	Champagne Gold	Black	Polished Nickel

[Flush Installation]

● Open

● Closed

C (detail)

* Chamfering is required depending on clearance for proper door motion.

Y	B	X	A
Door Clearance	Door Chamfering	Frame Clearance	Frame Chamfering
4 and under	0	3 and under	0
5	1	4	1
6	2	5	2
7	3	6	3
8	4	7	4
9	6	8	6

[Cladded Installation]

● Open

● Closed

If something is attached to a frame, for example decorative sheets, please include the thickness into the X.

C (detail)

* Chamfering is required depending on clearance for proper door motion.

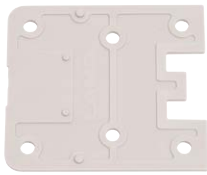
Available on doors which are not aligned flush to the wall or frame.

Y	B	X	A	X-Y+1
Door Clearance	Door Chamfering	Frame Clearance	Frame Chamfering	Step Amount
3	0	3 to 12	0	1 to 10
		13	1	11
		14	2	12
		15	4	13
4	1	3 to 10	0	0 to 7
		11	1	8
		12	2	9
		13	3	10
5	2	14	4	11
		3 to 6	0	-1 to 2
		7	1	3
		8	2	4
5	3	9	3	5
		10	4	6
		11	4	7
		12	5	8
		13	6	9

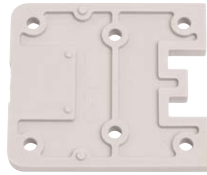
Y	B	X	A	X-Y+1
Door Clearance	Door Chamfering	Frame Clearance	Frame Chamfering	Step Amount
6	3	3 to 6	0	-2 to 1
		7	1	2
		8	2	3
		9	3	4
6	4	10	4	5
		11	5	6
		12	6	7
		3 to 6	0	-3 to 0
7	5	7	1	1
		8	2	2
		9	3	3
		10	5	4
7	6	11	7	5
		3 to 6	0	-4 to -1
		7	1	0
		8	3	1
		9	5	2
8	6	10	7	3

RoHS	CAD	Item Code	Item Name	Colour	Door Size			Load Capacity				Opening Angle	Weight (g)	Box (pcs)	Carton (pcs)
					Width	Height	Thickness	N/2pcs	kgf/2pcs	N/3pcs	kgf/3pcs				
●	●	170-047-901	HES3D-W190DC	Silver	Max. 915	Max. 2440	Min. 42	981	100	1230	125	180°	-	2	12
●	●	170-047-902	HES3D-W190DN	Champagne Gold										2	12
●	●	170-047-903	HES3D-W190BL	Black										2	12
●	●	170-047-904	HES3D-W190PN	Nickel										2	12

AILERON SPACER ARN-DP 2 and 5 mm Thick



ARN-DP2
(2 mm)



ARN-DP5
(5 mm)

- Specially designed for use with the AILERON stay [1](#).
- The ARN-DP2 decreases overlay of outset doors by 2 mm.
- The ARN-DP5 decreases overlay of outset doors by 5 mm.
- The ARN-DP2 can be doubled for 4 mm thickness.

[Available Mounting Plate]

- ARN-SZ [2](#)

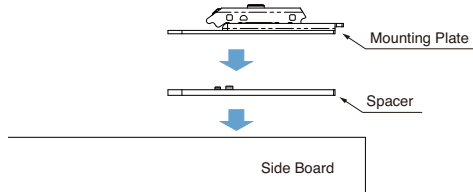
[Remarks]

- The included screws are for fixing the spacer (ARN-DP5) and mounting plate (ARN-SZ).
- Please use the optional screws if two ARN-DP2 are used.

[Parts Included]

- Cross-recessed binding head tapping screw 3.5 × 20
(Only the ARN-DP5 comes with these screws.)

[How to Use]



Set the spacer between the mounting plate and side board.

[Spacer]

RoHS	CAD	Item Code	Item Name	Colour	Type	Material	Box (pcs)	Carton (pcs)
●	●	180-046-667	ARN-DP2	Grey	+ 2 mm	POM	80	640
●	●	180-047-915	ARN-DP5		+ 5 mm (screw included)		80	640

Refer to [1](#) : P.B11 [2](#) : P.B13

[Optional screw when using two ARN-DP2]

RoHS	CAD	Item Code	Item Name
●	—	180-046-669	TAP3520NI

Sold in sets of 4 screws.

SPRING-ASSIST TORQUE HINGE HG-TLAJ Torque Adjustment

Lift Assist Free-stop Passed 50,000 open/close private test



Hinge



Cover
(sold separately)

[Application]



- The built-in spring makes lids feel lighter to open and close. (The hinge is for top-opening lids.)
- The retaining torque is adjustable with a hex key. (0 to 3.5 N.m)
- Optional cover is sold separately.

[Specifications]

- Operating temperature: - 0° to 40°.

[Application]

- Medical equipment, analytical instruments

[Remarks]

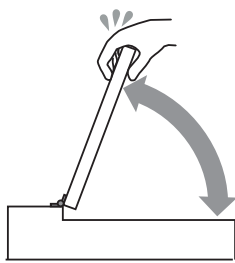
- Do not open/close the hinge before installation. The spring could accidentally pinch fingers.
- When installing, ensure that both hinge shafts are levelled and aligned.
- Do not detach the torque adjustment nut.
- Do not tighten the torque adjustment nut with a force of over 10 N.m. It may damage the hinge.

[Sold Separately]

- Cover

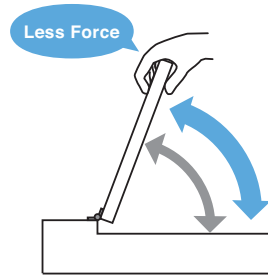
[Smoother than ever before]

Normal Torque Hinge



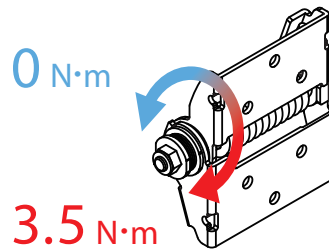
Only Retaining Torque

Spring-assist Torque Hinge



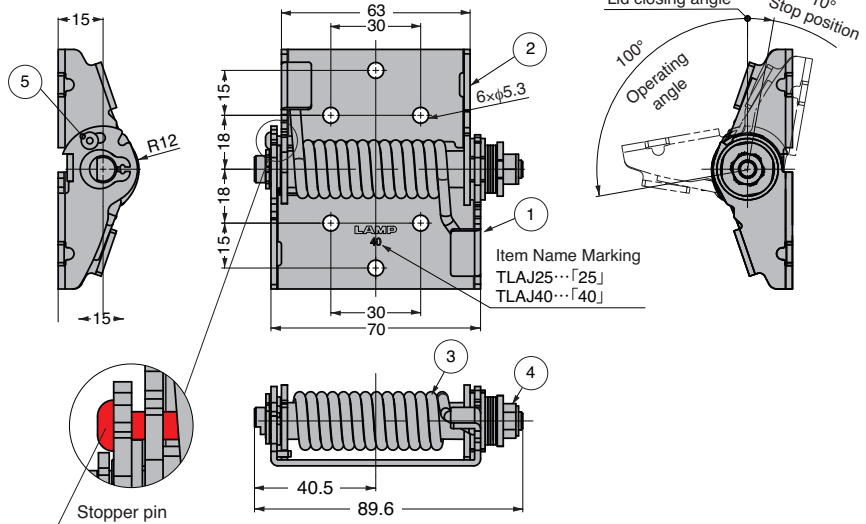
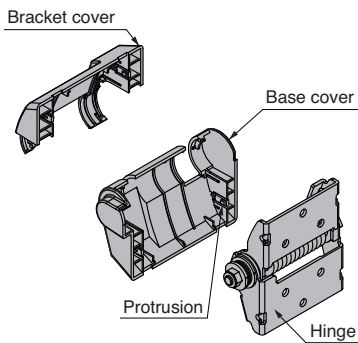
Retaining Torque
+
Spring-assist Force

[Retaining Torque Adjustment]



A hex key is needed (size: 10). 0 N.m is the factory preset.

[Component Parts]



[How to Attach the Covers]

1. Install the hinge to a lid.
2. Close the lid.
3. Attach the covers to the hinge.
4. Make sure the protrusion properly fits into the hinge.

The hinge is delivered with the pin attached. It keeps the hinge open. Please do not detach it until the hinge is installed.

[Hinge]

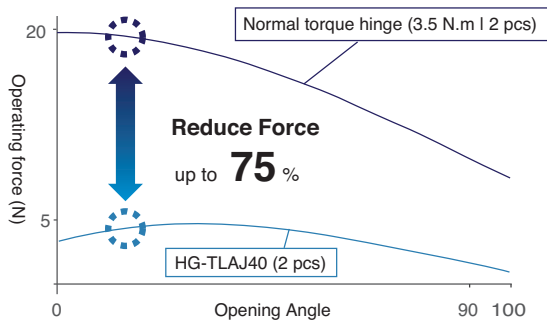
RoHS	CAD	Item Code	Item Name	Spring-assist Force		Retaining Torque		Weight (g)	Box (pcs)	Carton (pcs)
				N·m	kgf·cm	N·m	kgf·cm			
●	●	170-045-749	HG-TLAJ25	2.2 - 2.9	22 - 30	0 - 3.5	0 - 36	218	10	40
●	●	170-045-750	HG-TLAJ40	3.5 - 4.4	36 - 45			222	10	40

[Cover] Sold separately

RoHS	CAD	Item Code	Item Name	Material	Weight (g)	Box (pcs)	Carton (pcs)
●	●	170-043-831	HG-TLAJC	PBT	41	10	40

No.	Part Name	Material	Finish
①	Base	Stainless Steel (SUS304)	Barrel Polished
②	Bracket	Stainless Steel (SUS430)	Barrel Polished
③	Spring	Stainless Steel	
④	Torque Adjustment Nut M6	-	-
⑤	Stopper Pin	Stainless Steel	

[Compare Required Force]

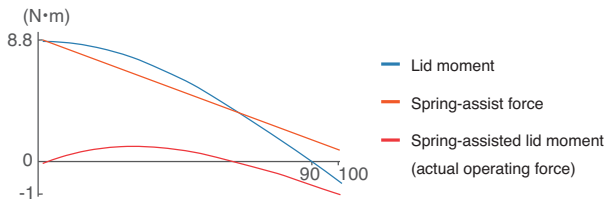


[Conditions]

- Height: 400 mm
- Weight: 4 kg
- Centre of gravity: centre of lid

[Lift Assist Mechanism]

The spring-assist force offsets the lid moment.

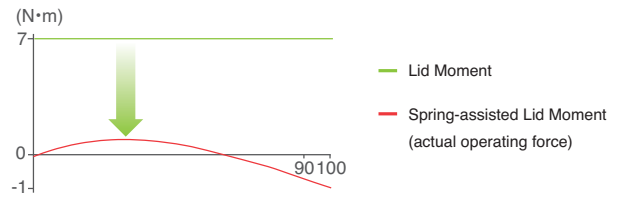


Force Formula

"Spring-assisted lid moment" = "Lid moment" - "Spring-assist force"

[Free-stop Mechanism]

The retaining torque keeps the lid in position.



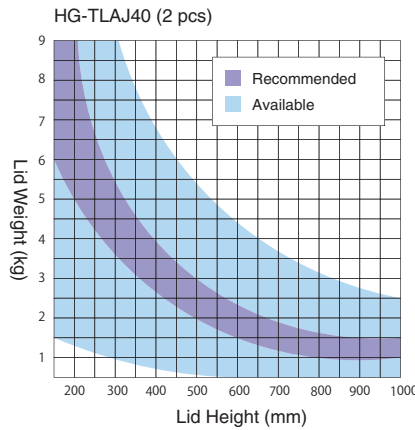
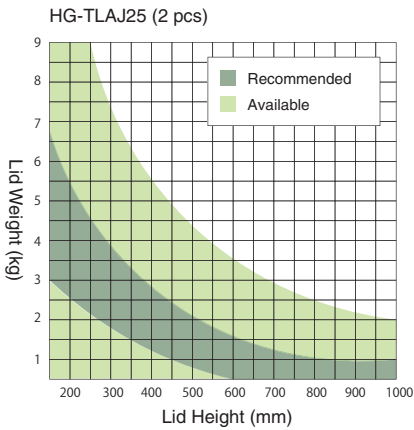
Free-stop Formula

"Retaining Torque" - "Spring-assisted Lid Moment" > 0

Tips for Smoother Movement

The closer retaining torque is to spring-assisted lid moment, the more lightly a lid moves. (The retaining torque is adjustable.)

[Available Lid Size]



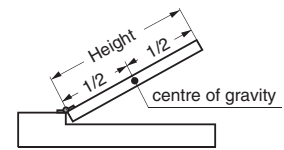
Available Range

- Free-stop: 0° to 100°

Recommended Range

- Free-stop: 0° to 100°
- Moves very lightly: 1° to 99°

* Spring-assisted lid moment is close to 0 N.m.



Calculation Condition:
The centre of gravity is at the centre of the lid.



Product Selection Tool Sasuga-kun

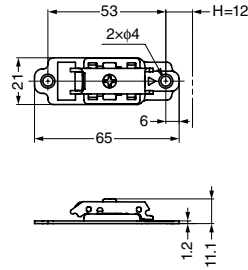
Access here

You can easily find suitable products on the website.
This can simulate moment, force, and more.



MOUNTING PLATE 360-P3W-53T Straight Type

OLYMPIA



- The slim design gives a sleek look.

[Specification]

- Vertical adjustment : ± 2.5 mm
- Standard height : 0 mm
- Value of H : door thickness + 17 mm in case of inset.
- Value of H : door thickness + 19 mm in use of GH-360FP. 1

[Remarks]

- When using with two H360 hinges, door spec should be as below:
 - Door width : max. 450 mm
 - Door weight : max. 7 kg

[Sold Separately]

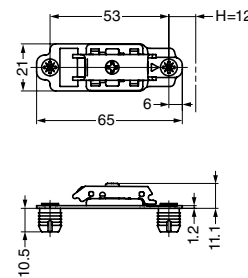
- Raised countersunk head tapping screw 3.5 x 15

RoHS	CAD	Item Code	Item Name	Material	Finish	Weight (g)	Box (pcs)
●	●	160-046-697	360-P3W-53T	Steel	Nickel Plating	20	400

Refer to 1: P.A25

MOUNTING PLATE 360-P3W-53T-D10 Straight Type / With Dowels

OLYMPIA



- The slim design gives a sleek look.
- Pre-attached with press-in dowels.

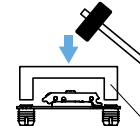
[Specification]

- Vertical adjustment : ± 2.5 mm
- Standard height : 0 mm
- Value of H : door thickness + 17 mm in case of inset.
- Value of H : door thickness + 19 mm in use of GH-360FP. 1
- Mounting hole : $\phi 10$ (depth: 11mm and more)

[Remarks]

- Press in the dowels at the same time.
- When using with two H360 hinges, door spec should be as below:
 - Door width : max. 450 mm
 - Door weight : max. 7 kg

[Installation]



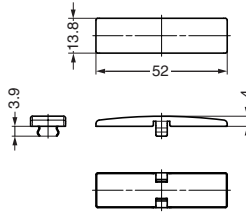
Please prepare a jig by yourself.

RoHS	CAD	Item Code	Item Name	Material	Finish	Dowel Material	Weight (g)	Box (pcs)
●	●	160-046-698	360-P3W-53T-D10	Steel	Nickel Plating	Polyamide (PA)	24	400

Refer to 1: P.A25

BODY COVER 360HC-19H26-NI For 19 and 26 mm Overlay

OLYMPIA



- Hides screws for a sleek look.

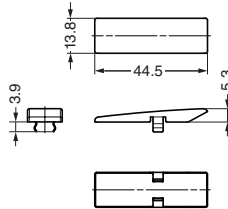
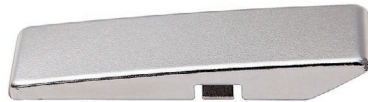
[Available Hinge]

- 360 (19 mm overlay type)
- H360 (26 mm overlay type)

RoHS	CAD	Item Code	Item Name	Material	Finish	Weight (g)	Box (pcs)
●	●	160-046-883	360HC-19H26-NI	Steel	Nickel Plating	2.6	400

BODY COVER 360HC-9H16-NI For 9 and 16 mm Overlay

OLYMPIA



- Hides screws for a sleek look.

[Available Hinge]

- 360 (9 mm overlay type)
- H360 (16 mm overlay type)

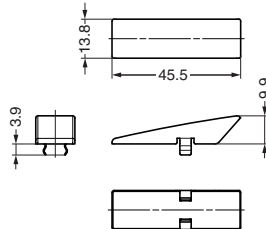
[Remarks]

- Cannot be used in 14 mm overlay installation.

RoHS	CAD	Item Code	Item Name	Material	Finish	Weight (g)	Box (pcs)
●	●	160-046-884	360HC-9H16-NI	Steel	Nickel Plating	2.2	400

BODY COVER 360HC-0H0-NI For Inset

OLYMPIA



- Hides screws for a sleek look.

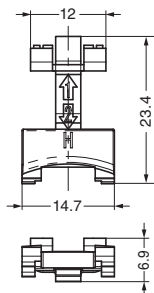
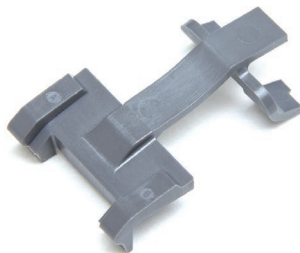
[Available Hinge]

- 360 (inset type)
- H360 (inset type)

RoHS	CAD	Item Code	Item Name	Material	Finish	Weight (g)	Box (pcs)
●	●	160-046-885	360HC-0H0-NI	Steel	Nickel Plating	2.7	400

85° ANGLE LIMITER H360-85 For Thick Doors

OLYMPIA

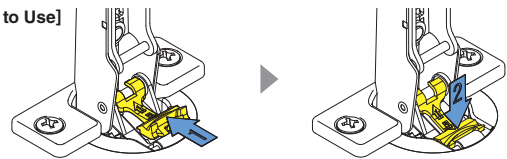


- Limits the opening angle from 100° to 85° of the H360 hinge.
(The H360 is a thick door model of OLYMPIA hinge series.)

[Remarks]

- Not available for inset use.

[How to Use]



RoHS	CAD	Item Code	Item Name	Material	Colour	Box (pcs)
●	●	160-044-151	H360-85	PBT	Grey	1,000

FOLDING HINGE HG-RCT1S-90 90° Locking



- Locks at 90°. Produces click sound when locked.
- Unlocks when the angle goes over 90° and can be folded.
- Ratchet mechanism allows for high load capacity.
- HG-RCT12-C ratchet hinge with multiple locking angles is also available. **1**

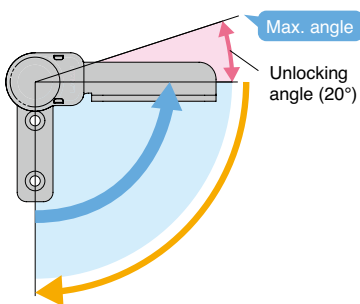
[Application]

- Foldable tables and shelves.

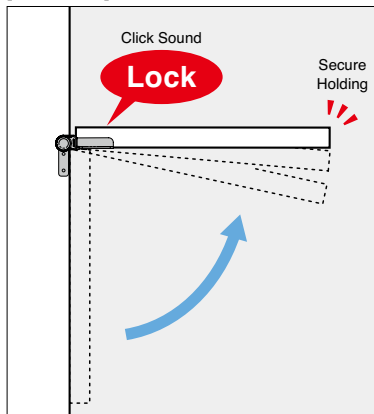
[Remarks]

- Used in pairs. (right and left)
- Make sure the housing has sufficient strength so that the ratchet mechanism can function properly.
- If the length between two hinges is more than 400 mm, the ratchets may not activate at the same time.
- The hinge does not have free-stop mechanism. Please hold a shelf with hands when closing.

[Operating Angle]

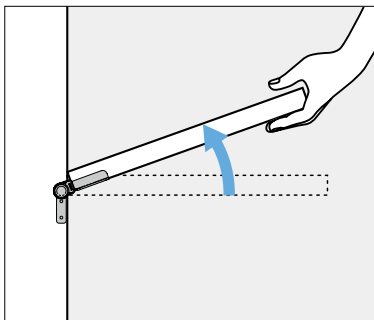


[Lock at 90°]

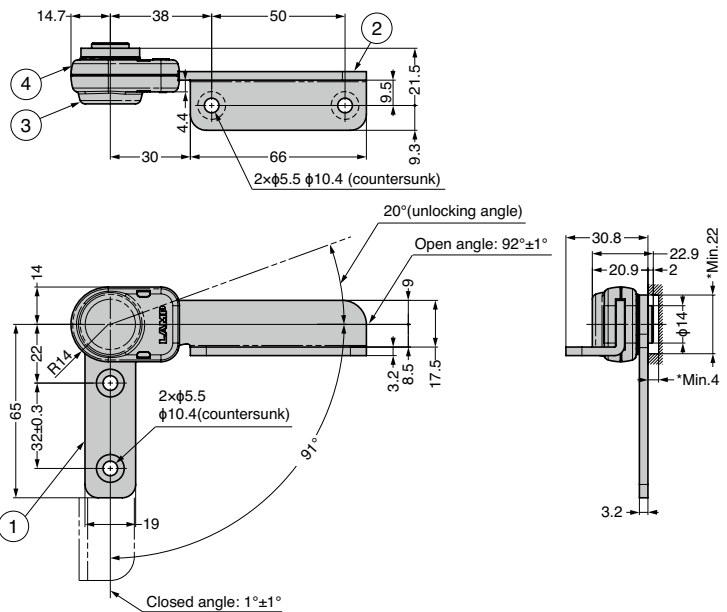


Provides click sound with ratchet mechanism.

[Unlock]



The lock will be released if the angle is more than 90° .



- Right-handed type is shown. Right and left handed types are symmetrical.
- Make space indicated by * marks when installing.

No.	Part Name	Material	Finish/Colour
①	Bracket	Steel	Nickel
②	Arm		
③	Upper Cover	Polycarbonate (PC)	Light Grey
④	Lower Cover		

Sold in set of two hinges. (right and left)

RoHS	CAD	Item Code	Item Name	Moment Load Capacity / set		Weight (g)	Box (set)	Carton (set)
				N.m	kgf.cm			
●	●	170-048-682	HG-RCT1S-90	40	408	310	10	40

Refer to **1** : No.280 P.86

MONITOR ARM KA-T100S50-W/P Free Stop and Lock / For Touch Screens

INSTRUCTION

Free Stop

Passed 20,000 private cycle test



KA-T100S50-W3-BL



KA-T100S50-P2-WT

- The robust structure securely holds monitors in position. It prevents touch screens from shaking or causing unintentional inputs.
- Allows for free-stop motion in tilt and swivel directions.
- Comes with auxiliary lock mechanism which prevents sagging.
- The auxiliary lock has a safety function. The lock temporarily releases to avoid breakage if an unintentional heavy load is applied on it.
- One-touch installation and removal.

[Specification]

- Compliant with the VESA standard. (75x75mm,100x100mm)
- Available moitor size: 12 - 23 inches (Weight: Max. 10 kg)

[Application]

- Liquid crystal monitors for machine tools, OA equipment and medical equipment

[Remarks]

- Do not forcibly move the monitor after auxiliary lock is activated.
- After installing the monitor, make sure that the release lever is locked.
- Do not operate continuously (repeatedly in a short time).
- Avoid water, oil, and lubricant from getting on the product.

[Parts Included]

- Cable tie

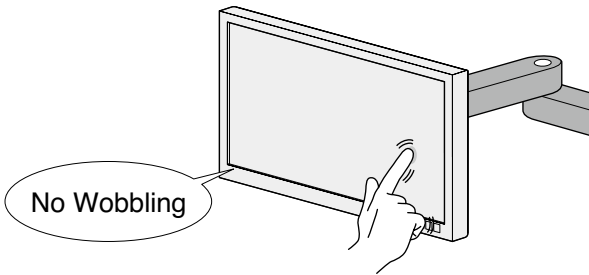
[Optional Parts]

- Rotation Bracket KA-T100S50-PMT 1

Video Link

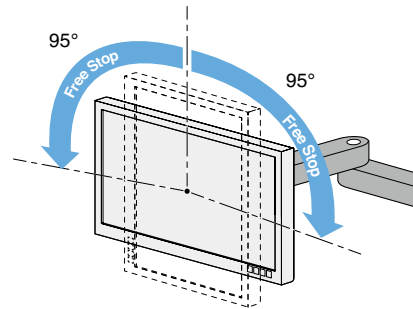


[Stable Operation]



Prevents touch screens from shaking or causing unintentional inputs.

[Rotational Motion]



The optional rotation bracket allows for free stop in the rotation direction. (Free-stop range: 95° on each side)

[Auxiliary Lock Operation]

Swivelling Auxiliary Lock Lever

Lock

Lock

Auxiliary Lock Lever

Unlocked

Locked

Tilting Auxiliary Lock Lever

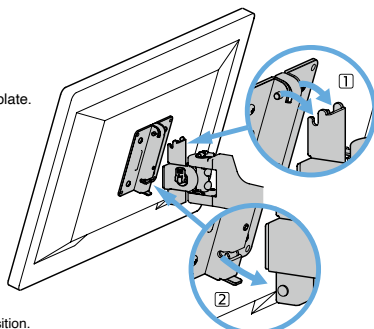
The auxiliary lock temporarily releases to avoid breakage if unintentional heavy load is applied to it.

*Do not forcibly move monitors when locked.

[Installation and Removal]

Installation

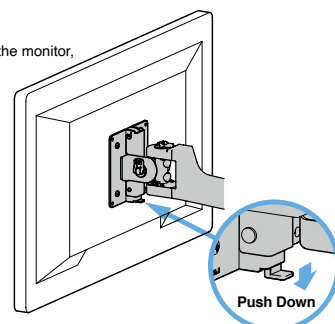
- 1 Fit the protrusion into the groove of the bracket.
- 2 Push the lower part of mounting plate.



*Make sure mark is in upward position.

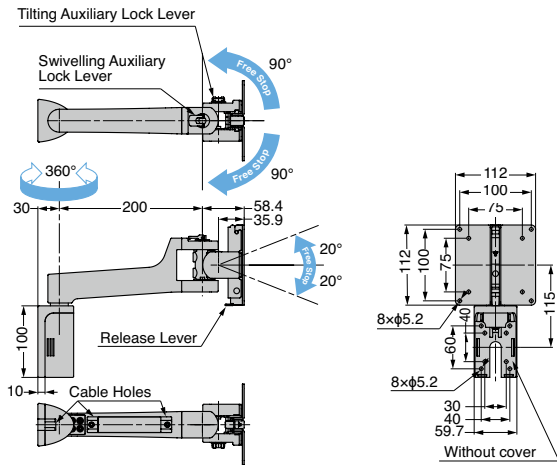
Removal

Push down the release lever and tilt the monitor, then the monitor can be removed.

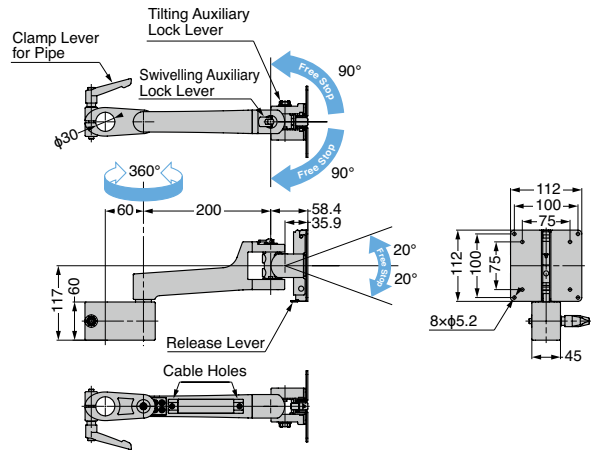


Refer to 1 :P.A48

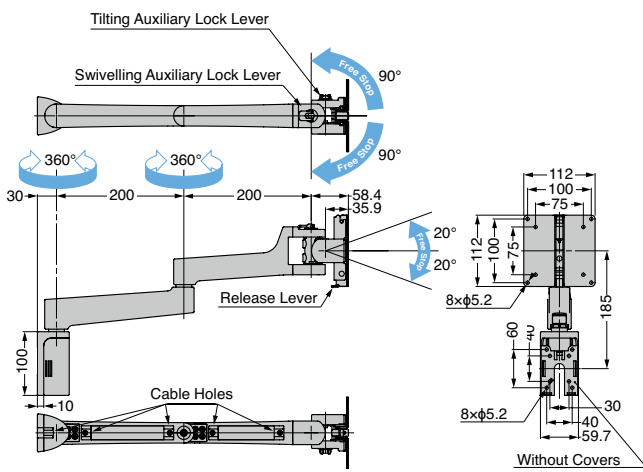
[KA-T100S50-W2] Wall Mount / Single Arm



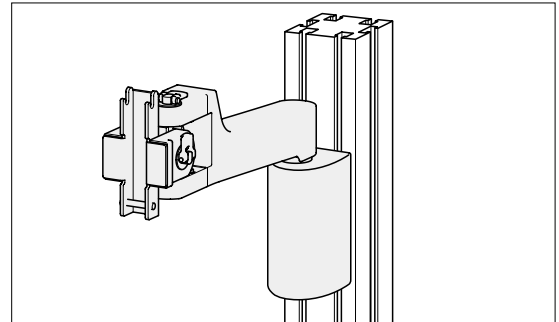
[KA-T100S50-P2] Pipe Mount (φ30) / Single Arm



[KA-T100S50-W3] Wall Mount / Double Arms

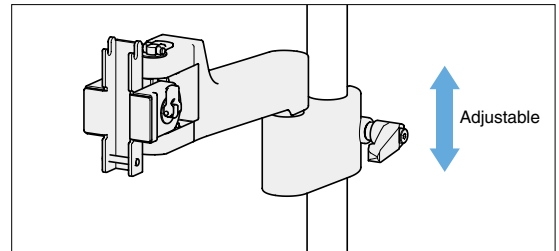


[Can be mounted on aluminium frame] For wall mount type

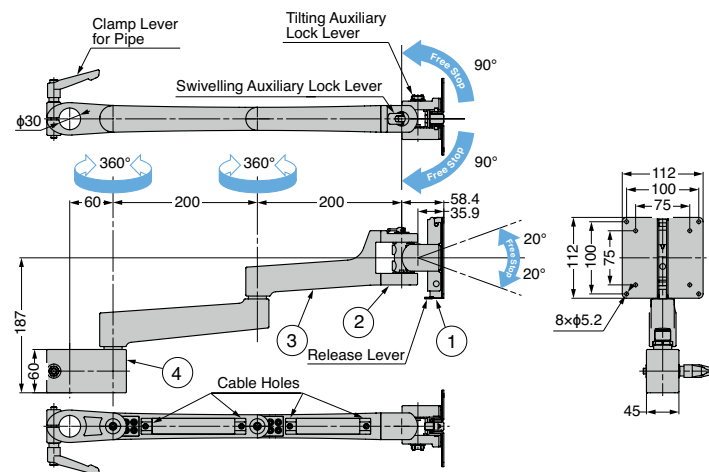


Available Aluminium Frame: 30 x 60 mm or 40 x 80 mm / 2 slots

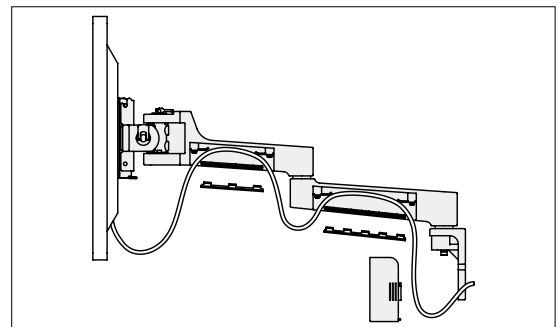
[Height Adjustment] For pipe mount type



[KA-T100S50-P3] Pipe Mount (φ30) / Double Arms



[Wiring Cables]



Comes with covers for cables.

No.	Part Name	Material	Finish
①	Mounting Plate	Steel (SPCC)	Electrodeposition
②	Body	Steel (SPCC) / ABS	
③	Arm	Aluminium Alloy (ADC) / ABS	Matte Anodized
④	Base	Aluminium Alloy (ADC)	

RoHS	CAD	Item Code	Item Name	Type	Colour	Torque N·m (Tilt)	Torque N·m (Rotation)			
							Monitor Part	Center Part	Mounting Part	
●	●	210-048-353	KA-T100S50-W2-BL	Wall Mount / Single Arm	Black	10 ±20%	5.0 ±20%	-	8.0 ±20%	
●	●	210-048-354	KA-T100S50-W2-WT		White					
●	●	210-048-349	KA-T100S50-P2-BL	Pipe Mount (φ30) / Single Arm	Black					
●	●	210-048-350	KA-T100S50-P2-WT		White					
●	●	210-048-355	KA-T100S50-W3-BL	Wall Mount / Double Arms	Black					4.0 ±20%
●	●	210-048-356	KA-T100S50-W3-WT		White					
●	●	210-048-351	KA-T100S50-P3-BL	Pipe Mount (φ30) / Double Arms	Black					
●	●	210-048-352	KA-T100S50-P3-WT		White					

ROTATION BRACKET KA-T100S50-PMT Free Stop

Free Stop



KA-T100S50-PMT-BL



KA-T100S50-PMT-WT

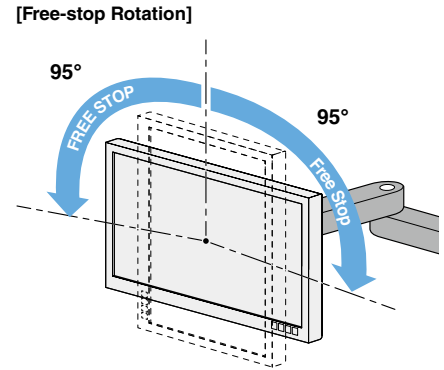
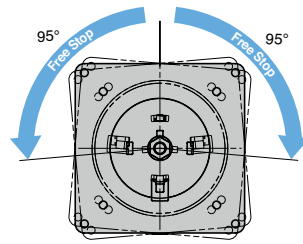
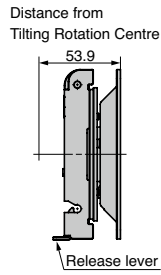
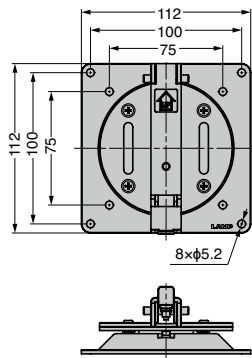
- Allows monitors to rotate and hold in position.
- Replace the original mounting plate with this bracket.

[Specification]

- Compliant with the VESA standard. (Hole interval: 75 x 75 mm / 100 x 100 mm)
- Available monitor size: 12 - 23 inches (Weight: Max. 8 kg)

[Compatible Product]

- Monitor Bracket KA-T100S50 **1**
- Monitor Arm KA-T100S50-W/P **2**



RoHS	CAD	Item Code	Item Name	Colour	Torque N·m (Rotate)	Weight (g)
●	●	210-048-357	KA-T100S50-PMT-BL	Black	4.0 ±20%	641
●	●	210-048-358	KA-T100S50-PMT-WT	White		

Refer to **1** : No.280 P.196 **2** : P.A46 to A47

Series Lineup

Monitor Mount Series KA-T100S50

	Single Arm 1	Double Arms 1	Armless 2	Option 3
<ul style="list-style-type: none"> • Wall Mount • Aluminium Frame Mount 	 KA-T100S50-W2-BL KA-T100S50-W2-WT	 KA-T100S50-W3-BL KA-T100S50-W3-WT	 KA-T100S50	 KA-T100S50-PMT-BL KA-T100S50-PMT-WT
<ul style="list-style-type: none"> • Pipe Mount 	 KA-T100S50-P2-BL KA-T100S50-P2-WT	 KA-T100S50-P3-BL KA-T100S50-P3-WT		

Refer to **1** : P.A46 to A47 **2** : No.280 P.196 **3** : P.A48

GRAVITY SOFT-CLOSE HINGE **HG-JG150** Self and Soft Close

INSTRUCTION

Passed 50,000 open/close private test



Self-close Hinge
(for lower)



Soft-close Hinge
(for upper)

- Automatically and slowly close doors from 65 degrees.
(The self-close feature uses gravity, and the soft-close feature is due to a built-in damper.)
- Can separate into two parts for easy installation and disassembly.
- The closing speed of doors is adjustable.
- Doors cannot be removed when closed for security purposes. (0°)
- Door position can be adjusted for depth and in a horizontal direction (± 3 mm).

[Specification]

- Temperature : 0 - 40 °C

[Remarks]

- Set door stopper to prevent doors from opening over 180°.
- Sold in set of two hinges. (soft-close hinge and self-close hinge)

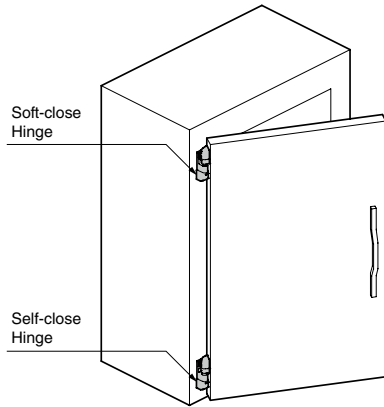
[Parts Included]

- Cover
- Adjustment Plate

[Recommended Screw]

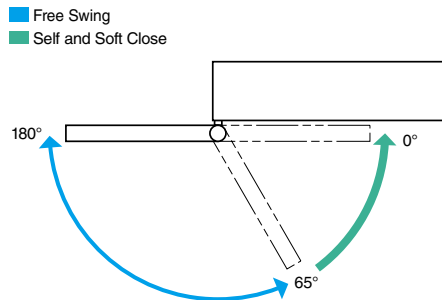
- M6 Binding head screw / Pan head screw
- M6 Hexagon socket head bolt / Button bolt

[Installation of Left-handed Type]

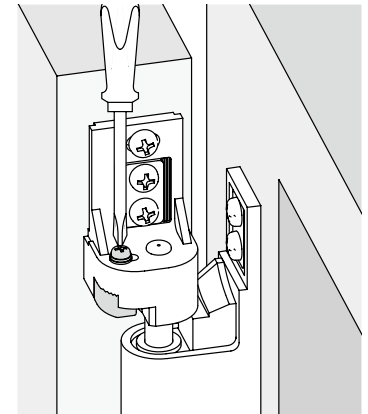


* Pitch between hinges: Min. 1200 mm

[Door Motion]

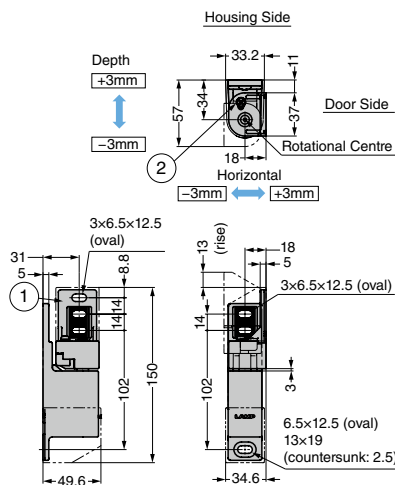


[Speed Adjustment]

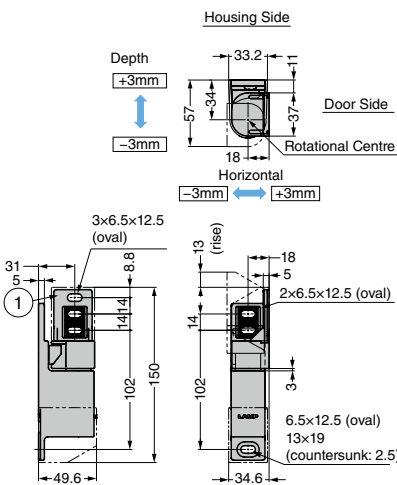


Closing speed can be adjusted with the screw of the soft-close hinge which is for the upper side.

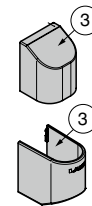
[Soft-close Hinge]



[Self-close Hinge]



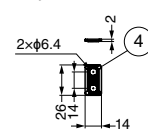
[Covers]



Video Link



[Adjustment Plate]



No.	Part Name	Material	Finish
①	Body	Zinc Alloy (ZDC)	Chrome
②	Speed Adjustment Screw	Steel	Nickel
③	Cover	ABS	Chrome
④	Adjustment Plate	Zinc Alloy (ZDC)	Chrome

* Left-handed type is shown.

Sold in set of two hinges. (soft-close hinge and self-close hinge)

RoHS	CAD	Item Code	Item Name	Position	Finish	Door Width	Door Height	Load Capacity kgf / set	Weight (g)	Carton (set)
●	●	170-048-340	HG-JG150R-CR	Right-handed	Chrome	Max. 900	Max. 2400	10 to 20	995	10
●	●	170-048-341	HG-JG150L-CR	Left-handed						10

SOFT-CLOSE HINGE HG-JV65-U-LGR Concealed Type / For Vertical Use

INSTRUCTION

Passed 50,000 open/close private cycle test



- Will be hidden from view when closed.
(The hinge is installed inside of enclosures.)
- Automatically and slowly closes doors from 35°.
(Self and soft closing)
- Closing speed of doors is adjustable with a hex key.

[Specification]

- Temperature: 0 - 40 °C

[Remarks]

- Set door stopper to prevent doors from opening over 95°.

[Parts Included]

- Body cover

[Recommended Screw]

- M5 binding head screw
- M5 pan head screw
- M5 button bolt
- M5 truss head screw

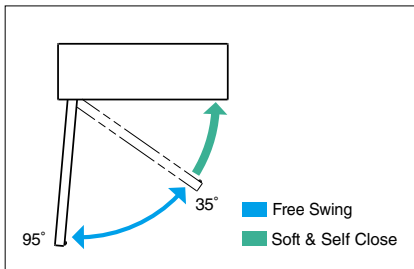
[Installation Inside Cabinet]



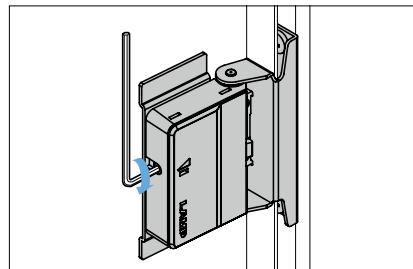
Video Link



[Operating Range]

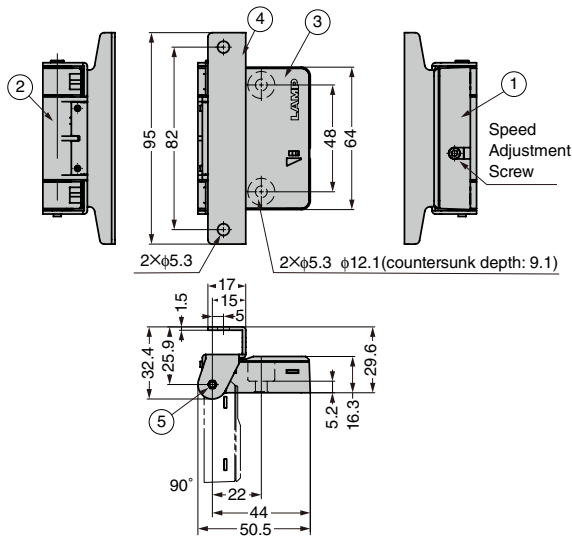
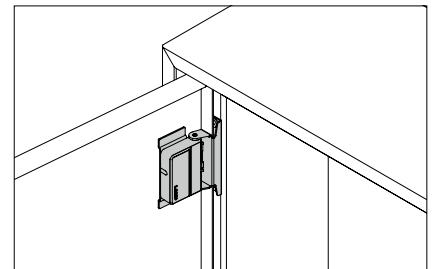


[Closing Speed Adjustment]

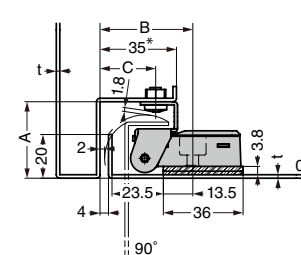


Closing speed is adjustable with a hex key. (size: 2.5)

[Installation]



[Installation and Dimensions]



* The nut and bending section might be close depending on the thickness of the sheet metal.

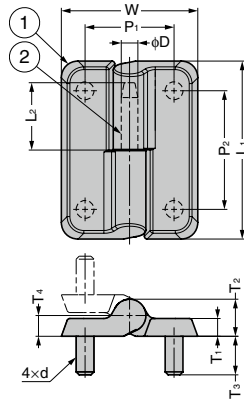
Thickness	A	B	C
t = 1.6	35	42.5	25.5
t ≤ 3.2	35+(t-1.6)	42.5+(t-1.6)	25.5+(t-1.6)

No.	Part Name	Material	Finish/Colour
①	Body A	Polyamide	Light Grey
②	Body B		
③	Body Cover	Polyacetal	
④	Press Arm	Stainless Steel (SUS304)	Plain
⑤	Shaft	Steel (SUM)	Nickel

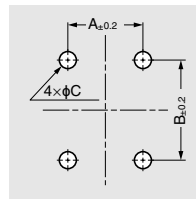
RoHS	CAD	Item Code	Item Name	Colour	Door Specs				Weight (g)
					Width	Height	Weight (kg / 2pcs)	Weight (kg / 3pcs)	
●	●	170-049-813	HG-JV65-U-LGR	Light Grey	Max. 700	Max. 2400	1.0 - 7.0	7.0 - 12.0	135

STAINLESS STEEL LIFT-OFF HINGE **HG-STN** With Stud Bolts

SUS



[Cut Out Dimensions]



- Easy-to-clean design:
 - Smoothly polished mirror surface.
 - Gently sloped sides.
 - Rounded edge and corners.
- Food-grade grease is used on the shaft. (NSF H1 registered)
- Has built-in stud bolts for easy assembly.

[Application]

• Cover of food processing machines

[Remarks]

- For calculation conditions, please refer to the "Concept of Load-bearing" **1**
- If grease is washed off by cleaning, please apply more grease. NSF H1 and NLGI No.2 grade grease is recommended.

[Specification]

Passed 20,000 open and close cycle tests in the conditions below:

- HG-STN-40: H800 x W600 mm / 7 kg
- HG-STN-60: H800 x W600 mm / 15 kg
- HG-STN-75: H1500 x W700 mm / 30 kg



Hinge Selection

Right-handed type shown. (R/L types are symmetrical.)

No.	Part Name	Material	Finish
①	Body	Stainless Steel (SCS13)	Mirror
②	Shaft	Stainless Steel (SUS316)	Plain

RoHS	CAD	Item Code	Item Name	Type	L ₁	L ₂	W	P ₁	P ₂	T ₁	T ₂	T ₃	T ₄	D	d	A	B	C	Load Capacity N/2 pcs	Load Capacity kg/2 pcs
-	●	170-048-991	HG-STN-40R	Right-handed	40	14	36	25	25	5	9.5	11	5.5	3.6	M5	25	25	6	88	9
-	●	170-048-992	HG-STN-40L	Left-handed																
-	●	170-048-993	HG-STN-60R	Right-handed	60	23	46	30	40	6	12.5	13	7	5.6	M6	30	40	7	196	20
-	●	170-048-994	HG-STN-60L	Left-handed																
-	●	170-048-995	HG-STN-75R	Right-handed	75	28.5	66	45	45	8	16.5	18	9	7.6	M8	45	45	9	284	29
-	●	170-048-996	HG-STN-75L	Left-handed																

Refer to **1** : No.280 P.15


LIFT-ASSIST DAMPER (FOR HEAVY DUTY)



LADH



Passed 100,000 open/close private cycle test

Opening Direction	Item Name	Description	Non-handed	Maximum Door Moment
 Top-opening	LADH-35	Lift-assist	Yes	25 - 35 N-m/pc (255 - 357 kgf-cm/pc)
	LADH-50	Soft-close		35 - 50 N-m/pc (357 - 510 kgf-cm/pc)

Features

- Ideal for counter flaps at bars, restaurants, and reception counters.
- Smooth and soft close movement near closing radius prevents flaps from slamming. Damper function works even if the flap is only opened slightly.
- Suitable for door moment of 25 - 50 N-m.
- Lift-assist mechanism with light opening.
- Stops flap at 95° opening with stopper.
- Installation position can be easily determined with the supplied template.
- Can be attached to already installed counters without extra processing.

Applications

Counter flaps, etc.

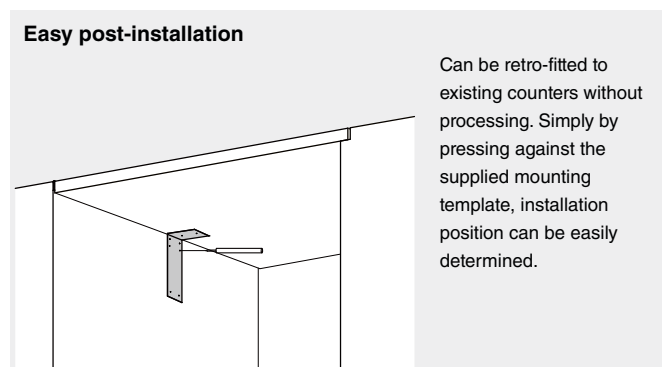
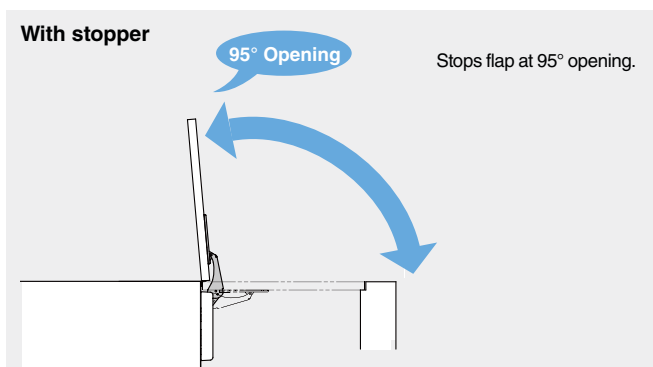
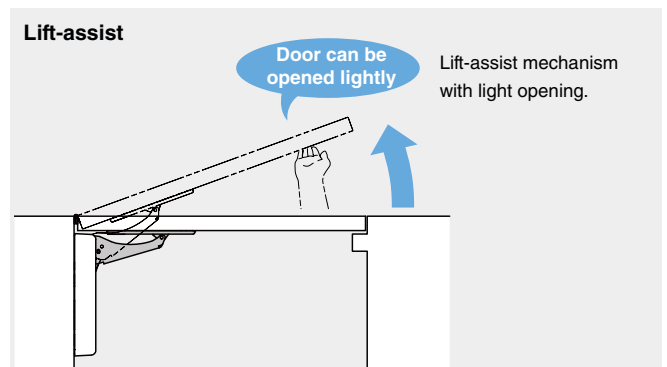
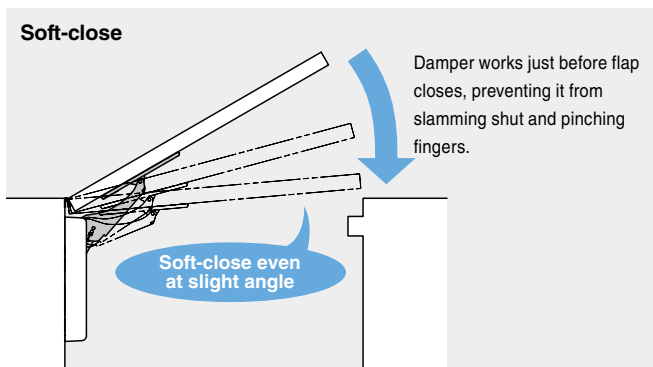
Remarks

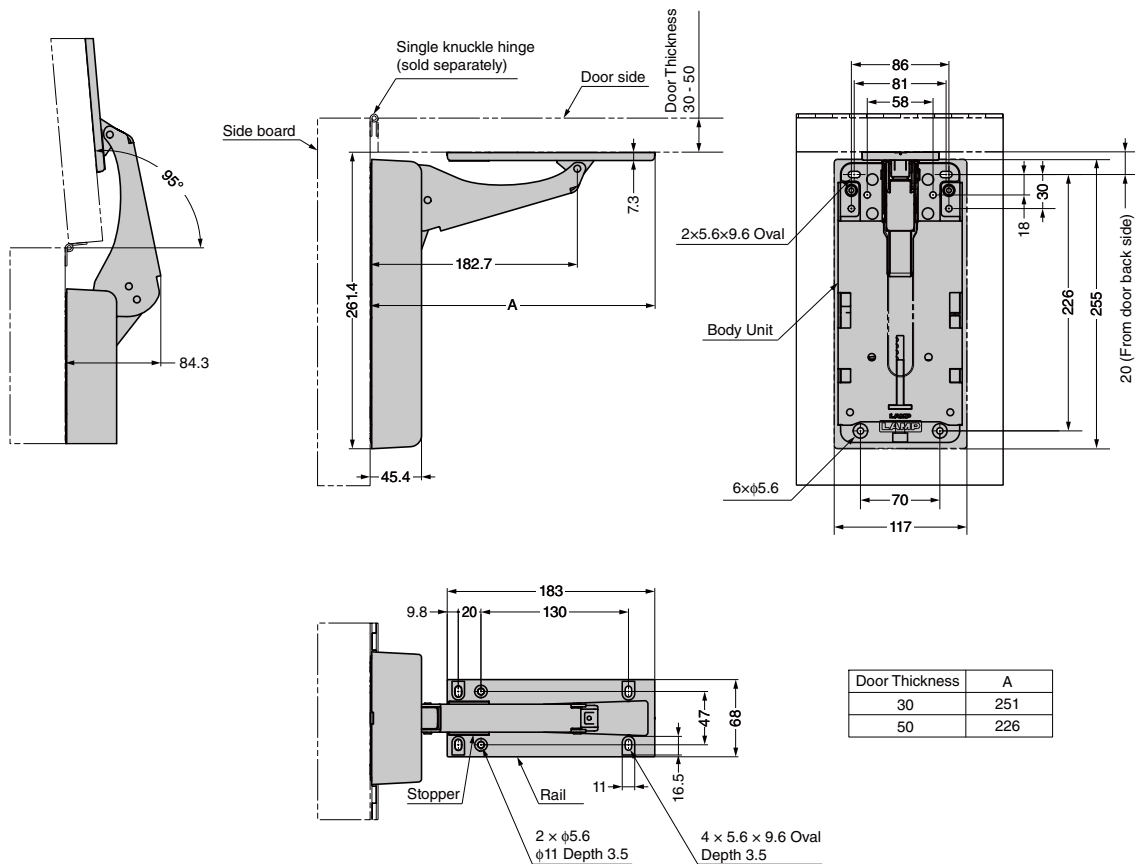
- Do not use more than two sets on one flap
- While open, the flap is not held firmly in position
- Make sure to have sufficient hinge strength and board material strength at the side from which the flap is suspended (rotates).
- Do not use in combination with multi-axis hinges.
- Closed flap will not be held in place with this product alone. Please install some type of catch on the side of the flap that lifts up.

Parts Included

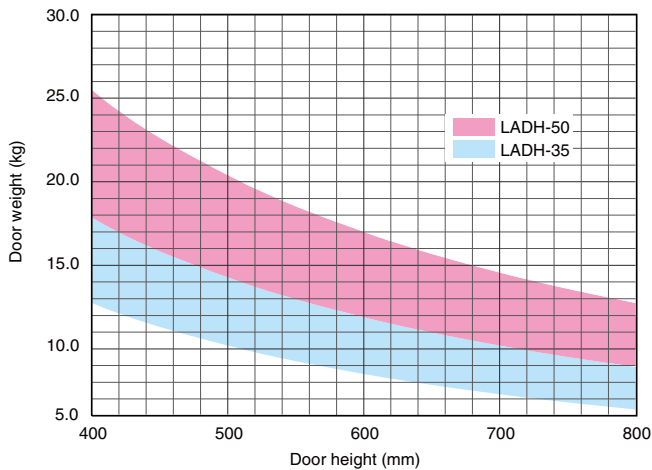
- Binding head tapping screw 5.1 × 20
- Paper template

Application Example





Door Size Ranges



Refer to the left graph as a guide for model selection. When using a door with size not given here, calculate the door moment as follows. Door weight includes attached decorations.

Maximum Door Moment (N-m)
 = Door weight (kg) × 9.80665 × Distance from rotation centre to door centre of gravity (m)

CAD	Item Code	Item Name	Material	Finish	Maximum Door Moment N-m/pc	Maximum Door Moment kgf-cm/pc	Recommended Thickness (mm)	Weight (kg)	Box (pcs)	Carton (pcs)
	170-034-868	LADH-35	Steel (SPCC)/	Nickel Plating/Nickel	25 - 35	255 - 357	30 - 50	2	1	4
	170-034-869	LADH-50	Polyacetal (POM)/ABS	Chrome/Dark Brown	35 - 50	357 - 510			1	4

MOUNTING PLATE FOR LAD



LAD-SPT



Features

A plate to reinforce the surface where the LAD Lift-Assist Damper or LAD-ST Arm Unit is mounted.

Remarks

- Use the single-side type when the lateral plate thickness is 20 mm or greater, and the double-sided type if the thickness is 15 - 19 mm.
- Two plates are required when using the double-sided type.
- Cannot be used with the LAD-DP Spacer for thick plates or the LAD-BKT Bracket for Back Mount.

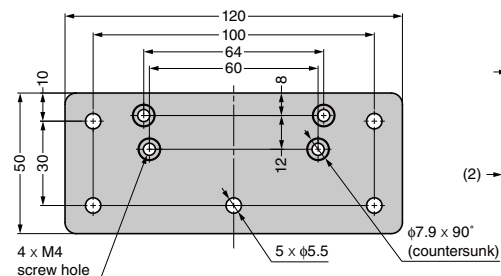
Parts Included

Size M4 x 8 binding screws

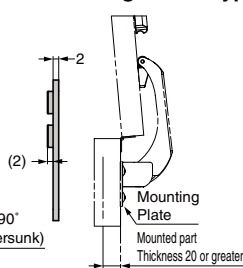
Recommended Screw

- Single-side type: Size 5 x 20 or larger cross-recessed truss tapping screws
- Double-sided type: Size M5 cross-recessed truss screws and flat washers, spring washers and nuts for M5 screws

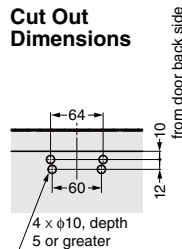
Application Example



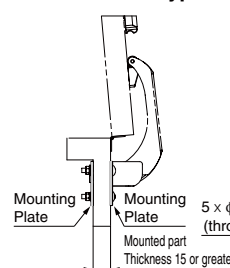
Single-side Type



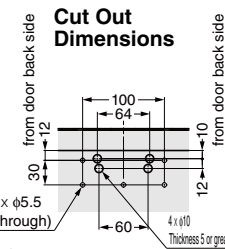
Cut Out Dimensions



Double-sided Type



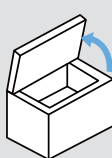
Cut Out Dimensions



CAD	Item Code	Item Name	Material	Weight (g)	Box (pcs)	Carton (pcs)
	170-034-754	LAD-SPT	Stainless Steel	130	10	50

BALANCE-ADJUSTABLE LIFT-ASSIST STAY S-ATJ Side Mount



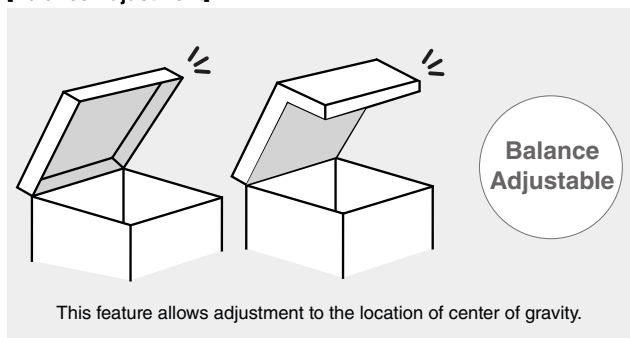
Opening Direction	Description	Non-handed	Maximum Door Moment*
 Top-opening	Side mount (damper option available)	Yes	6.1-8.8 N · m/pc (62-90 kgf · cm/pc)
			8.8-11.8 N · m/pc (90-120 kgf · cm/pc)

*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.

[Balance Adjustment]



[Specifications]

- Operating temperature : 0°C~40°C
- Operating humidity : 90%RH or less
- For other specifications exceeding the above range, please contact local representatives.

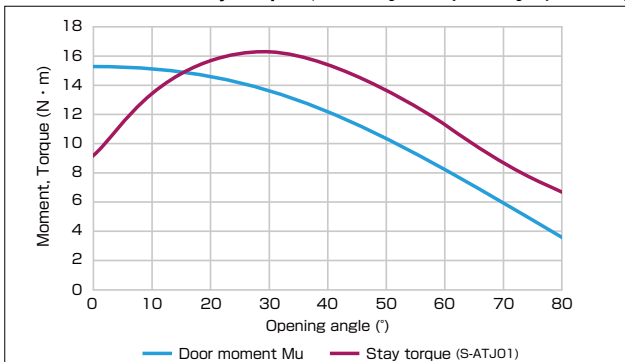
[Remarks]

- 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 rigidity 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 M5

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



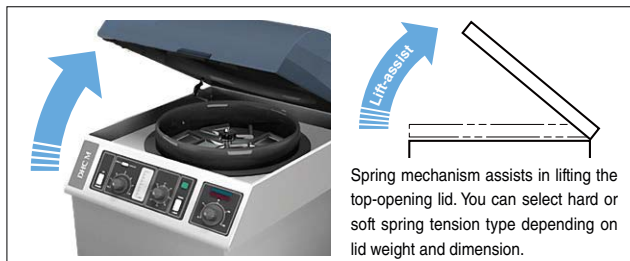
The graph above shows a ideal example of curves.

The stay torque should be above the door moment from the middle of the opening.

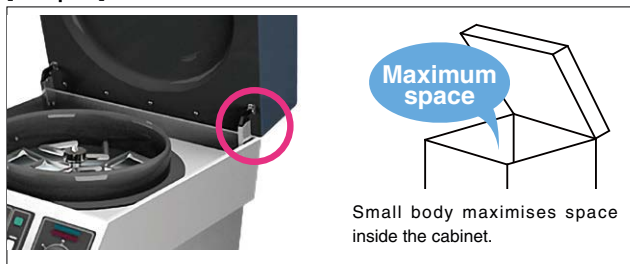
- Door moment Mu > Stay torque : Force is applied in the closing direction of door.
- Door moment Mu < Stay torque : Force is applied in the opening direction of door.
- Door specs (example) : X=500mm Y=20mm L=500.4mm m=3kg

*The installation point is the same as the drawings on the page of the HG-PA300-15.

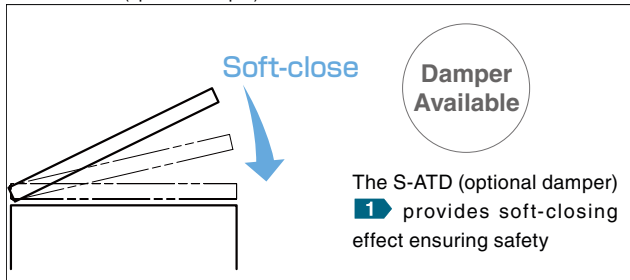
[Lift-assist]



[Compact]



[Soft-close] (optional damper)



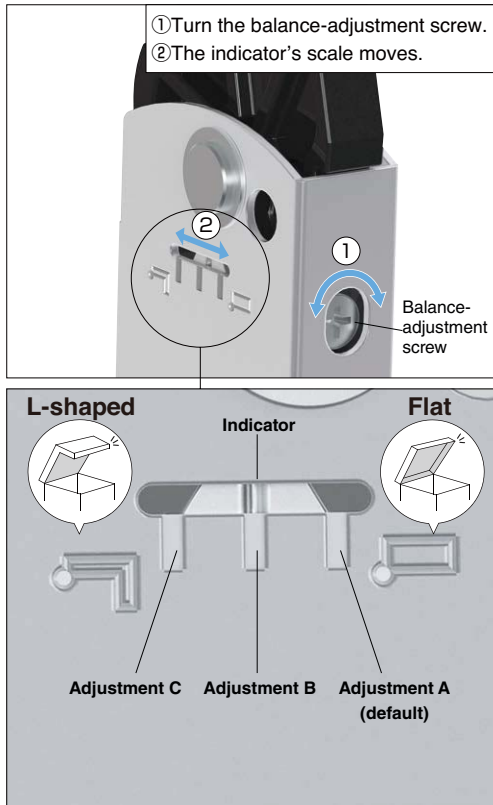
[Calculating Door Moment]

Calculation formula: $Mu = m \times L \times \cos\theta$

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

Refer to 1 : P.B7, 2 : P.15

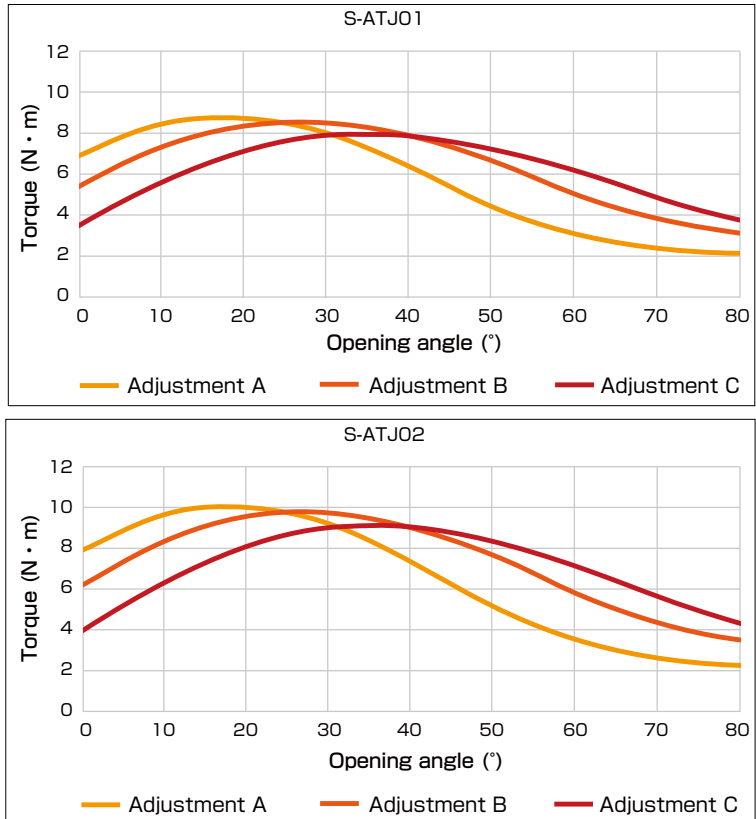
[Balance Adjustment]



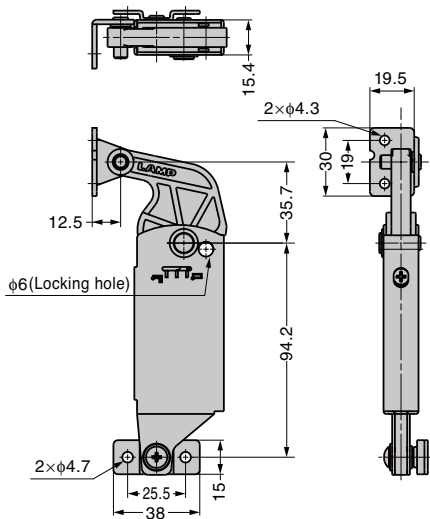
The indicator shows how much balance-adjustment is applied. Balance-adjustment should depend on the location of the center of gravity. When used in:

- 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.

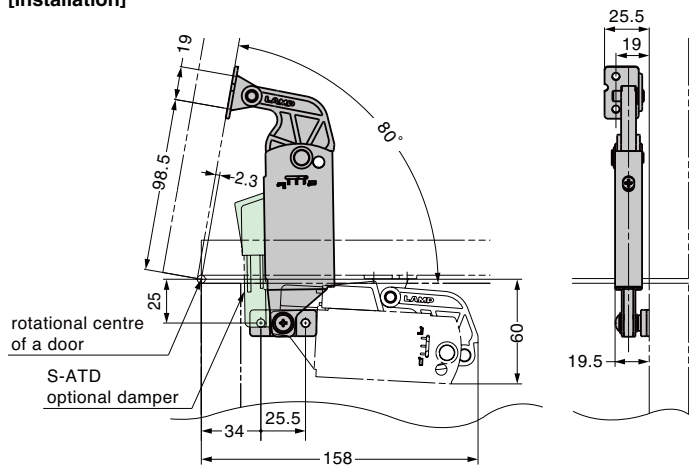
[Torque-Angle Graph] showing the variation of peak torque when balance-adjusted



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



[Installation]



[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)
		180-043-515	S-ATJ01	Stainless Steel (SUS430) / POM	Plain	6.1~8.8	62~90	200	10	50
		180-043-518	S-ATJ02	POM		8.8~11.8	90~120		10	50

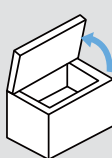
*The Max. door moment depends on location of center of gravity, installation point of stays, and balance adjustment.

[Damper Unit] option

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

BALANCE-ADJUSTABLE LIFT-ASSIST STAY S-ATJD Back Panel Mount



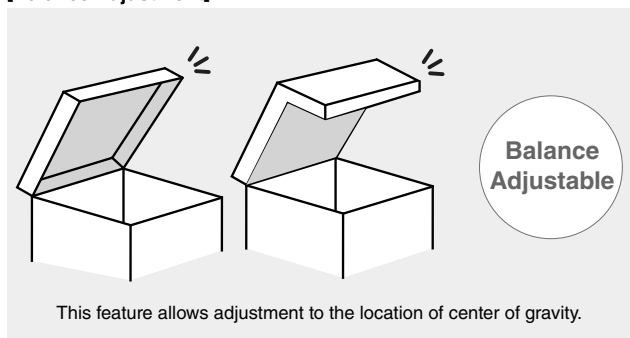
Opening Direction	Description	Non-handed	Maximum Door Moment*
 Top-opening	Back panel mount (damper option available)	Yes	6.1-8.8 N · m/pc (62-90 kgf · cm/pc)
			8.8-11.8 N · m/pc (90-120 kgf · cm/pc)

*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.

[Balance Adjustment]



[Specifications]

- Operating temperature : 0°C~40°C
- Operating humidity : 90%RH or less
- For other specifications exceeding the above range, please contact local representatives.

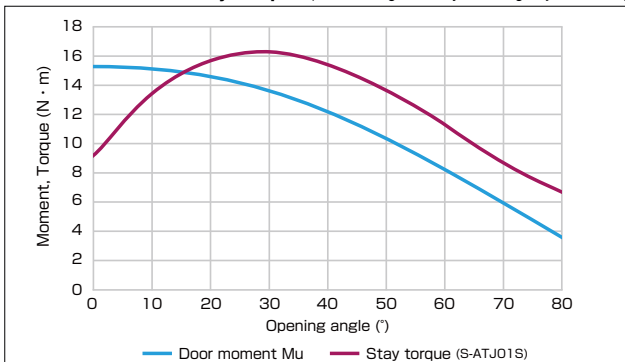
[Remarks]

- 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 rigidity 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

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



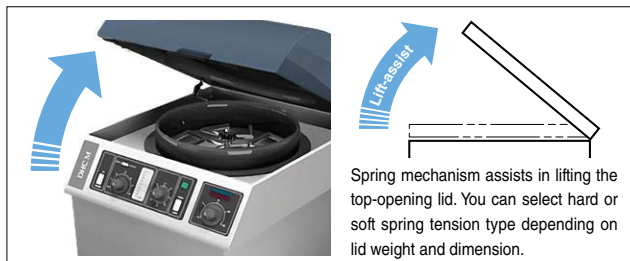
The graph above shows a ideal example of curves.

The stay torque should be above the door moment from the middle of the opening.

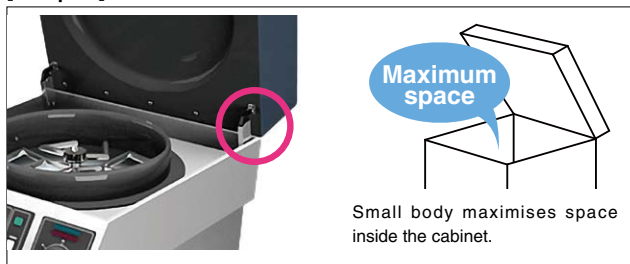
- Door moment Mu > Stay torque : Force is applied in the closing direction of door.
- Door moment Mu < Stay torque : Force is applied in the opening direction of door.
- Door specs (example) : X=500mm Y=20mm L=500.4mm m=3kg

*The installation point is the same as the drawings on the page of the HG-PA300-15.

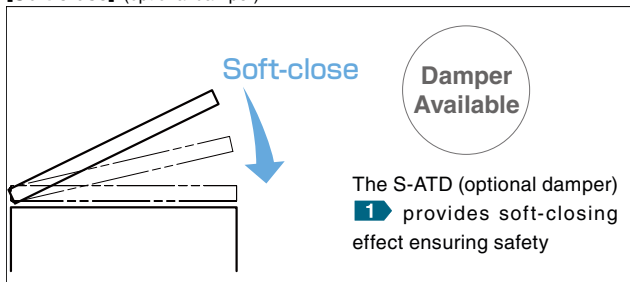
[Lift-assist]



[Compact]

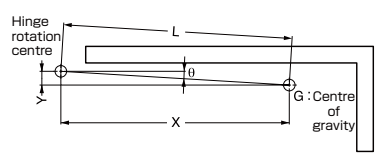


[Soft-close] (optional damper)



[Calculating Door Moment]

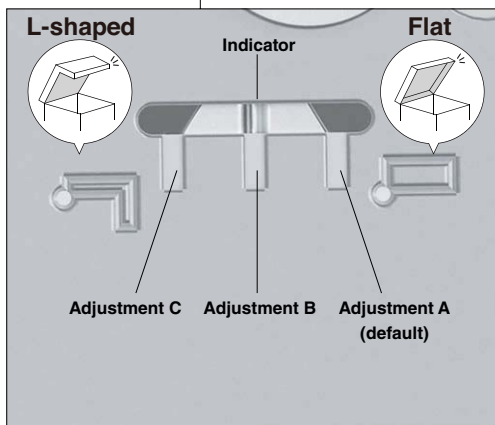
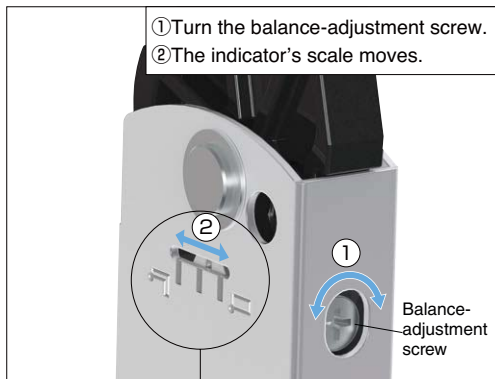
Calculation formula: $Mu = m \times L \times \cos\theta$



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

Refer to 1 : P.B7, 2 : P.15

[Balance Adjustment]

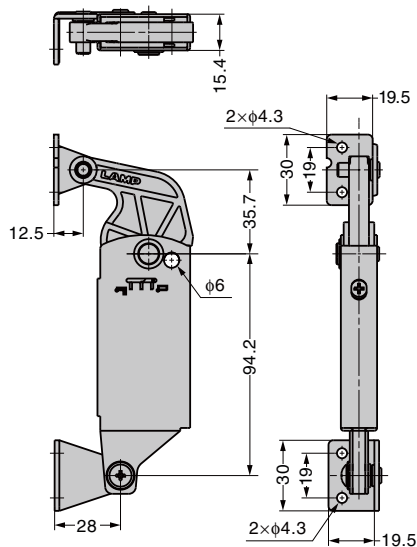
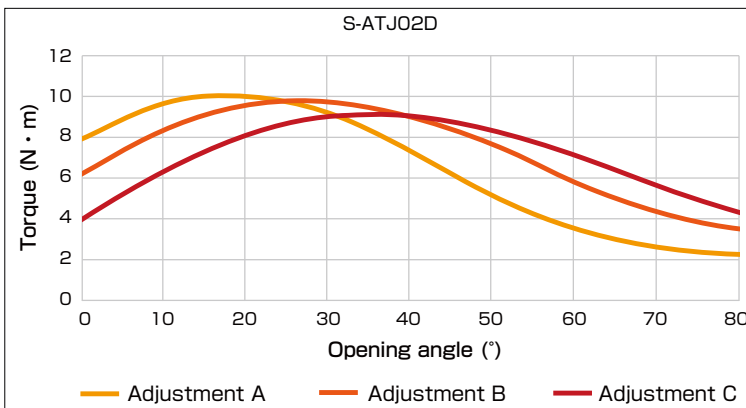
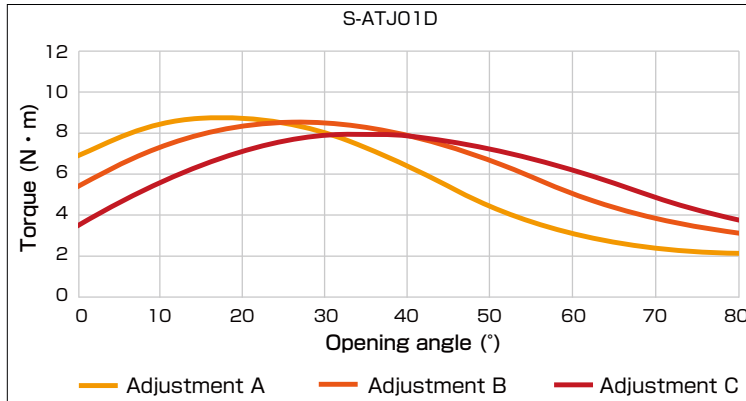


The indicator shows how much balance-adjustment is applied. Balance-adjustment should depend on the location of the center of gravity. When used in:

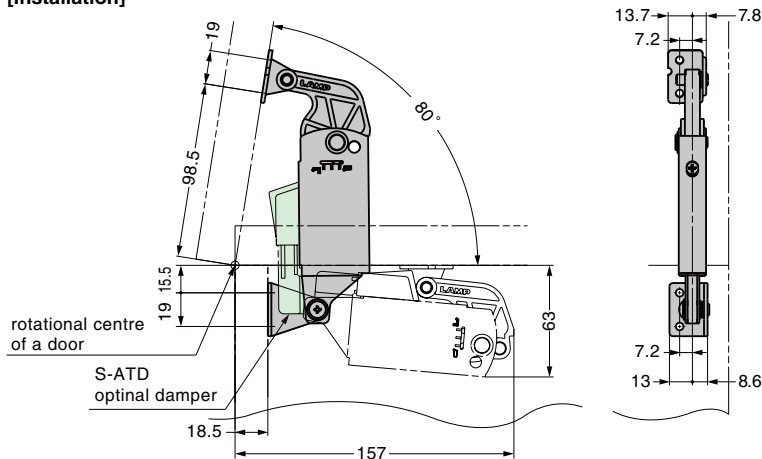
- a flat lid, "Adjustment A" becomes better setting.*
- a L-shaped lid, "Adjustment C" becomes better setting.*

*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



[Installation]



[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)
RoHS	CAD	180-043-516	S-ATJ01D	Stainless Steel (SUS430) / POM	Plain	6.1~8.8	62~90	210	10	50
RoHS	CAD	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)
RoHS	CAD	180-043-521	S-ATD-30	15	50	-

BALANCE-ADJUSTABLE LIFT-ASSIST STAY S-ATJS Back Panel Mount



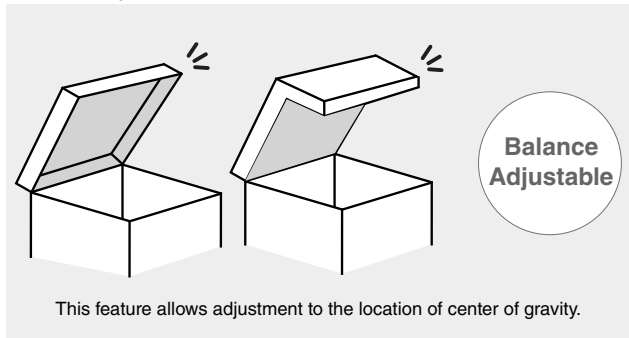
Opening Direction	Description	Non-handed	Maximum Door Moment*
 Top-opening	Back panel mount (damper option available)	Yes	6.1-8.8 N · m/pc (62-90 kgf · cm/pc)
			8.8-11.8 N · m/pc (90-120 kgf · cm/pc)

*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.

[Balance Adjustment]



[Specifications]

- Operating temperature : 0°C~40°C
- Operating humidity : 90%RH or less
- For other specifications exceeding the above range, please contact local representatives.

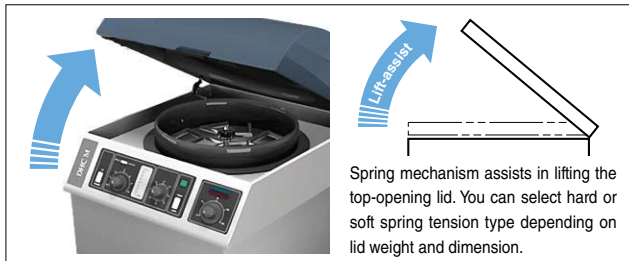
[Remarks]

- Be sure to read the "Cautions" 1.
- 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 taken into consideration. Low rigidity 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.

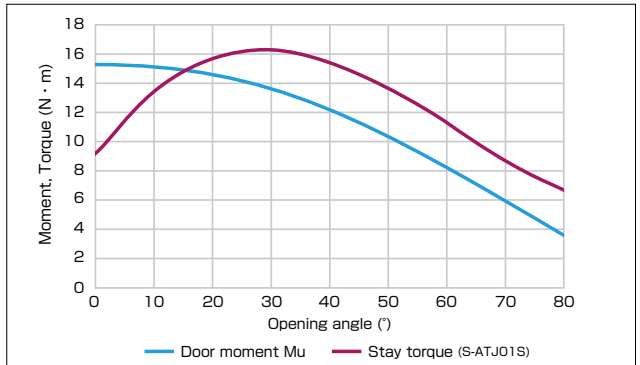
[Recommended Screw]

- Truss head screw M4

[Lift-assist]



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



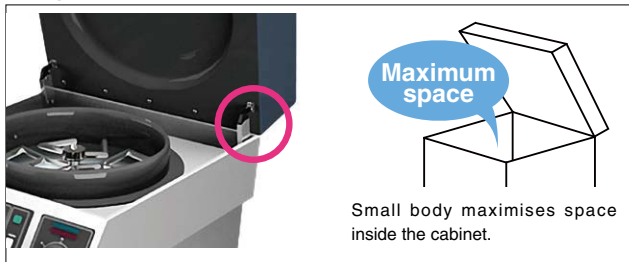
The graph above shows a ideal example of curves.

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.

[Compact]



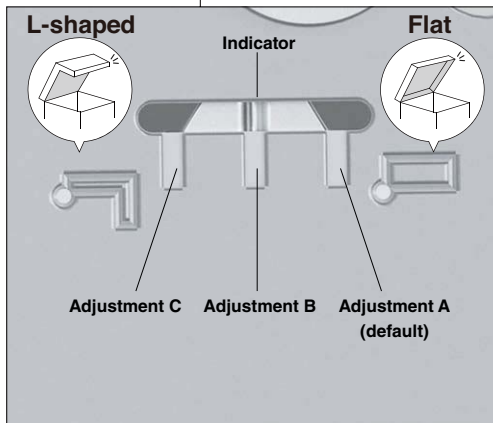
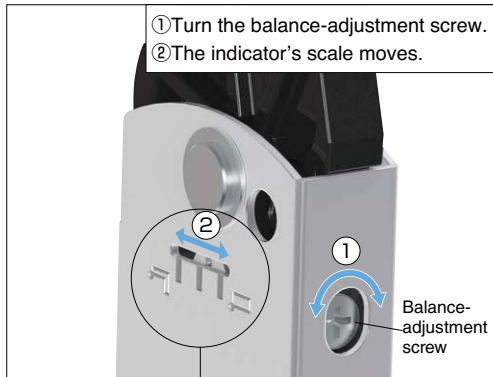
[Calculating Door Moment]

Calculation formula: $Mu = m \times L \times \cos\theta$

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

Refer to 1 : P.15

[Balance Adjustment]



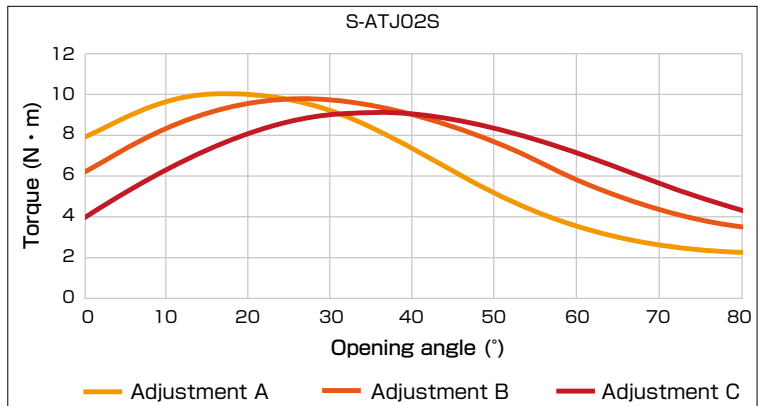
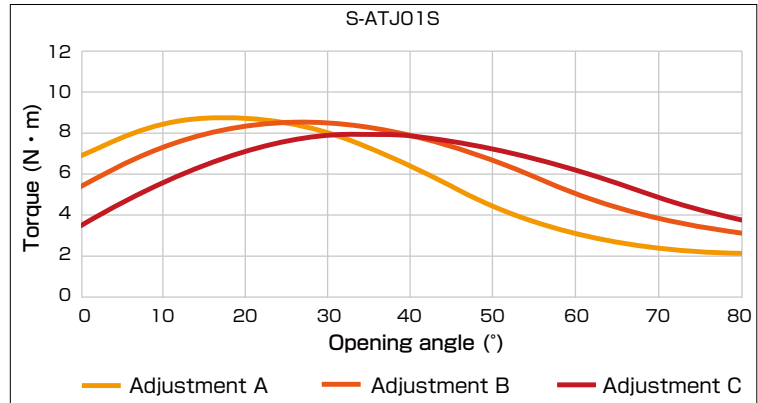
The indicator shows how much balance-adjustment is applied. Balance-adjustment should depend on the location of the center of gravity. When used in:

- a flat lid, "Adjustment A" becomes better setting.*
- a L-shaped lid, "Adjustment C" becomes better setting.*

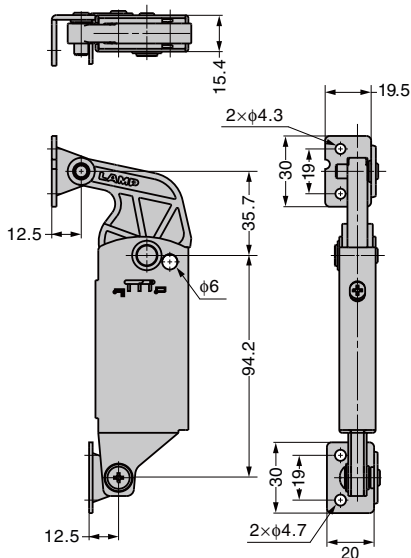
*A flat lid's center of gravity is higher than its rotational center.

*A L-shaped lid's center of gravity is lower than its rotational center.

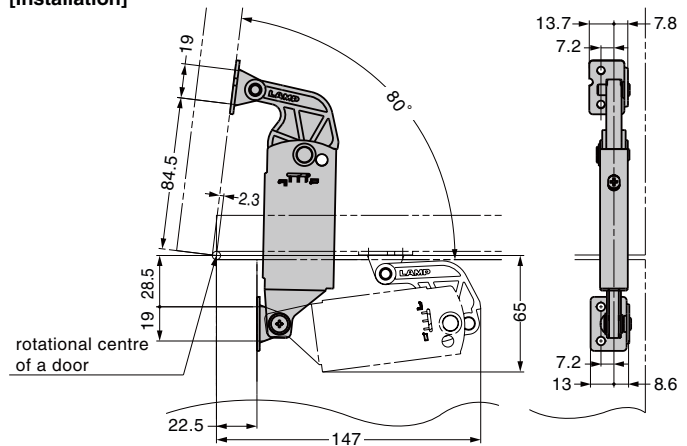
[Torque-Angle Graph] showing the variation of peak torque when balance-adjusted



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



[Installation]



[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)
		180-043-517	S-ATJ01S	Stainless Steel (SUS430) /	Plain	6.1~8.8	62~90	200	10	50
		180-043-520	S-ATJ02S	POM		8.8~11.8	90~120			

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

DAMPER UNIT S-ATD For S-ATJ and S-ATJD

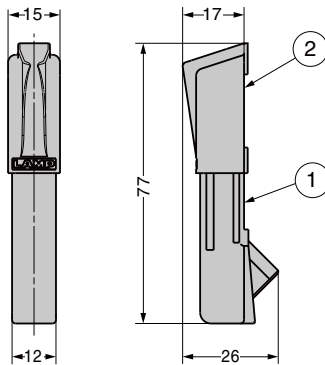


- Specially designed for use with the S-ATJ **1** and S-ATJD **2**.
Adds soft-closing feature to the stays.
- Easy to attach to the S-ATJ and S-ATJD stays by simply inserting it. The thickness is designed to fit the stays allowing for maximum space inside cabinets.

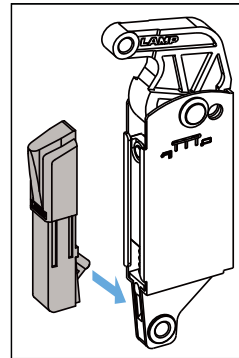
[Remarks]

- Only for use with the S-ATJ and S-ATJD. Can not be used with other items in the S-AT series.
- Other installation points than those in this catalogue may not be available. For details, please check with the product search engine called "Sasuga-kun" .

[When attached to the S-ATJD]



[Attaching]



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

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

No.	Part Name	Material
①	Damper Case	POM
②	Slider	PBT

Refer to **1** : PB4, **2** : PB5

AILERON STAY FOR OLYMPIA ARN-3 Upward Opening Model

L=R INSTRUCTION



Opening	Description	Non-handed	Type	Maximum Door Moment
Upward	Lift-assist Soft-close Free-stop	Yes	M	4.0~6.0 N·m/pc (40.8~61.2 kgf·cm/pc)
			H	6.0~8.0 N·m/pc (61.2~81.6 kgf·cm/pc)

- Smooth door movement. It is specially designed for use with the OLYMPIA concealed hinge (360-D26-19 / H360-D26-26T).
- The lift-assist function allows for light opening of doors.
- The force of lift-assist is adjustable.
- The soft-close function makes doors close gently (0°~30° degrees).
- Integrated design combines a concealed hinge and lid stay.
- The free-stop function enables doors to hold in position.
- Closing speed of doors is adjustable.

[Specifications]

- Operating temperature: 0°C - 40°C

[Parts Included]

- Door-side mounting plate
- Countersunk head tapping screw 3.5 x 1.5 (for attaching the mounting plate to AILERON)
- Binding head tapping screw 3.5 x 1.5 (for attaching the door-side mounting plate, mounting plate for AILERON, and AILERON)

[Sold Separately]

- Mounting plate for AILERON
- OLYMPIA concealed hinge
- Mounting plate for OLYMPIA
- Screw for OLYMPIA

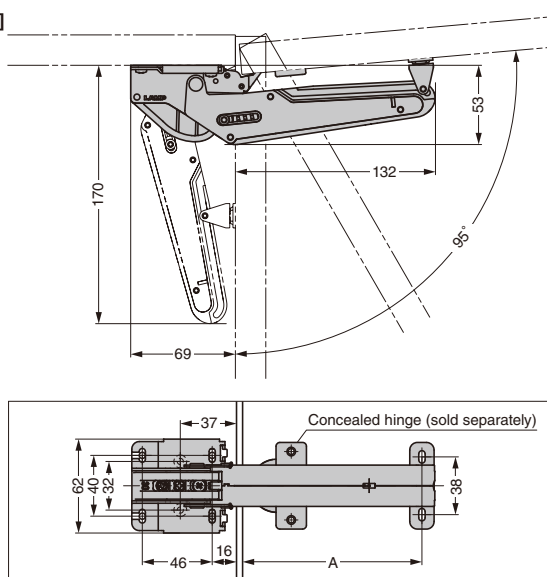
Video Link



[Door Movements]

Lift-assist	Soft-close	Free-stop
Allows for light opening of doors	OLYMPIA's damper makes doors close slowly. (0° - 30°)	Enables doors to hold in position.
Light opening	Gently closing	Holds in position

[Installation]



Hinge Used	A
360-D26-19T	118
H360-D26-26T	116

Please see pages of Olympia hinges for installation dimensions.

[Application Example]



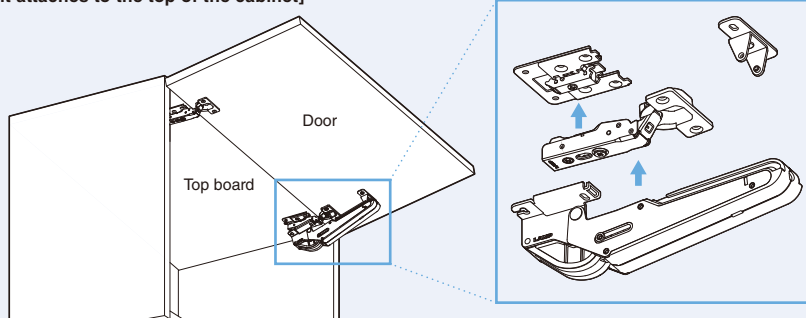
[Aileron Stay] Sold singly

RohS	CAD	Item Code	Item Name	Material	Finish / Colour	Type	Max. Door Moment N·m/pc	Max. Door Moment kgf·cm/pc	Box (pc)	Carton (pc)
Green	2C3D	180-043-947	ARN-3-M	Steel (SPCC) / POM	Nickel plating / Grey	M	4.0~6.0	40.8~61.2	1	20
Green	2C3D	180-043-948	ARN-3-H			H	6.0~8.0	61.2~81.6	1	20

[Standard Set] Including parts sold separately

RohS	CAD	Item Code	Item Name	Door Width	Max. Door Moment N·m	Max. Door Moment kgf·cm	Set Contents	Box (pc)	Carton (pc)
Green	2C3D	180-045-659	ARN-3-M-S	450~900	4.0~6.0	40.8~61.2	Aileron stay, Mounting plate for Aileron stay, Olympia hinge, Mounting plate for Olympia hinge, Screws	1	10
Green	2C3D	180-045-660	ARN-3-H-S		6.0~8.0	61.2~81.6		1	10

[Combined unit attaches to the top of the cabinet]



Simple installation only requires AILERON to be placed on OLYMPIA with a mounting plate designed for AILERON

AILERON STAY FOR OLYMPIA ARN-2 Top-opening Model

L=R INSTRUCTION



Opening	Description	Non-handed	Type	Maximum Door Moment
Top-opening	Lift-assist Soft-close Free-stop	Yes	M	4.0–6.0 N·m/pc (40.8–61.2 kgf·cm/pc)
			H	6.0–8.0 N·m/pc (61.2–81.6 kgf·cm/pc)

- Smooth door movement. It is specially designed for use with the OLYMPIA concealed hinge (360-D26-19 / H360-D26-26T).
- The lift-assist function allows for light opening of doors.
- The force of lift-assist is adjustable.
- The soft-close function makes doors close gently (0°–30° degrees).
- Integrated design combines a concealed hinge and lid stay.
- The free-stop function enables doors to hold in position.
- Closing speed of doors is adjustable.

[Specifications]

- Operating temperature: 0°C – 40°C

[Parts Included]

- Door-side mounting plate
- Countersunk head tapping screw 3.5 × 1.5 (for attaching the mounting plate to AILERON)
- Binding head tapping screw 3.5 × 1.5 (for attaching the door-side mounting plate, mounting plate for AILERON, and AILERON)

[Sold Separately]

- Mounting plate for AILERON
- OLYMPIA concealed hinge
- Mounting plate for OLYMPIA
- Screw for OLYMPIA

Video Link



[Door Movements]

Lift-assist	Soft-close	Free-stop
Allows for light opening of doors	OLYMPIA's damper makes doors close slowly. (0° - 30°)	Enables doors to hold in position.
Light opening	Gently closing	Holds in position

[Installation]

Hinge Used	A
360-D26-19T	118
H360-D26-26T	116

Please see pages of Olympia hinges for installation dimensions.

[Application Example]



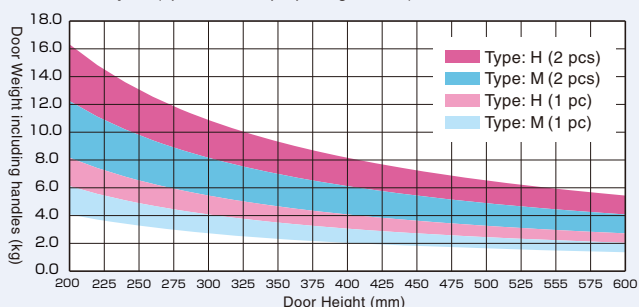
[Aileron Stay] Sold singly

RtHS	CAD	Item Code	Item Name	Material	Finish / Colour	Type	Max. Door Moment N·m/pc	Max. Door Moment kgf·cm/pc	Box (pc)	Carton (pc)
		180-043-945	ARN-2-M	Steel (SPCC) / POM	Nickel plating / Grey	M	4.0~6.0	40.8~61.2	1	20
		180-043-946	ARN-2-H			H	6.0~8.0	61.2~81.6	1	20

[Standard Set] Including parts sold separately

RtHS	CAD	Item Code	Item Name	Door Width	Max. Door Moment N·m	Max. Door Moment kgf·cm	Set Contents	Box (pc)	Carton (pc)
		180-045-661	ARN-2-M-S	450~900	4.0~6.0	40.8~61.2	Aileron stay, Mounting plate for Aileron stay, Olympia hinge, Mounting plate for Olympia hinge, Screws	1	10
		180-045-662	ARN-2-H-S		6.0~8.0	61.2~81.6			

[Selection Graph] (upward and top-opening models)

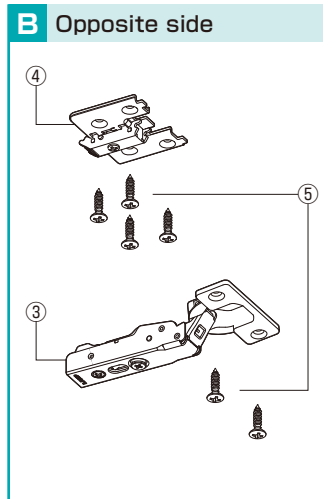
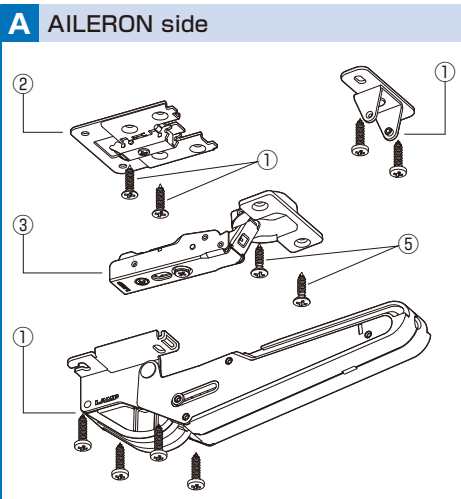
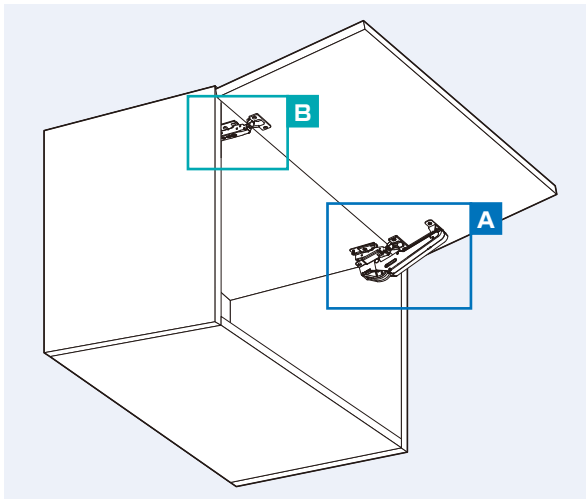


Maximum Door Moment	Type	Number of AILERON
4.0–6.0	M	1 pc
6.0–8.0	H	
8.0–12.0	M	2 pcs
12.0–16.0	H	

As a guide for model selection, please refer to the graph on the left. For use with doors outside of the scope of this graph, use the calculation below. (The door weight includes attached decorations such as handles.)

- The selection should be based on Max. door moment. (Two types are available.)
- Maximum Door Moment (N·m) = Door weight (kg) × 9.80665 × Distance from rotation centre to door centre of gravity (m)

Components for a single door



Necessary parts per door (A + B)

[Notes]

The required quantity depends on door width and moment.

*This is the required quantity when using with the 360-P6WT.
The required number of screws is reduced by one for each unit of 360-P4W-32T or 360-P4W-30T that is used.

		Item Code		Item Name		Door Width [mm]											
						450 ~ 900				900 ~ 1600				1600 ~ 2000			
						Door Moment [N · m]											
		4.0	6.0	8.0	12.0	4.0	6.0	8.0	12.0	4.0	6.0	8.0	12.0				
		6.0	8.0	12.0	16.0	6.0	8.0	12.0	16.0	6.0	8.0	12.0	16.0				
AILERON	① Stay	180-043-947/ 180-043-945	ARN-3-M/ ARN-2-M	1	-	2	-	1	-	2	-	1	-	2	-		
		180-043-948/ 180-043-946	ARN-3-H/ ARN-2-H	-	1	-	2	-	1	-	2	-	1	-	2		
	② Plate	180-043-949	ARN-SZ	1	2	1	2	1	2	1	2	1	2				
OLYMPIA	③ Hinge	160-026-840/ 160-029-084	360-D26-19T/ H360-D26-26T (Built-in damper)	2	3	2	3	2	3	2	3						
		160-026-836/ 160-029-081	360-26-19T/ H360-26-26T (Without catch)		-	1	-	1	-	2	-						
		160-026-832/ 160-029-078	360-C26-19T/ H360-C26-26T (With catch)		-		-		-		-		1				
④ Plate	160-026-846	360-P6WT (System 32 · 4 holes)															
	160-026-845	360-P4W-32T (System 32 · 3 holes)		1		2		1		3		2					
	160-026-844	360-P4W-30T (System 30 · 3 holes)															
⑤ Screw	160-070-030	TAP3515NI	8*	10*	14*	10*	20*	16*									

FULL EXTENSION SLIDE

LOAD CAPACITY 40~54kgf

DETACH

HOLD CLOSED

L=R

SUS

ESR-DC4513

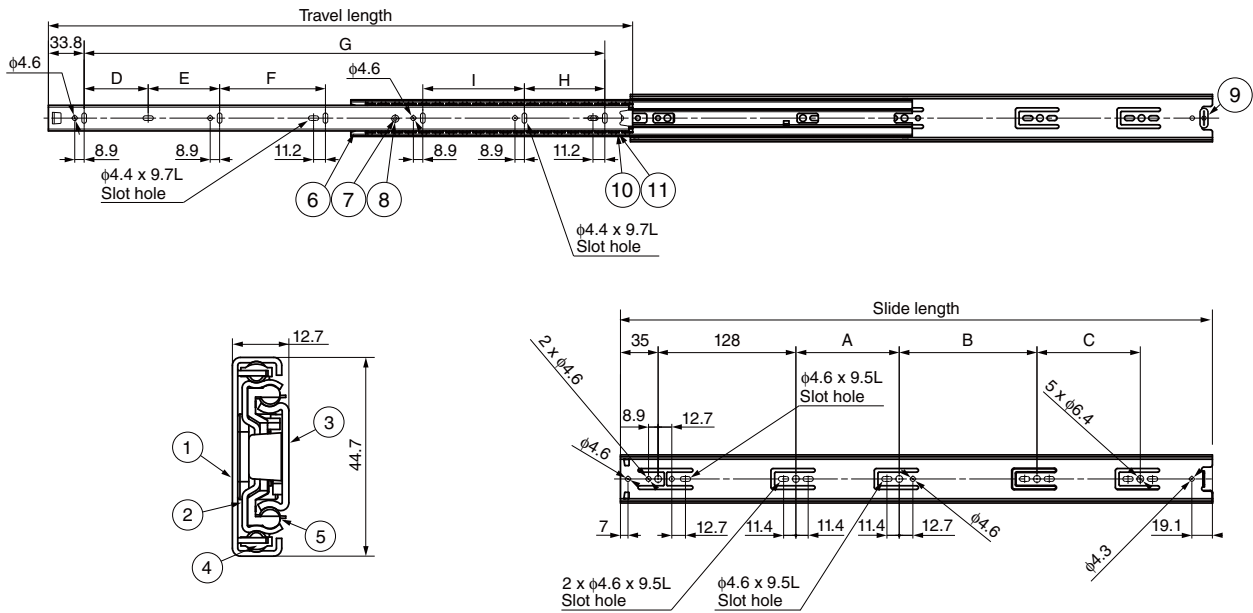


Features

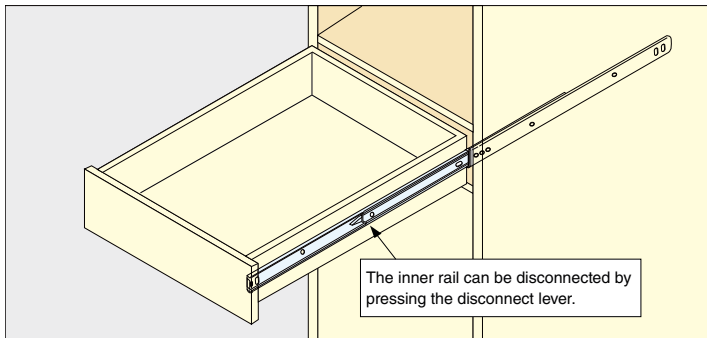
- Full extension.
- Front disconnect.
- Positive stop.
- Hold-in detent.
- Non-handed.

Recommended Screws

M4 or #8 Binding, or Pan head screws



Installation

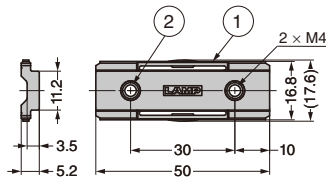


No.	Part Name	Material
①	Outer Member	Stainless Steel (SUS304)
②	Middle Member	
③	Inner Member	Polypropylene
④	Retainer	
⑤	Ball Case	Stainless Steel (SUS304)
⑥	Stopper (Guide)	Nylon 6
⑦	Disconnecter	Nylon 66
⑧	Rivet	Stainless Steel (SUS304)
⑨	Stopper	Urethane
⑩	Balls	Stainless Steel (SUS304)
⑪	Grease	H1 Grade

CAD	Item Code	Item Name	Slide Length	Travel Length	A	B	C	D	E	F	G	H	I	Load Capacity N/pair	Load Capacity kgf/pair	Weight (g)	Box (pair)
2D/3D	190-043-692	ESR-DC4513-8	200	200	-	-	-	-	-	-	142	-	-	529	54	447	10
2D/3D	190-035-153	ESR-DC4513-10	250	250	-	-	-	-	-	-	192	-	-	510	52	603	
2D/3D	190-035-154	ESR-DC4513-12	300	300	-	-	-	-	-	-	242	-	-	490	50	754	
2D/3D	190-035-155	ESR-DC4513-14	350	350	-	-	-	-	-	-	292	-	-	480	49	919	
2D/3D	190-035-156	ESR-DC4513-16	400	400	-	96	-	-	-	-	342	-	-	461	47	1064	
2D/3D	190-035-157	ESR-DC4513-18	450	450	-	128	-	-	-	-	392	72	-	451	46	1228	
2D/3D	190-035-158	ESR-DC4513-20	500	500	96	192	-	60.5	-	-	442	122	-	431	44	1373	
2D/3D	190-035-159	ESR-DC4513-22	550	550	96	-	96	-	67.5	-	492	76	96	421	43	1528	
2D/3D	190-035-160	ESR-DC4513-24	600	600	128	-	128	-	-	96	542	126	-	412	42	1687	
2D/3D	190-035-161	ESR-DC4513-26	650	650	128	-	192	-	-	96	592	48	128	402	41	1854	
2D/3D	190-035-162	ESR-DC4513-28	700	700	128	-	-	-	-	-	642	98	-	392	40	2020	

MINI GUIDE BLOCK (PRELOAD TYPE)

MR-20CNB



Features

- Preload type which minimises rattling.
- Made from special polyethylene resin with excellent sliding properties, eliminating the need for grease or oil.
- The special polyethylene resin has a high chemical resistance, providing for reliable usage with a wide range of chemicals.
- UL94 HB grade flame resistance.
- The MR-20CNB is designed only for use with the MRS20 Mini Guide Rail.

Remarks

This block is not designed to secure moving objects. Never use the Mini Guide Rail in a vertical or slanted position, as this is dangerous and may cause moving objects to slide or fall.

Operating force to the guide block changes depending on the temperature.

Specification

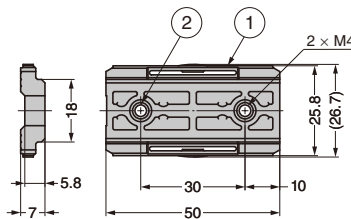
Temperature: 0°C-40°C

CAD	Item Code	Item Name	Weight (g)	Compatible Rail	Box (pcs)	Carton (pcs)
2020	190-037-638	MR-20CNB	5	MRS20	50	1,000

No.	Material	Finish/Colour
①	Special Polyethylene	High Sliding Grade/Grey
②	Stainless Steel (SUS304)	Plain

MINI GUIDE BLOCK (PRELOAD TYPE)

MR-30CNB



Specification

Temperature: 0°C-40°C

No.	Material	Finish/Colour
①	Special Polyethylene	High Sliding Grade/Grey
②	Stainless Steel (SUS304)	Plain

CAD	Item Code	Item Name	Weight (g)	Compatible Rail	Box (pcs)	Carton (pcs)
2020	190-037-639	MR-30CNB	7	MRS30	50	1,000

Features

- Preload type which minimises rattling.
- Made from special polyethylene resin with excellent sliding properties, eliminating the need for grease or oil.
- The special polyethylene resin has a high chemical resistance, providing for reliable usage with a wide range of chemicals.
- UL94 HB grade flame resistance.
- The MR-30CNB is designed only for use with the MRS30 Mini Guide Rail.

Remarks

This block is not designed to secure moving objects. Never use the Mini Guide Rail in a vertical or slanted position, as this is dangerous and may cause moving objects to slide or fall.

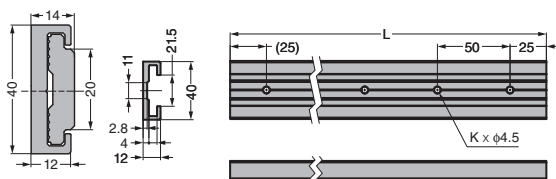
Operating force to the guide block changes depending on the temperature.

MINI GUIDE RAIL

MRS40



Combined Specifications



Sample combination: MR-40CS

*Same specifications apply to MR-40CNB preload type

Features

- Made from a lightweight, durable aluminium alloy.
- Anodised for excellent corrosion resistance.
- Recyclable.

Remarks

The installation holes and the edges of the sides are not anodized.

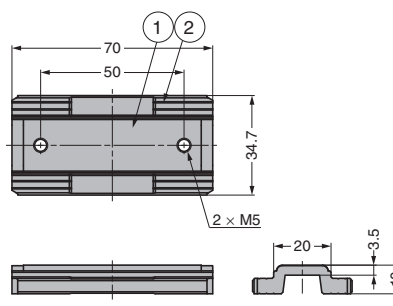
Recommended Screw

Size M4 hex socket button bolts or size M4 hex socket low head bolts, size M4 cross-recessed binding screws

CAD	Item Code	Item Name	Rail Length (L)	Number of Holes (K)	Material	Finish	Weight (g)	Compatible Carriage	Box (pcs)
2D3D	190-037-686	MRS40-400	400	8	Aluminium Alloy	Silver Anodising	236 per rail	MR-40CS,	50
2D3D	190-037-687	MRS40-800	800	16			472 per rail		MR-40CNB
2D3D	190-043-711	MRS40-1200	1200	24			708 per rail	15	
2D3D	190-037-688	MRS40-2000	2000	40			1180 per rail	10	

MINI GUIDE BLOCK

MR-40CS



Features

- Made from special polyethylene resin with excellent sliding properties, eliminating the need for grease or oil.
- The special polyethylene resin has a high chemical resistance, providing for reliable usage with a wide range of chemicals.
- UL94 HB grade flame resistance.
- The MR-40CS is designed only for use with the MRS40 Mini Guide Rail.

Specification

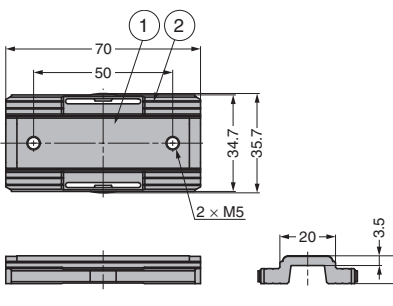
Temperature: 0°C-40°C

CAD	Item Code	Item Name	Weight (g)	Compatible Rail	Box (pcs)	Carton (pcs)
2D3D	190-041-092	MR-40CS	41	MRS40	25	250

No.	Material	Finish/Colour
①	Special Polyethylene	High Sliding Grade/Grey
②	Stainless Steel (SUS304)	Gloss Barrel Polished

MINI GUIDE BLOCK (PRELOAD TYPE)

MR-40CNB



Features

- Preload type which minimises rattling.
- Made from special polyethylene resin with excellent sliding properties, eliminating the need for grease or oil.
- The special polyethylene resin has a high chemical resistance, providing for reliable usage with a wide range of chemicals.
- UL94 HB grade flame resistance.
- The MR-40CNB is designed only for use with the MRS40 Mini Guide Rail.

Remarks

This block is not designed to secure moving objects. Never use the Mini Guide Rail in a vertical or slanted position, as this is dangerous and may cause moving objects to slide or fall. Operating force to the guide block changes depending on the temperature.

Specification

Temperature: 0°C-40°C

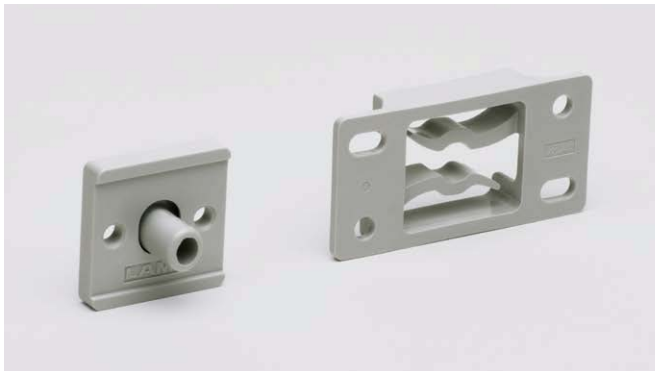
No.	Material	Finish/Colour
①	Special Polyethylene	High Sliding Grade/Grey
②	Stainless Steel (SUS304)	Gloss Barrel Polished

CAD	Item Code	Item Name	Weight (g)	Compatible Rail	Box (pcs)	Carton (pcs)
2D3D	190-041-093	MR-40CNB	40	MRS40	25	250

TWO-WAY CATCH FOR SLIDES



JC-30TW



Features

- Holds a slide in position from both directions.
- Retaining force can be adjusted by rotating the strike.
- Designed to be used with a two-way travel slide, holding it in the center.
- Can be used with slides between 19 and 21 mm in thickness.

Applications

- A two-way travel slide to hold in the center.
- A one-way travel slide to hold in open or closed position.
- A one-way travel slide to hold in the middle.

Remarks

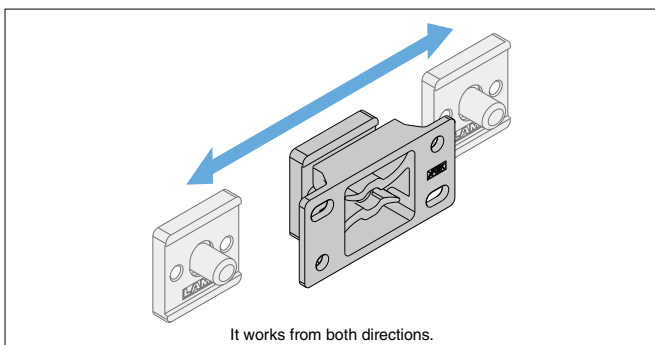
- Should be used with slides.
- It is recommended to use one per slide.
- Retaining force may vary. Please check actual performance with an actual product.

Parts Included

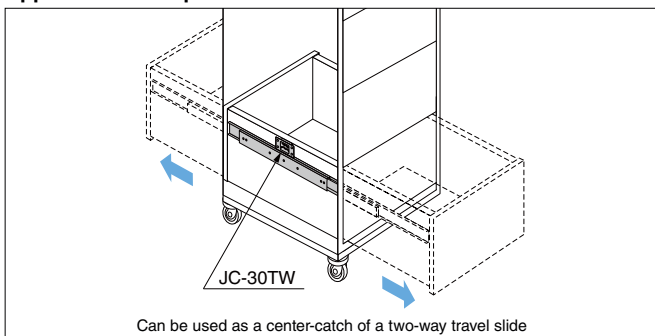
- Truss head tapping tapping screw 4 × 16

Recommended Screw

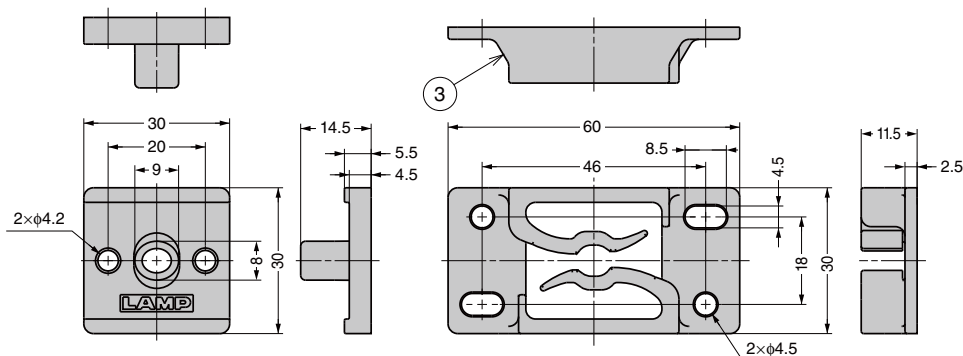
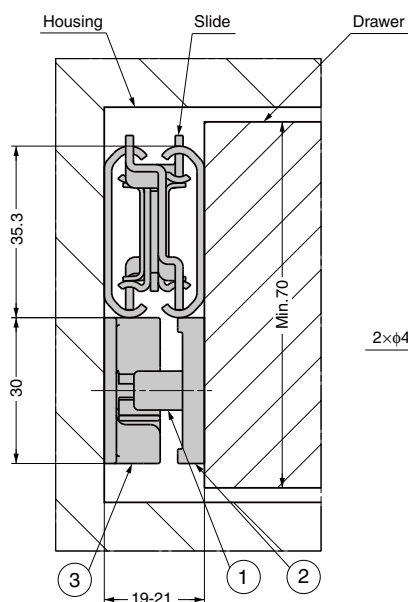
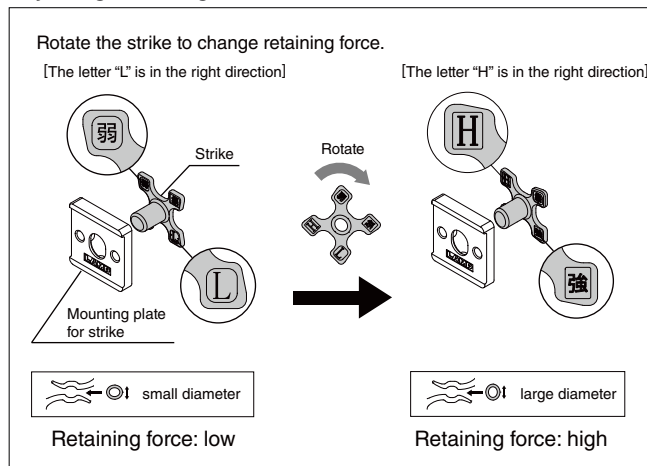
- M4 binding head screw, M4 truss head screw



Application Example



Adjusting Retaining Force

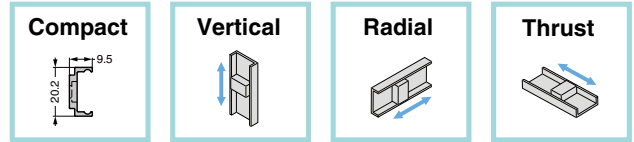


Strike and mounting plate for strike
*Setting of retaining force: low

No.	Part Name	Material	Finish / Colour
①	Strike	Polyamide (PA)	Grey
②	Mounting plate for strike	POM	Grey
③	Strike plate	POM	Grey

CAD	Item Code	Item Name	Push-in Force N		Push-in Force kgf		Pulling Force N		Pulling Force kgf		Weight (g)	Box (pcs)	Carton (pcs)
			Low	High	Low	High	Low	High	Low	High			
2030	140-041-094	JC-30TW	18.5	27.9	1.9	2.8	32.6	65.9	3.3	6.7	12.4	30	300

MULTI-ROLLER LINEAR SLIDE SYSTEM **MLG** Mini Type



● Allows for smooth movement with the unique mechanism called "multi-roller".

[Application]

● Medical equipment, food machine, amusement machine, analytical instruments.

[Recommended Bolt]

● Hexagon socket bolt M4 (for the rail)

[Remarks]

- Please use with stoppers.
- The finish of the mounting holes and the rail edge is plain.

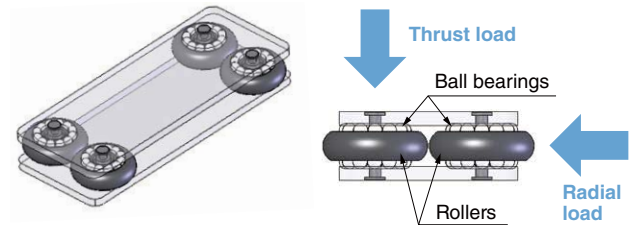
[Parts Included]

● #0-1 pan head screw M2.6 × 4 (for the mounting plate)

[Recommended Screw]

- Hexagon socket bolt M4 (for the rail)
- Screw M2.6 × 4 (Max. length: sheet thickness + 4 mm)
- Screw M4 (for the plate)

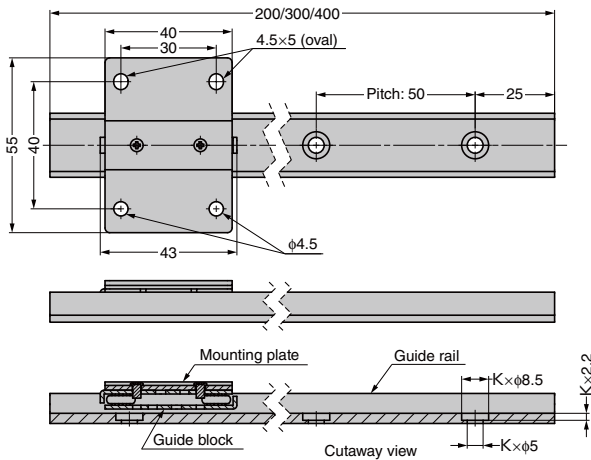
[The Unique Mechanism]



The multi-roller mechanism makes it possible to have smooth movements even with loads applied in radial or thrust directions.

[Combination Drawings]

The guide rail, guide block, and mounting plate are used.



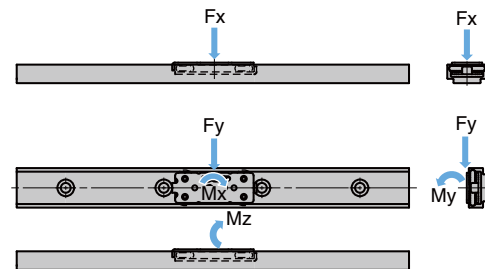
[Rated Load Reference Values] The rated load refers to the load limit .

- Max. load = Static rated load × Static safety coefficient
- Operating load = Max. load × Dynamic safety coefficient
- Max. moment = Static rated moment × Static safety coefficient
- Operating moment = Max. moment × Static safety coefficient

Use Conditions	Static Safety Coefficient		Dynamic Safety Coefficient	
	N	kgf	N	kgf
Low movement frequency with gentle movement	0.4-0.5	0.9-1.0	0.4-0.5	0.9-1.0
High movement frequency with smooth movement	0.3-0.4	0.6-0.8	0.3-0.4	0.6-0.8
High movement frequency with vibration or impact	0.2-0.3	0.3-0.5	0.2-0.3	0.3-0.5

Item Name	Horizontal Static Rated Load Fx		Vertical Static Rated Load Fy	
	N	kgf	N	kgf
MLG-20C	40	4.0	40	4.0

Item Name	Vertical Static Rated Moment Mx		Horizontal Static Rated Moment My		Horizontal Static Rated Moment Mz	
	N·m	kgf·cm	N·m	kgf·cm	N·m	kgf·cm
MLG-20C	1.2	12.2	0.4	4.0	0.8	8.1



The calculation formula above is for reference purpose only. Please confirm with the actual item before use.

ALUMINIUM DOOR HANDLE SRH Antibacterial Type

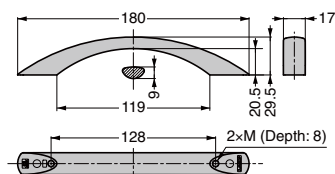
ANTIBACTERIAL



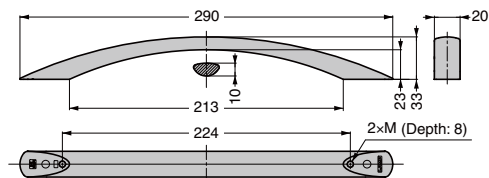
- Sleek handle with flowing curve design.
- Designed to protrude only a small amount.
- Has anti-bacterial coating.

[Applications]

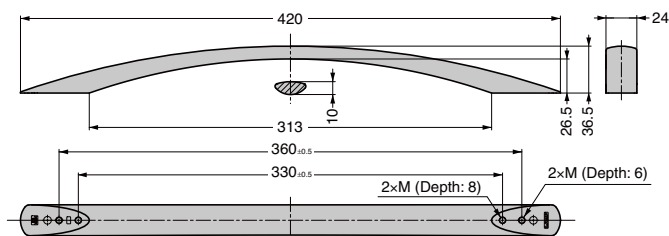
- Medical and diagnostic equipment.



SRH-128



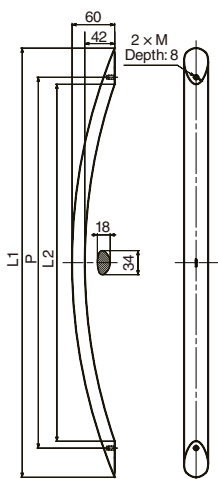
SRH-224



SRH-330

RoHS	CAD	Item Code	Item Name	Material	Finish/Colour	M	Load Capacity		Weight (g)	Box (pcs)	Carton (pcs)
							N	kgf			
●	●	100-044-288	SRH-128SL-M4	Aluminium Alloy (ADC)	Silver Enamel Finish	4	500	51	68	10	80
●	●	100-044-289	SRH-128SL-M5		5	10				80	
●	●	100-044-290	SRH-128BL-M4		Matt Black Enamel Finish	4				10	80
●	●	100-044-291	SRH-128BL-M5		5	10				80	
●	●	100-044-292	SRH-224SL-M4		Silver Enamel Finish	4				130	10
●	●	100-044-293	SRH-224SL-M5		5	10	80				
●	●	100-044-294	SRH-224BL-M4		Matt Black Enamel Finish	4	10	80			
●	●	100-044-295	SRH-224BL-M5		5	10	80				
●	●	100-044-296	SRH-330SL-M4		Silver Enamel Finish	4	400	41	233		10
●	●	100-044-297	SRH-330SL-M5		5	10				40	
●	●	100-044-298	SRH-330BL-M4		Matt Black Enamel Finish	4				10	40
●	●	100-044-299	SRH-330BL-M5		5	10				40	

ALUMINIUM DOOR HANDLE ASH



[Remarks]

- Designed for single-sided mount. (Not available with double-sided mount)

[Recommended Screw]

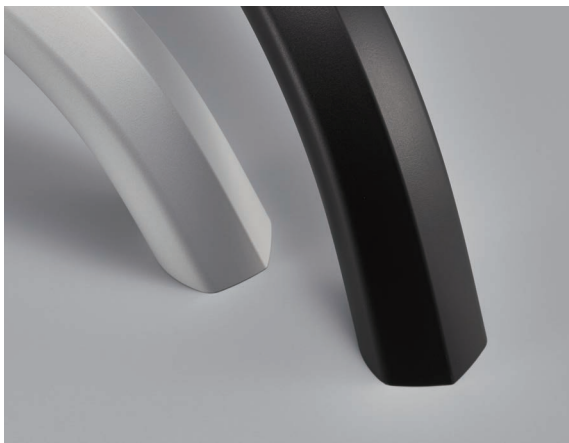
- M6 screw, M8 screw

[3 Finishes]



RoHS	CAD	Item Code	Item Name	Material	Finish/Colour	L ₁	L ₂	P	M	Load Capacity		Weight (g)	Box (psc)				
										N	kgf						
●	●	100-042-506	ASH-400SL	Aluminium Alloy	Satin and Silver/Anodised	391.9	323	335	M6	500	51	482	10				
●	●	100-042-507	ASH-400BL		Satin and Black/Anodised								10				
●	●	100-042-508	ASH-400ST		Satin and Stainless Steel/Anodised								10				
●	●	100-042-509	ASH-600SL		Satin and Silver/Anodised	604	502	522					M6	500	51	725	10
●	●	100-042-510	ASH-600BL		Satin and Black/Anodised												10
●	●	100-042-511	ASH-600ST		Satin and Stainless Steel/Anodised												10
●	●	100-042-512	ASH-800SL		Satin and Silver/Anodised	822.7	686	710	M8	500	51	978	5				
●	●	100-042-513	ASH-800BL		Satin and Black/Anodised								5				
●	●	100-042-514	ASH-800ST		Satin and Stainless Steel/Anodised								5				

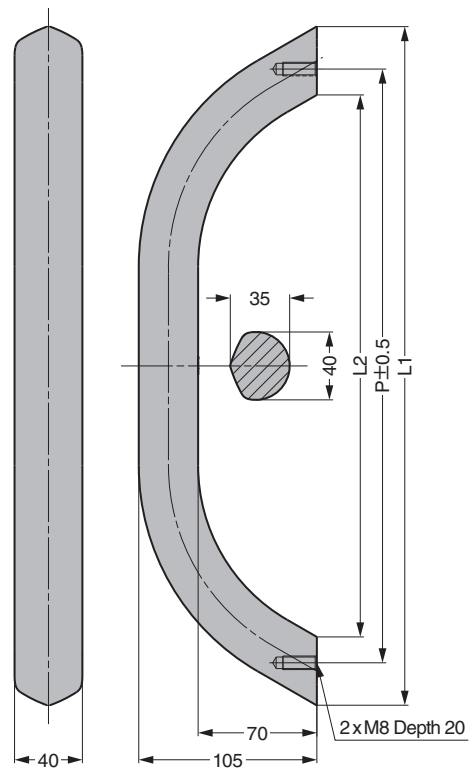
MACHINERY HANDLE MMH



- Cross-section is thicker than the MSH **1**, which makes this handle suitable for use in large machine tools.
- Ideal for inset sliding doors. The handle is designed to be higher than common handles, which prevents hands from accidentally hitting the doorframe when sliding.
- Back side of the handle is large and round, which prevents hands from hurting even when grasping tightly.
- Harmonious design. The handle has a centerline helping it harmonise with machine tools with chamfered edges.

[Remarks]

- Load capacity represents the strength of the pull itself. Actual load capacity may vary depending on wall and cabinet materials. Please install the pull at places with sufficient strength or in places that are reinforced.
- Surface colour of installation side may discolour. This does not affect the performance.



RoHS	CAD	Item Code	Item Name	Material	Finish	L ₁	L ₂	P	Load Capacity		Weight (g)	Box (pc)
									N	kgf		
●	●	100-043-781	MMH-350SL	Aluminium Alloy	Matte Silver/Anodised	400	319.5	350	1000	102	1250	1
●	●	100-043-782	MMH-350BL		Matte Black/Anodised							1
●	●	100-043-783	MMH-550SL		Matte Silver/Anodised	600	519.5	550				1
●	●	100-043-784	MMH-550BL		Matte Black/Anodised							1
●	●	100-043-785	MMH-750SL		Matte Silver/Anodised	800	719.5	750				1
●	●	100-043-786	MMH-750BL		Matte Black/Anodised							1

Refer to **1** : No.280 P.466

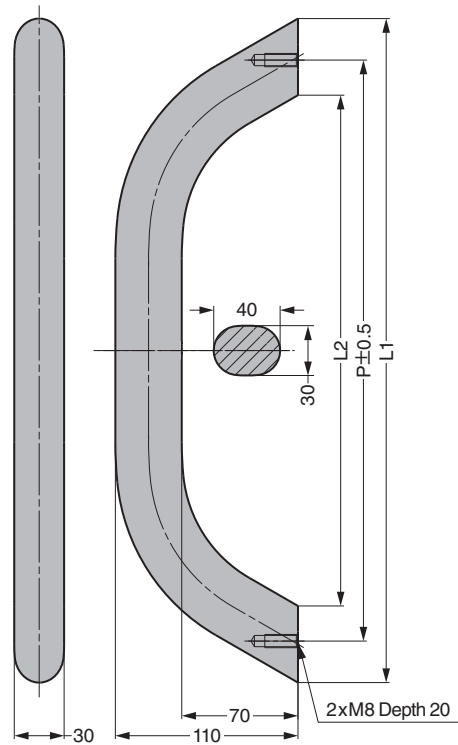
MACHINERY HANDLE MGH



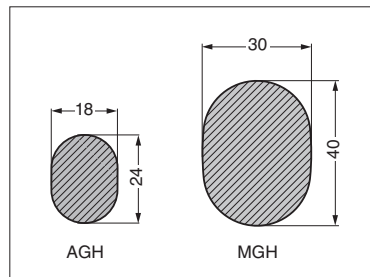
- Cross-section is thicker than the AGH **1**, which makes this handle suitable for use in large machine tools.
- Ideal for inset sliding doors. The handle is designed to be higher than common handles, which prevents hands from accidentally hitting the doorframe when sliding.
- Back side of the handle is large and round, which prevents hands from hurting even when grasping tightly.
- Easy-to-use design. The ellipse cross-section allows it to comfortably fit a human hand.

[Remarks]

- Load capacity represents the strength of the pull itself. Actual load capacity may vary depending on wall and cabinet materials. Please install the pull at places with sufficient strength or in places that are reinforced.
- Surface colour of installation side may discolour. This does not affect the performance.



[Cross-section]



Can be used with the AGH **1** for design harmonisation.

RoHS	CAD	Item Code	Item Name	Material	Finish	L ₁	L ₂	P	Load Capacity		Weight (g)	Box (pc)
									N	kgf		
●	●	100-043-775	MGH-350SL	Aluminium Alloy	Matte Silver/Anodised	400	308	350	1000	102	1170	1
●	●	100-043-776	MGH-350BL		Matte Black/Anodised							1
●	●	100-043-777	MGH-550SL		Matte Silver/Anodised	600	508	550			1710	1
●	●	100-043-778	MGH-550BL		Matte Black/Anodised							1
●	●	100-043-779	MGH-750SL		Matte Silver/Anodised	800	708	750			2250	1
●	●	100-043-780	MGH-750BL		Matte Black/Anodised							1

Refer to **1** : No.280 P.467

STAINLESS STEEL DOOR HANDLE SLH

SUS

 Toughness & Beauty
HANDLE


SLH-3240SH



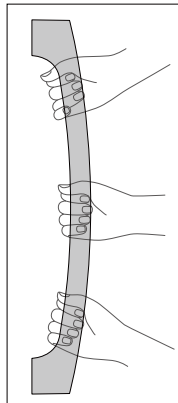
SLH-3260SH



SLH-3280SH

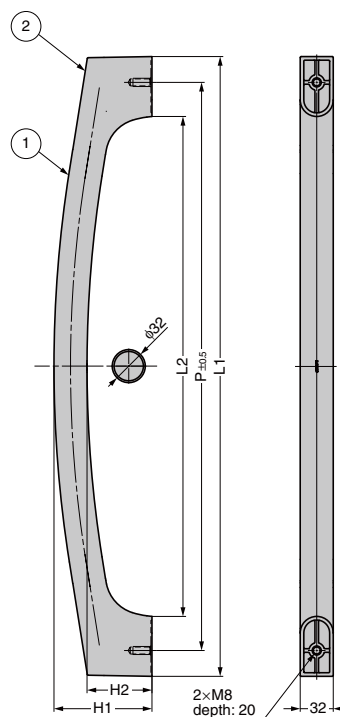
- All parts are made of stainless steel for high corrosion resistance.
- Has smooth streamlined shape and premium satin finish.
- Ergonomically designed. It is easy to hold any part of the handle.

[Ergonomic Design]



Easy to hold any part of the handle.

[Premium Satin Finish]



No.	Part Name	Material
①	Pipe	Stainless Steel (SUS304)
②	Bracket	Stainless Steel (SCS13)

Re/HS	CAD	Item Code	Item Name	Finish	L ₁	L ₂	P	H ₁	H ₂	Load Capacity N	Load Capacity kgf	Weight (g)	Box (pc)
●	●	100-045-419	SLH-3240SH	Satin	400	284	350	87	55	600	61	2030	1
●	●	100-045-420	SLH-3260SH		600	484	550	95	63			2290	1
●	●	100-045-421	SLH-3280SH		800	684	750	102	70			2560	1

STAINLESS STEEL RECESSED PULL HH-KPR150-SH SEMI Compliant

SUS



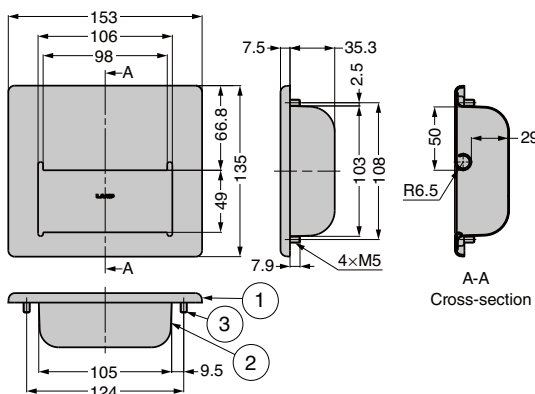
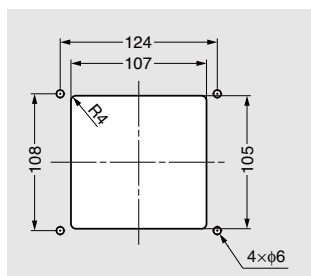
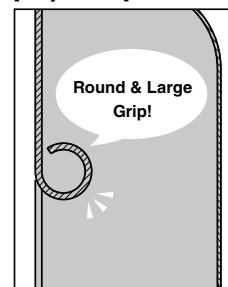
- Compliant with SEMI standard. (SEMI S8-0218 section 6.8)
- The bolts are designed to swing for easy installation

[Application]

- Semiconductor and liquid crystal manufacturing equipment

[Parts Included]

- Hexagon head bolts M5 (stainless steel)

[Cut Out Dimensions]**[Easy to Hold]**

RoHS	CAD	Item Code	Item Name	Load Capacity N	Load Capacity kgf	Weight (g)	Box (pcs)	Carton (pcs)
●	●	100-044-558	HH-KPR150-SH	400	41	443	5	50

No.	Part Name	Material	Finish
①	Plate	Stainless Steel (SUS304)	Satin
②	Cup		
③	Hexagon Head Bolt M5x10	Stainless Steel	Plain

RECESSED PULL HH-DN (Previous Name: 5103)



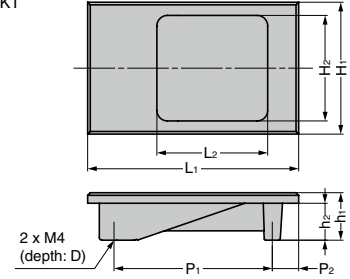
- Small flush pull handle made of metal.
- A new smaller size type is added to the lineup.
The new HH-DN-29WB perfectly fits one finger.
- Can also be used on sheet metal when using with HH-DN-BKT bracket.

[Parts Included]

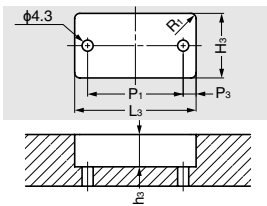
- Countersunk truss head screw M4 x 12 (for wood installation)

[Optional Parts]

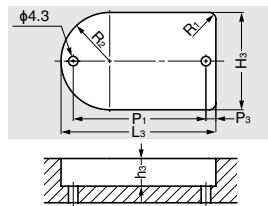
- Bracket for Sheet Metal HH-DN-BKT



[Installation on Wood]

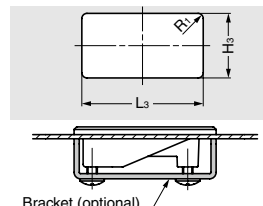


HH-DN-29WB / HH-DN-40WB

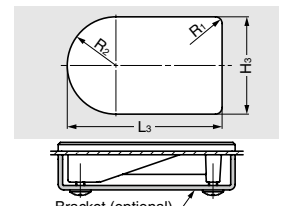


HH-DN-50WB

[Installation on Sheet Metal]



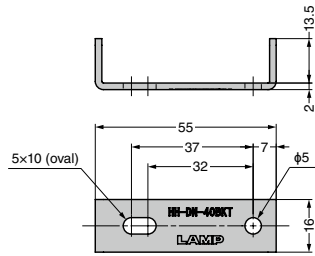
HH-DN-29WB / HH-DN-40WB



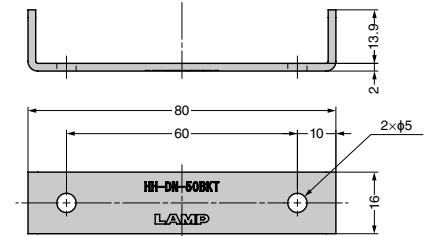
HH-DN-50WB

RoHS	CAD	Item Code	Item Name	Old Name	Material	Finish	L ₁	L ₂	H ₁	H ₂	h ₁	h ₂	P ₁	P ₂	D	L ₃	H ₃	P ₃	R ₁	R ₂	h ₃	Weight (g)	Box (pcs)	Carton (pcs)	
●	●	100-049-509	HH-DN-29WB	-	Zinc Alloy (ZDC)	White	55	32	29	20	15.5	12.5	37	11	8.5	47	25	4	2	-	12.5	50	40	160	
●	●	100-014-085	HH-DN-40WB	5103-55		Bronze	80	42	40	31.5	40	31.5	15.5	32	16	7	46	36	10	2	-	12.5	35	40	160
●	●	100-014-084	HH-DN-50WB	5103-80			80	42	50	40	18	14	60	10	5	70	44	4.5	3	22	14	85	20	80	

Bracket for Sheet Metal HH-DN-BKT



HH-DN-40BKT



HH-DN-50BKT

[Parts Included]

- Cross-recessed truss head screw M4 x 10

RoHS	CAD	Item Code	Item Name	Material	Finish	Available Pull	Avialable Thickness	Weight (g)	Box (pcs)	Carton (pcs)
●	●	100-049-510	HH-DN-40BKT	Steel	Coloured Chromate (trivalent)	HH-DN-29WB / HH-DN-40WB	0.8 - 2.3	19	40	160
●	●	100-049-511	HH-DN-50BKT			HH-DN-50WB	0.8 - 3.2	26	40	160

HOOK

TEST METHOD 4 SUS Y 4HJU-40M

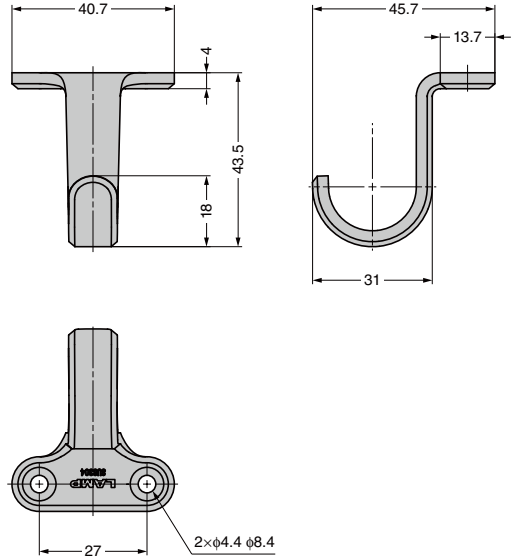


Feature

- Chamfered edge provides safety and smart design.

Parts Included

- Countersunk head tapping screw 4x25 (Stainless Steel)



RoHS	CAD	Item Code	Item Name	Material	Finish / Colour	Load Capacity N	Load Capacity kgf	Weight g	Box	Carton
		110-041-004	4HJU-40M	Stainless Steel (SUS304)	Mirror	150	15.3	42.5	20 pcs	200 pcs

HOOK

TEST METHOD 4 SUS Y 5HJU-60M

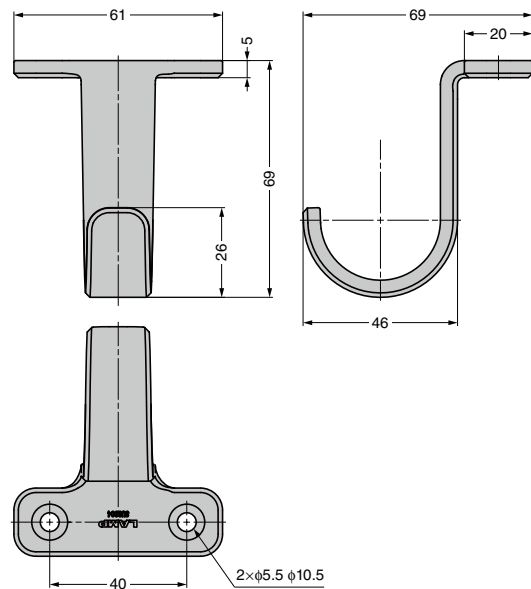


Feature

- Chamfered edge provides safety and smart design.

Parts Included

- Countersunk head tapping screw 4x25 (Stainless Steel)



RoHS	CAD	Item Code	Item Name	Material	Finish / Colour	Load Capacity N	Load Capacity kgf	Weight g	Box	Carton
		110-041-005	5HJU-60M	Stainless Steel (SUS304)	Mirror	200	20.4	130	20 pcs	200 pcs

RUBBER HOOK TWIN TYPE



PXB-GR05-212

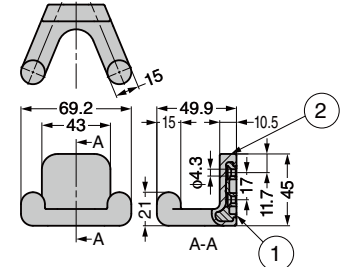


Round-shaped and cute, this hook is covered by soft silicon rubber. It can be used everywhere thanks to its colours that enlight without being too bright.

- After the installation the silicon cover is difficult to remove thanks to its safety-focused internal shape.
- The good load capacity is guaranteed by the stainless steel base.
- MOQ order for custom made colours is only 300 pcs.

Parts Included

- Stainless steel countersunk tapping screw 4x32



Variations



No.	Part Name	Material	Finish
①	Base	Stainless Steel (SCS13)	Plain
②	Cover	Silicon Rubber (Q)	

*SCS13 is the equivalent of SUS304.

[Set] Hook base + Cover

RoHS	CAD	Item Code	Item Name	Colour	Load Capacity N	Load Capacity kgf	Weight (g)
✓	3D	110-037-037	PXB-GR05-212-BRD	Bright Red	100	10.2	90.5
✓	3D	110-037-038	PXB-GR05-212-BYE	Bright Yellow			
✓	3D	110-037-039	PXB-GR05-212-BGN	Bright Green			
✓	3D	110-037-040	PXB-GR05-212-BBU	Bright Blue			
✓	3D	110-037-041	PXB-GR05-212-WT	White			
✓	3D	110-041-367	PXB-GR05-212-BL	Black			

*The load capacity is intended for each arm.

[Cover Only] *In case you need to replace only the cover

RoHS	CAD	Item Code	Item Name	Colour
✓	3D	110-037-140	PXB-GR05-212G-BRD	Bright Red
✓	3D	110-037-141	PXB-GR05-212G-BYE	Bright Yellow
✓	3D	110-037-142	PXB-GR05-212G-BGN	Bright Green
✓	3D	110-037-143	PXB-GR05-212G-BBU	Bright Blue
✓	3D	110-037-144	PXB-GR05-212G-WT	White
✓	3D	110-041-370	PXB-GR05-212G-BL	Black

PLASTIC HOOK



HK-CM40

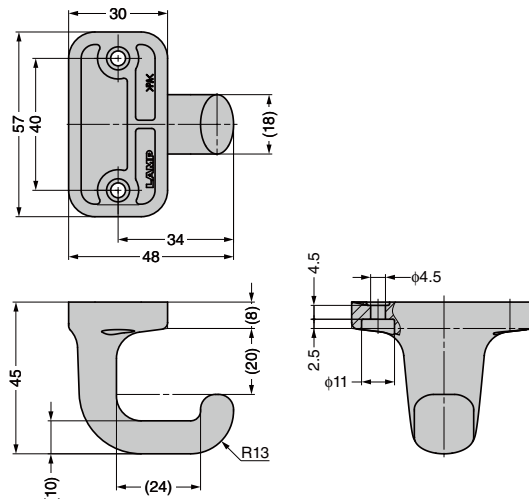


*The colours can be different from the picture, please check the product.

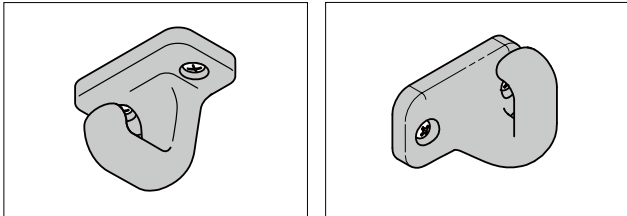
- Plastic hook with a wide colour variation.
- Can be both wall-mounted or ceiling-mounted.

Parts Included

- Pan head tapping screw 4x20



Installation Examples



RoHS	CAD	Item Code	Item Name	Colour	Load Capacity				Weight (g)	Box	Carton
					Side Mount (N)	Side Mount (kgf)	Under/Ceiling Mount (N)	Under/Ceiling Mount (kgf)			
✓	3D	110-036-818	HK-CM40-BL	Black	78	8	78	8	24	6 pcs	60 pcs
✓	3D	110-036-819	HK-CM40-BR	Brown							
✓	3D	110-036-820	HK-CM40-WT	White							
✓	3D	110-036-821	HK-CM40-BU	Blue							
✓	3D	110-036-822	HK-CM40-RD	Red							

RECESSED HOOK **NF-60DF** Soft Close / Surface Mount on Sheet Metal

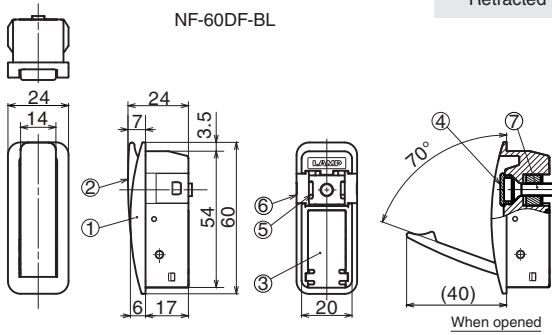
TEST METHOD 18



NF-60DF-BL



Retracted



Feature

- Easy installation and removal. Surface mount type on sheet metal.
- Arm automatically and slowly closes when hooked items are removed.
- Handhold at hook tip allows for easy opening.
- Little projection when hook is retracted.

Applications

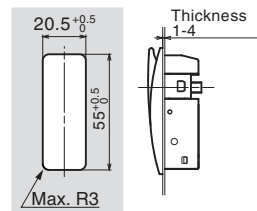
- Cabinet, vehicle, etc.

Remarks

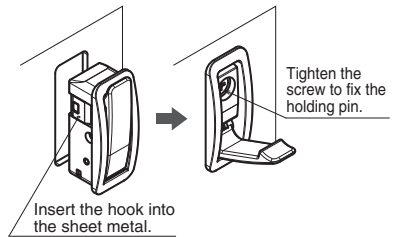
- Please take off the cushion rubber when tighten the screw and put it on again when finished.
- Please do not tighten the screw too much (recommended fastening torque: 3N·m).

Cut Out Dimensions

Sheet Metal



Installation



No.	Part Name	Material	Finish / Colour
①	Body	Aluminium Alloy	Black,
②	Arm	(ADC)	Metallic Silver
③	Cover	POM	Dark Grey
④	Cushion Rubber	CR	Black, Metallic Silver
⑤	Nut	ZDC	Chromate
⑥	Holding Pin		
⑦	Screw	Stainless Steel (SUS304)	Plain

Body

RoHS	CAD	Item Code	Item Name	Colour	Load Capacity N	Load Capacity kgf	Weight (g)	Box	Carton
-	3D	110-037-738	NF-60DF-BL	Black	294	30	54	10 pcs	200 pcs
-	3D	110-037-740	NF-60DF-MSL	Metallic Silver				10 pcs	200 pcs

HOOK (MINI NORDIC RUBBER SERIES) TEST METHOD 19 INSTRUCTION PXB-GN05-101



A design reminiscent of young branches combined with mellow colours, this tasteful design is inspired by the natural spaces of Northern Europe.

Features

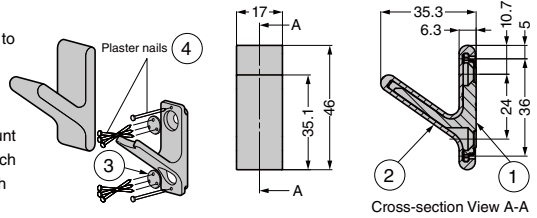
- Can be used on plaster board.
- Orders of over 300 pieces (1 lot) can be requested in special colours.

Parts Included

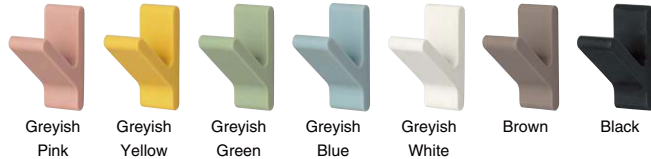
Size 4 x 32 cross-recessed flat head tapping screws, plaster nails, plaster nail fixing parts

Installation Method

Mounts easily to plastic board with plaster nails. Use screws to mount to surfaces such as wood. (Both are included.)



Variations



Set

CAD	Item Code	Item Name	Colour	Load Capacity N	Load Capacity kgf	Weight (g)
	110-034-492	PXB-GN05-101-GPK	Greyish Pink	40	4.1	39
	110-034-493	PXB-GN05-101-GYE	Greyish Yellow			
	110-034-494	PXB-GN05-101-GGN	Greyish Green	20	2	
	110-034-495	PXB-GN05-101-GBU	Greyish Blue			
	110-034-496	PXB-GN05-101-GWT	Greyish White	20	2	
	110-034-497	PXB-GN05-101-BR	Brown			
	110-034-498	PXB-GN05-101-BL	Black			

No.	Part Name	Material	Finish
①	Base	Zinc Alloy (ZDC)	Nickel Plating
②	Cover	Silicone Rubber (Q)	Plain
③	Plaster Nail Fixing Parts	AES Resin	
④	Plaster nails	Stainless Steel	

Cover Only *Order this when replacing only the cover.

CAD	Item Code	Item Name	Colour
	110-037-153	PXB-GN05-101G-GPK	Greyish Pink
	110-037-154	PXB-GN05-101G-GYE	Greyish Yellow
	110-037-155	PXB-GN05-101G-GGN	Greyish Green
	110-037-156	PXB-GN05-101G-GBU	Greyish Blue
	110-037-157	PXB-GN05-101G-GWT	Greyish White
	110-037-158	PXB-GN05-101G-BR	Brown
	110-037-159	PXB-GN05-101G-BL	Black

MAGNETIC HOOK (MINI NORDIC RUBBER SERIES) INSTRUCTION PXB-GN05M-101



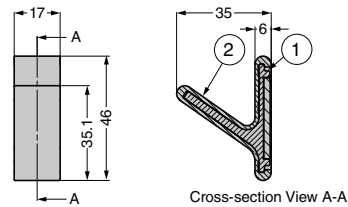
Easy to set and adjust magnet type hook. The Northern European inspired colours add vibrance and life to monotone, dull colored objects like refrigerators and cabinets.

Features

- Orders of over 300 pieces (1 lot) can be requested in special colours.

Remarks

- Do not slide the body while it is attached as this may damage the surface to which it is attached.
- The load capacity may differ depending on the steel surface to which the product is mounted. Please test the product under actual use conditions before placing items.



Variations



Set

CAD	Item Code	Item Name	Colour	Load Capacity N	Load Capacity kgf	Weight (g)
	110-036-556	PXB-GN05M-101-YR	Orange	10	1.1	32
	110-036-555	PXB-GN05M-101-GY	Green Yellow			
	110-036-557	PXB-GN05M-101-NB	Navy Blue			
	110-036-558	PXB-GN05M-101-GWT	Greyish White			
	110-036-559	PXB-GN05M-101-GR	Grey			

No.	Part Name	Material	Finish
①	Base	Zinc Alloy (ZDC), Neodymium	Nickel Plating
②	Cover	Silicone Rubber (Q)	Plain

Cover Only *Order this when replacing only the cover.

CAD	Item Code	Item Name	Colour
	110-037-160	PXB-GN05M-101G-YR	Orange
	110-037-161	PXB-GN05M-101G-GY	Green Yellow
	110-037-162	PXB-GN05M-101G-NB	Navy Blue
	110-037-163	PXB-GN05M-101G-GWT	Greyish White
	110-037-164	PXB-GN05M-101G-GR	Grey

STAINLESS STEEL FRICTION TYPE LARGE HOOK WITH SPHERICAL TIP

TEST METHOD 19

SUS

HK-TS

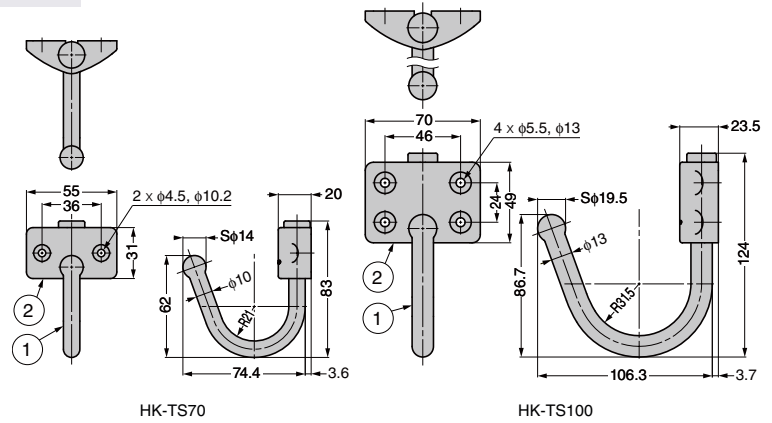
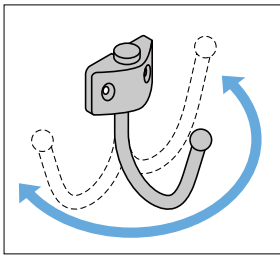


Features

- Hook swivels 180°.
- Friction prevents unintended swivelling caused by vibrations.
- Ball end prevents injury.
- Double-hook type (HK-TT) is also available.

Parts Included

- HK-TS70: Size 4 x 25 cross-recessed truss head tapping screws (stainless steel)
- HK-TS100: Size 5 x 35 cross-recessed truss head tapping screws (stainless steel)



No.	Part Name	Material	Finish
①	Hook	Stainless Steel (SUS304)	Polished
②	Strike	Stainless Steel (SCS13)	

CAD	Item Code	Item Name	Load Capacity N	Load Capacity kgf	Weight (g)
2D/3D	110-041-226	HK-TS70	100	10.2	230
2D/3D	110-041-227	HK-TS100	260	26.5	550

STAINLESS STEEL FRICTION TYPE LARGE HOOK WITH SPHERICAL TIP

TEST METHOD 19

SUS

HK-TT

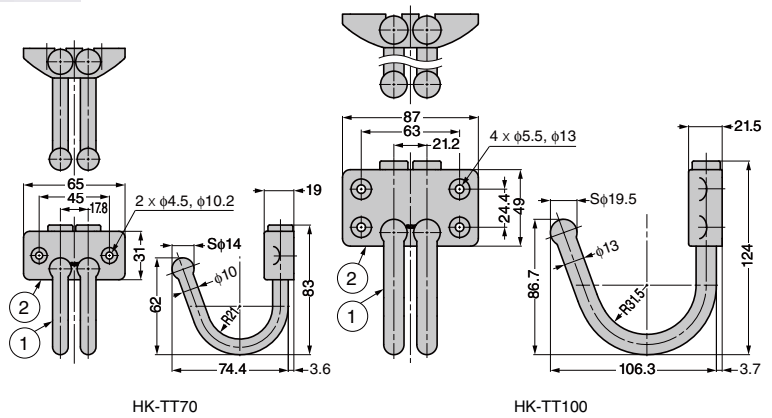
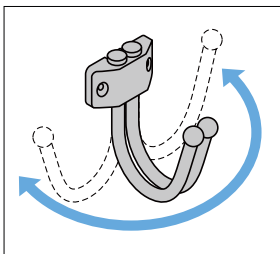


Features

- Hook swivels 180°.
- Friction prevents unintended swivelling caused by vibrations.
- Ball end prevents injury.
- Single-hook type (HK-TS) is also available.

Parts Included

- HK-TT70: Size 4 x 25 cross-recessed truss head tapping screws (stainless steel)
- HK-TT100: Size 5 x 35 cross-recessed truss head tapping screws (stainless steel)



No.	Part Name	Material	Finish
①	Hook	Stainless Steel (SUS304)	Polished
②	Strike	Stainless Steel (SCS13)	

CAD	Item Code	Item Name	Load Capacity N	Load Capacity kgf	Weight (g)
2D/3D	110-041-228	HK-TT70	100	10.2	260
2D/3D	110-041-229	HK-TT100	260	26.5	600

* Load capacity values are for one side only.

STAINLESS STEEL ROTATING BALL HOOK (W/FRICTION)

TEST METHOD 4 SUS

TK-W-45F

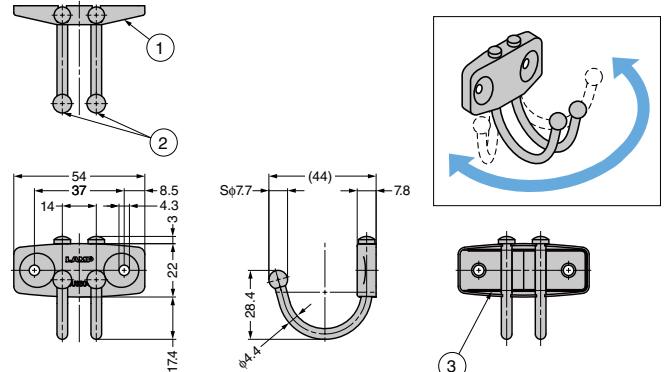


Features

- Friction prevents unintended swivelling caused by vibrations.
- Ball end prevents injury.

Parts Included

Size 4 x 20 cross-recessed round flat head tapping screws (stainless steel)



No.	Part Name	Material	Finish
①	Mounting Plate	Stainless Steel (SUS304)	Barrel Polished
②	Hook Arm		Plain
③	Wire Spring		

CAD	Item Code	Item Name	Material	Finish	Load Capacity N	Load Capacity kgf	Weight (g)	Box (pcs)	Carton (pcs)
2D/3D	110-040-999	TK-W-45F	Stainless Steel (SUS304)	Barrel Polished	80	8.2	34	50	300

* Load capacity values are for one side only.

RESIN FOLDING HOOK (W/SOFT CLOSING FUNCTION)

TEST METHOD 18

NF-47D



Features

- Soft closing function automatically closes the hook gradually after items on hook are removed.
- The tip of the hook has a grip for easy opening.
- Streamlined design with minimum protrusion when the hook is closed.
- Made with flame-retardant grade (UL94V-0 compliant) polycarbonate.
- Also available in special colours. Contact us for details.

Application

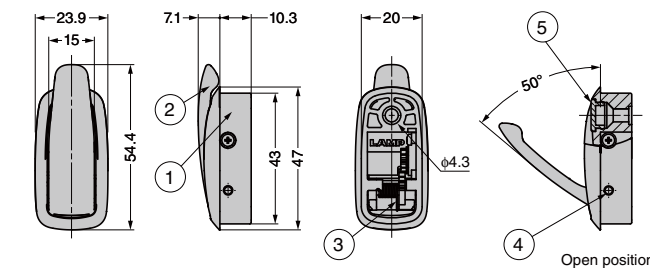
Cabinets, train cars, etc.

Remarks

Attach the cushioning rubber after installation.

Recommended Screw

M4 cross-recessed screw or size 4 countersunk head tapping screw

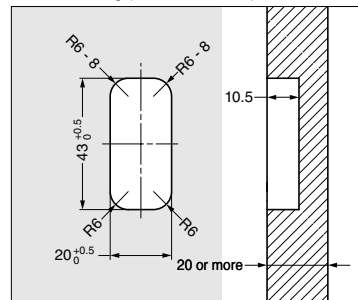


No.	Part Name	Material	Finish
①	Main Body	Polycarbonate (PC)	Partial Blast
②	Arm		Finish
③	Spring	Stainless Steel (SUS304)	Plain
④	Shaft		
⑤	Cushioning Rubber	Chloroprene Rubber (CR)	-

CAD	Item Code	Item Name	Colour	Load Capacity N	Load Capacity kgf	Weight (g)	Box (pcs)	Carton (pcs)
2D/3D	110-041-087	NF-47D-GR	Grey	75	7.6	11	40	360
2D/3D	110-041-088	NF-47D-DGR	Dark Grey				40	360
2D/3D	110-041-089	NF-47D-WT	White				40	360

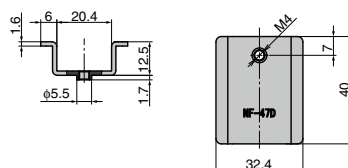
Cut Out Dimensions

Wood Mounting (20 mm or thicker)



BRACKET FOR RECESSED HOOK

NF-47DB



Features

A bracket for attaching the NF-47D recessed hook to a metal sheet.

Parts Included

Size M4 x 16 cross-recessed flat head screws

CAD	Item Code	Item Name	Material	Finish	Weight (g)
2D/3D	110-042-079	NF-47DB	Steel (SPCC)	Coloured Chromate Finish (Trivalent)	25

RECESSED HOOK

TEST METHOD 18

NF-R



Pearl Chrome

Chrome

Matte Black

Application Example



When closed



When open

Features

- The arm section is spring powered and automatically folds back in when no force is exerted on it.
- The product does not protrude when the arm is folded in, creating a neat design and ensuring safety.
- Can also be mounted to sheet metal using the NF-50D or NF-50 bracket (sold separately).
- A square type is also available.

Remarks

- Remove the cushioning rubber before mounting to a wooden surface.

Sold Separately

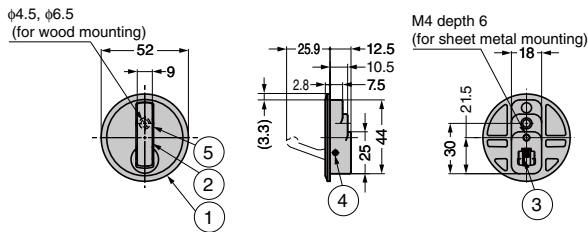
NF-50D bracket, NF-50 bracket (P.129)

Recommended Screw

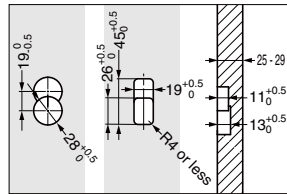
- Wood mounting (thickness 25-29 mm): Size 4 x 15 cross-recessed pan head tapping screws
- Wood mounting (thickness 30 mm or more): Size 4 x 20 cross-recessed pan head tapping screws

No.	Part Name	Material
①	Main Body	Zinc Alloy (ZDC)
②	Arm	
③	Spring	Stainless Steel (SUS304)
④	Knurled Pin	Stainless Steel (SUS303)
⑤	Cushioning Rubber	Chloroprene Rubber (CR)

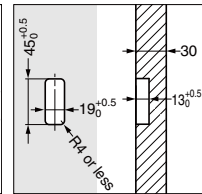
NF-R52



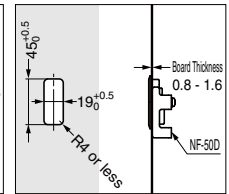
Wood Mounting (thickness 25-29 mm)



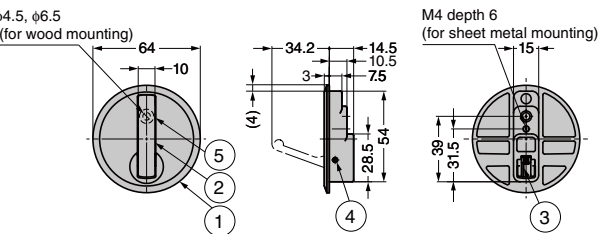
Wood Mounting (thickness 30 mm or more)



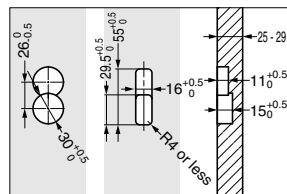
Metal Sheet Mounting



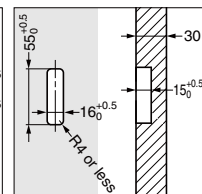
NF-R64



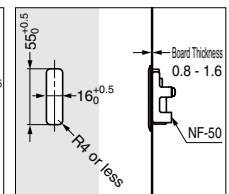
Wood Mounting (thickness 25-29 mm)



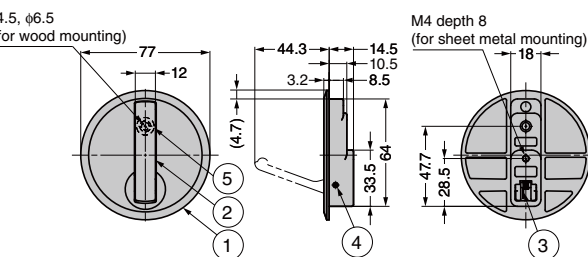
Wood Mounting (thickness 30 mm or more)



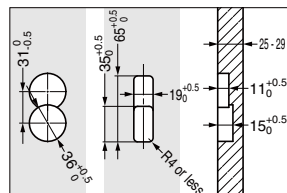
Metal Sheet Mounting



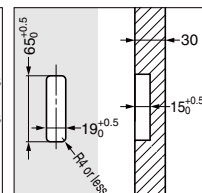
NF-R77



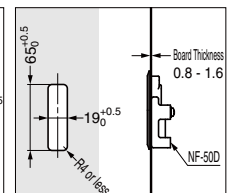
Wood Mounting (thickness 25-29 mm)



Wood Mounting (thickness 30 mm or more)



Metal Sheet Mounting



CAD	Item Code	Item Name	Finish/Colour	Load Capacity N	Load Capacity kgf	Weight (g)	Box (pcs)	Carton (pcs)				
203D	110-041-175	NF-R52-SCR	Pearl Chrome Plating	196	20	70	10	120				
203D	110-041-176	NF-R52-CR	Chrome Plating				10	120				
203D	110-041-177	NF-R52-BL	Baked Enamel Finish/Matte Black				10	120				
203D	110-020-068	NF-R64-SCR	Pearl Chrome Plating			196	20	90	10	120		
203D	110-041-178	NF-R64-CR	Chrome Plating						10	120		
203D	110-041-179	NF-R64-BL	Baked Enamel Finish/Matte Black						10	120		
203D	110-034-954	NF-R64-GP	24K Gold Plating, Clear Coating						10	120		
203D	110-041-180	NF-R77-SCR	Pearl Chrome Plating						130	20	10	120
203D	110-041-181	NF-R77-CR	Chrome Plating								10	120
203D	110-041-182	NF-R77-BL	Baked Enamel Finish/Matte Black	10	120							

RECESSED HOOK

TEST METHOD 18

NF-K



Features

- The arm section is spring powered and automatically folds back in when no force is exerted on it.
- The product does not protrude when the arm is folded in, creating a neat design and ensuring safety.
- Can also be mounted to sheet metal using the NF-50D or NF-50 bracket (sold separately).
- A round type is also available.

Remarks

Remove the cushioning rubber before mounting to a wooden surface.

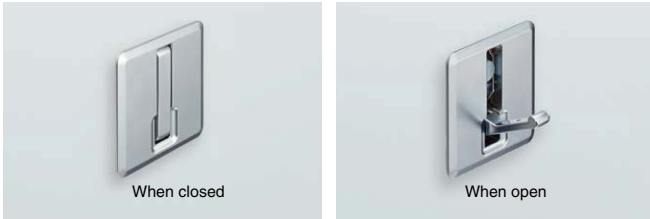
Sold Separately

NF-50D bracket, NF-50 bracket (P.129)

Recommended Screw

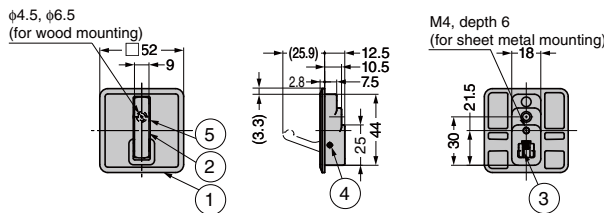
- Wood mounting (thickness 25-29 mm): Size 4 x 15 cross-recessed pan head tapping screws
- Wood mounting (thickness 30 mm or more): Size 4 x 20 cross-recessed pan head tapping screws

Application Example

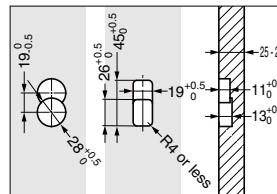


No.	Part Name	Material
①	Main Body	Zinc Alloy (ZDC)
②	Arm	
③	Spring	Stainless Steel (SUS304)
④	Knurled Pin	Stainless Steel (SUS303)
⑤	Cushioning Rubber	Chloroprene Rubber (CR)

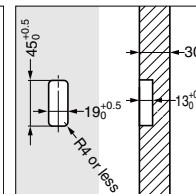
NF-K52



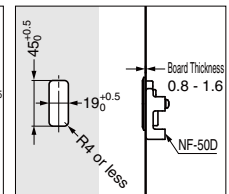
Wood Mounting (thickness 25-29 mm)



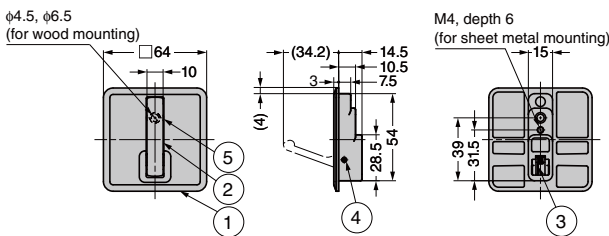
Wood Mounting (thickness 30 mm or more)



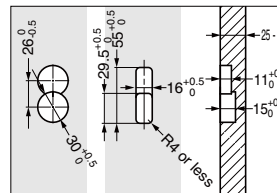
Metal Sheet Mounting



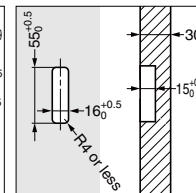
NF-K64



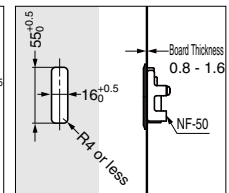
Wood Mounting (thickness 25-29 mm)



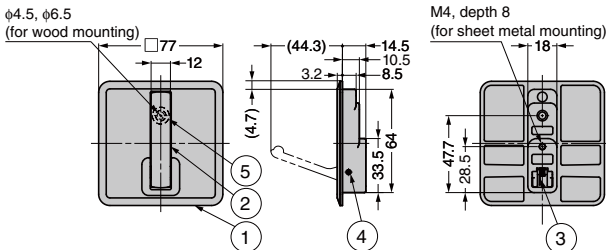
Wood Mounting (thickness 30 mm or more)



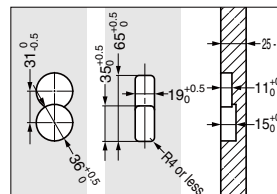
Metal Sheet Mounting



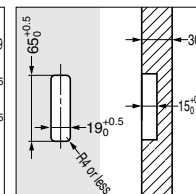
NF-K77



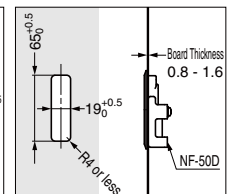
Wood Mounting (thickness 25-29 mm)



Wood Mounting (thickness 30 mm or more)

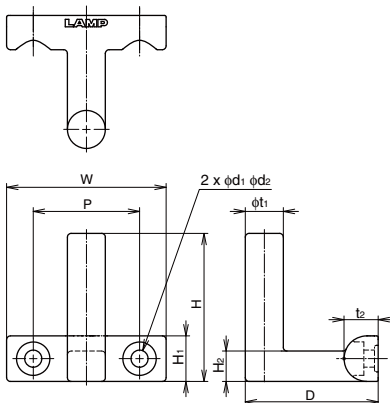


Metal Sheet Mounting



CAD	Item Code	Item Name	Finish/Colour	Load Capacity N	Load Capacity kgf	Weight (g)	Box (pcs)	Carton (pcs)		
203D	110-041-183	NF-K52-SCR	Pearl Chrome Plating	196	20	77	10	120		
203D	110-041-184	NF-K52-CR	Chrome Plating				10	120		
203D	110-041-185	NF-K52-BL	Baked Enamel Finish/Matte Black				10	120		
203D	110-041-186	NF-K64-SCR	Pearl Chrome Plating			145	20	95	10	120
203D	110-041-187	NF-K64-CR	Chrome Plating						10	120
203D	110-041-188	NF-K64-BL	Baked Enamel Finish/Matte Black						10	120
203D	110-041-189	NF-K77-SCR	Pearl Chrome Plating						10	120
203D	110-041-190	NF-K77-CR	Chrome Plating						10	120
203D	110-041-191	NF-K77-BL	Baked Enamel Finish/Matte Black						10	120

HOOK



TEST METHOD 1 TEST METHOD 4 SUS HK-RH

Features

- Flat bottomed hook
- Made from stainless steel and suitable for use in corrosive environments.

Parts Included

- HK-RH40 : Binding head tapping screw 4 × 20 (SUS)
- HK-RH60 : Binding head tapping screw 5 × 30 (SUS)

CAD	Item Code	Item Name	Material	Finish	D	d ₁	d ₂	H	H ₁	H ₂	P	t ₁	t ₂	W	Load Capacity N	Load Capacity kgf	Weight (g)	Box (pcs)	Carton (pcs)
2D/3D	110-037-670	HK-RH40	Stainless Steel	Polished	35	4.5	8.8	39	12	8	28	10	9	42	196	20	57	-	-
2D/3D	110-037-671	HK-RH60	(SCS13)		51.5	5.5	10.8	58	16	11	40	15	12	63	245	25	175	-	-

*SCS13 is equivalent of SUS304.

STAINLESS STEEL HOOK

TEST
METHOD 19

SUS316

HK-LB



HK-LB50

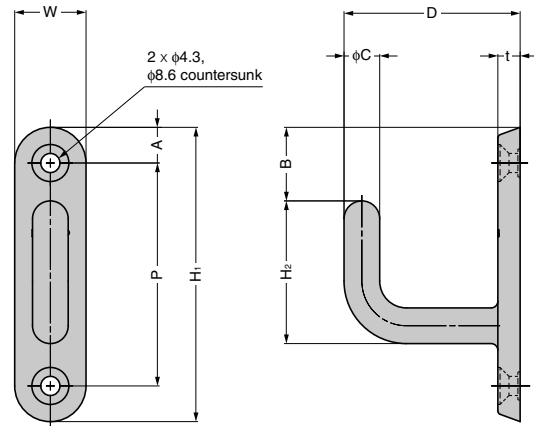
HK-LB65

Features

- A stainless steel hook with a thick plate for a high-class look.
- Rounded hook tip ensures safe use.

Parts Included

Size 4 x 32 cross-recessed round flat head tapping screws (stainless steel)



CAD	Item Code	Item Name	Material	Finish	W	H ₁	H ₂	P	A	B	C	D	t	Load Capacity N	Load Capacity kgf	Weight (g)
203D	110-041-267	HK-LB50	Stainless Steel (SCS14)	Polished	16	65	32	50	8	16.5	8	39.5	5	150	15.3	46
203D	110-041-268	HK-LB65			18	85	44.5	65	9	20	9	49	6.5			81

*SCS14 is a cast steel material similar to SUS316.

STAINLESS STEEL HOOK

TEST
METHOD 19

SUS

JF2B-40M

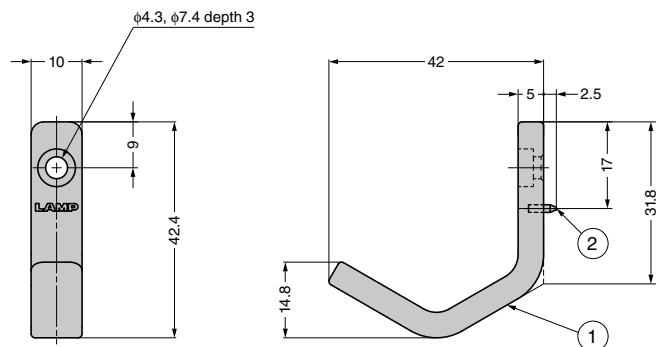


Features

A stainless steel hook that can be used in many places including modernist interiors.

Parts Included

Size 4 x 32 cross-recessed pan head tapping screws (stainless steel)



No.	Part Name	Material	Finish/Colour
①	Hook Body	Stainless Steel (SUS304)	Polished
②	Sharp Pins	Stainless Steel (SUS303)	Plain

CAD	Item Code	Item Name	Load Capacity N	Load Capacity kgf	Weight (g)	Box (pcs)	Carton (pcs)
203D	110-037-145	JF2B-40M	100	10.2	27.4	20	120

LARGE ALUMINIUM HOOK

TEST METHOD 19

HK-AJ100

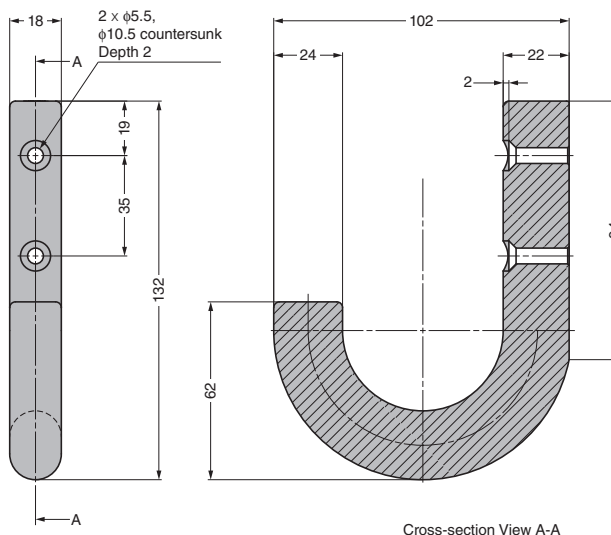


Features

- A very large hook for hanging large items that would otherwise have been set on the floor.
- Thick aluminium piece which bends at its thickest end.

Parts Included

Size 5 x 50 cross-recessed flat head tapping screws



CAD	Item Code	Item Name	Material	Finish/Colour	Load Capacity N	Load Capacity kgf	Weight (g)	Box (pcs)
2D/3D	110-041-192	HK-AJ100-SL	Aluminium	Anodised/Matte Silver	200	20.4	202	1
2D/3D	110-041-193	HK-AJ100-BL		Anodised/Matte Black				1

GIANT ALUMINIUM HOOK

TEST METHOD 19

HK-AJ180



Product may vary slightly from photo

Features

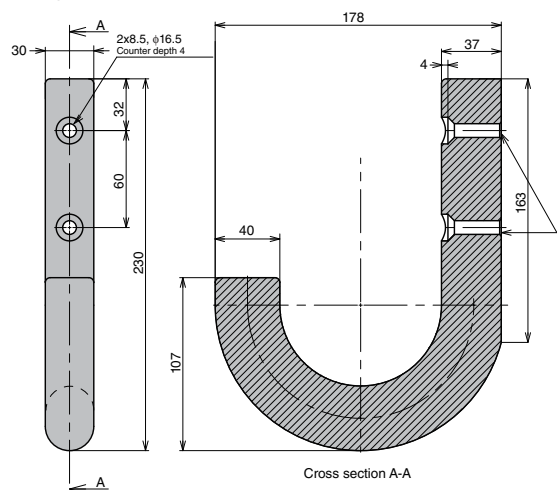
- Hook with a profile depth of almost 180 mm.
- Thick aluminium piece which bends on its thickest side.

Remarks

- The load capacity stands for strength of the hook itself. Actual load capacity also depends on wall materials and strength.
- Surface colour of installation side may discolour. This does not affect the performance

Parts Included

- Cross-recessed countersunk tapping screw 8 x 90
- Lock plug (screw diameter: $\phi 8$ / drill diameter: $\phi 10$)



*The hole is not for a mounting screw.



CAD	Item Code	Item Name	Material	Finish / Colour	Load Capacity N	Load Capacity kgf	Weight (g)
2D/3D	110-044-096	HK-AJ180-SL	Aluminium Alloy	Anodized / Matte Silver	1000	102	954
2D/3D	110-044-097	HK-AJ180-BL		Anodized / Matte Black			

ADJUSTABLE MOUNT

INSTRUCTION

FSL-V36



Features

- Holds at any height on aluminium frames.
- The cover prevents unintentional lock release.
- Designed for use with the FSL-L, an aluminium frame.
Can also be used with other companies' aluminium frames that are over 40 mm in width. Please see the drawing below for details.
- The locking mechanism prevents only downward motion.
- Can be installed to an aluminium frame that is already assembled.
- A monitor can be mounted on the FSL-V36 when used with the FSL-MB, an optional monitor-mounting bracket.

Application

Control panels, monitors

Remarks

- It is recommended to use one per frame.
- Please use only with vertical sliding applications.

Parts Included

- Hex bar spanner (nominal 2.5)

Optional Parts

- FSL-MB, Monitor Mounting Bracket
- FSL-L, Aluminium Frame

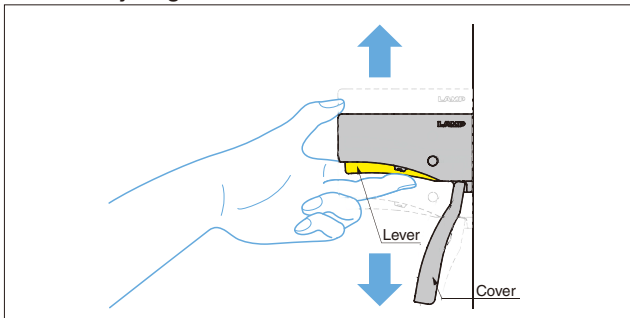
Recommended Screw

M5 screws

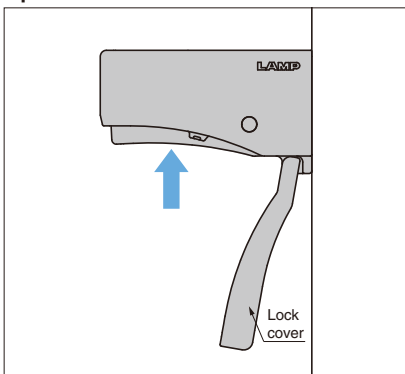
[Video Link](#)



Holds at any height

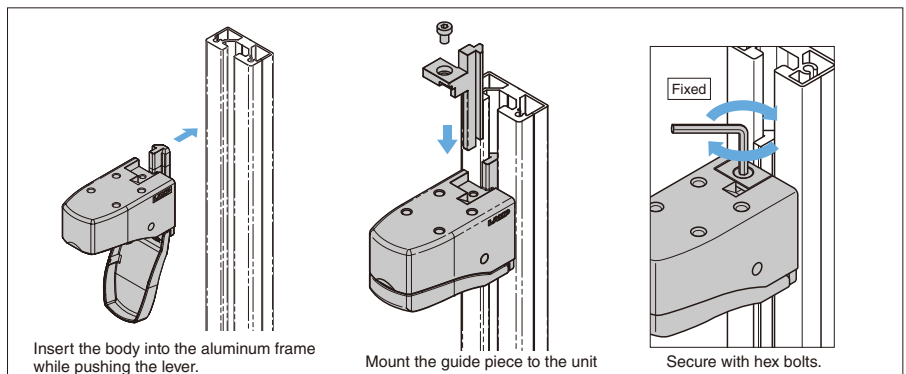


Operation

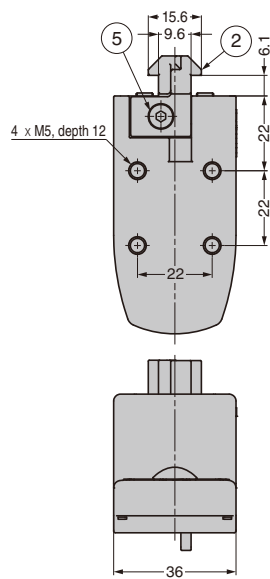


Open the cover and push the lever to move the unit up or down. The unit stops where the lever is released.

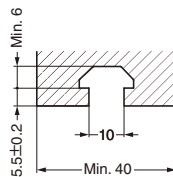
Installation



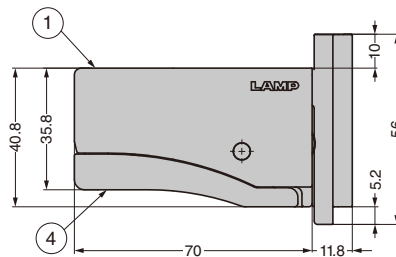
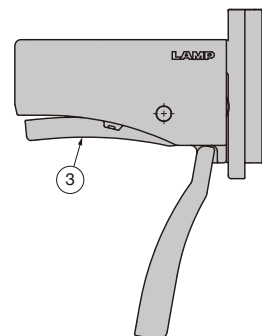
Can be installed to an aluminium frame that is already assembled. (see the instruction manual for details)



Mountable Aluminium Frame



When cover is opened

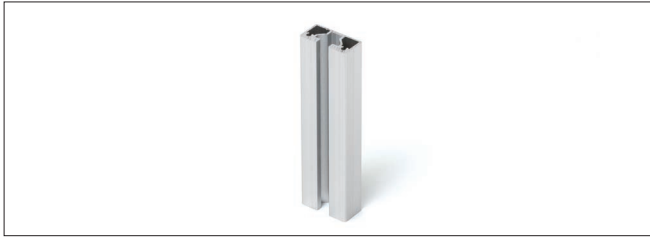


No.	Part Name	Material	Finish/Colour
①	Main Body	Zinc Alloy (ZDC)	Satin Chrome Plating
②	Guide Piece		
③	Lever	ABS Resin	White
④	Lock Cover		
⑤	Hexagonal socket cap low head bolt M4×6	Stainless Steel	Plain

RoHS	CAD	Item Code	Item Name	Vertical Load Capacity N	Vertical Load Capacity kgf	Allowable Moment N·m	Allowable Moment kgf·cm	Weight (g)	Box	Carton
✓	2D/3D	190-042-160	FSL-V36	117	12	20	204	310	1 pc	18 pcs

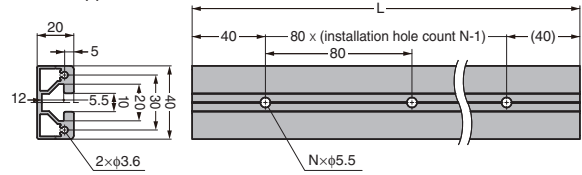
ALUMINIUM FRAME

FSL-L



Optional Parts

- FSL-EC End Cap
- FSL-S4 Stopper



CAD	Item Code	Item Name	L	Installation Hole Count N	Material	Finish	Weight (g)	Box
2D/3D	190-042-162	FSL-L400	400	5	Aluminium Alloy	Silver Anodising	333	30 pcs
2D/3D	190-042-163	FSL-L800	800	10			665	15 pcs
2D/3D	190-042-164	FSL-L1200	1200	15			998	9 pcs
2D/3D	190-042-165	FSL-L2000	2000	25			1663	6 pcs

END CAP

FSL-EC

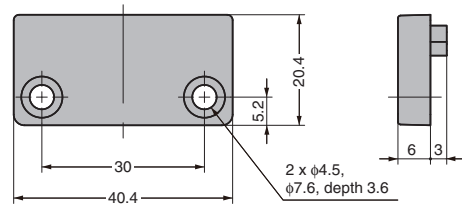


Features

End cap for the FSL-L Aluminium Frame.

Parts Included

Size 4 x 8 cross-recessed pan head tapping screws



CAD	Item Code	Item Name	Material	Colour	Weight (g)	Box
2D/3D	190-042-166	FSL-EC	ABS Resin	Grey	3.1	200 pcs

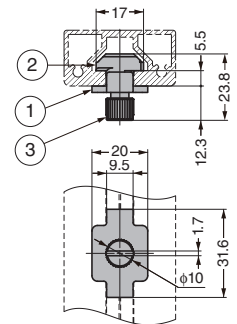
STOPPER

FSL-S4



Features

- A stopper for the FSL-L Aluminium Frame.
- Can also be used with other companies' aluminium frames that are over 40 mm in width. Please see the drawing of the FSL-V36 for details.



No.	Part Name	Material	Finish/Colour
①	Body	SPCC	Chrome Plating
②	AS Nut	Stainless Steel (SUS316)	Barrel Polished
③	Knurled Knob	Steel	Nickel Plating

CAD	Item Code	Item Name	Weight (g)	Box
2D/3D	190-042-167	FSL-S4	22	200 pcs

MONITOR MOUNTING BRACKET

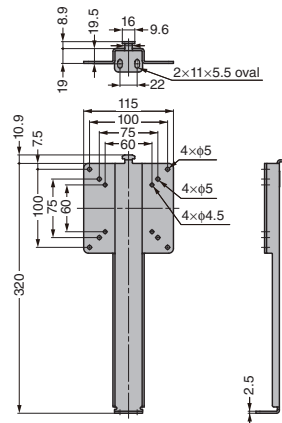
FSL-MB



Application



Used with FSL-V36 and KA-T100S50



Features

- Enables mounting of monitors with hole pitch compliant with the VESA standard (75 x 75 mm, 100 x 100 mm).
- The KA-T100S50, a monitor mount can also be mounted to the FSL-V36, an adjustable mount.

Sold Separately

- KA-T100S50, Monitor Mount



*Angle adjustment: 180° swiveling, and 40° tilting

CAD	Item Code	Item Name	Material	Finish/Colour	Weight (g)	Box
2D/3D	190-042-161	FSL-MB	Steel (SPCC)	Enamel Silver	566	20 pcs

PANEL CATCH AUH-C70 For Panel Hanger "AUH"



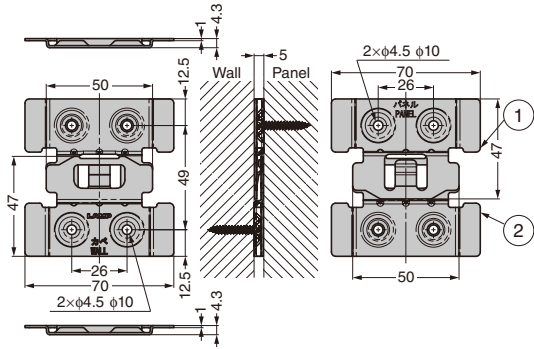
- Holds panels hung with the AUH in place.
This catching function prevents panels from moving or falling even when bumped.
- Specially designed for use with the AUH panel hanger.
- The correct mounting position can be found by simply aligning with the AUH.

[Remarks]

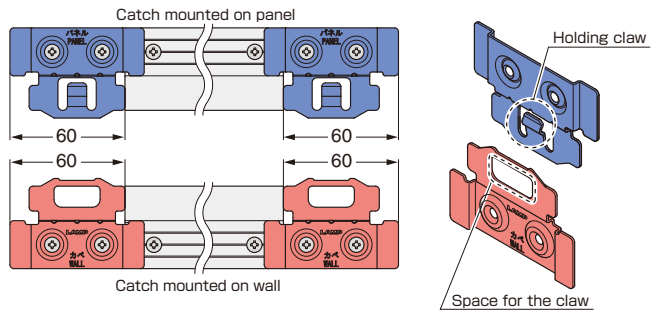
- Please make sure that the panel is not subject to a pulling force when using the AUH-C70 without the AUH.
- Recommended quantity per panel: two
- The retaining force may vary. Please confirm with actual products before use.

[Recommended Screw]

- Cross-recessed countersunk head tapping screw 4



[Drawing] when using two AUH-C70 and AUH



Video Link



No.	Part Name	Material	Finish/Colour
①	Catch mounted on panel	Stainless Steel (SUS304)	Barrel Polished
②	Catch mounted on wall		

RoHS	CAD	Item Code	Item Name	Retaining Force N	Retaining Force kgf	Load Capacity N*	Load Capacity kgf*	Weight (g)
CE	3D	110-044-905	AUH-C70	50	5.1	100	10.2	41

* The load capacity is a value when using the AUH-C70 alone. When using with the AUH, please see the load capacity of the AUH.

PANEL HANGER AUH



- Panel can be easily attached/detached without tools.
- Distance to wall is only 5 mm.
- Continuous panels can also be installed easily.
- Can prevent warping of large size panels.
- Mounting holes can be set in the groove of screw guide (see drawing).

[Applications]

- Exhibition panels, paintings, furniture.

[Remarks]

- Be sure to install panel to wall made from strong materials.
- Actual load capacity varies depending on use conditions.

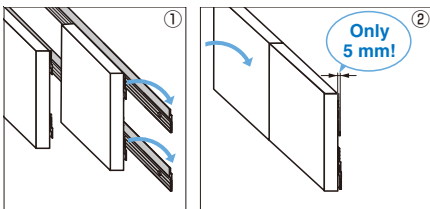
The load capacity in the catalog is based on the conditions below.

- Numbers of AUH: 2 pcs
- Length : 700mm
- Distance between 2 AUH : 780mm
- Panel Height : 900mm
- Panel Length : 700mm
- Panel Thickness : 25mm

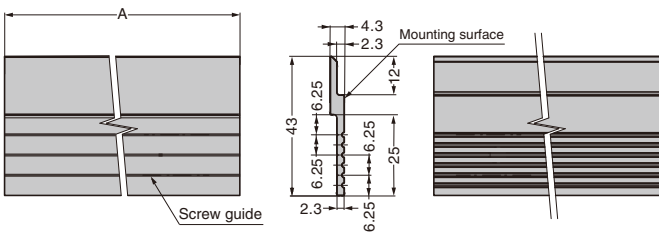
[Recommended Screws]

- Countersunk head tapping screw 4

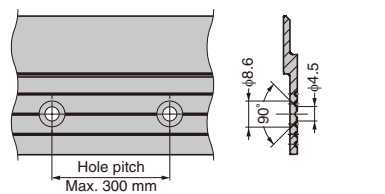
[Panel Installation]



[Example]

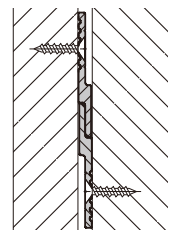


[Cut Out Dimensions]



Mounting holes should be located symmetrically to the centre of mounting surface, with the pitch below 300mm.

[Installation]



RoHS	CAD	Item Code	Item Name	A	Material	Finish	Load Capacity N	Load Capacity kgf	Weight (g)	Carton (pcs)
CE	3D	110-021-888	AUH-900	900	Aluminium Alloy	Anodised Silver	294.2	30	35	10
CE	3D	110-023-958	AUH-2700	2700					700	10

FOLDING BRACKET EB-DA Built-in Damper



Soft-close



- Can be folded when not in use, allowing full use of space.
- The built-in damper allows for soft-close motion.
- Automatically locks when flap is in opened position.
The lock can be easily released by pushing the lever.
- Keeps in folded position and has click sound when fully closed.
- Can also be used with the EB-303 (without damper type). **1**
- No hinges are needed.

[Application]

• Shelves and tables (garages, recreational vehicles, commercial facilities, factories)

[Parts Included]

• Cross-recessed truss tapping screw ST4.8 x 38, Cross-recessed truss tapping screw ST4.8 x 16 (3 each)

[Optional Parts]

• Folding Bracket EB **1**

[Remarks]

- Used in pairs. (Shelf width: Max. 1300 mm)
- Be careful not to get fingers caught in the bracket.
- Use a long screwdriver for installation.
- Make sure the release lever is attached to bottom of the shelf for correct installation

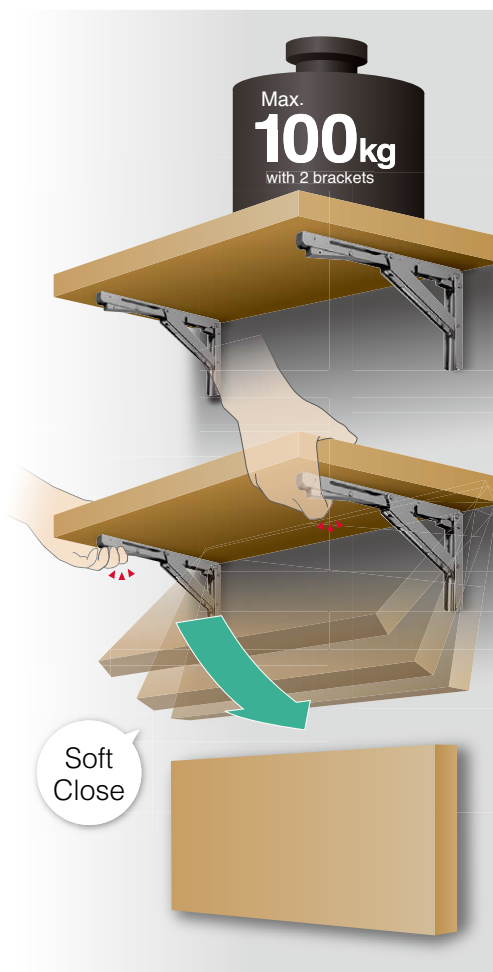
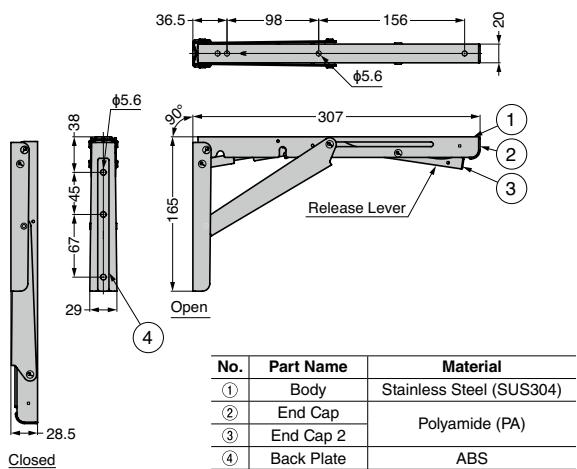
[Built-in Damper]



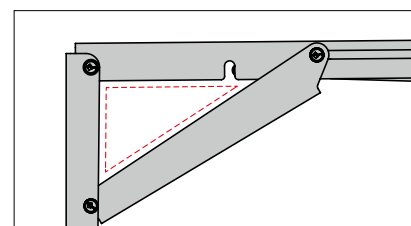
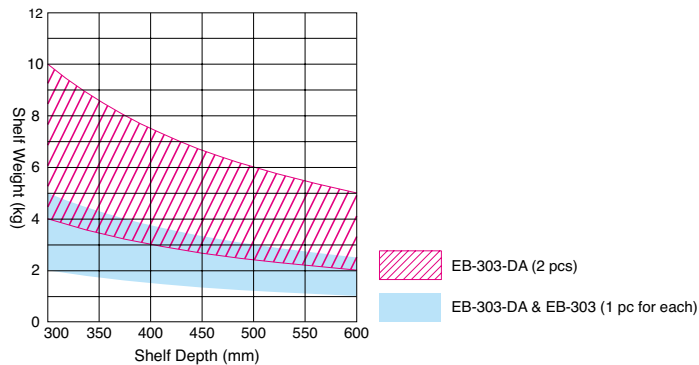
[End Cap]



Comes with end caps for safe use.



[Product Selection Graph]



Be careful not to get fingers caught in this space when folding.

RoHS	CAD	Item Code	Item Name	Material	Finish	Number of Mounting Holes	Load Capacity / 1 pc		Weight (g)	Box (pcs)
							N	kgf		
●	●	120-048-775	EB-303-DA	Stainless Steel (SUS304)	Mirror	6	495	50	525	20

Refer to **1** : No. 280 P.572

FOLDING BRACKET 388-D Built-in Damper



- Can be folded for saving space when not in use.
- The built-in damper allows for soft closing which prevents accidental shutting.
- Made of aluminium alloy for a lighter body.
- Can also be used together with the 388 bracket. (without damper model) **1**

[Recommended Number of Bracket]

- Shelf width is under 600 mm : 1 pc
- Shelf width is 600-1300 mm : 2 pcs
- *See also the [Selection Guide].

[Parts Included]

- Cross-recessed truss head tapping screw ST4.8 x 38
- Cross-recessed truss head tapping screw ST4.8 x 16

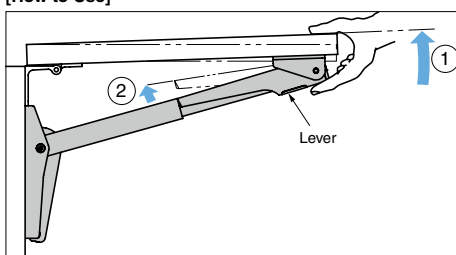
[Optional Part]

- Folding hinge 388 H
- Folding bracket 388

[Remarks]

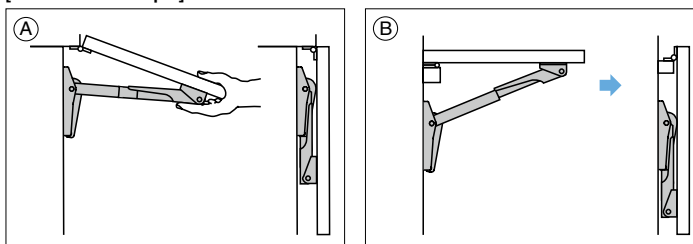
- When folding/unfolding the brackets, please hold both the shelf and brackets with hands.
- Make enough space for the shelf to lift up. See the [How to Use].
- Recommended shelf thickness: 15 -35 mm
- The load capacity was measured at the position demonstrated in the [Dimensions] drawing below.

[How to Use]



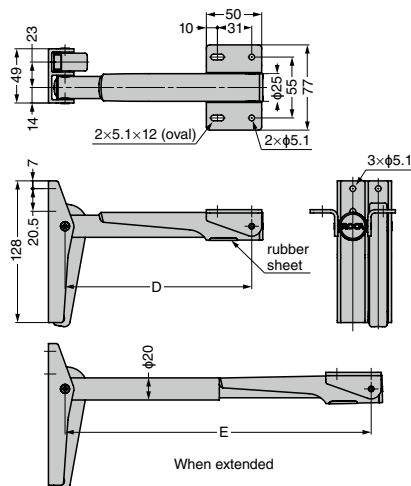
Note: ① Do not lift up the shelf forcibly. It may result in breakage.

[Installation Example]

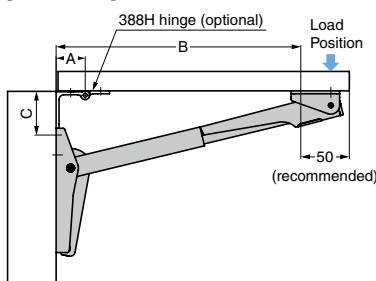


*Installation B: the 388H hinge can not be used.

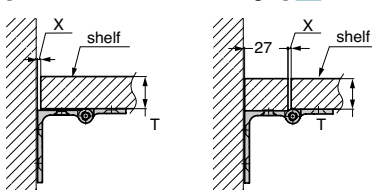
[Recommended Hinge] 2



[Dimensions]

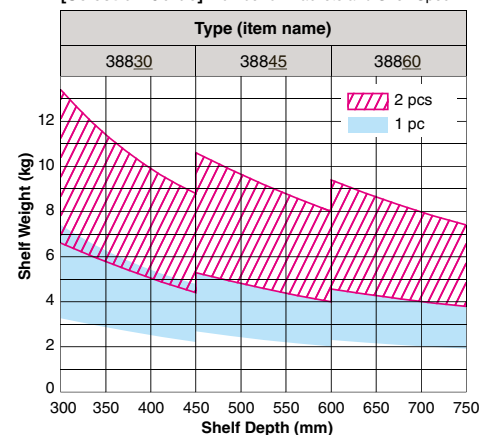


[Installation with the 388H Hinges] 1



Thickness T and Clearance X	
T	X
< 20	1
20 - 40	2

[Selection Guide] Number of Brackets and Shelf Spec



*If 388-D (1pc) is used together with 388 (1pc), please refer to 1 pc of graph above.

RefS	CAD	Item Code	Item Name	Material	Finish / Colour	A	B	C	D	E	Load Capacity/pc		Weight (g)	Box	Carton
											N	kgf			
●	●	120-048-966	38830-25-D	Aluminium Alloy	Silver Anodised	28-39	252	45	168	275.9	309	31	341	5	50
●	●	120-048-967	38845-25-D			28-50	402	87	258.5	430.8	330	33	411	5	30
●	●	120-048-968	38860-25-D			28-40	549	137	368.5	585.8	360	36	491	5	30
●	●	120-048-969	38830-25-BL-D		Black Anodised	28-39	252	45	168	275.9	309	31	341	5	50
●	●	120-048-970	38845-25-BL-D			28-50	402	87	258.5	430.8	330	33	411	5	30
●	●	120-048-971	38860-25-BL-D			28-40	549	137	368.5	585.8	360	36	491	5	30

Refer to **1**: No.280 P.573

FOLDING HINGE 388H For Bracket 388



388H001

388H000

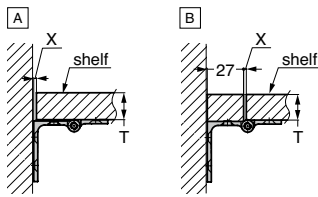
- For use with the folding brackets 388-D and 388. 1
- Easy to find the right position for the hinges.

[Parts Included]

- Cross-recessed countersunk tapping screw 4.8 x 35 (3 pc)
- Cross-recessed countersunk tapping screw 4.8 x 16 (2 pc)
- * Finish: anodised / black anodised

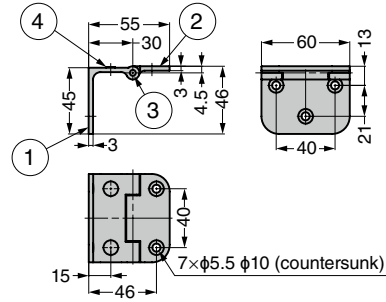


[Installation Example]



Thickness T and Clearance X

T	X
< 20	1
20 - 40	2



RoHS	CAD	Item Code	Item Name	Finish / Colour	Weight (g)	Box (pcs)
●	●	120-048-776	388H000	Silver Anodised	53	128
●	●	120-048-777	388H001	Black Anodised		128

No.	Part Name	Material
①	Base	Aluminium Alloy
②	Bracket	
③	Shaft	Stainless Steel
④	Cap	Elastomer (TPE)

Refer to 1 : No.280 P.573

FOLDING BRACKET EB-F Multi Angle Locking



Holds at 60/70/80/90 degrees, and folds to 0 degrees.

- Can be folded when not in use, allowing full use of space.
- Holds at 4 angles: 60°, 70°, 80°, 90° (multi angle locking). This makes it perfect for wall display shelves.
- The multi angle locking function prevents the brackets from fully collapsing if the lever is accidentally pulled up.
- Can be used with the interlock lever EB-90. **1** (optional part)
- No hinge is required.

[Application]

- Shelves in garages, commercial facilities, factories, camping vehicles, or workbenches.

[Parts Included]

- Cross-recessed truss head tapping screw ST4.8 x 35
- Cross-recessed truss head tapping screw ST4.8 x 16

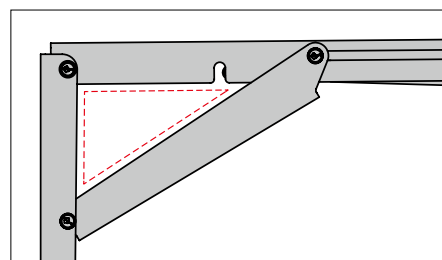
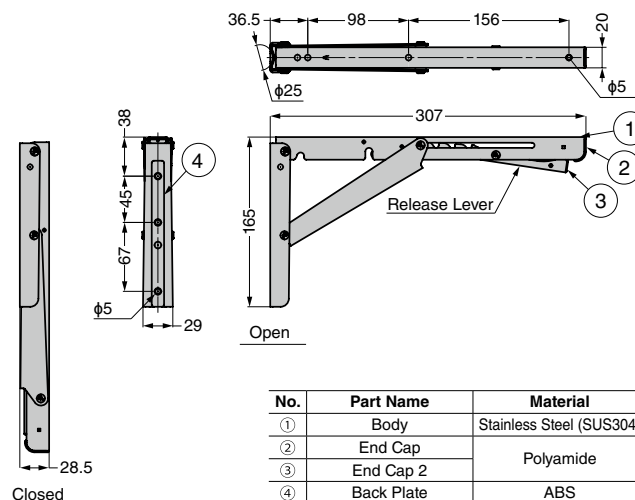
[Optional Parts]

- Interlock lever EB-90. **1**

[Remarks]

- When folding/unfolding the brackets, please hold both the shelf and brackets with your hands.
- If three brackets are used, please use together with the interlock lever EB-90.
- Be careful not to get fingers caught in the bracket.
- Please use a long screwdriver for easy installation.
- Please make sure the unlocking lever is installed on leading edge side of the shelf.
- Cannot be combined with EB or EB-DA.
- Please make sure the wall can sustain the load.

[Application Example]



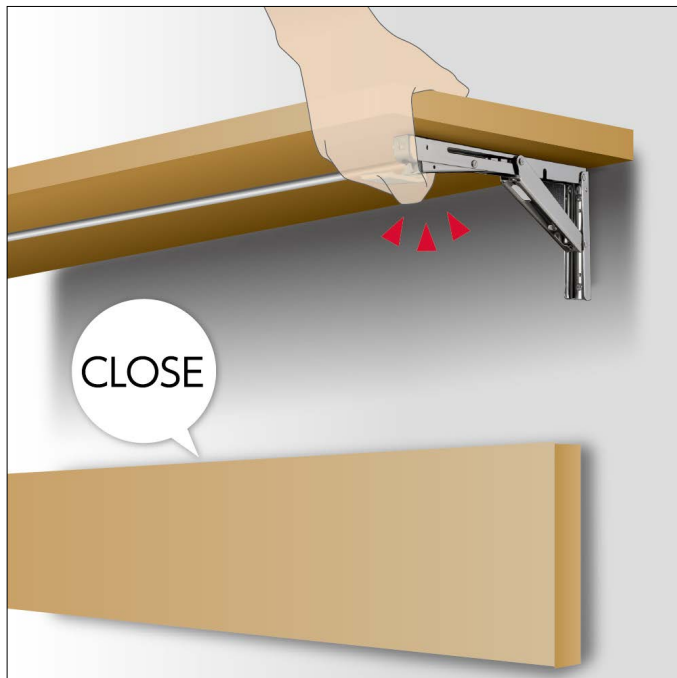
Be careful not to get fingers caught in this section when folding.

RoHS	CAD	Item Code	Item Name	Material	Finish	Number of Holes	Load Capacity N/1pc	Load Capacity kgf/1pc	Weight (g)	Box (pcs)
●	●	120-046-398	EB-303-F	Stainless Steel (SUS304)	Mirror Polished	6	495	50	511	20

Refer to **1** : P.F23

INTERLOCK LEVER EB-90 For EB-DA and EB-F / For Wide Shelf

INSTRUCTION



Used with the folding brackets.

- Multiple levers allow for one-handed operation.
- Can be used with the EB-DA **1** and EB-F **2** (folding brackets).
- Ideal for use on wide shelves.
- The rod can be cut to desired length.

[Remarks]

- If the rod is used with a length of 700 mm or more, please install the included additional mounting plate on the middle of the rod to prevent warping.
- When folding/unfolding the brackets, please hold both the shelf and brackets with your hands.

[Components]

- For 3 brackets



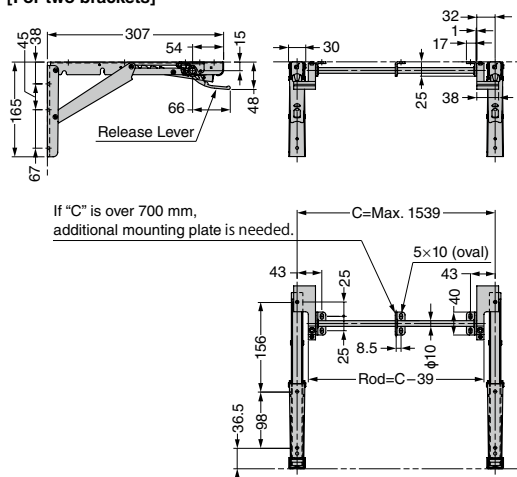
- For 2 brackets



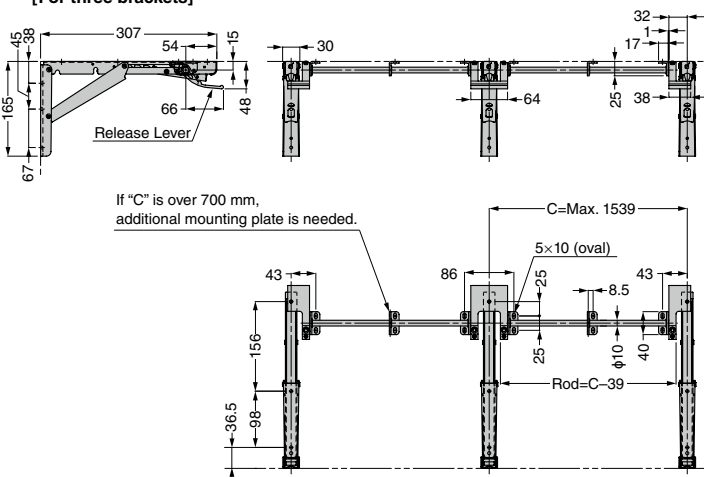
- Rod



[For two brackets]



[For three brackets]



[Lever]

ReHS	CAD	Item Code	Item Name	Type	Material	Finish	Weight (g)	Box (set)
●	●	120-046-395	EB-907560	For 2 brackets	Aluminium Alloy	Anodized	114	34
●	●	120-046-396	EB-907561	For 3 brackets			218	34

[Rod]

ReHS	CAD	Item Code	Item Name	Length	Material	Finish	Weight (g)	Box (pcs)
●	●	120-046-397	EB-907572	1500	Aluminium Alloy	Anodized	98	25

Refer to **1** : P.F19 **2** : P.F22

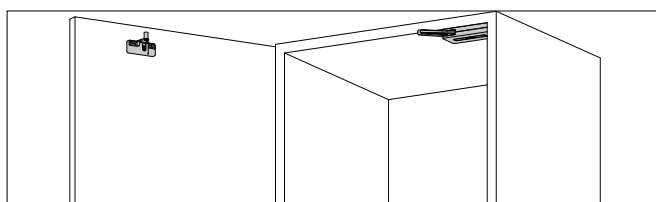


DC-200

DAMPER CATCH

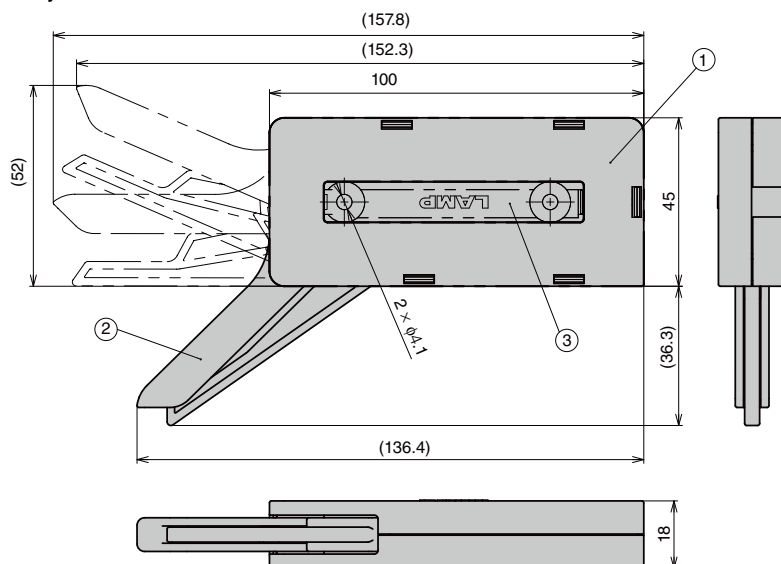


Installation Example

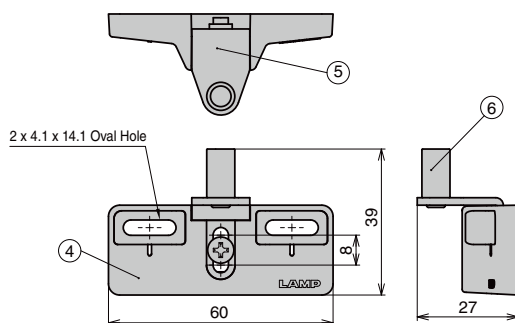


Attach to the interior of the cabinet.

Body



Counter Plate



Features

- Damper and catch combination for sideways opening doors.
- Prevents doors from slamming.
- Holds doors in closed position.
- Easy to install by simply aligning body with the interior wall.
- Non-handed.
- Can handle doors up to 40 kg. (When using DC-200 - 40).
- Strike can be adjusted post-installation: horizontally ± 5 mm, vertically ± 4 mm.
- Passed 50,000 open/close cycles in a private test.

Recommended hinges

- Heavy Duty Concealed Hinge J95 (With catch type)
- 3way Adjustable Concealed Hinge HES3D-90
- Single axis furniture hinges

Caution

- The screws for installing on sheet metal are not included. We recommend the following screws:
Recommended screws for body: Cross binding head M4 \times 30
Recommended screws for counter plate: Cross binding head M4 \times 15
- Do not install to body or strike to hollow surfaces.
- If there is a large resistant force during closing, the door may not close fully.

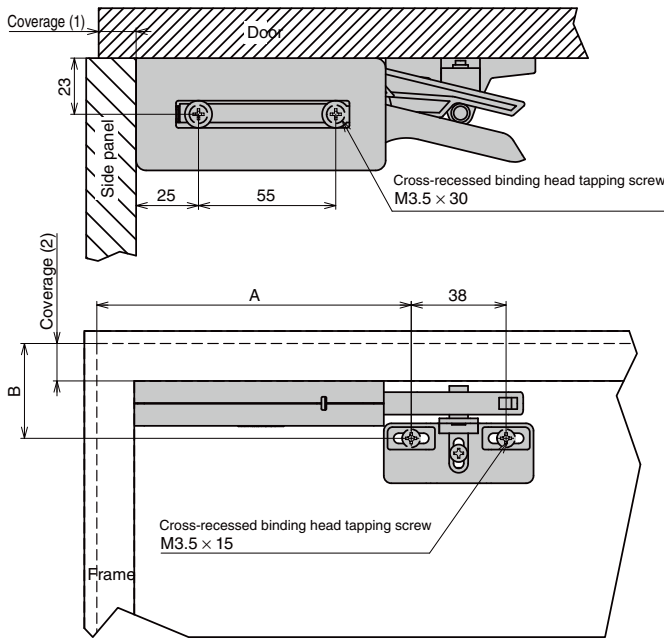
Parts included

- Body Cover
- Counter
- Screws to attach body: 3.5 \times 30
- Screws to attach counter: 3.5 \times 15

No.	Item Name	Materials	Finish/Colour
①	Body	PC/ABS	White / Black
②	Arm	PA	White / Black
③	Body Cover	ABS	White / Black
④	Counter	PC/ABS	White / Black
⑤	Counter Plate	Steel (SPCC)	Nickel Plating
⑥	Bumper	Elastomer	Gray

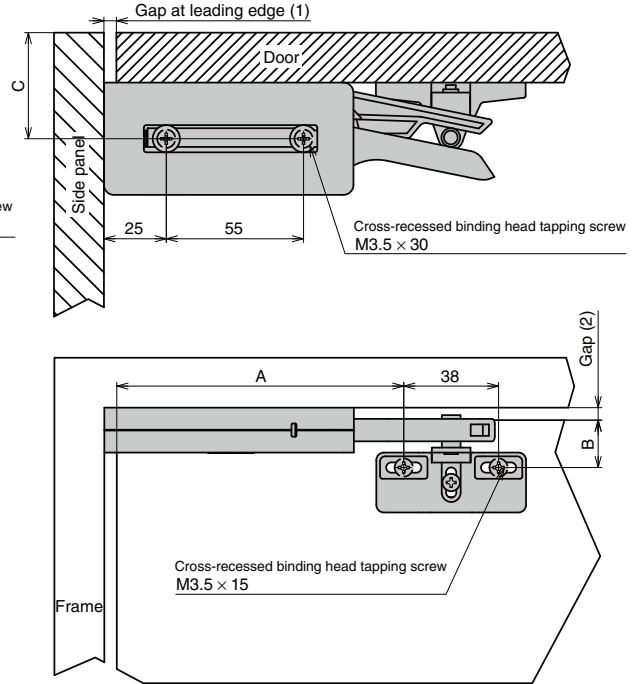
CAD	Item Code	Item Name	Colour	Door Width	Door Height	Load Capacity (kg)	Weight (g)
2D/3D	140-043-604	DC-200-25WT	White	450 - 900	Under 2400	7 - 25	105
2D/3D	140-043-605	DC-200-25BL	Black				
2D/3D	140-043-606	DC-200-40WT	White			25 - 40	
2D/3D	140-043-607	DC-200-40BL	Black				

For lapped (outset) doors



For inset doors

Install a door stopper in addition to this product.

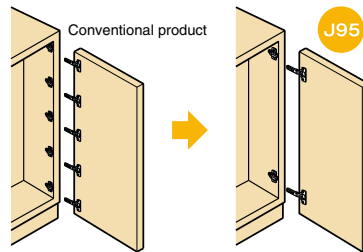


	A	B	C
Outset Doors	114 + Coverage (1)	24 + Coverage (2)	
Inset Doors	114 - gap at leading edge (1)	24 - gap (2)	23+Door Thickness

Related Products

ONE-TOUCH SLIDING HINGE FOR HEAVY DOORS

J95



Two pieces will do the job of five conventional hinges!

Features

- A sliding hinge for heavy doors that can be used together with the DC-200 damper catch.
- Use the type with a catch if using together with the DC-200 damper catch.
- Supports large doors weighing up to 25 kg with 2 hinges or up to 40 kg with 3 hinges.
- Enables one-touch installation and removal of the door.
- Enables three-dimensional adjustment of the door.
(+1.5 mm/-2.5 mm forward/back, ±3 mm up/down, +0 mm/-4 mm coverage adjustment [left/right])
- Streamlined design free of protrusions such as adjustment screws on the body top.
To ensure safety, the lock lever does not protrude from the back of the body.

Related Products

LAPCON DOOR DAMPER

LDD-S, LDD-V



LDD-S



LDD-V

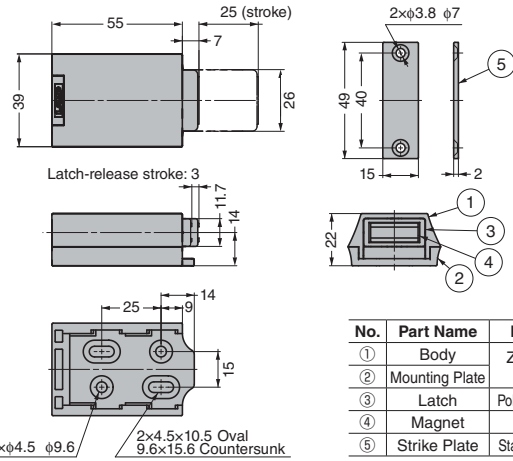
Features

- A damper for doors (fixtures).
- Enables the door to be opened with less force than with door closers.
- Supports doors weighing up to 40 kg.
- Contact us if your door is wider than 900 mm.

METAL MAGNETIC TOUCH LATCH ML-ZN80



Passed 100,000 open/close private cycle test



No.	Part Name	Material	Finish/Colour
①	Body	Zinc Alloy (ZDC)	Enamel Finish
②	Mounting Plate	Zinc Alloy (ZDC)	Enamel Finish
③	Latch	Polyamide (PA)	-
④	Magnet	Ferrite	-
⑤	Strike Plate	Stainless Steel	Barrel Polished

- The body is made of metal for high durability.
- Designed for use on large doors due to its strong push force.
- The plastic part is flame resistant and compliant with the UL94V-0 standard.
- The magnet part has an allowance of 1.5° on each side to catch the strike plate correctly.
This helps the magnet to adjust even if there is a slight misalignment.
- The screws for the mounting plate are designed to be hidden from view.
- For overlay doors, please make sure there is correct clearance between the door and side board as shown in the drawings below.

[Application]

- Walk-in closets, concealed doors.

[Remarks]

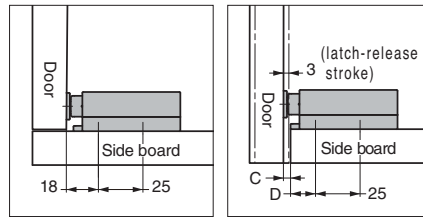
- The magnetic force may vary. Please confirm with actual products before use.
- Please install the body at the height where people are supposed to push.
- Please use hinges which do not have catch functions.

[Parts Included]

- Cross-recessed tapping screw M4 × 16
- Cross-recessed tapping screw M3 × 16

[Installation]

- Inset Doors
- Overlay Doors



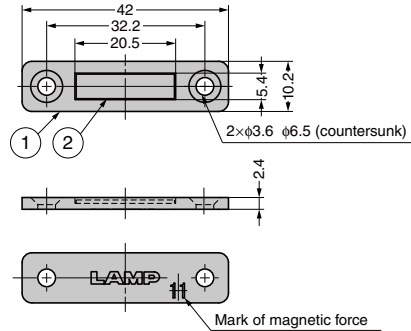
[Dimension]	
C (mm)	D (mm)
3	15
4	14

Please make sure there is the "C clearance" on the side board.
It makes the installation easier to align the edge of the body to the edge of the side board.

RoHS	CAD	Item Code	Item Name	Colour	Magnetic Force		Push Force		Max. Door Specs (reference)			Weight (g)	Box (pcs)	Carton (pcs)
					N	kgf	N	kgf	Height (mm)	Width (mm)	Weight (kg)			
●	●	140-043-880	ML-ZN80BL	Black	29.4	3	49	5	2440	915	125	160	10	100
●	●	140-043-881	ML-ZN80WT	White									10	100

ULTRA-THIN MAGNETIC CATCH MC-421

Ultra-thin



- Super-slim and compact design: 2.4 mm thick and 10.2 mm wide.

[Remarks]

- Be sure to read the "Cautions" [1](#).
- Max. temperature: 80
- The counter plate should be in contact with the body.
Direct contact may damage the magnet.

[Recommended Screw]

- Countersunk head wood screw M3

No.	Part Name	Material	Finish
①	Body	Steel (SPCC)	Nickel
②	Magnet	Neodymium	

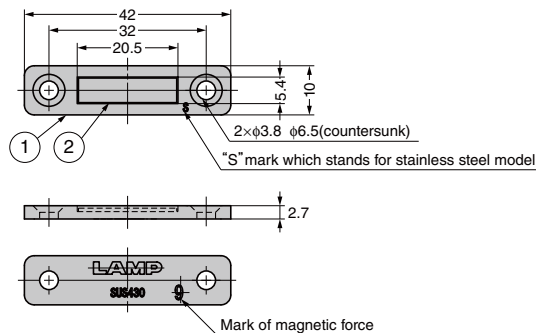
RoHS	CAD	Item Code	Item Name	Magnetic Force N	Magnetic Force kgf	Weight (g)	Box (pcs)	Carton (pcs)
●	●	140-045-390	MC-421-11	11	1.1	6.4	250	1500
●	●	140-045-391	MC-421-30	30	3.1	6.6	250	1500

Refer to [1](#) : No.280 P.607

ULTRA-THIN MAGNETIC CATCH MC-421SUS Stainless Steel

SUS

Ultra-thin



- Made of stainless steel for high corrosion resistance.
- Super-slim and compact design: 2.7 mm thick and 10 mm wide.

[Remarks]

- Be sure to read the "Cautions" [1](#).
- Max. temperature: 80
- The counter plate should be in contact with the body.
Direct contact may damage the magnet.

[Recommended Screw]

- Countersunk head wood screw M3

No.	Part Name	Material	Finish
①	Body	Stainless Steel (SUS430)	Barrel Polished
②	Magnet	Neodymium	Nickel

RoHS	CAD	Item Code	Item Name	Magnetic Force N	Magnetic Force kgf	Weight (g)	Box (pcs)	Carton (pcs)
●	●	140-045-392	MC-421SUS-9	9	0.9	6.9	250	1500
●	●	140-045-393	MC-421SUS-24	24	2.4	7.1	250	1500

Refer to [1](#) : No.280 P.607

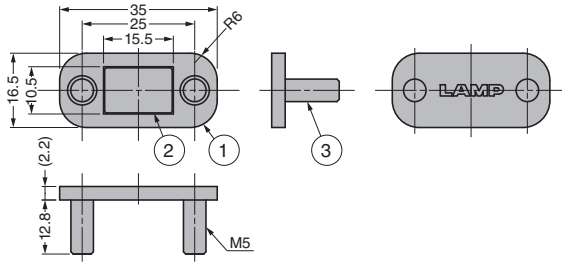
STAINLESS STEEL MAGNETIC CATCH MC-159-STD Ultra-thin / Back-mount

SUS



Front

Back



- The bolts are designed to be fixed with nuts from the back side. As there are no screw heads, it is easy to keep the flat surface clean.
- Neodymium magnet is used for strong force.
- 2.2 mm ultra-thin design.
- Counter plate of back-mount type is also available.

[Remarks]

- Be sure to read the "Cautions" [1](#).
- Max. temperature: 80°C
- The counter plate to be used with should be in contact with the catch body. If an object makes direct surface contact with the magnet, it may break and no longer work properly.

[Parts Included]

- Hexagon nut M5 stainless steel (SUS304)

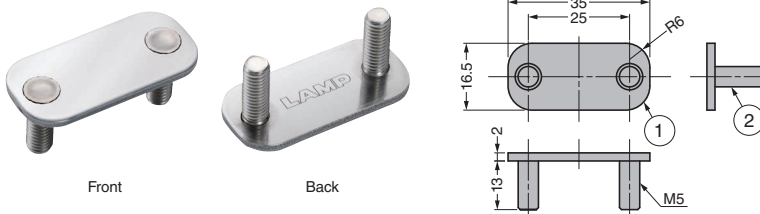
RoHS	CAD	Item Code	Item Name	Magnetic Force		Weight (g)
				N	kgf	
●	●	140-045-567	MC-159-2-STD	19.6	2	14
●	●	140-045-568	MC-159-4-STD	39.2	4	

Refer to [1](#) : No.280 P607

No.	Part Name	Material	Finish/Colour
①	Body	Stainless Steel (SUS430)	Barrel Polished
②	Magnet	Neodymium	Nickel
③	Stud Bolt	Stainless Steel (SUS303)	-

STAINLESS STEEL COUNTER PLATE MC-159U-STD Back-mount

SUS



Front

Back

- The bolts are designed to be fixed with nuts from the back side. As there are no screw heads, it is easy to keep the flat surface clean.

[Parts Included]

- Hexagon nut M5 stainless steel (SUS304)

RoHS	CAD	Item Code	Item Name	Weight (g)	Box (pcs)	Carton (pcs)
●	●	140-045-569	MC-159U-STD	13.2	50	1,000

No.	Part Name	Material	Finish/Colour
①	Body	Stainless Steel (SUS430)	Barrel Polished
②	Stud Bolt	Stainless Steel (SUS303)	-

FLUSH SLAM LATCH LC-60

SUS



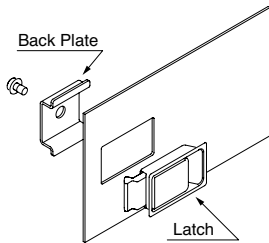
- Automatically locks doors when closed.
- Has a large finger pull for easy operation.
- The slim design does not take space inside the cabinet.
- Screws are hidden from outside.
- The latch bolt is compliant with flammability standard UL94-HB.

[Application]

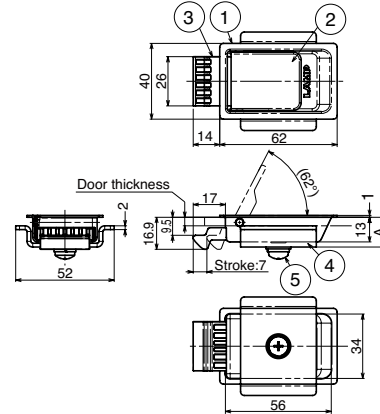
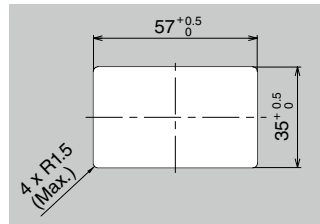
- Maintenance doors of control panels

[Parts Included]

- Spring washer / Cross-recessed pan head screw M6 x 12 (stainless steel)

[Easy Installation]

Insert the latch through the cutout,
and fix it with the back plate and screw.

[Cut Out Dimensions]

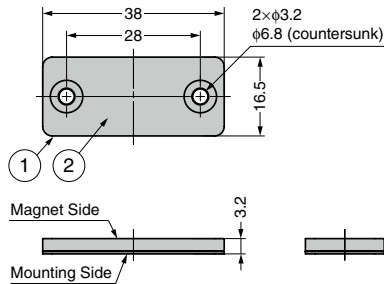
No.	Part Name	Material	Finish
①	Case	Stainless Steel (SUS304)	Barrel Polished
②	Handle		
③	Latch Bolt	Polyamide (Glass reinforced)	
④	Back Plate	Stainless Steel (SUS304)	Plain
⑤	Cross-recessed pan head screw M6x12	Stainless Steel	

RoHS	CAD	Item Code	Item Name	A	Door Thickness	Weight (g)	Box (pcs)	Carton (pcs)
-	-	140-048-546	LC-60-3	15.7 - 16.9	2 - 3.2	94	20	120
●	●	140-048-547	LC-60-5	15.7	4.5		20	120

SEALED MAGNETIC CATCH **MC-JM38** Ultra-thin

MC-JM38WT

MC-JM38BL



- Covered with resin to prevent from rusting.
- Made of neodymium for strong magnetic force.
- The thickness is only 3.2 mm.
- Ideal for clean room, wet condition. It is recommended to use with the MC-JMP45 sealed counter plate. [1](#)

[Application]

- Washing machine, kitchen equipment.

[Sold Separately]

- MC-JMP45 sealed counter plate

[Recommended Screw]

- Countersunk screw M3

[Remarks]

- Max. temperature: 80°C
- Recommended tightening torque: Max. 31.5 N·cm (3.2 kgf·cm)

No.	Part Name	Material	Finish/Colour
①	Body	Polypropylene	White, Black
②	Magnet	Neodymium	Nickel

[Counter Plate] Sold Separately

RoHS	CAD	Item Code	Item Name
●	●	140-050-122	MC-JMP45WT
●	●	140-029-241	MC-JMP45BL

[Magnetic Catch]

RoHS	CAD	Item Code	Item Name	Colour	Magnetic Force N	Magnetic Force kgf	Weight (g)	Box (pcs)	Carton (pcs)
●	●	140-050-608	MC-JM38WT	White	14.7	1.5	5	200	1,000
●	●	140-050-609	MC-JM38BL	Black				200	1,000

Refer to [1](#) : No.280 P.638

LEVELLING GLIDE (WITH TILT FUNCTION)

TEST METHOD 14

SG-CGP40



SG-CGP40M8L54

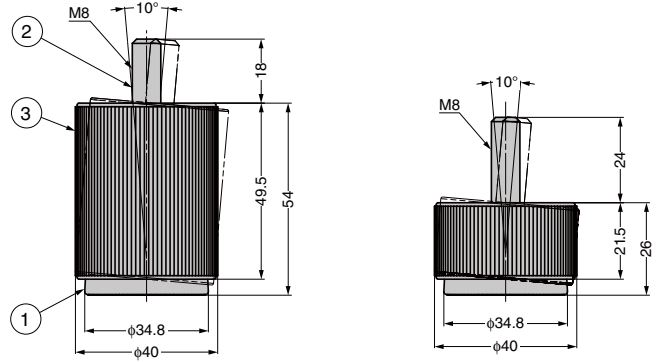
SG-CGP40M8L26

Features

- The body of the levelling glide can tilt up to approximately 10°, enabling it to hold level even on slanting floors.
- Separated body and base structure enables height to be adjusted by rotating the body even while a load is applied.
- The base is made from slip-resistant ethylene-vinyl acetate (EVA).

Remarks

- The base is made from slip-resistant material. Do not forcibly drag this product, as it may cause this material to wear off or peel.
- If the body cannot be rotated by hand, lift the mounted item slightly and try adjusting again.



SG-CGP40M8L54

SG-CGP40M8L26

No.	Part Name	Material	Finish/Colour
①	Base	Ethylene-vinyl Acetate (EVA)	Blast Finish
②	Screw Part	Steel (SWCH)	Black Chromate Finish (Trivalent)
③	Cover	Polyamide (PA)	Black

CAD	Item Code	Item Name	Load Capacity N	Load Capacity kgf	Weight (g)
2030	200-042-136	SG-CGP40M8L26	588	60	38
2030	200-042-137	SG-CGP40M8L54			60

HIGH DURABILITY URETHANE BEARING



- Highly resistant to wear, rupture, and peeling.
- By directly building bearings into the urethane wheel, the product makes less noise when it rolls.
- An antistatic model can be made to order. (electrical resistance: $10^6 \sim 10^9 \cdot \Omega \text{cm}$)

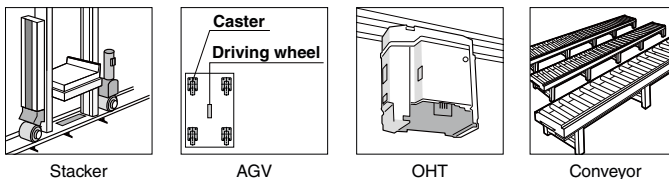
[Remarks]

- Discoloration of the urethane wheel does not affect the performance. (A special urethane is used, which allows ultraviolet rays to significantly change the wheel colour. Please note that it may already be discoloured when delivered.)



*Discoloration of urethane does not affect the performance. A special urethane is used, and that allows ultraviolet rays to significantly change the colour.

[Applications]



[Less wear. 95% less dust from peeling.]

Protects against dust from peeling, reducing the amount by 95% compared to common urethane bearings according to the test. On a distance roll test, wear was significantly reduced with almost no visible abrasion.

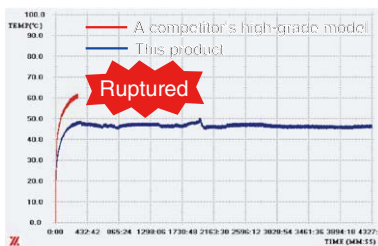
[Resistant to rupturing and peeling]

A durability test showed this product did not inflate or swell even after 72 hours of testing, while a competitor's high-grade model expanded and ruptured after only five hours.



Test conditions

- Size: $\phi 58 \times 20$
- Hardness: Shore A95
- Load: 60kgf
- Speed: 6km/h (100m/min)
- Length: 250km
- Test equipment: Capacity test device



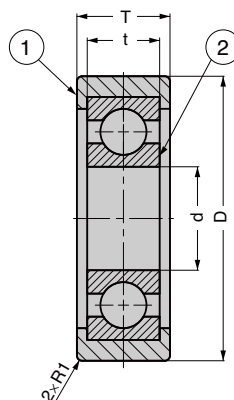
Test conditions

- Size: $\phi 500 \times 200$
- Hardness: Shore A95
- Load: 5tf (5 tonnes)
- Speed: 11km/h (183m/min)
- Time: 72h continuous testing
- Test equipment: Rolling pressure test device

Physical Properties

- Hardness Shore A95
- 100% Tensile Modulus 12.5 MPa
- 300% Tensile Modulus 19.1 MPa
- Tear Strength 151 KN/m
- Tensile Strength 50 MPa
- Elongation 560%
- Rebound Resilience 63%
- Compression Set 24%

- Test operated temperature (continuous): $-30^{\circ}\text{C} \sim 80^{\circ}\text{C}$
- Test operated temperature (normal): $-30^{\circ}\text{C} \sim 120^{\circ}\text{C}$



[Video Link](#)



No.	Part Name	Material
①	Outer Ring	Polyurethane (PUR)
②	Inner Ring	Steel

RoHS	CAD	Item Code	Item Name	Wheel		Hardness	Bearing			Weight (g)	Box (pcs)	Carton (pcs)
				D	T		d	t	Number			
		210-043-787	PM30-11-608ZZ	30	11	Shore A95	8	7	608ZZ	18	1	-
		210-043-788	PM35-11-608ZZ	35	11		8	7	608ZZ	21	1	-
		210-043-789	PM40-14-6201ZZ	40	14		12	10	6201ZZ	47	1	-
		210-043-790	PM45-15-6202ZZ	45	15		15	11	6202ZZ	60	1	-
		210-043-791	PM50-16-6004ZZ	50	16		20	12	6004ZZ	83	1	-
		210-043-792	PM55-18-6204ZZ	55	18		20	14	6204ZZ	126	1	-
		210-043-793	PM60-18-6204ZZ	60	18		20	14	6204ZZ	136	1	-
		210-043-794	PM65-18-6205ZZ	65	19		25	15	6205ZZ	163	1	-
		210-043-795	PM75-21-6305ZZ	75	21		25	17	6305ZZ	279	1	-
		210-043-796	PM85-23-6306ZZ	85	23		30	19	6306ZZ	400	1	-

FOOD INDUSTRY GROMMET MPG Food Sanitation Act Compliant Material



MPG-28

MPG-22

MPG-16

- Contains metal powder, allowing for detection by metal detectors.
- Coloured in blue for simple visual verification.
- Made of silicone rubber for better heat and cold resistance.
- Compliant with the Food Sanitation Act.

[Specifications]

- Operating temperature: -10°C – 110°C

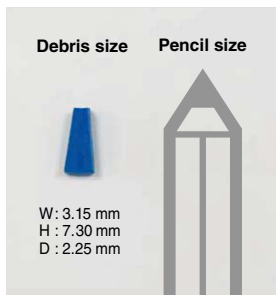
[Applications]

- Food machinery and food packaging machines

[Remarks]

- Detectable size of the contaminant depends on the settings and performance of the metal detector.

Point.1 Can be detected by metal detectors



- Machine Metal detector (conveyor) BMD-0835NII Made by NISSIN ELECTRONICS CO., LTD.

- Detection range Fe ϕ 1.5 mm, SUS ϕ 2.5 mm

[Remarks]

- Detectable size of the contaminant depends on the settings and performance of the metal detector.



Point.2 Easy visual detection



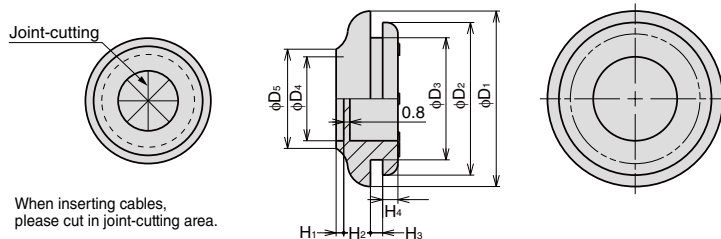
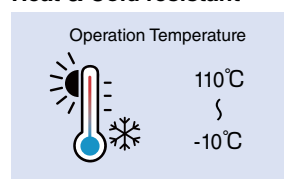
The blue colour is a rarely occurring natural characteristic and therefore stands out if accidentally mixed during food processing.

Point.3 Silicone rubber

Safe



Heat & Cold resistant



Material	Hardness	Colour
Silicone Rubber	50° ±5°	Blue

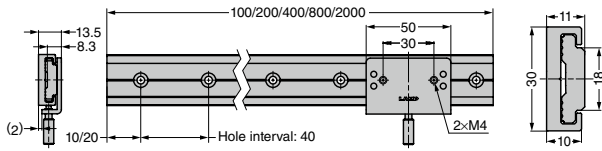
RoHS	CAD	Item Code	Item Name	D ₁	D ₂	D ₃	D ₄	D ₅	H ₁	H ₂	H ₃	H ₄	Weight (g)	Box (pcs)	Carton (pcs)
✓	3D	210-044-044	MPG-16	23	20	16	11	13	1	3.5	1.6	2	2	200	800
✓	3D	210-044-045	MPG-22	29	26	22	17	19		4	2.3	2.5	3	120	480
✓	3D	210-044-046	MPG-28	37	33	28	21	24	1.5	5		3	6	50	200

MINI GUIDE RAIL MRS-30 Series



- The guide block is made of special polyethylene resin for excellent sliding. This requires no grease and oil.
- The special polyethylene resin has high chemical resistance.
- Has flame resistance of UL94HB grade.
- Preload type is also available which can minimize rattling.
- The rail is recyclable.

[Use with the rail, block, and clamp]



Refer to 1: No.280 P.442

[Recommended Bolt]

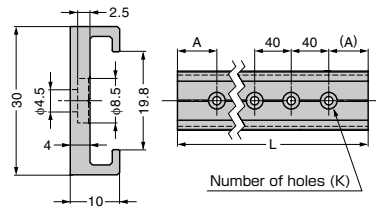
- Hexagon button bolt M4 (for rail)

[Remarks]

- When used with clamp, make sure moment loads (Mx, My, Mz) are not applied to it. 1
- The holes and the edges of the sides are not anodized.
- The preload type is not designed to secure moving objects in a fixed position. Never use in a vertical or slanted position, as this is dangerous and may cause moving objects to slide or fall.

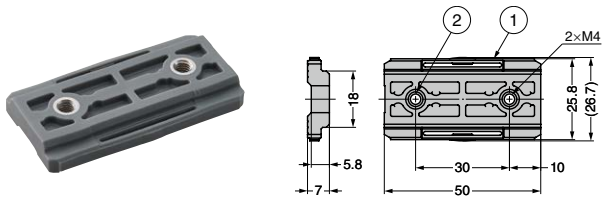
Component Parts

Guide Rail MRS-30



RoHS	CAD	Item Code	Item Name	L	A	Numer of Holes K	Material	Finish	Weight (g)
●	●	190-112-860	MRS30-100	100	10	3	Alluminium Alloy	Silver Anodized	39
●	●	190-112-861	MRS30-200	200	20	5			79
●	●	190-112-862	MRS30-400	400		10			159
●	●	190-112-863	MRS30-800	800		20			312
●	●	190-112-864	MRS30-2000	2000		50			790

Guide Block MR-30CNB Preload Type

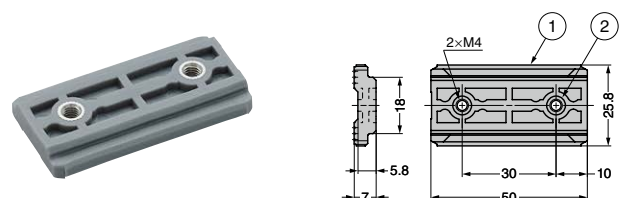


- Temperature: 0 - 40°

No.	Part Name	Finish/Colour
①	Special Polyethylene	Low Friction Grade/Grey
②	Stainless Steel (SUS304)	Plain

RoHS	CAD	Item Code	Item Name	Weight (g)
●	●	190-037-639	MR-30CNB	7

Guide Block MR-30CS

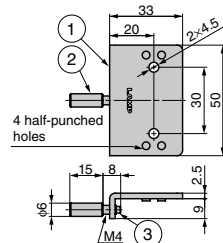


- Temperature: 0 - 40°

No.	Part Name	Finish/Colour
①	Special Polyethylene	Low Friction Grade/Grey
②	Stainless Steel (SUS304)	Plain

RoHS	CAD	Item Code	Item Name	Weight (g)
●	●	190-111-489	MR-30CS	7

Clamp MR-30CLP



- Easily fixes the guide block by simply turning the knob.

[Remarks]

- Fixing position may shift when an external force more than the retaining force (reference value) is applied.
- Knob tip may be damaged when the knob tightening torque is exceeded.
- Mounting screw is not included.

RoHS	CAD	Item Code	Item Name	Retaining Force N (reference)	Knob Tightening Torque N.m	Weight (g)
●	●	190-035-312	MR-30CLP	14 and under	0.1 and under	40.8

No.	Part Name	Material	Finish/Colour
①	Plate	Stainless Steel (SUS304)	Barrel Polished
②	Knob Body	Stainless Steel (SUS303)	Plain
③	Knob Tip	POM	Black

Bracket for Sensor MR-30BKT



Horizontal Mount Type

Vertical Mount Type

- Mounts photoelectric sensors on the guide block (MRS-30).
- Compatible with sensors which have hole interval of 25.4 mm.
- Height and angle of photoelectric sensors are adjustable.

[Application]

- Production line, test equipment

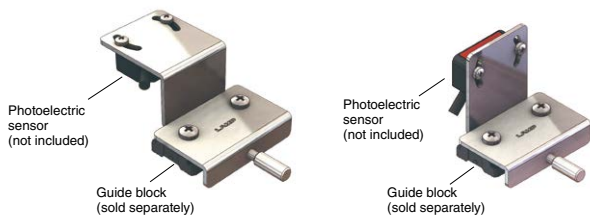
[Remarks]

- Fixing position may shift when an external force more than the retaining force (reference value) is applied.
- Knob tip may be damaged when the knob tightening torque is exceeded.

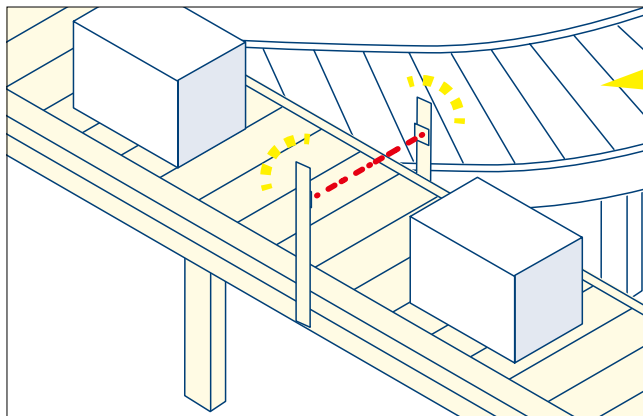
[Included Parts]

- Pre-assembled cross-recessed pan head screw (p=4) stainless steel M3 x 12 (for photoelectric sensor)
- Cross-recessed pan head screw stainless steel M4 x 18 (for guide block)

[With a Photoelectric Sensor]



[Application]



Easy Position Adjustments

[Height]



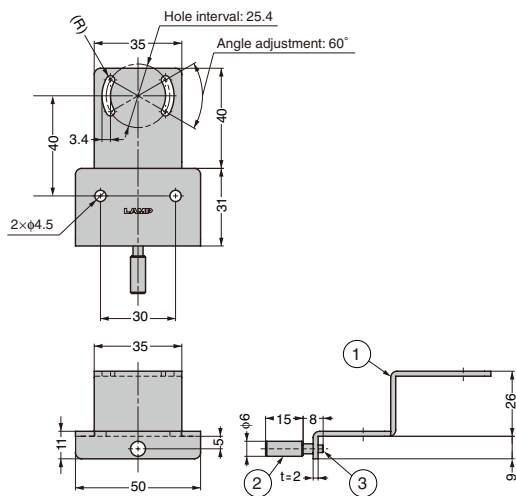
Turn the knob to adjust the height of the photoelectric sensor.

[Angle]

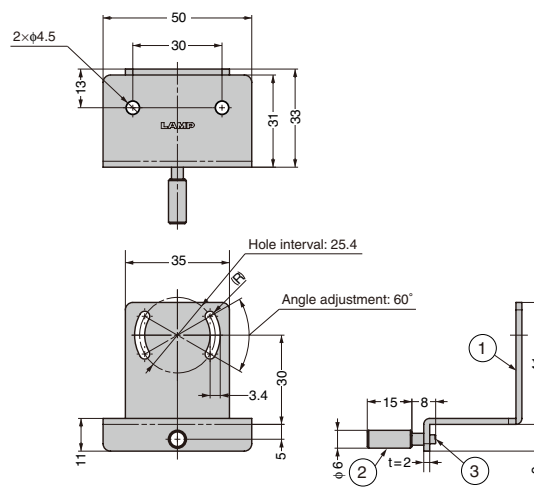


Turn the screws to adjust the angle of the photoelectric sensor.

[Horizontal Mount Type]



[Vertical Mount Type]



RcHS	CAD	Item Code	Item Name	Mount Type	Retaining Force N (reference)	Knob Tightening Torque N	Weight (g)
●	●	190-048-569	MR-30BKT-PH	Horizontal	14 and under	0.1 and under	60
●	●	190-048-568	MR-30BKT-PV	Vertical			50

No.	Part Name	Material	Finish/Colour
①	Plate	Stainless Steel (SUS304)	Barrel Polished
②	Knob Body	Stainless Steel (SUS304)	Plain
③	Knob Tip	POM	Black

RATCHET HEIGHT ADJUSTER VA-RCT



- The ratchet mechanism allows for one-way motion.
- The height adjustment is available in increments of 4 mm.
- The ratchet unlocks when the height exceeds the top step.
- Can extend again from the middle position once the ratchet is released.

[Remarks]

- Cannot be used in either horizontal or inclined directions.
- Use of multiple products in one device may cause malfunctions.
- Support device by hand when lowering height.
- To prevent unbalanced load, recommended to use in combination with linear guide rails.

[Parts Included]

- Body Bracket

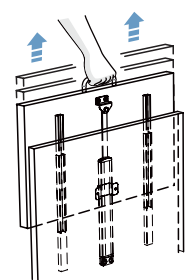
[Sold Separately]

- Housing Bracket LOM-A-6
- Housing Bracket LOM-B-6

* The VA-RCT-200 of the picture is attached with the body and housing brackets.

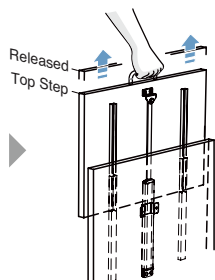
[Ratchet Operation]

1. Extension



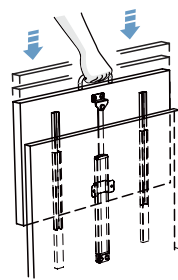
Lift up the fitting slowly. The ratchet provides click sounds for each step. (Ratchet interval: 4 mm)

2. Ratchet Release

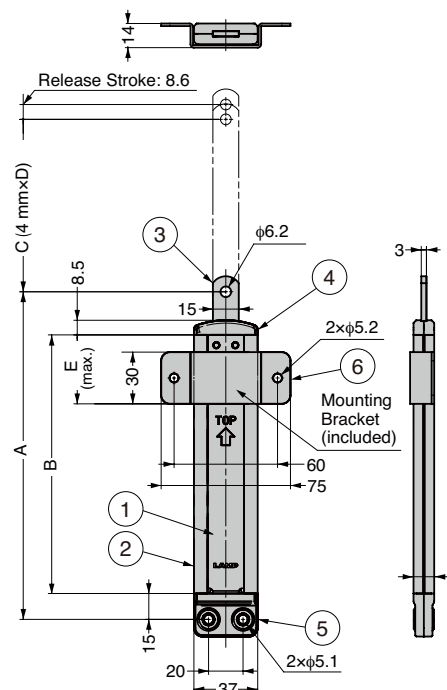


The ratchet lock will be released when it exceeds the top step.

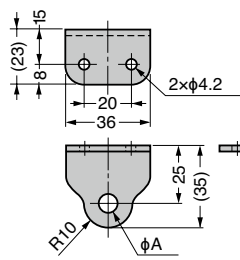
3. Lowering



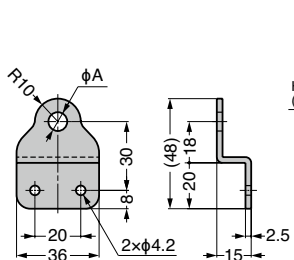
It can extend again in the middle position. (Not required to lower to the bottom step.)



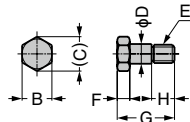
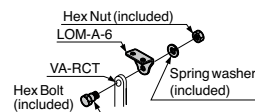
[Bracket]



[LOM-A-6]



[LOM-B-6]



Hex Bolt (included with bracket)

No.	Part Name	Material	Finish/Colour
①	Body	Stainless Steel (SUS304)	Plain
②	Side Cover	ABS	-
③	Slider	Stainless Steel (SUS304)	Plain
④	Upper Cap	Polyacetal (POM)	-
⑤	Bottom Cap	-	-
⑥	Bracket	Stainless Steel (SUS304)	Barrel Polished

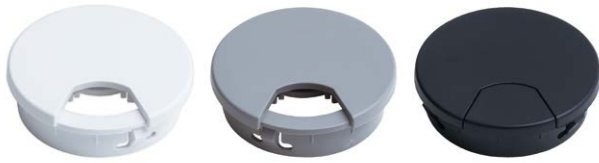
[Body]

RoHS	CAD	Item Code	Item Name	Min. Height A	Stroke C	B	Ratchet Interval	Ratchet Steps D	E	Load Capacity		Weight (g)	Box (pcs)	Carton (pcs)
										N	kgf			
●	●	180-045-683	VA-RCT-100	190	100	150	4	25	50	294	30	280	5	20
●	●	180-045-684	VA-RCT-200	290	200	250		50	80			450	5	20

[Housing Bracket] Sold Separately

RoHS	CAD	Item Code	Item Name	Material	Finish	A	B	C	D	E	F	G	H
●	●	180-109-302	LOM-A-6	Stainless Steel (SUS304)	Barrel Polished	5.2	10	11.5	5.6	M5	4	19	9
●	●	180-109-303	LOM-B-6										

CABLE GROMMET LS50F, LS60F Sheet Metal / One-touch Installation



- One-touch easy installation on sheet metal.
- Folding flap can close the opening when not in use.
- Can be used for thickness from 0.8 to 2.0 mm.
- Compliant with flame retardancy standard UL94 V-0.

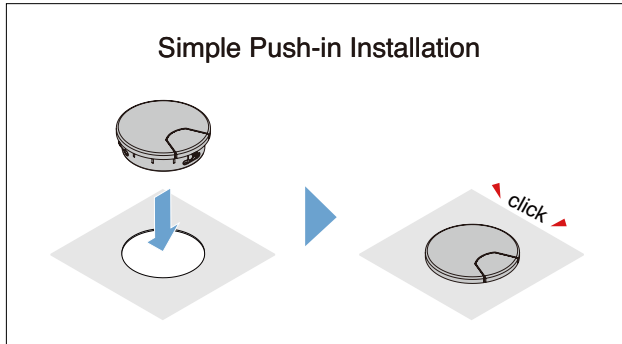
[Application]

- Operation consoles, steel cabinets, self-checkout

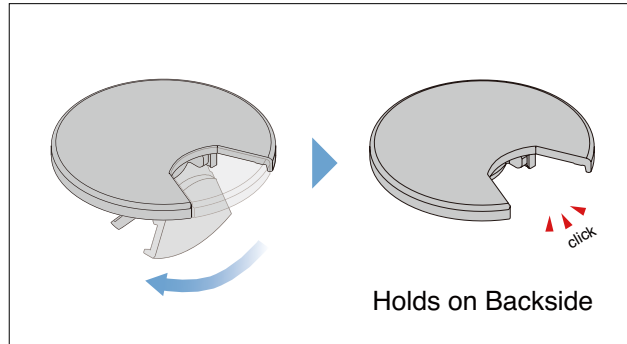
[Remarks]

- Cannot be installed on wood boards.

[Quick Installation to Sheet Metal]

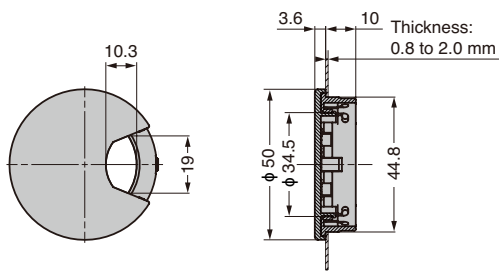


[Flap Cover]

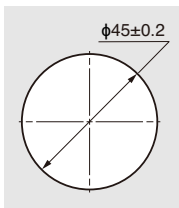


The cover can be folded and held on backside to prevent misplacement. The whole cap is removable for a wider opening.

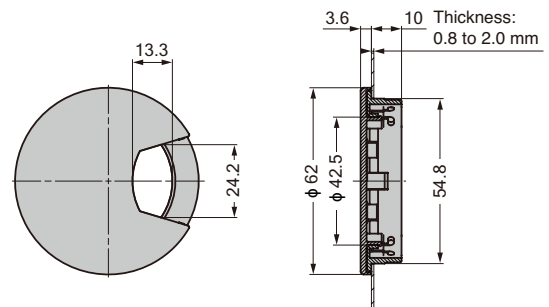
[LS50F]



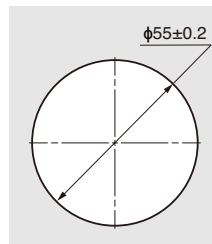
Cut Out Dimension



[LS60F]



Cut Out Dimension



[Video Link](#)



[LS50F] Hole diameter: 45 mm

RoHS	CAD	Item Code	Item Name	Colour	Material	Available Thickness	Weight (g)
●	●	210-045-891	LS50F-WT	White	ABS	0.8 to 2.0	9.8
●	●	210-045-892	LS50F-GR	Grey			
●	●	210-045-893	LS50F-BL	Black			

[LS60F] Hole diameter: 55 mm

RoHS	CAD	Item Code	Item Name	Colour	Material	Available Thickness	Weight (g)
●	●	210-045-894	LS60F-WT	White	ABS	0.8 to 2.0	15.3
●	●	210-045-895	LS60F-GR	Grey			
●	●	210-045-896	LS60F-BL	Black			