No.500



Stylishly subtle hardware **highlights displays**





SUGATSUNE

Since 1930

Manufacturer of LAMP® brand products

# Furniture & Architectural Hardware



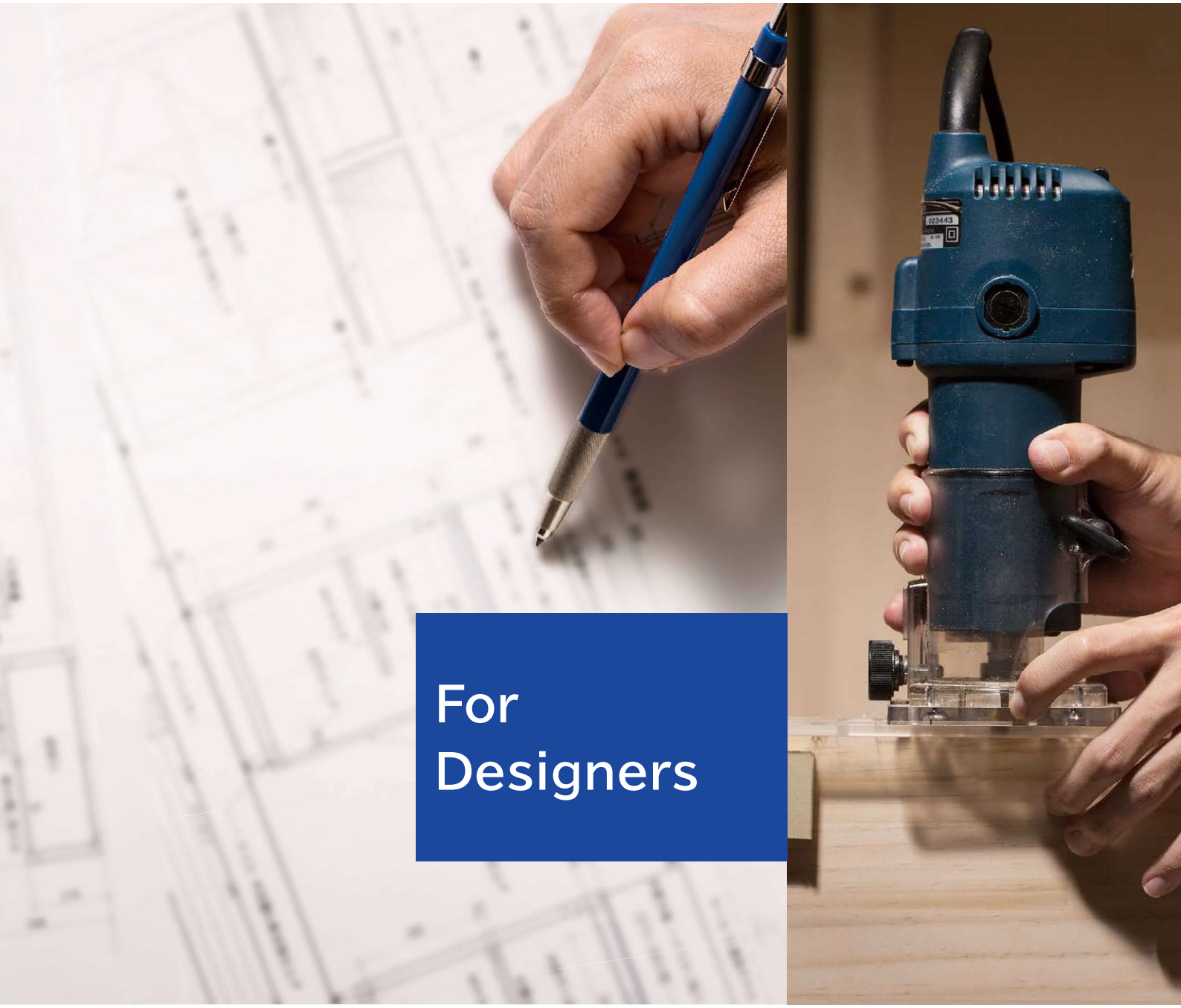
Hinges **integrated** with thin door frames





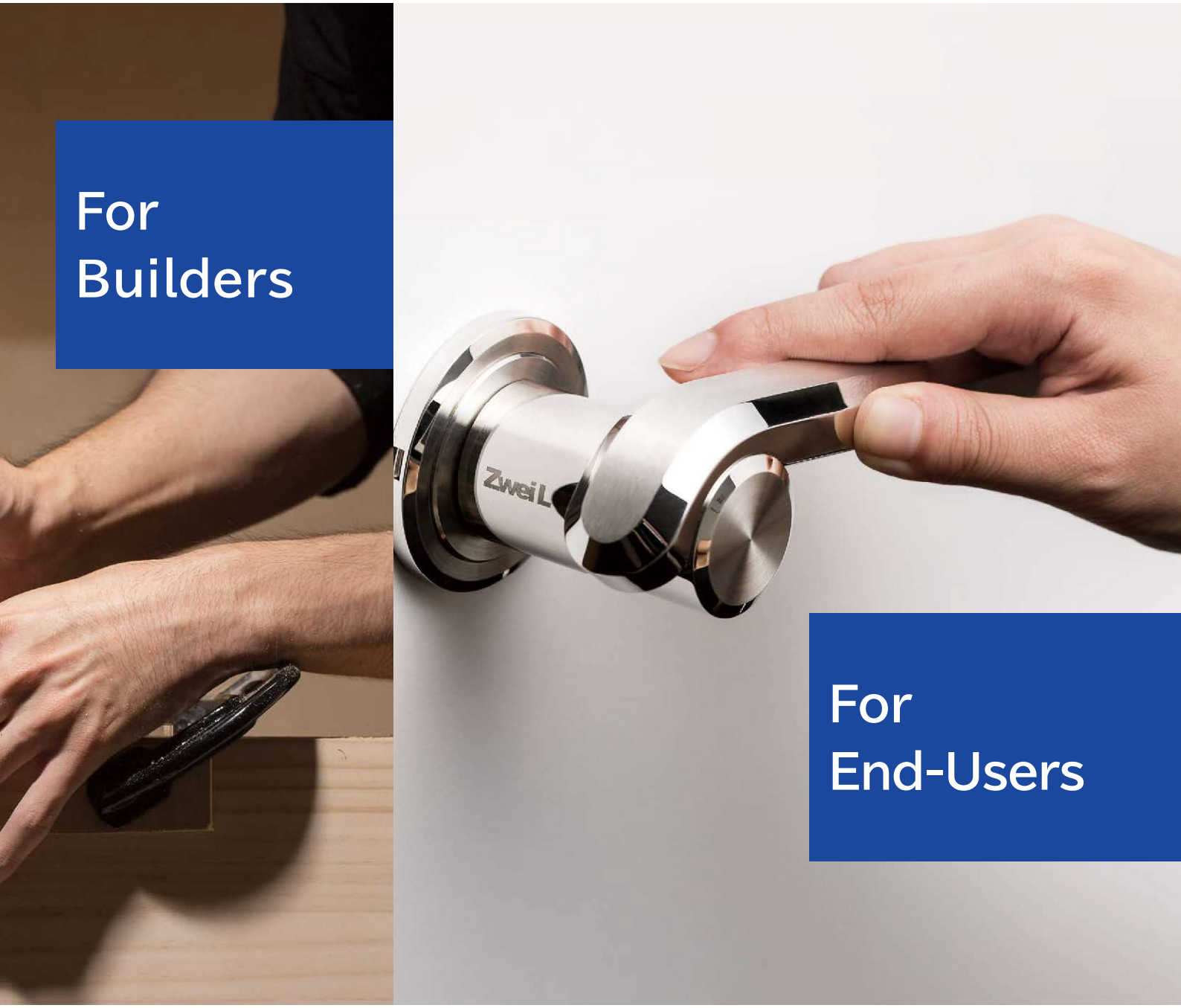
*Innovation beyond expectation*

*Because Details Matter*



For
Designers

# Realising Your Vision with Diversity and Expertise




Sugatsune connects the ideas and aspirations of various people by expanding the potential of hardware and meticulously designing each product.
We meet the demands of furniture and architectural projects with unmatched functionality, quality, and service. Sugatsune' s unwavering dedication remains steadfast now and in the future.

LAMP®

High-Quality Products, Expertly Designed in Japan



September 2024

# Enriching the meaning of “Manufacturing”

## Product Development

The creativity and ability to create new products



Sugatsune recognises originality as a key component to creating products that are long time favourites in the market and that can also drive sales. With enhancing originality comes increasing difficulty to conceptualise and make original products. But by challenging these hurdles, a new and tailored market can be conceived.

## Core Technology

A legacy of expertise




Sugatsune’s Motion Design Tec delivers specialised movements solutions such as “free stop motion,” “soft motion,” and “assist motion” for a better user experience. Cultivated over the decades, Sugatsune can provide highly original, reliable, and quality products with Motion Design Tec technologies worldwide.

# Expanding Globally with Partners in Over 80 Countries

Please enquire about custom-made products!

- Finish change
- Dimension change
- Processing
- Function addition
- Specification change
- Development

# Our Factory

Sugatsune has it's own exclusive factory and within its facilities is a development research centre specializing in motion design. It is here that Sugatsune's new and unique technologies emerge.



## Design

### Commitment to Functional Design



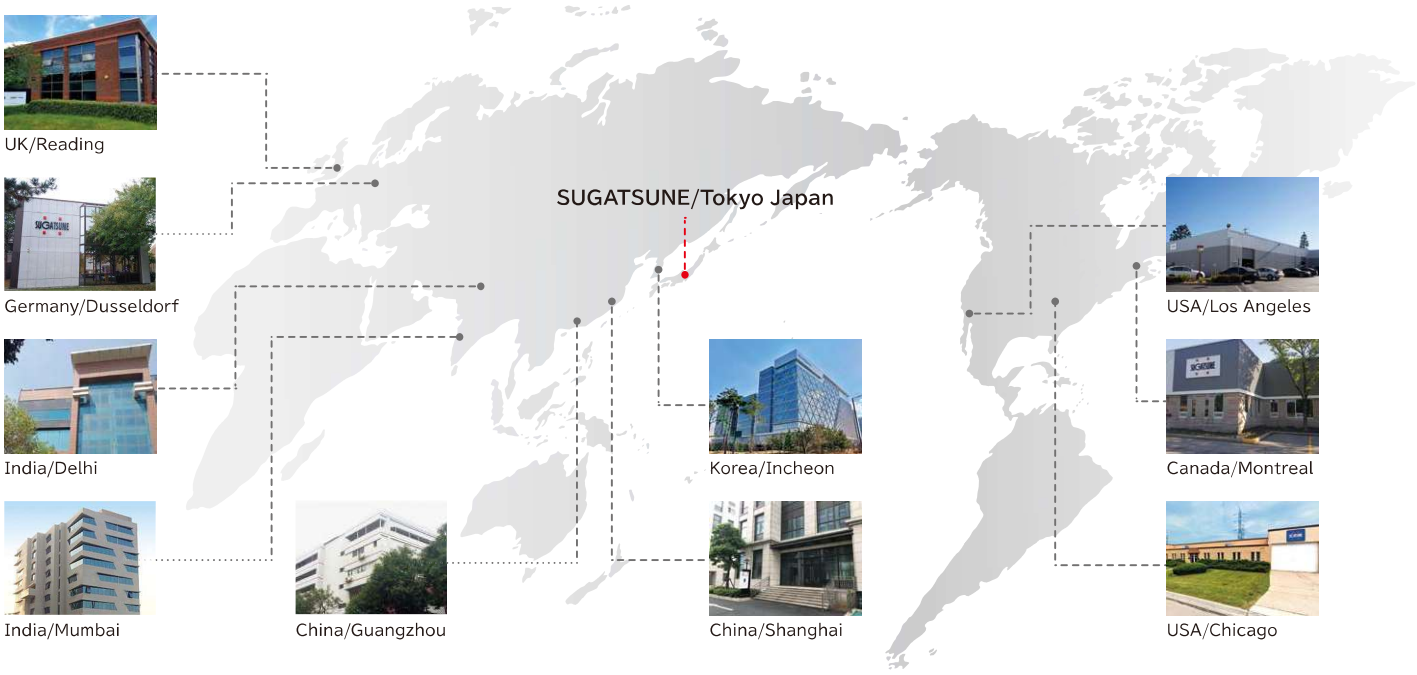
Design is no longer just about shape and colour. To deepen the meaning of "design," practicality and functionality have become integral elements in the Sugatsune manufacturing development process. Without ignoring the traditional design approach, resulting products undoubtedly possess a distinct visually appealing quality.

## Product Variety

### A product lineup to meet all needs



With over 30,000 products in its lineup, Sugatsune can quickly and accurately meet the needs of its customers. Moreover, support for specialised custom made items is also available.





# Zwei Lichter

## [ Two Lights ]

### High precision polish, artfully sculpted shine

Flawless, distortion free lines. Stainless steel surfaces polished to the smoothness of a mirror juxtaposed seamlessly against a soft metallic satin finish creating a stately radiance.

Zwei L®



# Exquisite Distortion-free Straight Lines

Beauty, lives in the finer details.

“The pursuit of the essential and the ideal” is Sugatsune Kogyo’s vow, given form in Zwei L.

With its dual gleams of light, premium interiors are enhanced with a lustrous glow.

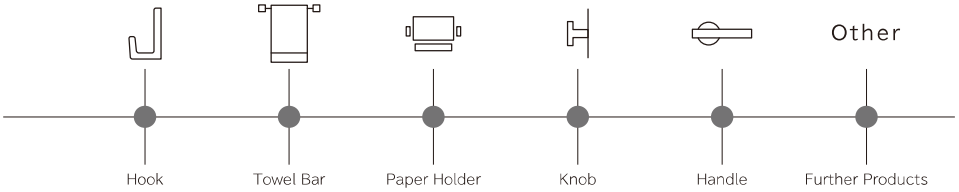








LINE UP





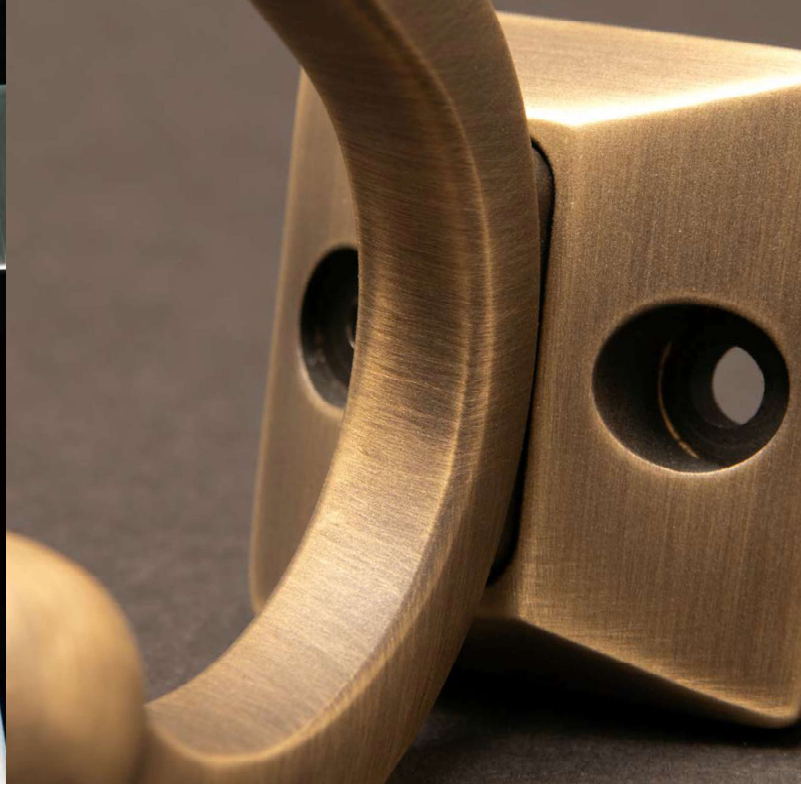
# LAMP®

## An original brand of Sugatsune quality

LAMP brand represents our answers to numerous manufacturing challenges and Sugatsune's commitment to quality and function is evident in the design, construction, material selection, finishing, and quality control of our products.







## Confidence in our quality

Due to our “manufacturing by pursuing the ideal” strategy, which includes stringent quality control, a reliable testing system, and a dedication to exquisite finishes, you can use LAMP products with confidence for a long time. This ensures a consistent supply of goods of high calibre.

## Specialised mechanisms

The components of LAMP are symbolised by their unique mechanisms, which are the outcome of our creative vision. By choosing the best mechanism for the project during the design phase, we maximise the potential of the components and produce a product of a quality that our clients can rely on.

## The art of attention to detail

Design is an integral part of our hardware. With this in mind, we make no compromises with materials and finishes. Sugatsune’s dedication is demonstrated by the stunning finishes and exquisite craftsmanship of our products, which are like works of art.





## MonoFlat UNISON MFU1200 Flush Sliding Door System





The MFU1200 Flush Sliding Door System by Sugatsune offers a sleek and integrated design, effortlessly blending with your wall for a concealed appearance. This system supports a maximum door mass of 70 kg and features a two-way damper, ensuring doors open and close smoothly and quietly, enhancing your space's luxurious feel.
Installation is straightforward with a minimal number of parts and no need for floor rail or groove processing. The door pushes open, eliminating the need for a handle on the front side, creating a perfectly flat surface when closed.

# Seamlessly Blends with Any Interiors







No lower rail or grooving is required on the floor.

MonoFlat UNISON

## Concealed Hinge The HES Series





The HES series offers superb hinges that are virtually invisible from the outside.
It discreetly enhances the beauty of doors without obstructing original designs.
Various interior styles look better with the HES hinges.
For example, the HES1F seamlessly integrates into door frames
and it enhances the overall aesthetic of interior spaces.

# Enhance the Interior Space You Design







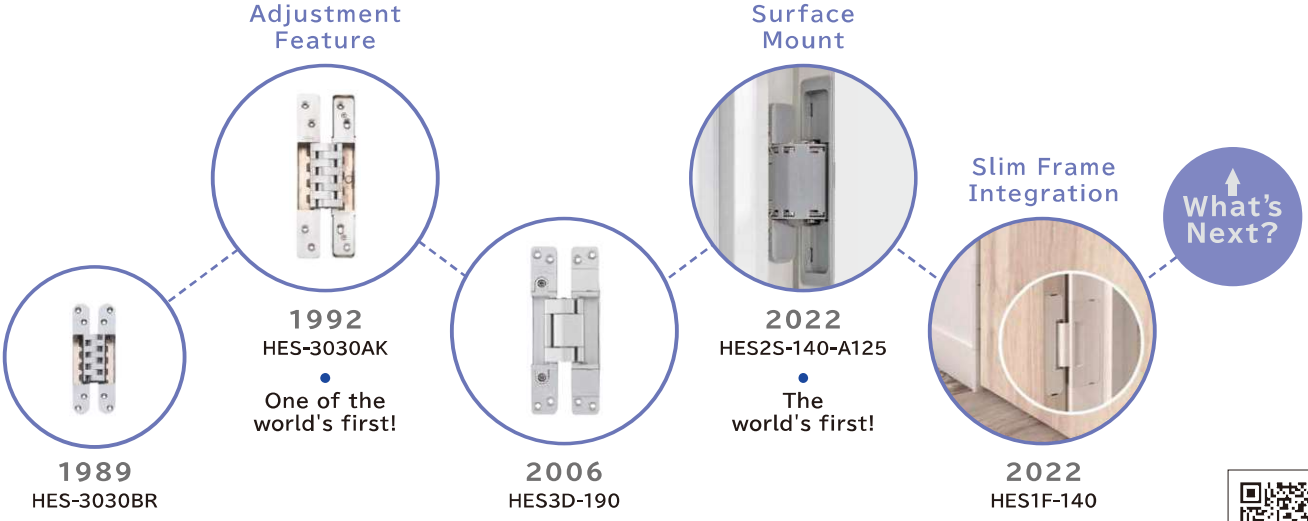
HES1F



HES2S



HES3D




## HES Series Milestones at a Glance

## MonoFlat LIN-X Hinge For Heavy Doors



When closed, the LIN-X Series doors seamlessly align with the wall, creating a clean and sophisticated space. This system can accommodate large doors with a width of up to 1100 mm and a weight of 90 kg. With a wide opening of 930 mm, it also allows for easy wheelchair access.

# Elegant Flush Design for Compact & Functional Spaces

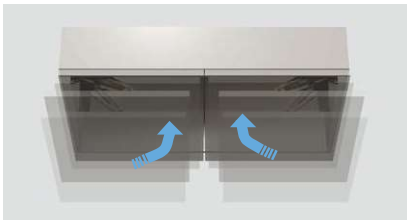
LAMP

Simple & High Quality-Design













MonoFlat LIN-X hinge

# GS-G Series Glass Showcase Hardware




Silver


Gold


Black

Crafted with sleek, modern lines, this showcase hardware enhances your exhibited pieces without stealing the spotlight.



# Premium Stainless Steel Solutions for Modern and Durable Design

Stainless steel products are favoured for all applications due to their modern finish, durability, and non-corrosive quality. This material is also known for being low-maintenance, making it easy to care for while offering great aesthetic appeal. Sugatsune offers a wide range of stainless steel products, from simple decorative hardware to complex functional hardware. Choose Sugatsune's quality stainless steel for a long-lasting, simple, and modern design.



SUGATSUNE HELP HUB

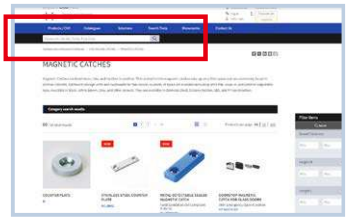
# Build Better with Sugatsune!

## Explore Our Comprehensive Support Resources

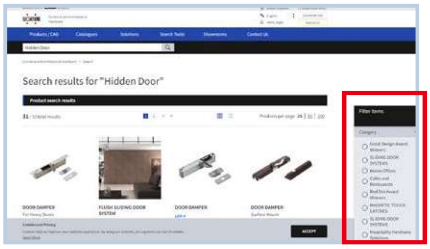


## Keyword Search & Product Filters

Search for products by keyword and utilize our product filters. Access comprehensive information including our online catalogue, CAD data and instruction manuals!



Find relevant products with fuzzy search strings like "Hidden Door"!

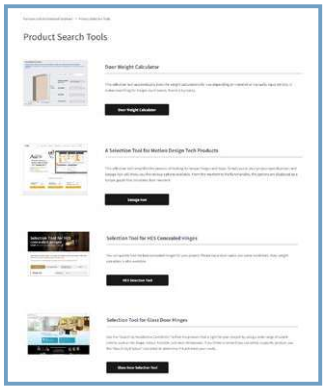



Filter by size, colour, or material as well!

## Product Search Tools

The product search tools allow you to choose products tailored to your installation conditions, such as damper stays, damper hinges, torque hinges, torque stays, and more. With moment calculation and operation force simulation, you can easily identify the products that best meet your product requirements.

- Selection Tool for Motion Design Tech Products (Damper stays and hinges, Free stop hinges, etc.)
- Selection Tool for HES Concealed Hinges
- Selection Tool for Glass Door Hinges
- Selection Tool for Pocket Door System




## Customer Solutions Case Studies

Our case studies introduce our products and demonstrate how they have been used to solve customer project issues.




## Hardware Basics

Discover the basics of our products here. Learn about hinge and stay mechanisms, as well as the differences between various product types.

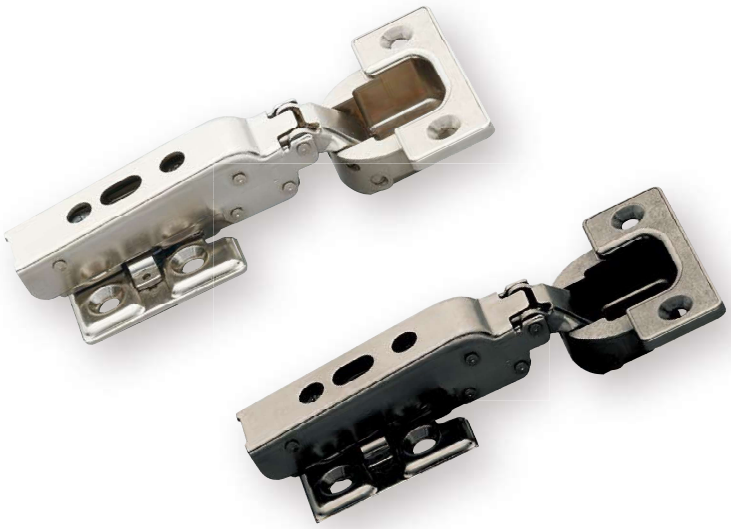



## Official Sugatsune Global Channel

/@SugatsuneGlobal

Videos explain product characteristics and installation methods. Watching the product in action promotes deeper understanding.










# A

# HINGES

These components are used for opening and closing furniture and interior doors. Our range includes concealed hinges that preserve the door's appearance and soft close hinges that reduce the impact of opening and closing, among various other products.

# Selection Guide for Hinges

## Products listed in this category

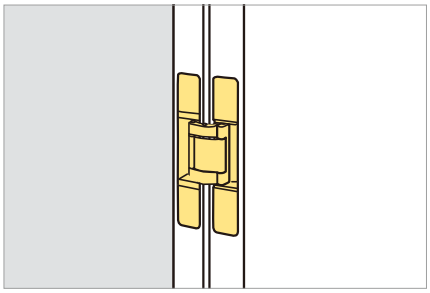
SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

### HES CONCEALED HINGES

For internal doors and interior design furniture

From P.36

Provides ultimate flush storage, with shafts and hinges entirely invisible from both sides when the door is closed.

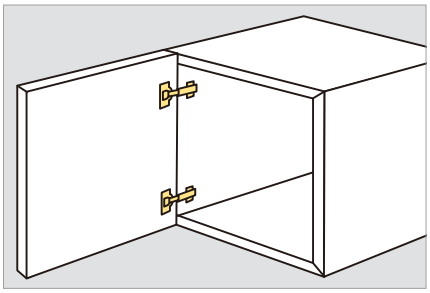


### CONCEALED HINGES

For doors in all kinds of furniture

From P.66

Offers excellent install-ability and durability, suitable for all types of furniture without interfering with adjacent doors.

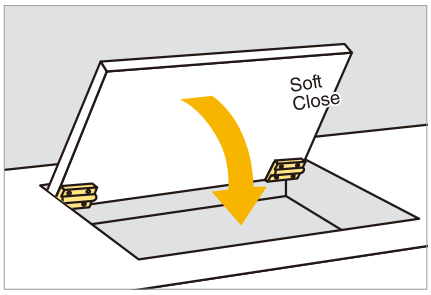


### DAMPER HINGES

For extra-quiet and safe doors and lids

From P.112

Ensures slow and gentle closing via the built-in damper.

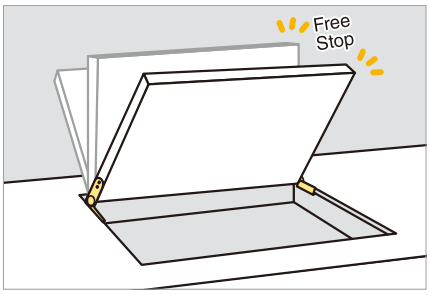



### TORQUE HINGES

For doors and lids requiring angle adjustment

From P.131

Allows doors to stop at any angle without the need for additional stays or stoppers.

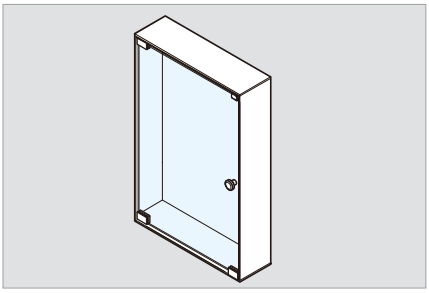



### GLASS HINGES

For glass doors

From P.158

Ideal for showcases and shower booths.

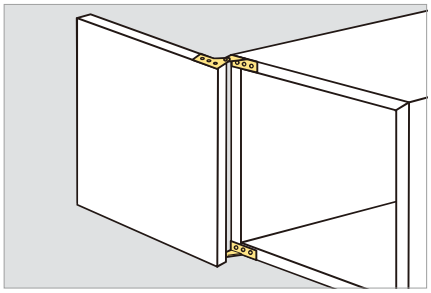


### PIVOT HINGES

For small doors

From P.189

Mounted on the top and bottom edges of doors, also known as P-hinges.

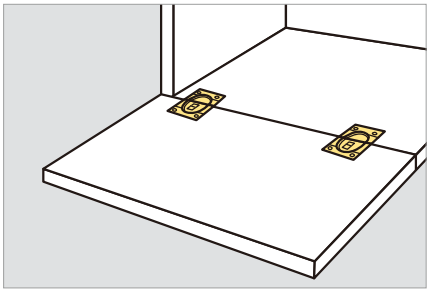


### TABLETOP HINGES

For downward-opening doors

From P.199

Commonly used in television panels and writing desks, ensuring doors lie flush with interior surfaces when fully opened.

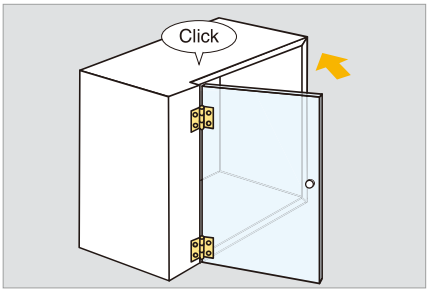


### DETENT HINGES

For doors that provide a tangible opening/closing experience

From P.202

Features a clicking sensation when the door reaches a certain angle (detent).

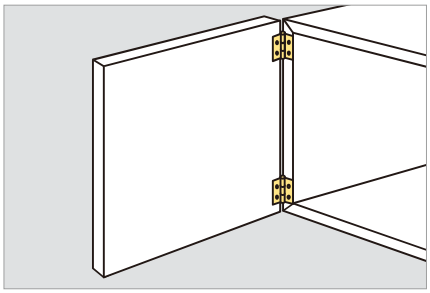



### BUTT HINGES

For doors of all sizes

From P.209

Simple structure with a shaft and leaves, accommodating a wide range of door sizes.

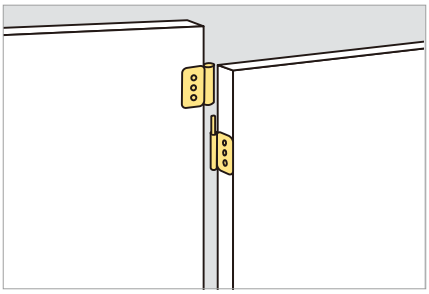


### LIFT-OFF HINGES

For large doors and mass-produced furniture

From P.216

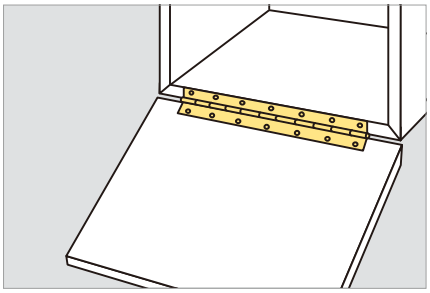
The right and left leaves can be removed for separate machining and transport of doors and frames, facilitating easier installation.



## PIANO HINGES

For wide doors
From P.219

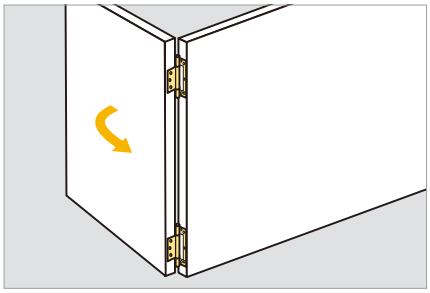
These hinges are longer in the shaft direction. One hinge is used per door.



## SPRING HINGES

For doors remaining normally closed, such as side entrances
From P.222

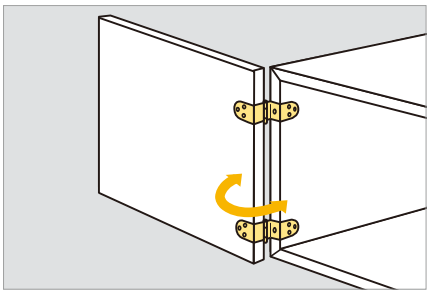
Doors can be automatically closed with spring tension. Dedicated hinges for bathroom stalls are also available.



## ANGLE HINGES

For small overlay doors
From P.228

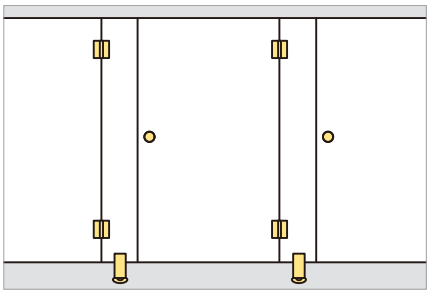
Simple, inconspicuous hinges with shafts unlikely to pop out.



## GRAVITY HINGES

For bathroom stall doors
From P.230

Select normally open or normally closed; the design matches other hardware used in bathroom stalls, such as display latches and door stoppers.



## Introduction to the Selection Tool

Just input the required lid / door dimensions, weight, and so on to find products meeting the conditions.

**For HES Concealed Hinges**

**For Damper Hinges**

**For Torque Hinges**

**For Glass Door Hinges**

## Precautions for Use

### Hinges overall

- Excluding piano hinges, etc., we recommend using at least 2 hinges per door (lid).
- When not indicated otherwise, hinges are sold by the piece; most product specifications, however, anticipate the use of 2 or 3 pieces. Confirm the quantity listed by the item name in the table and order the number required for the projected door size.
- When the quantity is not listed for the door width and height table items, it is the same as the quantity listed in the load capacity item. Depending on the quantity used, larger doors may be supported. Confirm with the "Required Hinge Quantity" figure on each product page.
- When both maximum door size and load capacity are listed, prioritise the load capacity for selection.
- Even when the opening / closing angles are listed, the door may not stop at that position. To prevent damage to the hinges, the door itself, or the surroundings, provide a separate door stopper to prevent opening further.

### Damper Hinges

- Use within the torque range.
- Be sure to conduct prototype verification before use. The same applies to torque hinges.

### Glass Hinges

- When using 3 architectural hinges (for shower stalls), the intermediate hinge position should be centred between the upper and lower hinges (Fig.1).

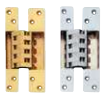
### Torque Hinges

- When not otherwise indicate, the torque is the value with 1 hinge.
- Do not operate repeatedly (repeated motions within a short period of time).
- Do not apply eccentric load to the hinges.
- For torque hinges without resistance indicated, do not expose to water, oil, lubricant, etc.
- The torque is as of delivery. The figure does not indicate post-durability testing torque.
- Other than where explicitly indicated, do not use torque hinges outdoors or in locations exposed to dust, as their performance may be seriously affected.
- The torque is the value set for top-opening doors. Be sure to test with the actual product upon selection.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

## HES CONCEALED HINGES

| Product | Door Width | Door Height | Door Thickness |
|---|---|---|---|
|  | SLIM FRAME HINGE<br>HES1F-140 NEW<br>P.42 | | |
| | Max. 900 | Max. 2700 | Min. 36 |
|  | SURFACE-MOUNT CONCEALED HINGE<br>HES2S-140-A125 NEW<br>P.47 | | |
| | Max. 900 | Max. 2700 | Min. 38 |
|  | SURFACE-MOUNT CONCEALED HINGE<br>HES2S-150-A110 NEW<br>P.48 | | |
| | Max. 900 | Max. 2700 | Min. 35 |
|  | 3-WAY ADJUSTABLE CONCEALED HINGE<br>HES3D-70 For furniture<br>P.49 | | |
| | Max. 600 | Max. 1200 | Min. 19 |
|  | 3-WAY ADJUSTABLE CONCEALED HINGE<br>HES3D-90 For furniture<br>P.50 | | |
| | Max. 600 | Max. 1500 | Min. 23 |
|  | 3-WAY ADJUSTABLE CONCEALED HINGE<br>HES3D-120<br>P.52 | | |
| | Max. 900 | Max. 2400 | Min. 29 |
|  | 3-WAY ADJUSTABLE CONCEALED HINGE<br>HES3D-120-A100 NEW<br>P.53 | | |
| | Max. 900 | Max. 2400 | Min. 29 |
|  | 3-WAY ADJUSTABLE CONCEALED HINGE<br>HES3D-H120-36<br>Centre Door Mortise NEW<br>P.55 | | |
| | Max. 900 | Max. 2700 | Min. 34 |
|  | 3-WAY ADJUSTABLE CONCEALED HINGE<br>HES3D-V135LGR<br>P.56 | | |
| | Max. 900 | Max. 2400 | Min. 30 |
|  | 3-WAY ADJUSTABLE CONCEALED HINGE<br>HES3D-E160<br>P.57 | | |
| | Max. 900 | Max. 2400 | Min. 36 |
|  | STAINLESS STEEL CONCEALED HINGE<br>HGS3D-S160SH NEW<br>P.58 | | |
| | Max. 900 | Max. 2400 | Min. 36 |
|  | 3-WAY ADJUSTABLE CONCEALED HINGE<br>HES3D-E190<br>P.59 | | |
| | Max. 900 | Max. 2400 | Min. 38 |
|  | 3-WAY ADJUSTABLE CONCEALED HINGE<br>HES3D-W190 NEW<br>Wide Throw<br>P.62 | | |
| | Max. 915 | Max. 2440 | Min. 42 |
|  | CONCEALED HINGE<br>HES-3038BK<br>P.65 | | |
| | Max. 900 | Max. 2000 | Min. 36 |

## CONCEALED HINGES

| Product | Door Width | Door Height | Door Thickness |
|---|---|---|---|
|  | CONCEALED HINGE<br>R<br>P.196 | | |
| | Max. 450 | Max. 700 | – |
|  | CONCEALED HINGE<br>INO-66N<br>P.197 | | |
| | Max. 800 | Max. 2100 | Min. 32 |
|  | CONCEALED HINGE<br>RK-50<br>P.198 | | |
| | Max. 450 | Max. 700 | Min. 15 |
|  | CONCEALED HINGES<br>RE-45 NEW<br>P.198 | | |
| | – | – | – |

## CONCEALED HINGES (EUROPEAN STYLE)




P.32 - 33

# DAMPER HINGES

| Product | |
|---|---|
|  | SELF-OPEN MINI DAMPER HINGE<br>HG-JHS9 P.114<br>Torque Moment 0.027 - 0.043 N·m / 1 set |
|  | MINI DAMPER HINGE<br>HG-JHM9 P.115<br>Torque Moment 0.027 - 0.086 N·m / 1 set |
|  | DAMPER HINGE<br>HG-JHM11 P.116<br>Torque 0.05 - 0.4 N·m / 1 set |
|  | SELF-OPEN DAMPER HINGE<br>HG-JHS11 NEW P.118<br>Torque 0.1 - 0.4 N·m / 1 set |
|  | DAMPER HINGE<br>HG-JHM14 P.120<br>Torque Moment 0.5 - 2.0 N·m / 1 set |
|  | DAMPER HINGE<br>HG-JHM16 P.122<br>Torque Moment 2 - 5 N·m / 1 set |
|  | DAMPER HINGE<br>HG-JHM20 P.123<br>Torque Moment 6 - 8 N·m / 1 set |
|  | DAMPER HINGE (SURFACE MOUNT TYPE)<br>HG-JHM20T P.124<br>Torque Moment 6 - 8 N·m / 1 set |
|  | STAINLESS STEEL DAMPER HINGE<br>HG-JH14-50 P.125<br>Torque Moment 3 - 5 N·m / 1 set |
|  | DETENT HINGE (WITH / WITHOUT DAMPER)<br>HG-CSH63 P.125<br>Torque Moment 1 - 2.5 N·m / 1 pc |
|  | DISK DAMPER<br>UDD P.126<br>Torque Moment 0.5 - 3.0 N·m / 1 pc |
|  | DAMPER HINGE<br>HG-JHW16S P.127<br>Torque Moment 2.0 - 5.0 N·m / 1 pc |
|  | DAMPER HINGE<br>HG-JH P.128<br>Torque Moment 3.0 - 7.0 N·m / 1 set |
|  | DAMPER HINGE<br>HG-JHW, HG-JHWG P.128<br>Torque Moment 3 - 7 N·m / 1 pc |

| Product | |
|---|---|
|  | COMBINATION HINGE<br>HG-VH8 P.129<br>Torque Moment 0.022 - 0.038 N·m / 1 pc |
|  | GRAVITY SOFT-CLOSE HINGE<br>HG-JG150 NEW P.130<br>Door Width Max. 900,<br>Load Capacity 10 to 20 kgf / 1 set |

# TORQUE HINGES

| Product | Torque Moment N·m |
|---|---|
|  | MINI TORQUE HINGE<br>HG-MF P.131<br>$0.0784^{\pm25\%}$ - $0.245^{\pm20\%}$ |
|  | TORQUE HINGE<br>HG-TS P.131<br>$0.35^{+40\%}_{-20\%}$ - $15^{+40\%}_{-20\%}$ |
|  | TORQUE HINGE<br>HG-TE NEW P.132<br>$0.3^{+40\%}_{-20\%}$ - $1.5^{+40\%}_{-20\%}$ |
|  | TORQUE HINGE<br>HG-TP NEW P.133<br>$2^{\pm25\%}$ - $4.5^{\pm25\%}$ |
|  | ADJUSTABLE TORQUE HINGE<br>HG-ITJ4080 P.133<br>$4^{\pm20\%}$ - 8 |
|  | TORQUE HINGES<br>HG-SFTH P.134<br>$0.343^{\pm15\%}$ - $5.686^{\pm9\%}$ |
|  | TORQUE HINGE<br>HG-IT P.135<br>$2.5^{\pm20\%}$ - $7.0^{\pm20\%}$ |
|  | ONE WAY TORQUE HINGE<br>HG-TQS15 NEW P.136<br>$1.5^{+40\%}_{-20\%}$ |
|  | ADJUSTABLE ONE WAY TORQUE HINGE<br>HG-TQJ100 P.137<br>0 - 10 |
|  | TORQUE HINGE<br>HG-TA P.138<br>$2.0^{\pm20\%}$ - $4.5^{\pm20\%}$ |
|  | DETENT TORQUE HINGE<br>HG-DTA P.138<br>$0.4^{\pm20\%}$ - $0.8^{\pm20\%}$ |

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

# TORQUE HINGES

| Product | Torque Moment N·m |
|---|---|
|  | TORQUE HINGE<br>HG-TAC Black Type **NEW** P.139<br>$2.0^{\pm20\%}$ - $4.5^{\pm20\%}$ |
|  | TORQUE HINGE<br>HG-TA45H P.140<br>$4.5^{\pm20\%}$ |
|  | TORQUE HINGE<br>HG-TB P.141<br>$0.7^{\pm20\%}$ - $4.5^{\pm20\%}$ |
|  | DETENT TORQUE HINGE<br>HG-DTB P.141<br>$0.4^{\pm20\%}$ - $0.8^{\pm20\%}$ |
|  | TORQUE HINGE<br>HG-TBC Black Type **NEW** P.142<br>$2.0^{\pm20\%}$ - $4.5^{\pm20\%}$ |
|  | ALL STAINLESS STEEL TORQUE HINGE<br>HG-TBS P.143<br>$1.5^{\pm20\%}$ - $4.0^{\pm20\%}$ |
|  | ADJUSTABLE ALL STAINLESS STEEL TORQUE HINGE<br>HG-TBSJ40 P.144<br>0 - 4.0 |
|  | DUAL AXIS TORQUE HINGE<br>HG-TMH P.145<br>$1.5^{\pm20\%}$ - $2.0^{\pm20\%}$ (Shaft A)<br>$3.0^{\pm20\%}$ (Shaft B) |
|  | DETACHABLE TORQUE HINGE<br>HG-RNM30 P.146<br>$3.0^{\pm20\%}$ N·m / 2 pcs |
|  | PIVOT TORQUE HINGE<br>HG-PTH30 **NEW** P.147<br>$3.0^{\pm20\%}$ N·m / 2 pcs |
|  | CONCEALED TORQUE HINGE<br>HG-TU P.150<br>$0.35^{+40\%}_{-20\%}$ - $0.7^{+40\%}_{-20\%}$ |
|  | TORQUE HINGE (DUAL AXIS)<br>HG-T30S15 P.151<br>$3.0^{\pm20\%}$ (Tilting) / $1.5^{\pm20\%}$ (Swiveling) |
|  | TORQUE HINGE (DUAL AXIS)<br>HG-T70S30 P.151<br>$7.0^{\pm20\%}$ (Tilting) / $3.0^{\pm20\%}$ (Swiveling) |
|  | SWIVEL TORQUE HINGE<br>HG-S P.152<br>$0.7^{\pm20\%}$ - $10.0^{\pm20\%}$ |

| Product | Torque Moment N·m |
|---|---|
|  | SPRING-ASSIST TORQUE HINGE<br>HG-TLAJ **NEW** P.156<br>0 - 3.5 |

# DETENT HINGES

| Product | Detent Angle |
|---|---|
|  | MINI DETENT HINGE<br>HG-MPS2 P.202<br>-10˚, 120˚and 170˚ |
|  | DETENT HINGE<br>HG-YJ50 P.202<br>90˚ increment |
|  | ANGLE-ADJUSTABLE DETENT HINGE<br>HG-CHJ70 **NEW** P.203<br>-3°, (45° / ±90° / -45° and 135°), 177° |
|  | MULTI ANGLE LOCKING HINGE<br>HG-MA95A **NEW** P.204<br>10° increment Locking |
|  | MULTI ANGLE LOCKING HINGE<br>HG-MA95B **NEW** P.205<br>10° increment Locking |
|  | FOLDING HINGE<br>HG-RCT1S-90 **NEW** P.206<br>90° Locking |
|  | RATCHET HINGE WITH FRICTION<br>HG-RCT12-C P.207<br>5° increment Locking (0 to 90°) |
|  | DETENT HINGE<br>HG-YC105 P.208<br>– |

## PIVOT HINGES

| Product | Door Width | Door Height | Door Thickness |
|---|---|---|---|
|  | OVERLAY DOOR PIVOT HINGE WP1, WP3 P.189 | | |
| | Max. 300 | Max. 700 | Max. 18, 24 |
|  | INSET DOOR PIVOT HINGE PP-60 P.189 | | |
| | Max. 450 | Max. 700 | – |
|  | OVERLAY DOOR PIVOT HINGE PL-60 P.190 | | |
| | Max. 450 | Max. 700 | 22 |
|  | INSET DOOR PIVOT HINGE PV-30 P.190 | | |
| | Max. 450 | Max. 700 | Max. 21 |
|  | INSET DOOR PIVOT HINGE PAW P.191 | | |
| | Max. 450 | Max. 700 | Min. 14, 16, 20, 28 |
|  | INSET DOOR PIVOT HINGE PH P.191 | | |
| | Max. 450 | Max. 700 | Min. 14, 16, 20, 28 |
|  | OVERLAY DOOR PIVOT HINGE PL-65 P.192 | | |
| | Max. 450 | Max. 700 | 22 |
|  | OVERLAY DOOR PIVOT HINGE PAS P.192 | | |
| | Max. 450 | Max. 700 | 21, 25, 30 |
|  | OVERLAY DOOR PIVOT HINGE PL-100 P.193 | | |
| | Max. 600 | Max. 750 | – |
|  | INSET DOOR PIVOT HINGE TTS-902 P.193 | | |
| | – | – | – |
|  | INSET DOOR PIVOT HINGE (ADJUSTABLE) PH084N P.194 | | |
| | Max. 300 | Max. 700 | 15 - 19 |
|  | 2-WAY ADJUSTABLE PIVOT HINGE PH-01 P.195 | | |
| | Max. 850 | Max. 2300 | 33 - 42 |

## TABLETOP HINGES Opening angle 90˚

| Product | Door Width | Door Height | Adjustment | Door Thickness |
|---|---|---|---|---|
|  | DROP HINGE (ADJUSTABLE TYPE) SDH-001 P.199 | | | |
| | Max. 900 / 2 pcs<br>Max. 1200 / 3 pcs | Max. 500 | 14 - 16 | 16 - 20 |
|  | DROP HINGE (ADJUSTABLE TYPE) SDH-P P.200 | | | |
| | Max. 900 / 2 pcs<br>Max. 1200 / 3 pcs | Max. 500 | 16 - 19 | 16 - 20 |

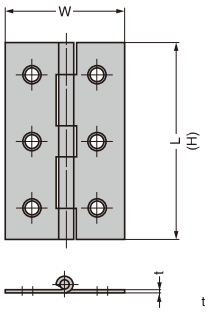
## TABLETOP HINGES Opening angle 180˚

| Product | Door Width | Door Height | Door Thickness |
|---|---|---|---|
|  | TABLETOP HINGE MH-30 P.201 | | |
| | Max. 450 | Max. 700 | Max. 21 |
|  | TABLETOP HINGE MH-40 P.201 | | |
| | Max. 450 | Max. 700 | Max. 21 |
|  | TABLETOP HINGE MH-83 P.201 | | |
| | Max. 450 | Max. 700 | Max. 21 |
|  | TABLETOP HINGE MA-5 P.201 | | |
| | Max. 450 | Max. 700 | Max. 21 |

| Product | Length L | Load Capacity kgf / pc |
|---|---|---|
|  | TABLETOP PIANO HINGE HG-MH P.222 | |
| | 400 | – |
| | 800 | |
| | 1100 | |

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

# BUTT HINGES




| t | L (H) × W | Load Capacity kgf / 2 pcs | Item Name | Page |
|---|---|---|---|---|
| **Brass** | | | | |
| 1.8 | 25 × 27 | 3.5 | TTS-101M | P.209 |
| | | | TTS-101WB | |
| | 32 × 27 | 4 | TTS-102M | |
| | | | TTS-102WB | |
| | 38 × 27 | 5 | TTS-103M | |
| | | | TTS-103WB | |
| 1.9 | 38 × 27 | 4.5 | TTS-801M | |
| | | | TTS-801WB | |
| 2.1 | 50 × 32 | 8 | TTS-104M | |
| | | | TTS-104WB | |
| 2.3 | | 7 | TTS-802M | |
| | | | TTS-802WB | |
| 2.3 | 65 × 38 | 14 | TTS-105M | P.209 |
| | | | TTS-105WB | |
| 2.5 | | 10 | TTS-803M | |
| | | | TTS-803WB | |
| | 75 × 42 | 19 | TTS-106M | |
| | | | TTS-106WB | |
| 2.6 | | 15 | TTS-804M | |
| | | | TTS-804WB | |
| 2.8 | 90 × 56 | 25 | TTS-107M | |
| | | | TTS-107WB | |
| 3 | 100 × 68 | 29 | TTS-108M | |
| | | | TTS-108WB | |
| 3.2 | 101.5 × 102 | 50 | 4040BPB | P.212 |
| | | | 4040BSC | |
| | | | 4040BAB | |
| 3.7 | 125 × 82 | 38 | TTS-109M | P.209 |
| | | | TTS-109WB | |
| **Stainless Steel** | | | | |
| 1.5 | 40 × 35 | 7 | LSB-40 | P.210 |
| | 50 × 35 | 9 | LSB-50 | |
| 2 | 65 × 50 | 16 | LSB-65 | |
| | 75 × 50 | 19 | LSB-75 | |
| 2.5 | 89 × 89 | 25 | 3535WSS | P.211 |
| | 101.6 × 101.6 | 30 | 4040WSS | |
| 3 | 90 × 60 | 34 | LSB-90 | P.210 |
| | 100 × 60 | 37 | LSB-100 | |
| | 89 × 89 | 34 | 3535SS | P.211 |
| | 107 × 76 | 40 | DFHG-4030BSS | P.213 |
| | 119 × 114 | 45 | DFHG-4545BSS | |
| | 132 × 76 | 50 | DFHG-5030BSS | |
| 3.4 | 101.6 × 101.6 | 44 | 4040SS | P.211 |
| | 114.3 × 114.3 | 49 | 4545BSS | |
| 4 | 38 × 39 | 17 | 28300 | P.210 |
| | 50 × 50 | 23 | 28400 | |
| | 43 ×39 | 17 | 28100 | P.214 |
| | 58 ×38 | | 27900 | |
| | 72 ×38 | | 27800 | |
| | 74 ×38 | | 28500 | |
| | 104 ×38 | | 28000 | |
| 5 | 50 × 50 | 28 | LSF-50 | P.212 |
| | 65 × 65 | 36 | LSF-65 | |
| 5.5 | 65 × 29 | 2.6 | HG-BH60 | P.215 |
| 6 | 75 × 75 | 51 | LSF-75 | P.212 |
| | 100 × 100 | 68 | LSF-100 | |
| | 210 × 150 | 200 | HG-LSC210 | P.213 |
| | | | HG-LSC210N | |
| 7.5 | 70 × 35 | 2.6 | HG-BH70 | P.215 |
| | 80 × 43.2 | | HG-BH80 | |

# LIFT-OFF HINGES

| Product | Load Capacity kgf / 2 pcs | Hinge Height L (H) | Hinge Width W |
|---|---|---|---|
|  | LIFT-OFF HINGE ZL-1701 | | P.216 |
| | 32 | 101 | 96 |
| | 57 | 133 | 104 |
|  | HEAVY-DUTY STAINLESS STEEL BUTT HINGE HG-LSH | | P.217 |
| | 200 | 154.5 | 116 |
| | 222 | 204.5 | 160 |
|  | HEAVY-DUTY STAINLESS STEEL BUTT HINGE (INSTALLATION HOLE TYPE) HG-LSW | | P.217 |
| | 200 | 154.5 | 116 |
| | 222 | 204.5 | 160 |
|  | LIFT-OFF HINGE TTS-200 SERIES | | P.218 |
| | 6.5 | 50 | 40 |
| | 11 | 65 | 50 |
| | 12 | 75 | 60 |
| | 21 | 100 | 75 |
| | 35 | 125 | 100 |

# PIANO HINGES

| Product | Length L | Load Capacity kgf / 1pc |
|---|---|---|
|  | STAINLESS STEEL PIANO HINGE LSN-C NEW | P.219 |
| | 450 | 40 |
| | 600 | 53 |
|  | PIANO HINGE LS, LSD, LB30, LB45 | P.220 |
| | 240 | – |
| | 300 | |
| | 360 | |
| | 450 | |
| | 600 | |
| | 900 | |
| | 1200 | |
| | 1800 | |
|  | PIANO HINGE LHN | P.221 |
| | 1200 | 56 |
| | 1500 | 60 |
| | 1872 | 76 |
| | 2100 | 85 |
|  | TORQUE PIANO HINGE HG-TLS30-50-300 NEW | P.221 |
| | 300 | – |

## SPRING HINGES

| Product | Torque Moment N·m | Hinge Height L (H) | Hinge Width W |
|---|---|---|---|
|  | HIGH DURABILITY SPRING HINGE HG-SHL P.222 | | |
| | 0.047 | 32 | 32 |
| | 0.089 | 50 | |
| | 0.14 | 60 | |
| | 0.214 | 90 | 50 |
| | 0.43 | 120 | |
| | 0.70 | 150 | |
| | 0.95 | 200 | |
|  | HIGH DURABILITY SPRING HINGE HG-SHL-RS NEW P.223 | | |
| | 0.047 | 32 | 32 |
| | 0.089 | 50 | |
| | 0.14 | 60 | |
| | 0.3 | 90 | 50 |

| Product | Load Capacity | Hinge Height L (H) | Hinge Width W |
|---|---|---|---|
|  | BUTT HINGE (W / SPRING) HG-BF3-2 P.224 | | |
| | 7 kgf / 2 pcs | 40 | 60 |
|  | ALUMINIUM SPRING LIFT-OFF HINGE PM120 P.224 | | |
| | 20 kgf / 2 pcs<br>30 kgf / 3 pcs | 120 | 80 |
|  | SPRING HINGE SA P.225 | | |
| | 20 kgf / 2 pcs<br>30 kgf / 3 pcs | 120<br>or<br>180 | 80 |
| | 40 kgf / 2 pcs<br>60 kgf / 3 pcs | | |
|  | SPRING HINGE ST150-6314-05 P.225 | | |
| | 40 kgf / 2 pcs<br>60 kgf / 3 pcs | 153 | 78.2 |
|  | DOUBLE ACTION HINGE DA P.226 | | |
| | Please check on the page. | 120 | 101 or 133 |
| | | 180 | 101, 133, or 157 |
|  | ALUMINIUM SPRING HINGE DAW P.227 | | |
| | Please check on the page. | 120 | 146 |
| | | 180 | |

## ANGLE HINGES

| Product | Door Width | Door Height | Door Thickness |
|---|---|---|---|
|  | OVERLAY DOOR ANGLE HINGE AHS P.228 | | |
| | Max. 450 | Max. 700 | 20<br>24 |
|  | OVERLAY DOOR ANGLE HINGE AHW P.228 | | |
| | Max. 450 | Max. 700 | 20<br>24 |
|  | OVERLAY DOOR ANGLE HINGE AHA-24 P.229 | | |
| | Max. 450 | Max. 700 | 24 |
|  | OVERLAY DOOR ANGLE HINGE AHB-18 P.229 | | |
| | Max. 450 | Max. 700 | 18 |

## GRAVITY HINGES

| Product | Hinge Height L (H) | Hinge Width W |
|---|---|---|
|  | GRAVITY HINGE Inside Opening ET-100A P.230 | |
| | 96 | 82 |
|  | GRAVITY HINGE Outside Opening ET-100BF P.230 | |
| | 96 | 82 |
|  | GRAVITY HINGE ET-100CD P.231 | |
| | 96 | 82 |

## OTHERS

| Product | Door Width | Door Height |
|---|---|---|
|  | DAMPER CATCH DC P.232 | |
| | Max. 600 | Max. 800 |

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

# GLASS HINGES



## Pivot Type

| Product | Door Width | Door Height | Load Capacity |
|---|---|---|---|
| GLASS HINGE (INSET) GS-GH5 P.160 | | | |
|  | Max. 600 | Max. 900 | 8 kgf / 1 set (2 pcs) |
| GLASS HINGE (INSET) GS-GH20 P.162 | | | |
|  | Max. 700 | Max. 1600 | 20 kgf / 1 set (2 pcs) |
| GLASS DOOR HINGE GS-GH50 NEW P.165 | | | |
|  | Max. 900 | Max. 2500 | 50 kgf / 1 set (2 pcs) |
| GLASS HINGE (OVERLAY, W / CATCH) XL-GC07-CR P.167 | | | |
|  | Max. 500 | Max. 1200 | 12 kgf / 2 pcs |
| GLASS HINGE XL-GC07D-CR Overlay / Soft Catch P.167 | | | |
|  | Max. 500 | Max. 1000 | 7.5 kgf / 2 pcs |
| GLASS PIVOT HINGE (INSET) XL-GC04-CR P.168 | | | |
|  | Max. 500 | Max. 1200 | 12 kgf / 1 set (2 pcs) |
| INSET GLASS DOOR PIVOT HINGE GP-40 P.169 | | | |
|  | Max. 450 | Max. 700 | 4 kgf / 2 pcs |
| INSET GLASS DOOR PIVOT HINGE GPH P.170 | | | |
|  | Max. 450 | Max. 700 | 4 kgf / 2 pcs |

## Side-mounted Type

| Product | Door Width | Door Height | Load Capacity |
|---|---|---|---|
| INSET GLASS DOOR HINGE GH34-0 P.171 | | | |
|  | Max. 450 | Max. 700 | 4 kgf / 2 pcs |
| HALF OVERLAY GLASS DOOR HINGE GH34-8 P.171 | | | |
|  | Max. 450 | Max. 700 | 4 kgf / 2 pcs |
| INSET GLASS DOOR HINGE GH34-0CR-K P.172 | | | |
|  | Max. 450 | Max. 700 | 4 kgf / 2 pcs |
| HALF OVERLAY GLASS DOOR HINGE GH34-8CR-K P.172 | | | |
|  | Max. 450 | Max. 700 | 4 kgf / 2 pcs |
| HALF OVERLAY GLASS DOOR HINGE (W / CATCH) GHC34-8CR-K P.173 | | | |
|  | Max. 450 | Max. 700 | 4 kgf / 2 pcs |
| HALF OVERLAY GLASS DOOR HINGE (W / CATCH) GHC34-8 P.173 | | | |
|  | Max. 450 | Max. 700 | 4 kgf / 2 pcs (GHC34-8B is 5 kgf / 2 pcs) |
| INSET GLASS DOOR HINGE GH34-0SS P.174 | | | |
|  | Max. 450 | Max. 700 | 5 kgf / 2 pcs |
| HALF OVERLAY GLASS DOOR HINGE GH34-8SS P.174 | | | |
|  | Max. 450 | Max. 700 | 5 kgf / 2 pcs |
| INSET GLASS DOOR HINGE XL-GH03-48-0 P.175 | | | |
|  | Max. 650 | Max. 900 | 12 kgf / 2 pcs |
| HALF OVERLAY GLASS DOOR HINGE XL-GH03-48-8 P.175 | | | |
|  | Max. 650 | Max. 900 | 12 kgf / 2 pcs |

| Product | Door Width | Door Height | Load Capacity |
|---|---|---|---|
| HALF OVERLAY GLASS DOOR HINGE (W / O CATCH) GH-456N P.176 | | | |
|  | Max. 600 | Max. 1200 | 15 kgf / 2 pcs |
| HALF OVERLAY GLASS DOOR HINGE (W / CATCH) GH-456C P.176 | | | |
|  | Max. 600 | Max. 1200 | 15 kgf / 2 pcs |
| INSET GLASS DOOR HINGE GH-450 P.177 | | | |
|  | Max. 600 | Max. 1200 | 15 kgf / 2 pcs |
| INSET GLASS DOOR HINGE (GLASS FRAME TYPE) GH-450G P.177 | | | |
|  | Max. 600 | Max. 1200 | 15 kgf / 2 pcs |
| GLASS DOOR HINGE XL-GH01-250 P.178 | | | |
|  | Max. 400 | Max. 600 | 4.8 kgf / 2 pcs |
| GLASS DOOR HINGE XL-GH01-600 P.178 | | | |
|  | Max. 450 | Max. 1300 | 11 kgf / 2 pcs |
| 3-WAY ADJUSTABLE CONCEALED HINGE HES3D-90/HES3D-G90BKT P.179 | | | |
|  | Max. 600 | Max. 1500 | 16 kgf / 3 pcs<br>12 kgf / 2 pcs |
| 3-WAY ADJUSTABLE CONCEALED HINGE, GLASS DOOR BRACKET HES3D-120/HES3D-G120BKT P.180 | | | |
|  | Max. 900 | Max. 2400 | 40 kgf / 3 pcs<br>30 kgf / 2 pcs |
| DROP HINGE (FOR GLASS DOOR) SDH-G P.181 | | | |
|  | Max. 900 / 2 pcs | Max. 300 | – |

## Gravity Hinge

| Product | Mounted On / Plumbing | Door Width | Door Height | Load Capacity |
|---|---|---|---|---|
| STAINLESS STEEL GLASS DOOR GRAVITY HINGE GH-G02SH NEW P.184 | | | | |
|  | Wall OK | Strong Self Closing / Self Opening | | |
| | | Max. 850 / 3 pcs | Max. 2400 / 3 pcs | 50 kgf / 3 pcs |
| STAINLESS STEEL GLASS DOOR GRAVITY HINGE GH-G07SH NEW P.184 | | | | |
|  | Wall OK | Strong Self Closing / Self Opening | | |
| | | Max. 850 / 3 pcs | Max. 2400 / 3 pcs | 50 kgf / 3 pcs |
| STAINLESS STEEL GLASS DOOR GRAVITY HINGE GH-G07SHK NEW P.185 | | | | |
|  | Wall OK | Strong Self Closing / Self Opening / Fixed Shaft | | |
| | | Max. 850 / 3 pcs | Max. 2400 / 3 pcs | 50 kgf / 3 pcs |
| STAINLESS STEEL GLASS DOOR GRAVITY HINGE GH-G07AC NEW P.185 | | | | |
|  | Wall OK | Strong Self Closing | | |
| | | Max. 850 / 3 pcs | Max. 2400 / 3 pcs | 50 kgf / 3 pcs |

## Others

| Product | Mounted On / Plumbing | Door Width | Door Height | Load Capacity |
|---|---|---|---|---|
| GLASS DOOR HINGE ZL-1703 P.187 | | | | |
|  | Wall OK | Max. 1000 | Max. 2500 | 65 kgf / 2 pcs |
| GLASS DOOR HINGE ZL-1702 P.188 | | | | |
|  | Wall OK | Max. 900 | Max. 2500 | 50 kgf / 2 pcs |

# CONCEALED HINGES (EUROPEAN STYLE)



| Series Name | | Features | Type of door | | | | | Page |
|---|---|---|---|---|---|---|---|---|
| | | | Cup Dia | Bore Depth | Door Thickness | Opening Angle | Overlay | |
| **■J95 Series**<br>•For Heavy Doors<br>•Compatible with door weight of 25kg for dual use.<br>•Passed 40,000 open / close private cycle test<br> | For Wood Doors | ~~SOFT-CLOSE~~ 3D Adjustment<br>Catch Quick Installation<br>~~GLASS~~ | ϕ40 | 15 | 18 - 30 | 95° | 21 - 25*1 | P.69 |
| | | | | | | | 12 - 16*1 | P.70 |
| | | | | | | 93° | Inset | P.71 |
| | For Glass Doors | ~~SOFT-CLOSE~~ 3D Adjustment<br>Catch Quick Installation<br>GLASS | ϕ40 | - | 8, 10 (GLASS) | 95° | 21 - 25 | P.69 - 71<br>P.74 - 75*3 |
| | | | | | | | 12 - 16 | |
| | | | | | | 93° | Inset | |
| **■J160 Series**<br>•For Doors: 160-degree wide-angle opening heavy-duty door<br>•Compatible with door weight of 25kg for dual use.<br>•Passed 40,000 open / close private cycle test<br> | | SOFT-CLOSE 3D Adjustment<br>~~Catch~~ Quick Installation<br>~~GLASS~~ | W72 × H44 | 15 | 18 - 36 | 160° (WIDE-ANGLE) | 21 - 25*1 | P.77 |
| **■OLYMPIA 360 Series** NEW<br>•First in the country, 5-level adjustment Soft Close<br>•Outstanding durability<br>Passed 200,000 open / close private cycle test<br><br>▶Optional Parts From P.91 | For Wood Doors | SOFT-CLOSE 3D Adjustment<br>5 levels<br>Catch Quick Installation<br>~~GLASS~~ | ϕ35 | 11 | 15 - 20 | 105° | 15 - 19*2 | P.80 |
| | | | | | | | 10 - 14*2 | P.81 |
| | | | | | | | 5 - 9*2 | P.82 |
| | | | | | | 85° | 15 - 19*2 | P.80 |
| | | | | | | | 10 - 14*2 | P.81 |
| | | | | | | | 5 - 9*2 | P.82 |
| | | | | | | 93° | Inset | P.83 |
| | For Glass Doors | SOFT-CLOSE 3D Adjustment<br>5 levels<br>Catch Quick Installation<br>GLASS | ϕ35 | - | 4, 5, 6 (GLASS) | 105° | 5 - 19 Inset | P.80 to 83<br>P.92*3 |
| | | | | | | 85° | | |
| | | | | | | 93° | | |
| **■OLYMPIA H360 Series (Thick doors)** NEW<br>•First in the country, 5-level adjustment Soft Close<br>•Outstanding durability<br>Passed 100,000 open / close private cycle test<br> | | SOFT-CLOSE 3D Adjustment<br>5 Levels<br>Catch Quick Installation<br>~~GLASS~~ | ϕ40 | 15 | 18 - 30 | 100° | 22 - 26*1 | P.84 |
| | | | | | | | 12 - 16*1 | P.85 |
| | | | | | | 93° | Inset | P.86 |

*1:When Overlay 8 mm *2:When Overlay 5 mm *3:Please use the concealed hinge, mounting plate, and face plate in combination.

| Series Name | | Features | Type of door | | | | | Page |
|---|---|---|---|---|---|---|---|---|
| | | | Cup Dia | Bore Depth | Door Thickness | Opening Angle | Overlay | |
| **■STAINLESS STEEL 100 series**<br>•A reassuring all-stainless steel for water-related areas.<br> | | ~~SOFT-CLOSE~~ 3D Adjustment<br>Catch ~~Quick Installation~~<br>~~GLASS~~ | ϕ35 | 11 | 15 - 20 | 100° | 15 - 19 | P.94 |
| | | | | | | | 10 - 14 | P.95 |
| | | | | | | | 5 - 9 | P.96 |
| **■100 series** | **170** | SOFT-CLOSE 3D Adjustment<br>Post-installation (P.108)<br>Catch ~~Quick Installation~~<br>~~GLASS~~ | ϕ35 | 11 | 15 - 20 | 140 - 170° (WIDE-ANGLE) | 15 - 20 | P.98 |
| | | | | | | | 5 - 10 | P.99 |
| | | | | | | | Inset | P.100 |
| <br>170 | | | | | | | | |
| | **H160** (Door Thickness) | | ϕ40 | 15 | 18 - 34 | 160° (WIDE-ANGLE) | 19 - 28 | P.101 |
| | | | | | | | 14 - 23 | P.102 |
| | | | | | | | 9 - 18 | P.103 |
| | | | | | | | Inset | P.104 |
| <br>H160 | | | | | | | | |
| T-90-200<br> | | ~~SOFT-CLOSE~~ ~~3D Adjustment~~<br>~~Catch~~ ~~Quick Installation~~<br>~~GLASS~~ | - | - | 15 - 18 | 90° | 15 - 18 | P.109 |
| 2000-150<br> | | ~~SOFT-CLOSE~~ ~~3D Adjustment~~<br>Catch ~~Quick Installation~~<br>~~GLASS~~ | - | - | Max. 20 | 150° (WIDE-ANGLE) | 0 - 20<br>Inset | P.110 |
| 2000-MIGNON<br> | | ~~SOFT-CLOSE~~ ~~3D Adjustment~~<br>Catch ~~Quick Installation~~<br>~~GLASS~~ | - | - | Max. 20 | 90° | 0 - 20<br>Inset | P.110 |
| **■For Sheet Metal Doors** NEW<br>H95TSH-F<br>•Has free-stop torque mechanism<br>Passed 10,000 open / close private test<br> | | ~~SOFT-CLOSE~~ ~~3D Adjustment~~<br>~~Catch~~ Quick Installation<br>~~GLASS~~ | - | - | 30*1 (sheet metal) | 95° | 13.6*2 | P.148 - 149 |

*1: Please check the product page for details. *2:When Bore Distance 5 mm

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

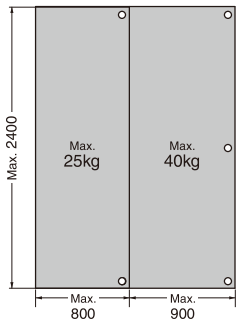
SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

# Door size and recommended hinge quantity

The number of hinges mounted varies according to the door dimensions. For doors of the same weight, a larger distance between the upper and lower hinges will enhance strength.
Generally, when using 3 hinges, the intermediate hinge should be a little higher than the centre point between the upper and lower hinges for enhanced strength.
Note: Use the figure only as a guideline.

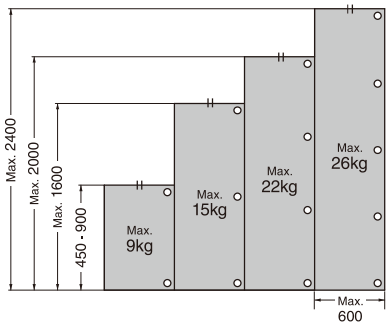
## Wood Doors

■J95 Series (P.69 - 71), J160 (P.77)




| | Door Thickness |
|---|---|
| J95 | 18 - 30 |
| J160 | 18 - 36 |

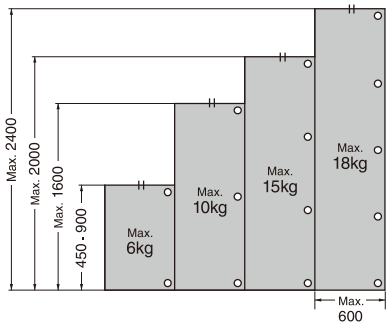
■H360 (Olympia Series) (P.84 - 86)




| | Door Width | Door Thickness | Material Density | Installation Pitch |
|---|---|---|---|---|
| H360 | Max. 600 | Max. 30 | Max. 0.6 | Min. 300 |

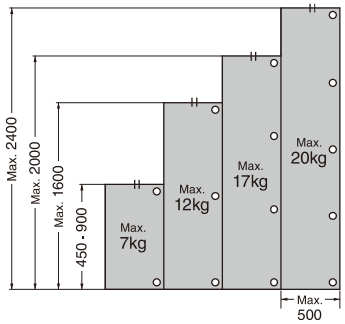
*When using 2 hinges with the straight type 360 Series mounting plate (P.87), the door width should be max. 450mm and the door weight max. 7kg.

■360 (Olympia Series) (P.80 - 83)



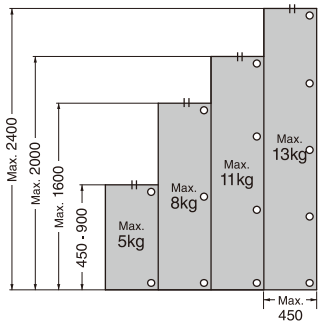

| | Door Width | Door Thickness | Material Density | Installation Pitch |
|---|---|---|---|---|
| 360 | Max. 600 | Max. 20 | Max. 0.6 | Min. 300 |

■H160 Series (P.101 - 104)




| Door Width | Door Thickness | Material Density | Installation Pitch |
|---|---|---|---|
| Max. 500 | Max. 34 | Max. 0.6 | Min. 300 |

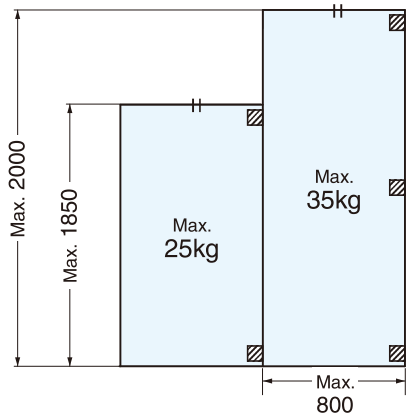
■170 Series (P.98 - 100)



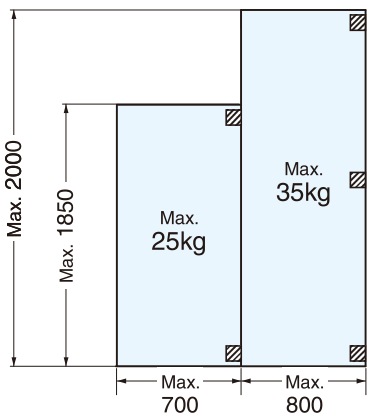

| Door Width | Door Thickness | Material Density | Installation Pitch |
|---|---|---|---|
| Max. 450 | Max. 20 | Max. 0.6 | Min. 300 |

## Glass Doors

■J95 Series (P.69 - 71)

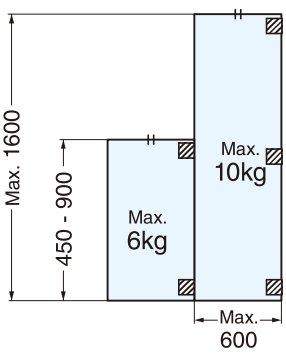



| Glass Thickness |
|---|
| 8 |




| Glass Thickness |
|---|
| 10 |

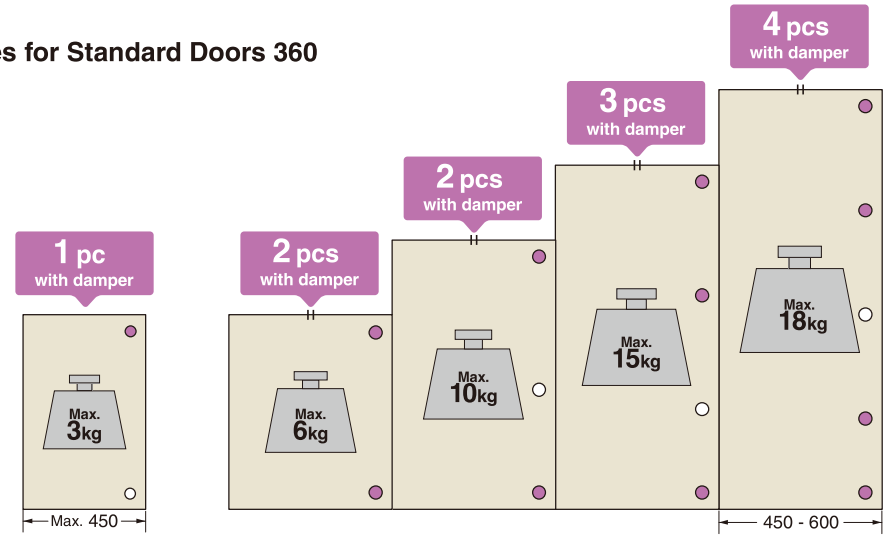
■360 (P.80 - 83) and GH-360FP (P.92)



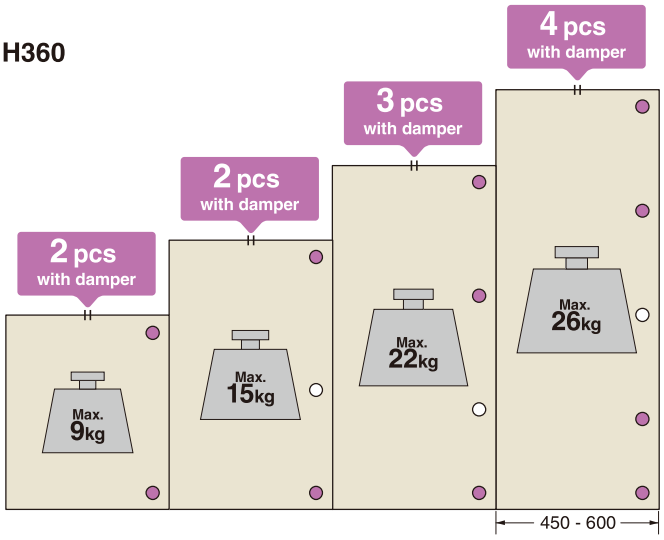

| Glass Thickness | Installation Pitch |
|---|---|
| 4, 5, 6 | Min. 300 |

# Recommended type of damper per installation

## [Wood Doors]
## Olympia Series for Standard Doors 360




## [Wood Doors]
## Olympia Series for Thick Doors H360




## Precautions for Use

- Set the door's centre of gravity at its midpoint.
- Increase the number of hinges if you want to increase the door width.
- Attach the upper and lower hinges within 100 mm of the door edge. For three or more hinges, install them at regular intervals.
- The figures in the tables above are indicative. Always test before finalizing your design.
- Contact us for any other configurations.
- Door dimensions and the number of hinges are based on tests conducted according to the JIS standard.
- Use all screw holes during installation.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES




# Experience the Unseen

When designing a door,
it's normal to focus on obvious visual aspects.

Hinges are often a secondary matter.

With this in mind,
we realise the value of hinges
that won't interfere with the door design.

The HES was designed to reflect this concept
to achieve great door design and functionality.

HES
Hinge + Esprit

Feature

Slim Frame

Seamless Integration into the Frame

**HES1F**







Frameless / Framed Doors Supported

**HES3D**



Without Frame

With Frame

Easy Surface Mounting

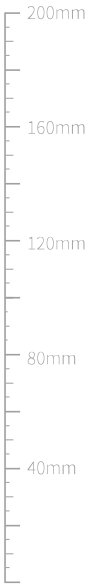
**HES2S**



SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

# LINEUP

**Selection tool**
May support conditions other than those specified in this catalogue.





HES3D-70
(P.49)
**For Furniture**


HES3D-90
(P.50)
**For Furniture**

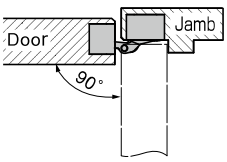

HES3D-120
HES3D-120-A100
HES3D-H120-36



HES1F-140



HES2S-140-A125

| | | | | | |
|---|---|---|---|---|---|
| Load capacity | 3 | 40 kgf | 50 kgf | | 55 kgf |
| | 2 | 30 kgf | 40 kgf | | |
| Product | |  **HES3D-120** For light-weight doors. KIDS DESIGN AWARD 2021 ▶ P.52 |  **HES3D-120-A100** Opens 100°. Can be used with door restrictors. KIDS DESIGN AWARD 2021 ▶ P.53 |  **HES2S-150-A110** Surface mount for door frame enables easy installation. ▶ P.48 |  **HES1F-140** Integrates in 8mm frame KIDS DESIGN AWARD 2022 GOOD DESIGN AWARD 2022 BEST 100 ▶ P.42 |  **HES3D-V135LGR** Unique motion by multi-axis.   ▶ P.56 |
| Door Size (mm) | Width | | | | | ≤ 900 |
| | Height | ≤ 2400 | ≤ 2700 | | ≤ 2400 | |
| | Thickness | ≥ 29 | ≥ 35 | ≥ 36 | ≥ 30 | |

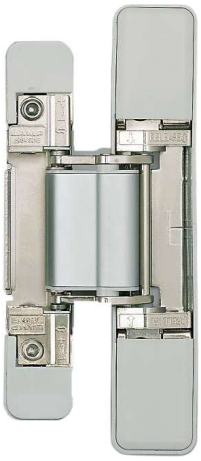


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

\High Load Capacity/

200mm
160mm
120mm
80mm
40mm


HES3D-V135LGR

NEW

HES2S-150-A110


HES3D-E160

NEW

HGS3D-S160SH


HES3D-E190
HES3D-W190

| 65 kgf | 70 kgf | 100 kgf | 125 kgf |
|---|---|---|---|
| 50 kgf | 55 kgf | 80 kgf | 100 kgf |



## HES3D-H120-36

The position of door cutouts will be at the centre. (36mm thick)

KIDS DESIGN AWARD 2021

▶ P.55



## HES2S-140-A125

No cutout on the jamb side (surface mount).
Opens 125°.

▶ P.47



## HES3D-E160

For mid-weight doors

▶ P.57



## HGS3D-S160SH

Made of stainless steel. Great corrosion resistance.

▶ P.58



## HES3D-E190

Meets fire resistance standards. UL Rated, up to 3 Hours.

▶ P.59



## HES3D-W190

Has a long arm for a wider throw.
For clad and thick doors. UL Rated, up to 3 Hours
(DC, DN, and BL models only)

▶ P.62

| | | | | ≤ 915 |
|---|---|---|---|---|
| ≤ 2700 | | ≤ 2400 | | ≤ 2440 |
| ≥ 34 | ≥ 38 | ≥ 36 | ≥ 38 | ≥ 42 |

This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.



Update: 03.10.2025

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES



# Create minimal design

LAMP NEW

## SLIM FRAME HINGE HES1F-140

**Load Capacity**

40kgf/2 pcs 50kgf/3 pcs

**3D Adjustability**

Vertical: ±4mm
Horizontal: ±2mm
Depth: ±1mm

**Safe for Kids**

Has a minimal gap on hinge side.
This reduces the risk of finger pinching



White



Black



open



closed



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

# HES1F-140 *for Stylish Design*

## with slim-framed doors.

Seamless Integration into Frames

Virtually Invisible Design

Flush-to-Wall Doors

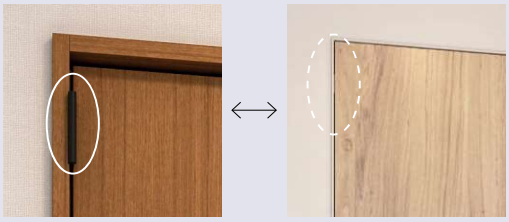
DESIGN AWARD 2023

GOOD DESIGN AWARD 2022 BEST 100

KIDS DESIGN AWARD 2022

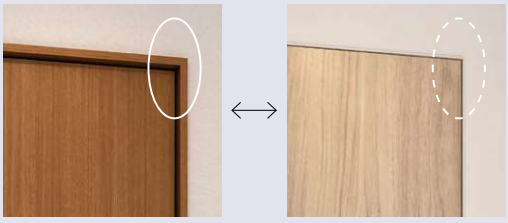



### Seamless integration into slim frames



The hinge will be virtually invisible from view.

### Flush with the wall



Optional parts are required. (base spacer / strike plate)



Standard hinge



HES1F hinge

This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.



Update: 10.18.2024

# LAMP SLIM FRAME HINGE HES1F-140 NEW

Latest Info



Passed Private 300K Cycle Test



Black



White

- Seamlessly integrates into the slim frame for a clean and modern look. The shaft part thickness is only 8 mm.
- Door is flush with wall when closed.
- 3D Adjustment Post Installation: Adjust vertically, horizontally, and depth.
- For simplified door hanging, the hinge divides into two parts: one for the door-side and one for the jamb-side.
- Can temporarily be hung before fixing with screws.
- KIDS DESIGN AWARD 2022 Encouragement Award: KDA Chairman's Award

INSTRUCTION SCREW

## Without Covers





DESIGN AWARD 2023

GOOD DESIGN AWARD 2022 BEST 100

KIDS DESIGN AWARD 2022

## Parts Included

- For Door: Cross-recessed pan head tapping screw 4×16 (4 pcs/hinge)
- For Jamb: Cross-recessed countersunk tapping screw 4×20 (5 pcs/hinge)
- Hex key 3
- Cutout template

## Optional Parts

- Base spacer
- Adjustment strike plate

## Remarks

- When using a lever handle, the optional base spacer and adjustment strike plate are required.

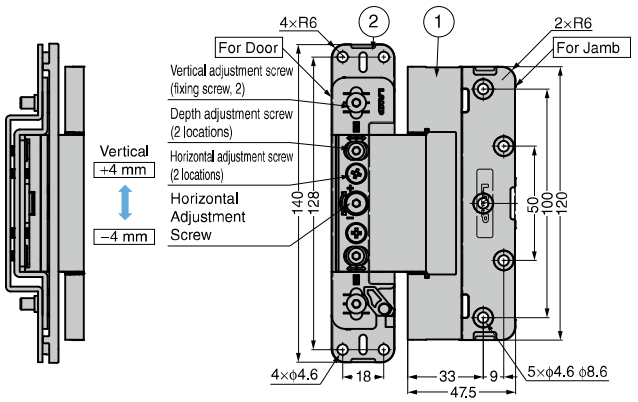
## Installation Example



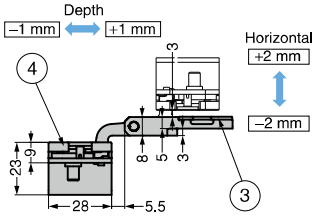
Open



Closed

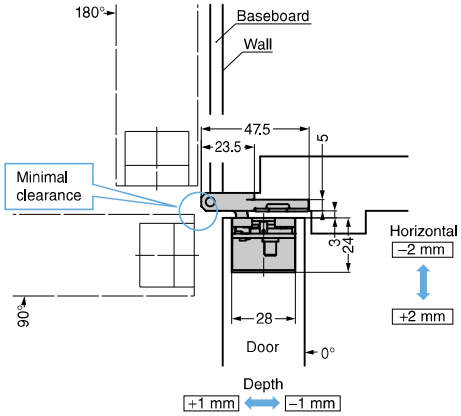



· Hinge is non-handed.
· This drawing shows the hinge without covers.



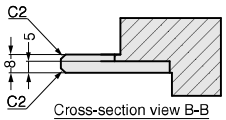

| No. | Part Name | Material | Finish/Colour | |
|---|---|---|---|---|
| | | | BL | WT |
| ① | Body | Zinc Alloy (ZDC) | baked finish/Black | baked finish/White |
| ② | Base Plate | Steel (SPCC) | Chrome | |
| ③ | Jamb Side Cover | ABS | Black | White |
| ④ | Door Side Cover | | | |

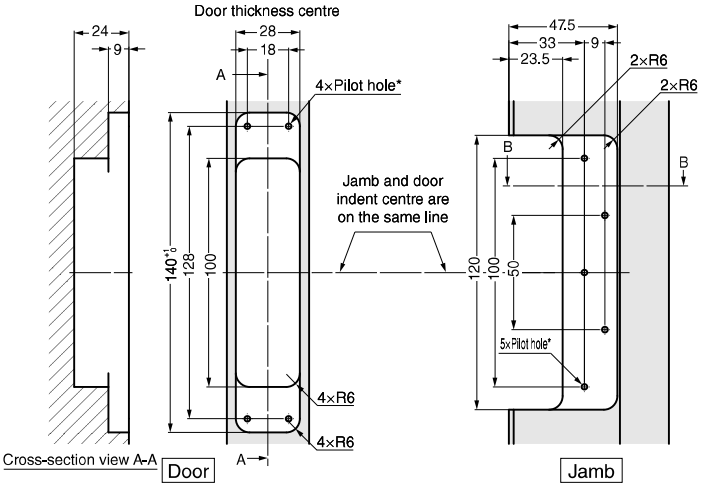
## Locus Chart




Feature
Installation
Selection Tool
HES Hinge

## Cut Out Dimension




*Diameter and depth of the pilot hole depends on the strength of the wood.

## Hinge

| Item Code | Item Name | Colour | Door Size | | | Load Capacity | | | | Opening Angle |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Width | Height | Thickness | N/2pcs | kgf/2pcs | N/3pcs | kgf/3pcs | |
| 170-053-352 | HES1F-140-BL | Black | Max. 900 | Max. 2700 | Min. 36 | 392 | 40 | 490 | 50 | 180° |
| 170-053-353 | HES1F-140-WT | White | | | | | | | | |

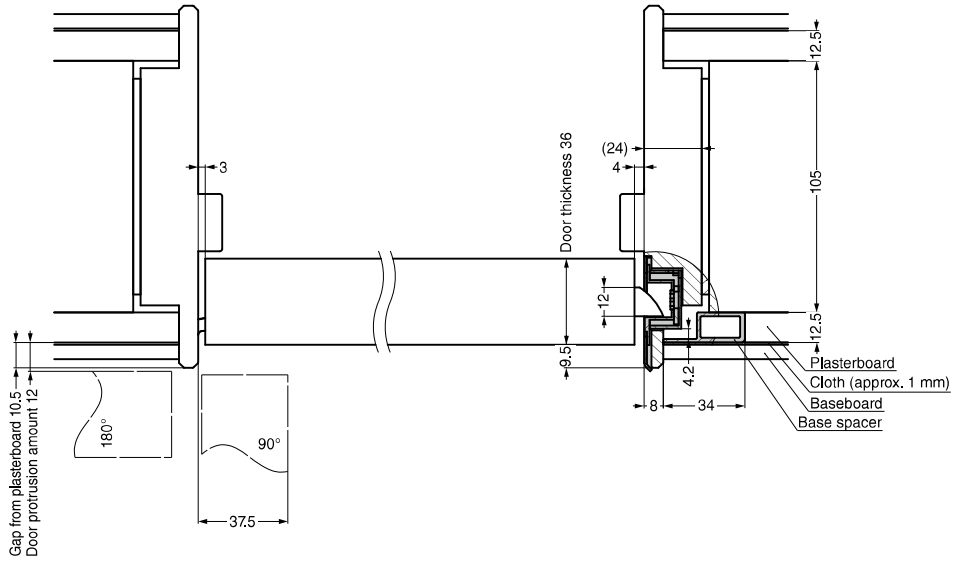


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

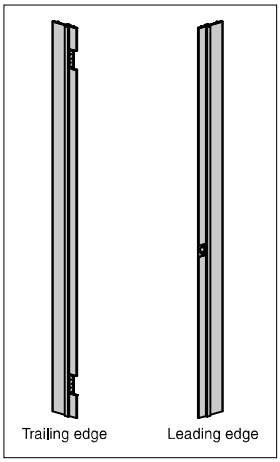
SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

## Standard Installation

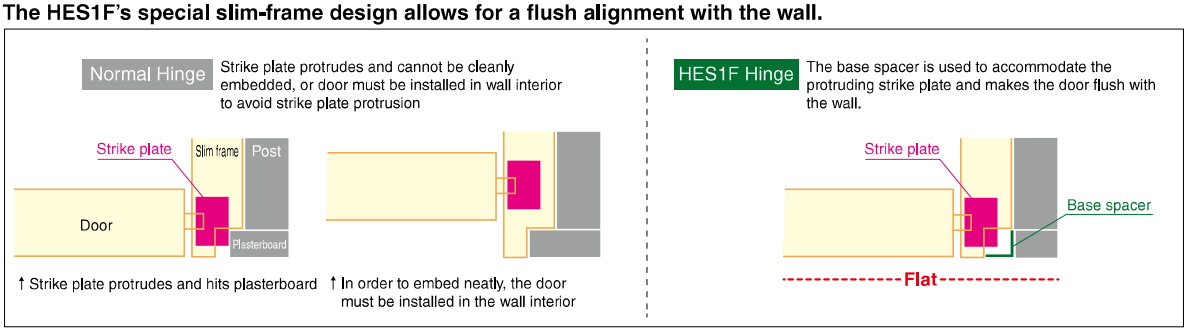
*Shows 8 mm width jamb.



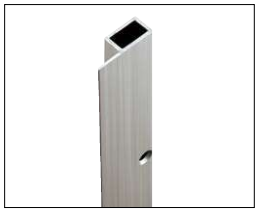

Aluminium frame (8 mm) is also under development.

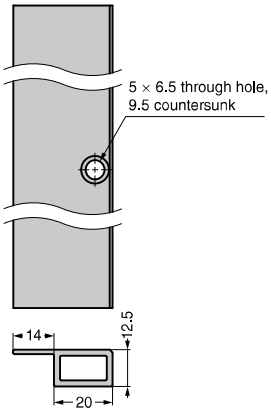



## The HES1F's special slim-frame design allows for a flush alignment with the wall.



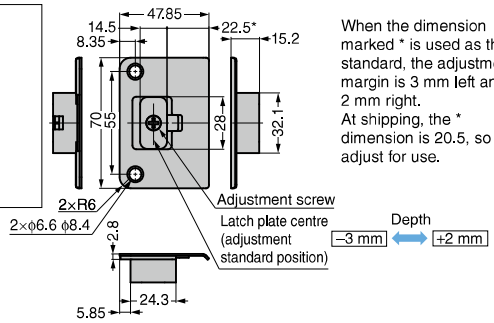

## Base Spacer (Optional parts)





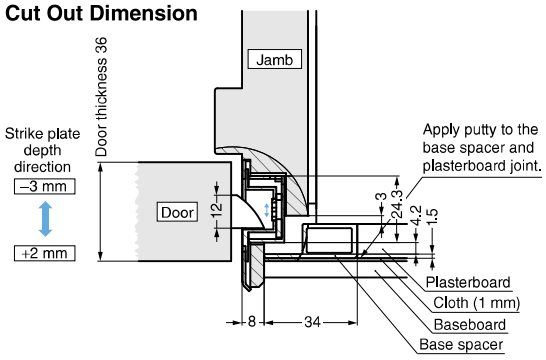

## Adjustment Strike plate (Optional parts)

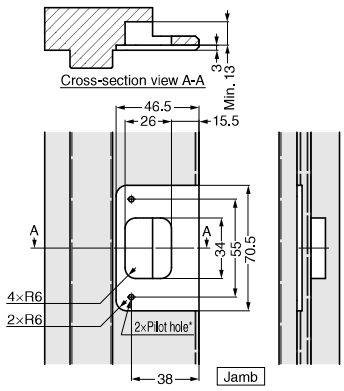





When the dimension marked * is used as the standard, the adjustment margin is 3 mm left and 2 mm right.
At shipping, the * dimension is 20.5, so adjust for use.

## Cut Out Dimension




*Diameter and depth of the pilot hole depends on the strength of the wood.

## Base Spacer (Optional parts)

| Item Code | Item Name | Material | Finish | Length | Weight (g) |
|---|---|---|---|---|---|
| 170-053-400 | HES1F-SP-2530 | Aluminium Alloy | Anodized | 2530 | 917 |
| 170-053-401 | HES1F-SP-2730 | | | 2730 | 990 |

## Adjustment Strike plate (Optional parts)

| Item Code | Item Name | Main material | Colour |
|---|---|---|---|
| 170-053-354 | HES1F-AST-SL | Stainless Steel (SUS304) | Silver |

This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

# LAMP SLIM FRAME AND HINGE SET HES1F-B NEW

Latest Info




*Door is not included.



- A set of necessary parts to make slim-framed doors.
- Includes aluminium frames, a strike plate, and the HES1F-140 hinge (P.42).
- The hinges and plates are preassembled on to the frames.
- Supports various wall thicknesses. Base frames can be used as stand-alone unit.
- The hinge has a 3-way adjustment function. Doors are easy to install.
- Patent pending in several countries.

INSTRUCTION SCREW

Selection Tool
HES Hinge

## Specifications

- Compatible wall thickness
  Base frame + adjustment frame: 114~145 mm
  Wallpaper: 90 mm up
- Compatible plasterboard thickness: 12.5 mm

## Parts Included

- Base frame: Hinge cover, cross-recessed pan head tapping screws 4×16, cross-recessed truss head tapping screws 4×40, screw caps for frame, hex key nominal 3, cutout template
- Adjustment frame: Screw caps for frame, cross-recessed truss head tapping screws 4×40

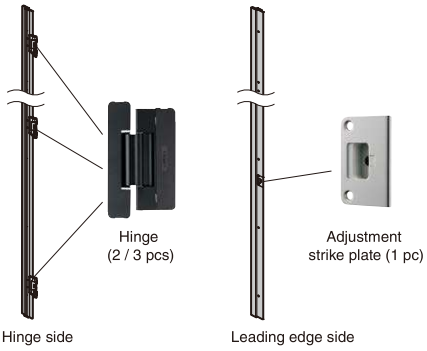
## Optional Parts

- Base spacer (P.43) (Prevent interference between the plasterboard and the adjustment strike plate)

## Base Frames

Includes two frames (leading edge and hinge side). All parts are preassembled.

### Items in the set




### Colour Variation

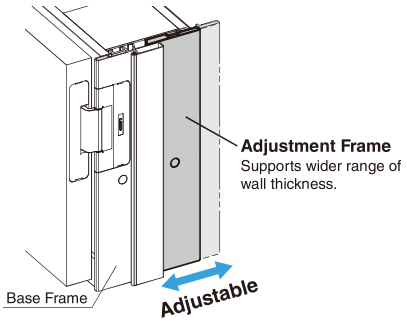






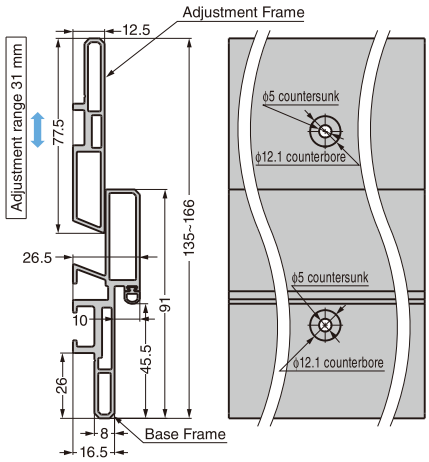
## Adjustment Frames

Includes two frames components (leading edge and hinge side).




### Colour Variation




## Base Frame

| Item Code | Item Name | Colour | Handed | Set Content | No. of Hinges | Door Thickness | Frame Height | Load Capacity N | Load Capacity kgf |
|---|---|---|---|---|---|---|---|---|---|
| 170-054-170 | HES1F-B2500L-BL | Black | Left | - Base frames (2 pcs)<br>- Hinges<br>- Adjustment strike plate (1 pc) | 2 pcs | 36~45 | 2500 | 392 | 40 |
| 170-054-171 | HES1F-B2500R-BL | | Right | | | | | | |
| 170-054-168 | HES1F-B2500L-WT | White | Left | | | | | | |
| 170-054-169 | HES1F-B2500R-WT | | Right | | | | | | |
| 170-054-164 | HES1F-B2700L-BL | Black | Left | | 3 pcs | | 2700 | 490 | 50 |
| 170-054-165 | HES1F-B2700R-BL | | Right | | | | | | |
| 170-054-162 | HES1F-B2700L-WT | White | Left | | | | | | |
| 170-054-163 | HES1F-B2700R-WT | | Right | | | | | | |

## Adjustment Frame

| Item Code | Item Name | Colour | Handed | Set Content | Door Thickness | Frame Height |
|---|---|---|---|---|---|---|
| 170-054-173 | HES1F-A2500-BL | Black | Non-handed | Adjustment frames (2 pcs) | 36~45 | 2500 |
| 170-054-172 | HES1F-A2500-WT | White | | | | |
| 170-054-167 | HES1F-A2700-BL | Black | | | | 2700 |
| 170-054-166 | HES1F-A2700-WT | White | | | | |

## Base Spacer (Optional Parts (P.43))

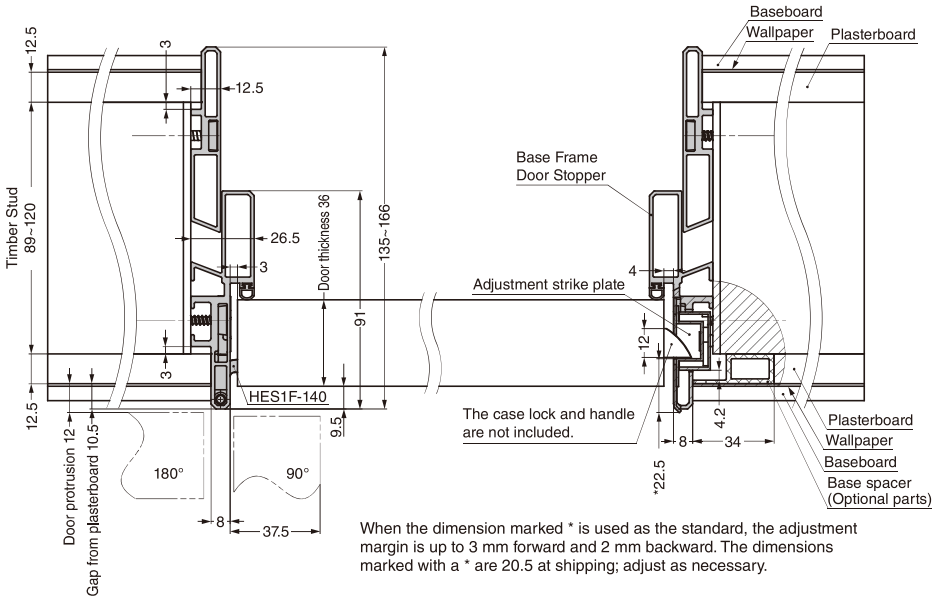
| Item Code | Item Name | Material | Finish | Length | Weight (g) |
|---|---|---|---|---|---|
| 170-053-400 | HES1F-SP-2530 | Aluminium Alloy | Anodized | 2530 | 917 |
| 170-053-401 | HES1F-SP-2730 | | | 2730 | 990 |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

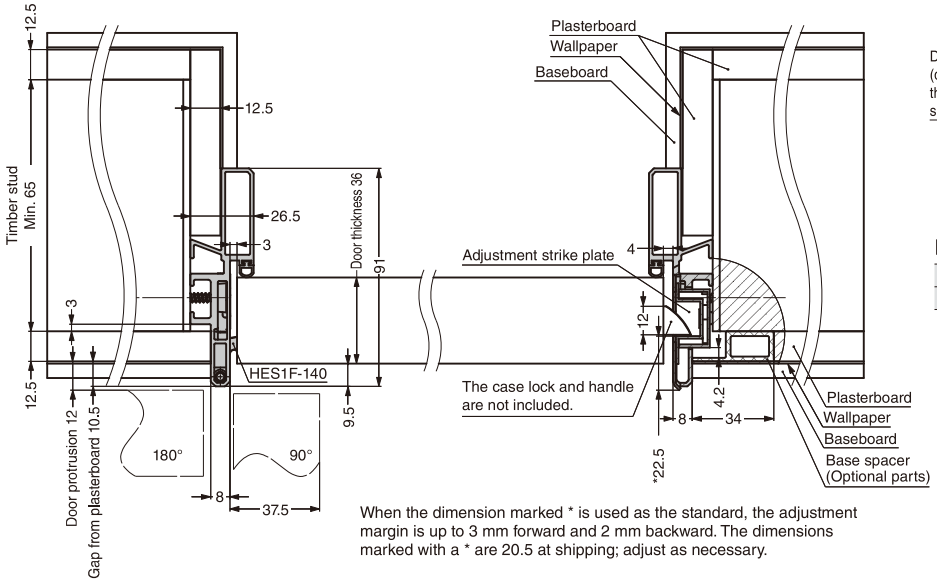
Left-handed type shown.
Use the optional base spacer with the standard installation below.
For details, see the base spacer cut out dimensions (P.43).

## Standard Installation (Base Frame + Adjustment Frame)



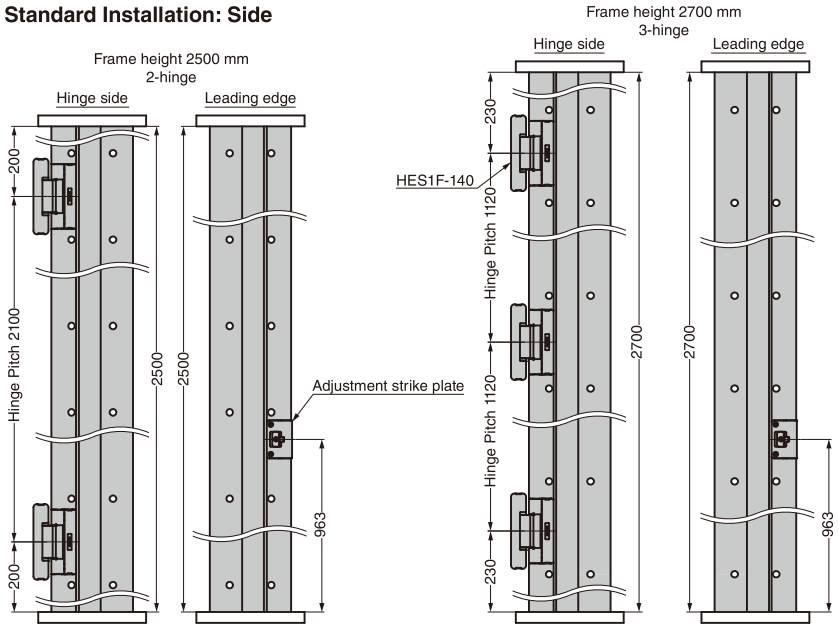

When the dimension marked * is used as the standard, the adjustment margin is up to 3 mm forward and 2 mm backward. The dimensions marked with a * are 20.5 at shipping; adjust as necessary.

## Standard Installation: Wallpaper (Base frame only)

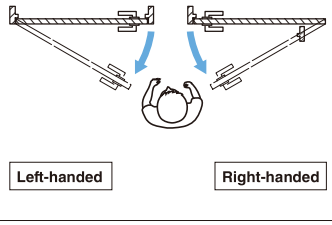



When the dimension marked * is used as the standard, the adjustment margin is up to 3 mm forward and 2 mm backward. The dimensions marked with a * are 20.5 at shipping; adjust as necessary.

## Standard Installation: Side

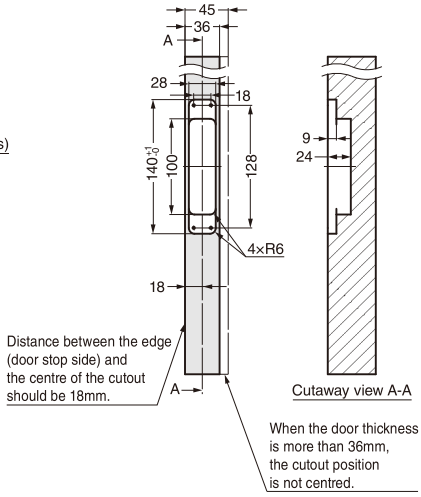



## Door Hinge Side




## Door Side Cut Out Dimensions

For right-handed doors, the position of the cutout should be reversed.




## Baseboard Thickness Guideline

| Door Thickness | 36 | 40 | 45 |
|---|---|---|---|
| Baseboard Thickness | Max. 9 | Max. 8 | Max. 3 |

## Frames can be cut

For cutting specifications, please check the instruction manual on our website.



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES



# Easy to Install
# No Jamb Cutouts Needed

## HES2S-140-A125

No mortising on the jamb side.

Useful on jambs that are too thin to mortise.

Compact body with high load capacity.



Black



Dark Grey



Light Grey

LAMP NEW

## SURFACE-MOUNT CONCEALED HINGE
## HES2S-140-A125

Can be used on slim-framed and frameless doors because no jamb mortising is required.




| Load Capacity | |
|---|---|
| 50kgf /2 pcs | 65kgf /3 pcs |

| 3D Adjustability |
|---|
| Vertical: ±3mm<br>Horizontal: +1mm<br>Depth: ±3mm |

| Easy to Install |
|---|
| No mortising is required on the jamb side. |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP SURFACE-MOUNT CONCEALED HINGE HES2S-140-A125 125° Opening NEW

Latest Info

Passed Private 300K Cycle Test



Black Dark Grey Light Grey



Closed Back With cover and plate removed

DESIGN AWARD 2023

interzum AWARD

- Surface mounts on the jamb side for easy installation.
- 3D Adjustment Post-Installation: adjust vertically, horizontally, and depth.

INSTRUCTION SCREW

## Remarks

- Read all remarks on handling thoroughly before use.
- Use with a door stopper, etc. to prevent opening farther than 125°.

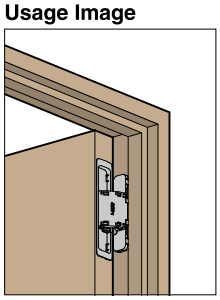
## Parts included

- Countersunk head tapping screw 4×20 (8 pcs/hinge) Steel
- Door side drilling/jamb side mounting template

Feature Installation Selection Tool

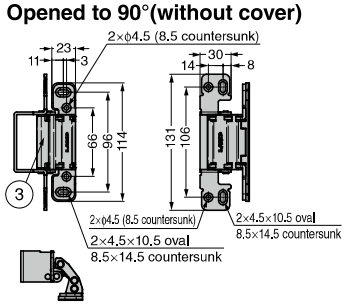
HES Hinge

## Usage Image

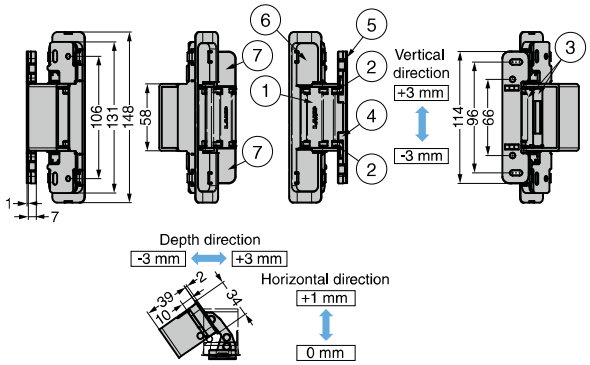


No mortising on the jamb side is required.

## Opened to 90°(without cover)

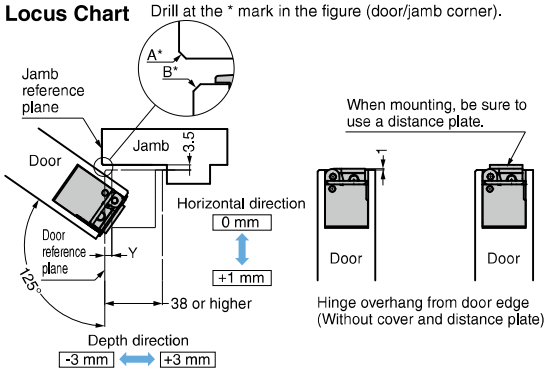



## Opened to 125°(with cover)




## Locus Chart

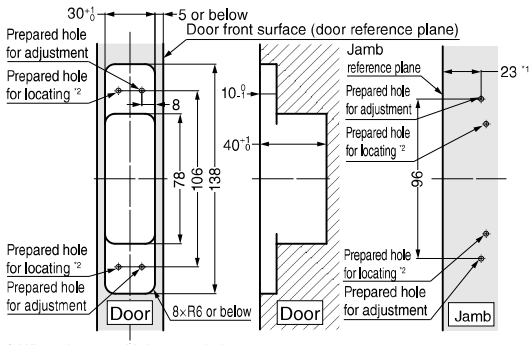
Drill at the * mark in the figure (door/jamb corner).




| Y: Door Machining Margin | B: Door chamfering | A: Jamb chamfering |
|---|---|---|
| 4 or below | 1 or higher | 1 or higher |
| 5 | | |

## Cut Out Dimensions

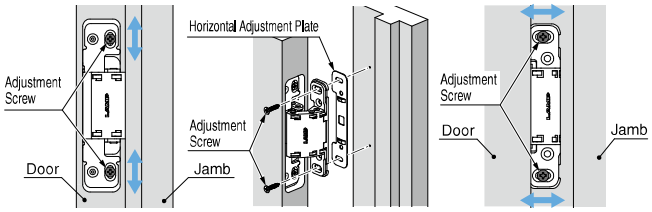
Drill pilot holes at the positions of the adjustment and locating screws.




*1 When door machining margin is 5 mm.
*2 The position of prepared hole for locating changes according to adjustment.

## Door Position Adjustment

- Vertical adjustment (±3 mm)
- Horizontal adjustment (+1 mm)
- Depth adjustment (±3 mm)




Adjust in the vertical/depth directions with oval hole screws and in the horizontal direction with the plate.

| No. | Part Name | Material | Finish / Colour |
|---|---|---|---|
| ① | Body | POM | Dark Grey, Light Grey, Black |
| ② | Base Plate | SPCC | Nickel |
| ③ | Arm | Zinc Alloy (ZDC) | Chemical Treatment |
| ④ | Distance Plate | PBT | Dark Grey, Light Grey, Black |
| ⑤ | Horizontal Adjustment Plate | POM | |
| ⑥ | Socket Cover | ABS | |
| ⑦ | Base Plate Cover | | |

| Item Code | Item Name | Colour | Door Width | Door Height | Door Thickness | Door Weight kgf/2 pcs | Door Weight kgf/3 pcs | Opening Angle |
|---|---|---|---|---|---|---|---|---|
| 170-053-252 | HES2S-140-A125-DGR | Dark Grey | Max. 900 | Max. 2700 | Min. 38 | 50 | 65 | 125° |
| 170-053-253 | HES2S-140-A125-LGR | Light Grey | | | | | | |
| 170-050-758 | HES2S-140-A125-BL | Black | | | | | | |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP SURFACE-MOUNT CONCEALED HINGE HES2S-150-A110 110° Opening NEW

Latest Info



HES Hinge + Esprit

Passed Private 300K Cycle Test



- Surface mounts on the jamb side for easy installation.
- Supports door thickness of 35 mm or more.
- For doors with a thickness of 35 or 36 mm, centre mounting is possible, making the door non-handed (usable as both right-handed and left-handed).
- 3D Adjustment Post Installation: Adjust vertically, horizontally, and depth.

INSTRUCTION SCREW

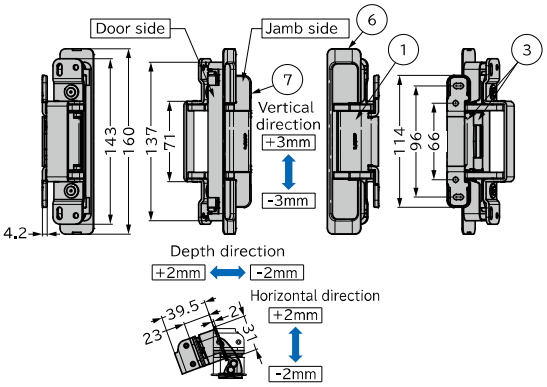
## Parts included

- Countersunk head tapping screw 4×20 (4 pcs/hinge) Stainless
- Cross-recessed truss tapping screw 4×16 (4 pcs/hinge) Steel
- Hex key 3
- Door side drilling/jamb side mounting template

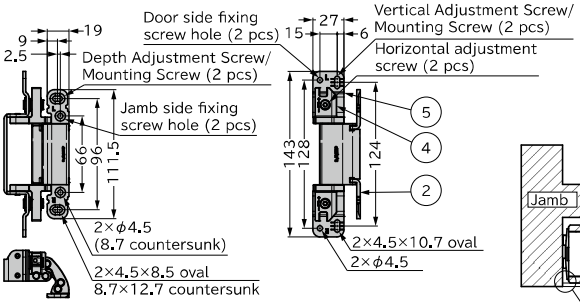
## Remarks

- Use with a door stopper to prevent opening farther than 110°.
- The hinge cannot be divided between the door and jamb.
- Use the selection tool to check the compatibility for your projects.

## Dimensions




*The illustration below shows the state when opened at 90° without a cover.




## Usage Image



No mortising on the jamb side is required.

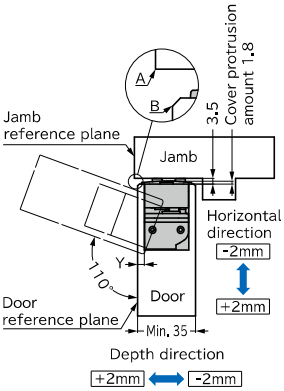
Selection Tool
HES Hinge

## Locus Chart

Drill at the door corner (B). The jamb corner (A) can be used even without machining.

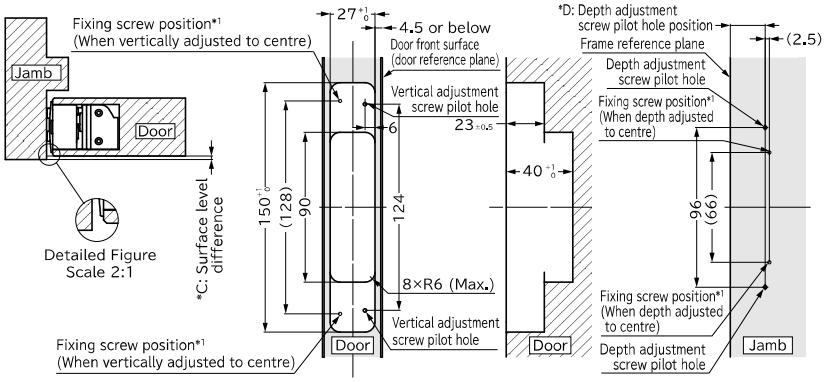
Check the leading edge opening clearance in the table (P.64).

| Y: Door Machining Margin | B: Door chamfering | A: Jamb chamfering |
|---|---|---|
| 4.5 or below | 1 or higher | - |




## Cut Out Dimensions

Drill pilot holes at the positions of the adjustment and locating screws.




*1 Vertical/depth adjustment is not possible when the fixing screws have been mounted. Be sure to adjust in the vertical/depth directions before drilling the fixing screw pilot holes and mounting the fixing screws.

| No. | Part Name | Material | Finish / Colour |
|---|---|---|---|
| ① | Body | POM | - |
| ② | Base Plate | SPCC | Chrome |
| ③ | Arm | Zinc Alloy (ZDC) | Chemical Treatment |
| ④ | Inner Socket | | Chrome |
| ⑤ | Outer Socket | SPCC | |
| ⑥ | Socket Cover | ABS | - |
| ⑦ | Base Plate Cover | | |

Diagram shows product under development.

| 35 mm door (machining margin 4 mm) | |
|---|---|
| *C: Surface level difference | *D: Adjustment screw pilot hole position |
| 0 | 19 |
| 1 | 20 |
| 2 | 21 |
| 3 | 22 |
| 4 | 23 |
| 5 | 24 |

| 36 mm door (machining margin 4.5 mm) | |
|---|---|
| *C: Surface level difference | *D: Adjustment screw pilot hole position |
| 0 | 19.5 |
| 1 | 20.5 |
| 2 | 21.5 |
| 3 | 22.5 |
| 4 | 23.5 |
| 5 | 24.5 |

| Item Code | Item Name | Colour | Door Width | Door Height | Door Thickness | Door Weight kgf/2 pcs | Door Weight kgf/3 pcs | Opening Angle |
|---|---|---|---|---|---|---|---|---|
| 170-056-969 | HES2S-150-A110-WT | White | Max. 900 | Max. 2700 | Min. 35 | 40 | 50 | 110° |
| 170-056-970 | HES2S-150-A110-BL | Black | | | | | | |
| 170-056-971 | HES2S-150-A110-WGR | Warm Grey | | | | | | |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP 3-WAY ADJUSTABLE CONCEALED HINGE HES3D-70

Latest Info

HES Hinge + Esprit

Passed Private 50K Cycle Test



KIDS DESIGN AWARD 2021



Without covers.

- Small HES series can be applied with Min. door thickness of 19 mm.
- Small bore depth, easy to cut out the door and jamb.
- 3-way adjustment function allows vertical, horizontal, and depth adjustment after hinge installed.
- Hinge can be split into the door side and the jamb side.

INSTRUCTION | SCREW

## Remarks

- Can not be used with LAPCON DOOR DAMPER LDD or LAPCON DOOR CLOSER LDC-N2.
- Can not be used with lid stays or door damper.
- Use below opening angle 180°.

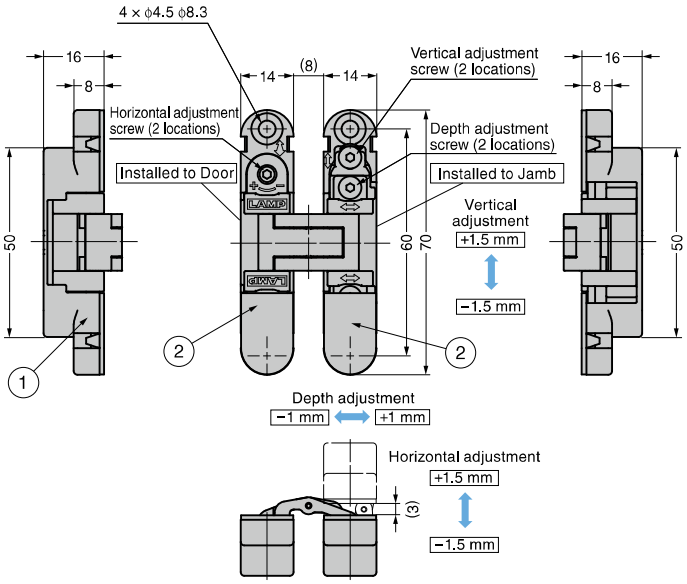
## Parts Included

- Countersunk head tapping screw 4 × 20 (4 pcs/hinge) SUS
- Hex key 2

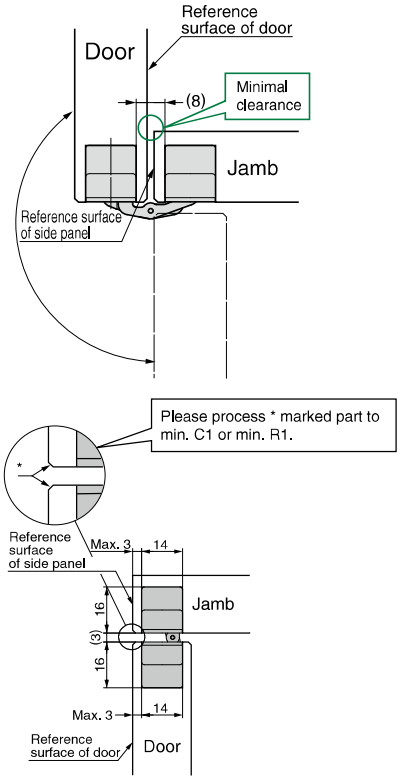
Installation | Installation | Selection Tool

HES Hinge

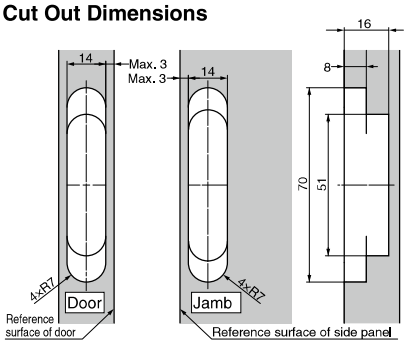
Figure below shows the state with the upper screw covers removed.




## Locus Chart




## Cut Out Dimensions




| No. | Part Name | Material | Finish | | |
|---|---|---|---|---|---|
| | | | DC | DN | BL |
| ① | Body | Zinc Alloy (ZDC) | Satin Chrome | Dull Nickel | Black Paint |
| ② | Cover (2 pairs) | ABS | Silver Paint | Champagne Gold Paint | Black |

| Item Code | Item Name | Colour | Door Width (mm) | Door Height (mm) | Door Thickness (mm) | Door Weight kg/2 pcs | Door Weight kg/3 pcs | Opening Angle | Weight (g) | Box (pcs) | Carton (pcs) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 170-035-441 | HES3D-70DC | Silver | Max. 600 | Max. 1200 | Min. 19 | Max. 9 | Max. 12 | 180° | 95 | 2 | 48 |
| 170-035-442 | HES3D-70DN | Champagne Gold | | | | | | | | 2 | 48 |
| 170-035-443 | HES3D-70BL | Black | | | | | | | | 2 | 48 |

## Installation Template

This is sold singly, because they can be used on both the door and jamb.

| Item Code | Item Name | Material | Colour |
|---|---|---|---|
| 170-040-988 | HES3D-70-TMP | Methacrylic Resin (PMMA) | Clear |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.



Update: 03.10.2025

# LAMP 3-WAY ADJUSTABLE CONCEALED HINGE HES3D-90

Latest Info



HES Hinge + Esprit

Passed Private 50K Cycle Test



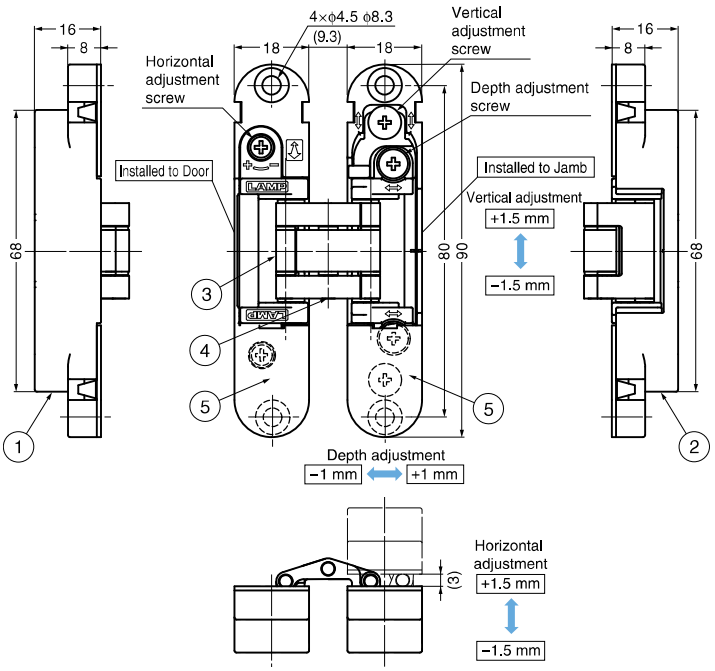
KIDS DESIGN AWARD 2021

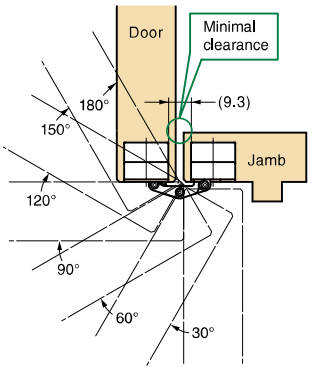
- Thin profile allows for shallow mortise and makes installation easier
- Jig (sold separately) makes installation easy
- Vertical, horizontal and depth adjustment possible post-installation (3way)
- Can be split into two parts (one for the jamb and one for the flap) making installation easy
- Custom colors available on request. Please contact us for details.
- Can be used with DC-200 damper catch but can not be used with lid stays or other door damper.

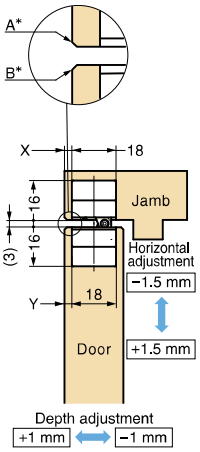
INSTRUCTION SCREW

## Parts Included

- Countersunk head screw 4×20 (4 pcs./hinge)
- Hexagonal spanner ×2




Please process the part (corner of door/jamb) of * marked on the drawing to C1 or more (or R1 or more).

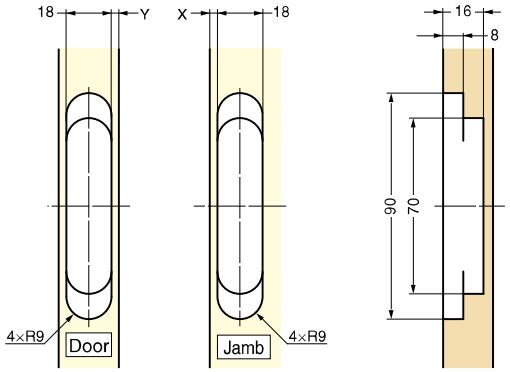
| Y: Door machining margin | B: Door chamfering | X: Jamb machining margin | A: Jamb chamfering |
|---|---|---|---|
| 3 and under | 1 | 3 and under | 1 |
| | 2 | 4 | 2 |
| 3.5 | | 3.5 | |

| No. | Part Name | Material | Finish | | |
|---|---|---|---|---|---|
| | | | DC | DN | BL |
| ① | Body | Zinc Alloy (ZDC) | Satin Chrome | Satin Nickel | Black Enamel |
| ② | Base Frame | Zinc Alloy (ZDC) | Satin Chrome | Satin Nickel | Black Enamel |
| ③ | Arm | Zinc Alloy (ZDC) | Satin Chrome | Satin Nickel | Black Enamel |
| ④ | Shaft | Stainless Steel | – | – | – |
| ⑤ | Cover | ABS | Silver | Champagne Gold | Black |

Installation | Installation | Selection Tool

HES Hinge

## Cut Out Dimensions




| Item Code | Item Name | Colour | Door Width | Door Height | Door Thickness | Door Weight | | Opening Angle | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 170-029-221 | HES3D-90DC | Silver | Max. 600 | Max. 1500 | Min. 23 | Max. 12 kg/2 pcs | Max. 16 kg/3 pcs | 180° | 198 g | 2 pcs | 48 pcs |
| 170-029-222 | HES3D-90DN | Champagne Gold | Max. 600 | Max. 1500 | Min. 23 | Max. 12 kg/2 pcs | Max. 16 kg/3 pcs | 180° | 198 g | 2 pcs | 48 pcs |
| 170-033-588 | HES3D-90BL | Black | Max. 600 | Max. 1500 | Min. 23 | Max. 12 kg/2 pcs | Max. 16 kg/3 pcs | 180° | 198 g | 2 pcs | 48 pcs |

## Installation Template

This is sold singly, because they can be used on both the door and jamb.

| Item Code | Item Name | Material | Colour |
|---|---|---|---|
| 170-029-034 | HES3D-90-TMP | Methacrylic Resin (PMMA) | Clear |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP BRACKET FOR HES3D-90 HES3D-90MB-BL NEW

Latest Info

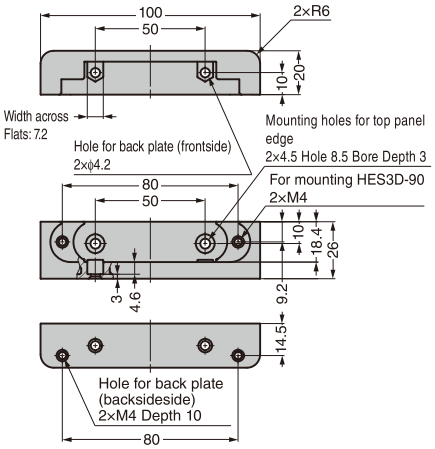


- This bracket allows the HES3D-90 to be easily mounted (thickness: 30 mm and more) It is ideal when step machining to the door edge is difficult. (P.50)

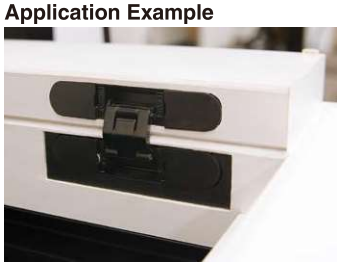
INSTRUCTION | SCREW

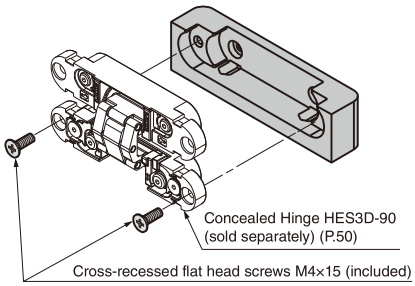
## Parts Included

- Cross-recessed flat head screws M4×15

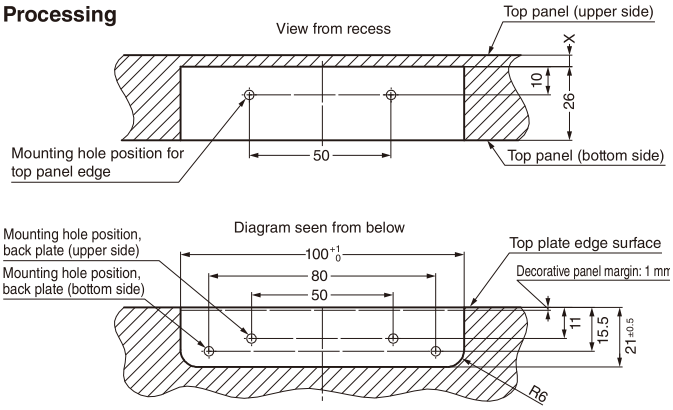



## Application Example

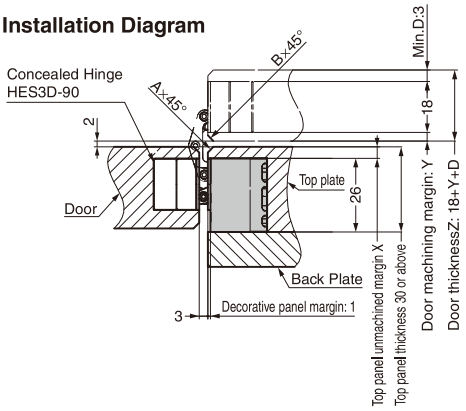





## Processing

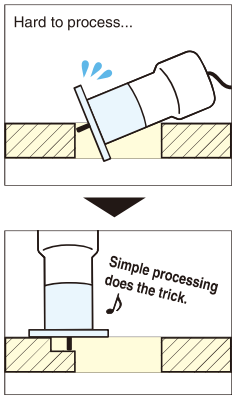



## Installation Diagram



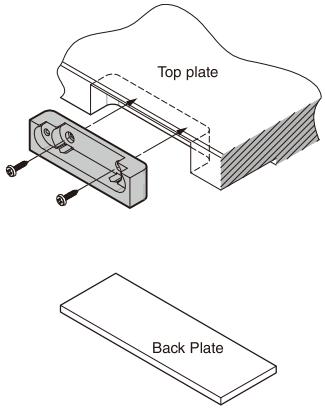

| Y: Door machining margin | B: Door chamfering | X: Top panel machining margin | A: Top panel chamfering |
|---|---|---|---|
| Max.3 | 1 | Max.3 | 1 |
| | 2 | 4 | 2 |
| 3.5 | | 3.5 | |

## Ideal in locations where step processing is difficult



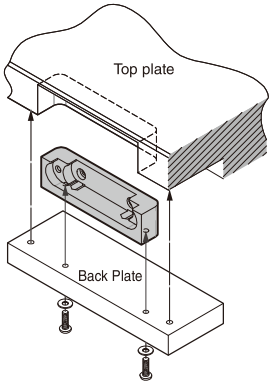

Because the processing part is a simple shape, processing is easier even at locations where using tools is difficult.

## Solid wood, laminated wood, etc.



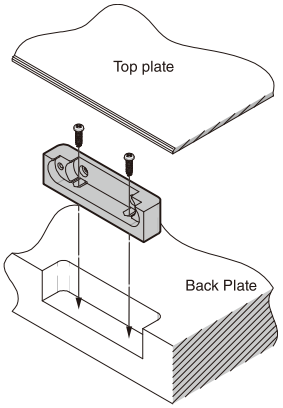

Can be installed with simple processing.

## Laminated plywood, MDF, etc.




Also supports laminated plywood and other materials where screw-fastening on the edge surface is not possible.

## Veneer, melamine facing, etc.




Folding tables with concealed hinges can be created by attaching a top plate to the back plate.

| Item Code | Item Name | Material | Finish/Colour | Corresponding Hinge | Box (pcs) | Carton (pcs) |
|---|---|---|---|---|---|---|
| 170-053-778 | HES3D-90MB-BL | Zinc Alloy (ZDC) | Black Powder Coating | HES3D-90 | 20 pcs | 80 pcs |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP 3-WAY ADJUSTABLE CONCEALED HINGE HES3D-120

Latest Info



HES Hinge + Esprit

Passed Private 300K Cycle Test



KIDS DESIGN AWARD 2021

- Thin profile (21mm) allows for shallow mortise.
- 3D Adjustment Post Installation: Adjust vertically, horizontally, and depth.
- For simplified door hanging, the hinge divides into two parts: one for the door-side and one for the jamb-side.
- Can temporarily be hung before fixing with screws.
- Custom colors available on request. Please contact us for details.

INSTRUCTION SCREW

## Remarks

- Read all remarks on handling thoroughly before use.
- Please use the Selection Tool for HES Concealed Hinges to select a hinge.
- Recommended for use with the following compatible door damper/door closers: LDD-S (P.566) and LDD-V (P.568).
- When used in combination with door restrictors, please use HES3D-120-A100 instead. (P.53)

## Parts Included

- Countersunk head tapping screw 5×20
- Hex. wrench (a nominal diameter 3)
- Cutout template

## Sold Separately

- Metal door bracket 120BKT (P.54)

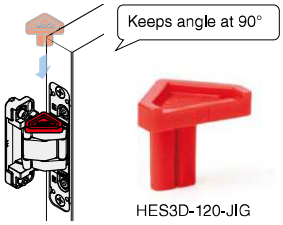
Feature | Example | Installation

Selection Tool
HES Hinge

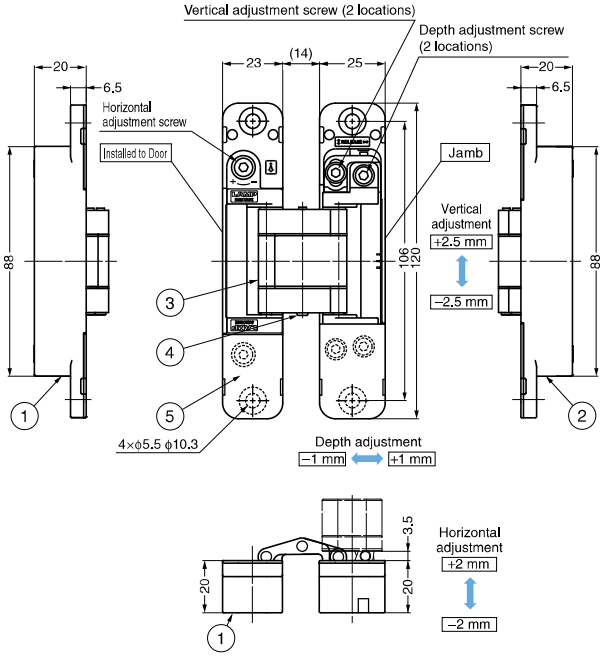
### Without Covers

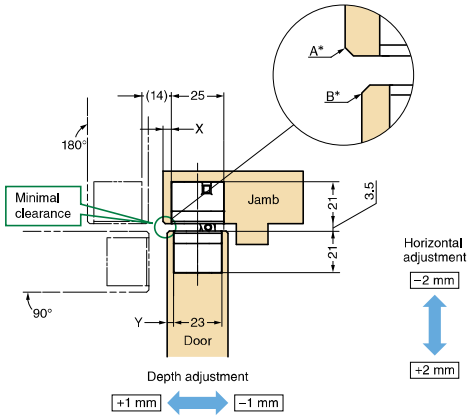


### Easy Installation with Jig




HES3D-120-JIG

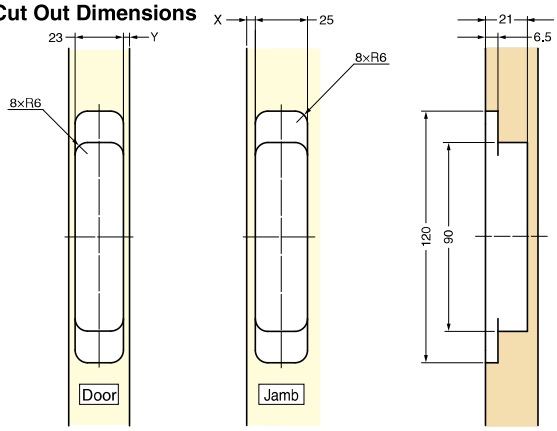



Please process the part (corner of door/jamb) of * marked on the drawing to C1 or more (or R1 or more).

| Y: Door machining margin | B: Door chamfering | X: Jamb machining margin | A: Jamb chamfering |
|---|---|---|---|
| 4 and under | 1 | 5 and under | 1 |
| | 2 | 6 | 2 |
| | | 7 | |
| 5 | 3 | 5 and under | 3 |

## Cut Out Dimensions




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

| Item Code | Item Name | Colour | Door Width | Door Height | Door Thickness | Door Weight | | Opening Angle | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|---|---|
| – | HES3D-120DC | Silver | Max. 900 | Max. 2400 | Min. 29 | Max. 30 kg/2 pcs | Max. 40 kg/3 pcs | 180° | 401 g | 2 pcs | 24 pcs |
| – | HES3D-120DN | Champagne Gold | Max. 900 | Max. 2400 | Min. 29 | Max. 30 kg/2 pcs | Max. 40 kg/3 pcs | 180° | 401 g | 2 pcs | 24 pcs |
| – | HES3D-120BL | Black | Max. 900 | Max. 2400 | Min. 29 | Max. 30 kg/2 pcs | Max. 40 kg/3 pcs | 180° | 401 g | 2 pcs | 24 pcs |

## Installation Template

This is sold in pairs, one for the door and one for the jamb.

| Item Code | Item Name | Material | Colour |
|---|---|---|---|
| 170-024-569 | HES3D-120-TMP | Methacrylic Resin (PMMA) | Clear |

## Installation Jig

| Item Code | Item Name | Material | Colour | Weight (g) |
|---|---|---|---|---|
| 170-044-186 | HES3D-120-JIG | Polyacetal (POM) | Red | 4 |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

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

Latest Info

HES Hinge + Esprit

Passed Private 300K Cycle Test



KIDS DESIGN AWARD 2021

- Can limit opening angle when used in combination with door restrictors.
- Thin profile (21 mm) allows for shallow mortise.
- 3D Adjustment Post Installation: Adjust vertically, horizontally, and depth.
- For simplified door hanging, the hinge divides into two parts: one for the door-side and one for the jamb-side.
- Can temporarily be hung before fixing with screws.

INSTRUCTION | SCREW

## Remarks

- Read all remarks on handling thoroughly before use.
- Please use the Selection Tool for HES Concealed Hinges to select a hinge.
- 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 (P.566), LDD-V (P.568), and LDC-N2 (P.572). Please note that the door weight should meet moment conditions of both door closers and door dampers. Verify all conditions before installation.

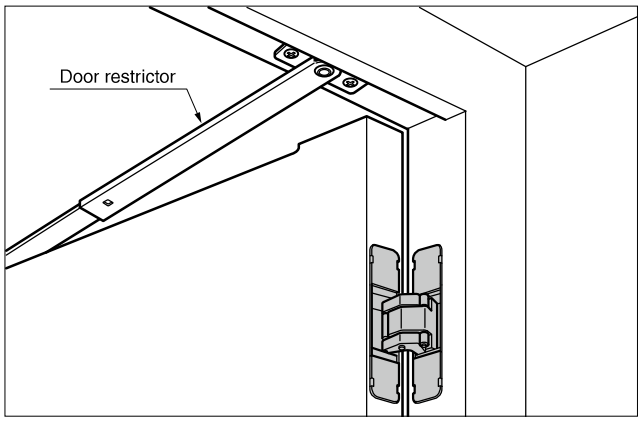
## Parts Included

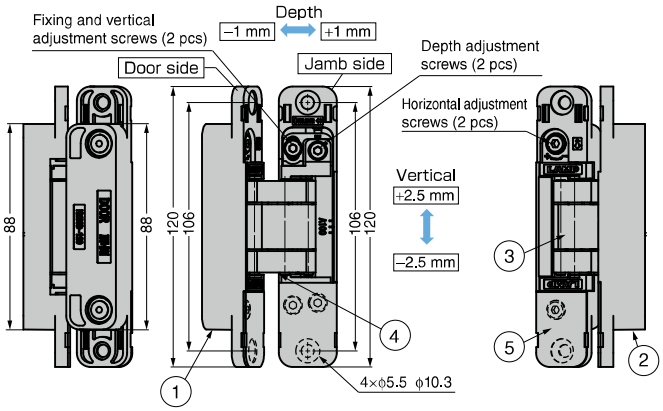
- Cross-recessed countersunk tapping screw 5×20 4 pcs (made of stainless steel)
- Hex key spanner 3

## Optional Parts

- HES3D-120TMP, installation template (P.60)
  (This reusable jig allows for easy mortising of doors and jamb using routers.)
- HES3D-120BKT, bracket for sheet metal (P.54)

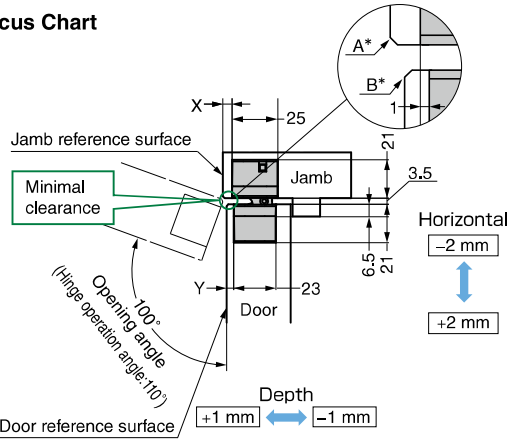
## Using with a Door Restrictor




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

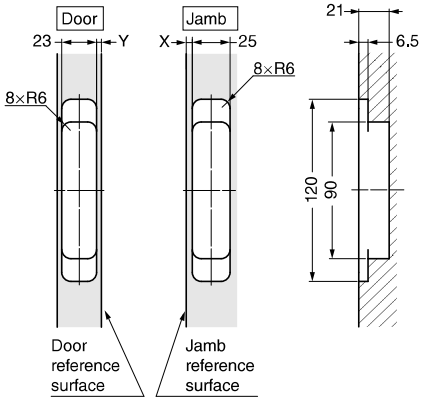
## Locus Chart




| Y : Door Clearance | B : Door Chamfering | X : Jamb Clearance | A : Jamb Chamfering |
|---|---|---|---|
| 4 | 1 | 5 | 1 |
| | 2 | 6 | 2 |
| | | 7 | 3 |
| 5 | 3 | 5 | |

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

## Cut Out Dimensions




Installation

Example

Selection Tool

HES Hinge

| 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) (Jamb side: 2 pcs) | ABS | Satin Chrome | Satin Nickel | Black |

| 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 | | | | | | | | | | |

**Installation Template** This is sold in pairs, one for the door and one for the jamb.

| Item Code | Item Name | Material | Colour |
|---|---|---|---|
| 170-024-569 | HES3D-120-TMP | Methacrylic Resin (PMMA) | Clear |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.



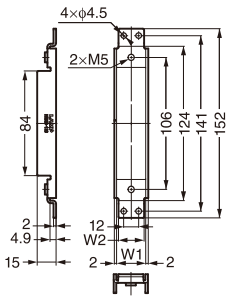
Update: 03.10.2025

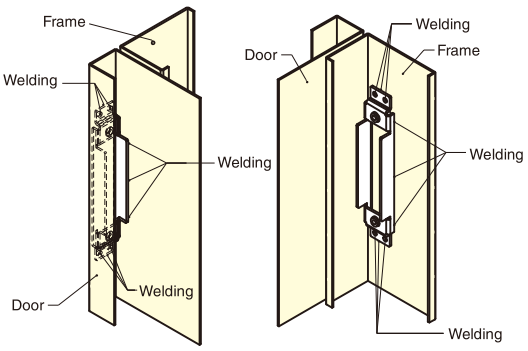
# LAMP BRACKET OF HES3D-120 FOR SHEET METAL HES3D-120BKT

Latest Info



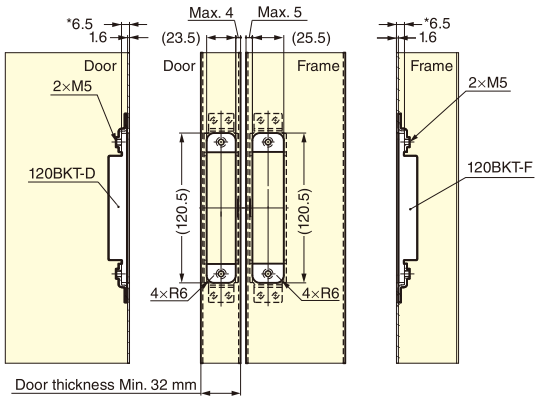





- Bracket to use HES3D-120 hinge,HES3D-120-A100 (P.52-53) with sheet metal.

## Installation




*Dimensions: For flat surface in case of 1.6 mm thick sheet metal.

| Item Code | Item Name | Type | Material | Finish/Colour | W1 | W2 | Weight | Carton |
|---|---|---|---|---|---|---|---|---|
| 170-032-739 | HES3D-120BKT-D | For Door | Steel (SPCC) | Zinc Chromate | 23.3 | 20.5 | 58 g | 50 pcs |
| 170-032-740 | HES3D-120BKT-F | For Frame | | | 25.3 | 22.5 | 58 g | 50 pcs |


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP 3-WAY ADJUSTABLE CONCEALED HINGE HES3D-H120-36 Centre Door Mortise NEW

Latest Info

HES Hinge + Esprit

Passed Private 300K Cycle Test



KIDS DESIGN AWARD 2021

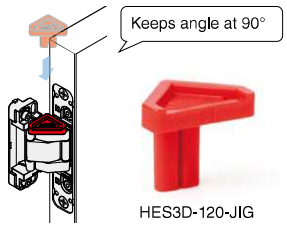
- For a 36mm thick door, the mortise is centred and allows it to function as either a left or right-handed door.
- Has increased load capacity of 50 kg with two hinges.
- Thin profile (21mm) allows for shallow mortise.
- 3D Adjustment Post Installation: Adjust vertically, horizontally, and depth.
- For simplified door hanging, the hinge divides into two parts: one for the door-side and one for the jamb-side.
- Can temporarily be hung before fixing with screws.

INSTRUCTION SCREW

## Without Covers



## Easy Installation with Jig




HES3D-120-JIG

Feature

Selection Tool

HES Hinge

## Applications

- Interior doors

## Parts Included

- Cross-recessed countersunk tapping screw 5 x 20 (4 pcs / hinge) stainless steel
- Hex key 3
- Cutout template

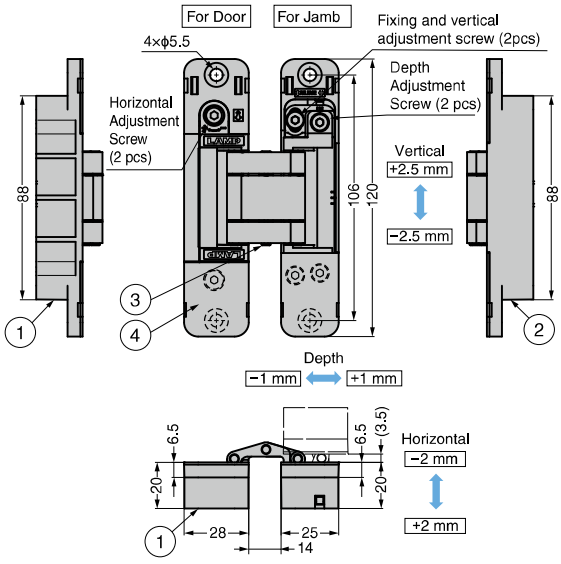
## Sold Seperately

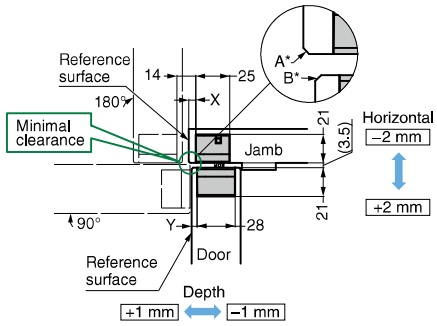
- HES3D-120-JIG (installation jig)

## Remarks

- Read all remarks on handling thoroughly before use.
- Please use the Selection Tool for HES Concealed Hinges to select a hinge.
- When use with a door damper, the following dampers are recommended:
  - LDD-S (P.566)
  - LDD-V (P.568)
  - LDD-V100 (P.570)
  - LDC-N2 (P.572)

  * Each door damper has different load capacity. Please check that before use.
- Required number of hinges also depends on door stiffness and warpage. Please check actual conditions and performance before use.

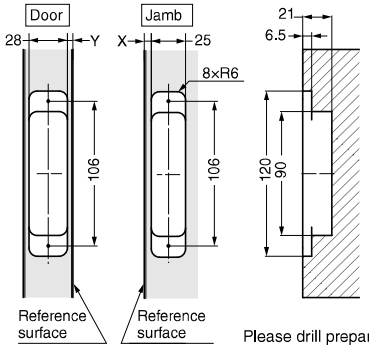



| Door | | Jamb | |
|---|---|---|---|
| Y : Machining Margin | B : Chamfering | X : Machining Margin | A : Chamfering |
| Max. 4 | 1 | Max. 5 | 1 |
| | 2 | 6 | 2 |
| | | 7 | 3 |
| 5 | 3 | Max. 5 | |

The table shows how much margin and chamfering are required for the door to open properly.

## Cut Out Dimensions




Please drill prepared holes for the tapping screws.

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

## Hinge

| Item Code | Item Name | Colour | 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 | | | |
| 170-047-861 | HES3D-H120-36DC | Silver | Max. 900 | Max. 2700 | Min. 34 | 490 | 50 | 637 | 65 | 180° | 2 | 24 |
| 170-047-862 | HES3D-H120-36DN | Champagne Gold | | | | | | | | | | |
| 170-047-863 | HES3D-H120-36BL | Black | | | | | | | | | | |

## Installation Jig sold separately

| Item Code | Item Name | Material | Colour | Weight (g) | Box (pcs) | Carton (pcs) |
|---|---|---|---|---|---|---|
| 170-044-186 | HES3D-120-JIG | POM | Red | 4 | 100 | 400 |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.



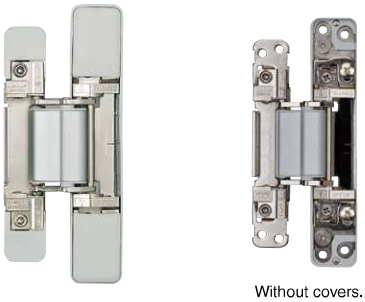
Update: 03.10.2025

# LAMP 3-WAY ADJUSTABLE CONCEALED HINGE HES3D-V135LGR

Latest Info



Passed Private 300K Cycle Test



Without covers.

- Thin profile allows for shallow mortise.
- 3D Adjustment Post Installation: Adjust vertically, horizontally, and depth.
- For simplified door hanging, the hinge divides into two parts: one for the door-side and one for the jamb-side.
- Unique seven link structure helps to prevent door sagging.

INSTRUCTION | SCREW

## Remarks

- Read all remarks on handling thoroughly before use.
- Please use the Selection Tool for HES Concealed Hinges to select a hinge.
- The locus is different from other products of the same series. Please confirm the position where the door is opened by 90° on the left figure.
- Recommended for use with the following compatible door damper/door closers: LDD-S (P.566), LDD-V (P.568), and LDC-N2 (P.572). Verify all conditions before installation.
- Using with other door closers might lead to hinge damage.
- For using Sugatsune door closer, please install the door holder separately at the stop position.

## Parts Included

- Binding head tapping screw 5 × 15

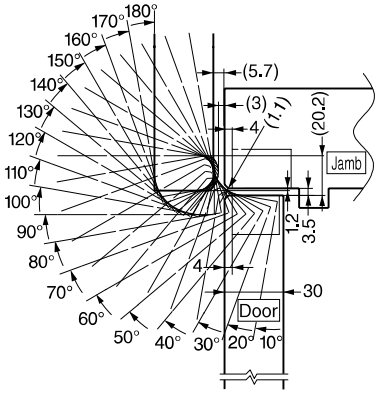
## Option

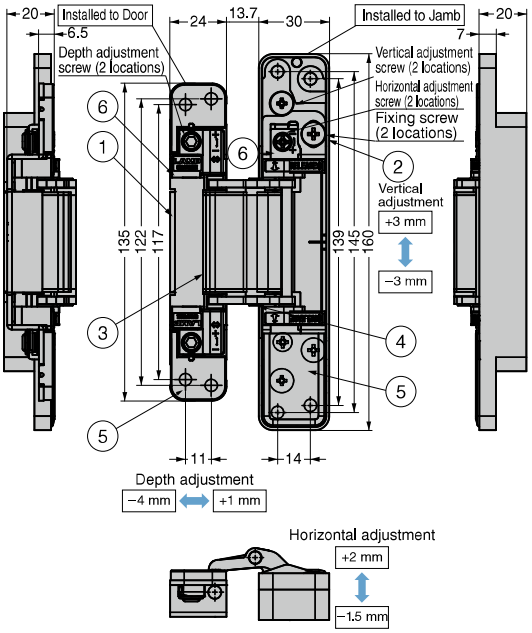
- Installation template HES3D-V135-TMP (P.60)

Installation | Selection Tool

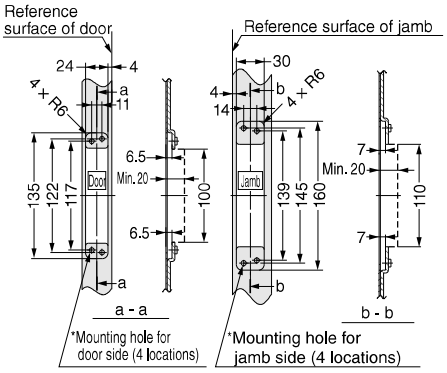
HES Hinge

## Locus Chart

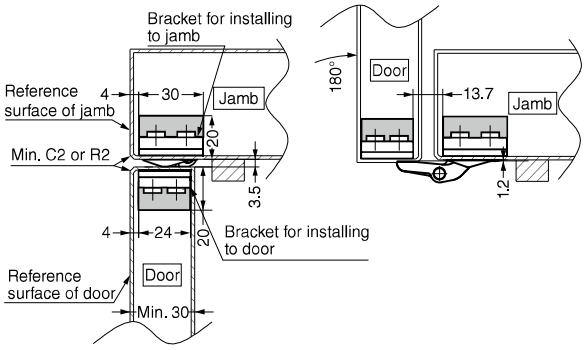


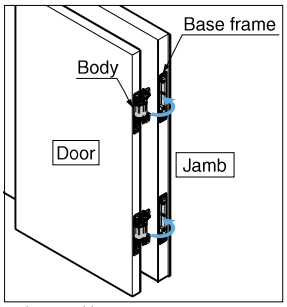




## Cut Out Dimensions




## Installation




## Temporary Holding Feature

1. Hinge can be split into the body and base frame. Install the body to the door and the base frame to the jamb.
2. Push the hinge body horizontally into the base frame in the direction of the arrow. The door is held to the jamb duo to the temporary holding feature.
3. Temporarily tighten the fixing screws and adjust the door position.
4. After adjustment, tighten the fixing screws completely to fix the hinge body.

| No. | Part Name | Material | Finish / Colour |
|---|---|---|---|
| ① | Body | Steel | Nickel |
| ② | Base Frame | POM | Light Grey |
| ③ | Arm | Aluminium Alloy | Anodized Silver |
| ④ | Shaft | Steel | Nickel |
| ⑤ | Cover | POM | Light Grey |
| ⑥ | Adjustment Block | Zinc Alloy (ZDC) | Nickel |

| Item Code | Item Name | Door Width | Door Height | Door Thickness | Jamb Thickness | Door Weight kg/2 pcs | Door Weight kg/3 pcs | Opening Angle | Weight (g) | Box (pcs) | Carton (pcs) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 170-020-804 | HES3D-V135LGR | Max. 900 | Max. 2400 | Min. 30 | Min. 20 | Max. 40 | Max. 55 | 180° | 400 | 2 | 24 |

## Installation Template

This is sold in pairs, one for the door and one for the jamb.

| Item Code | Item Name | Material | Colour |
|---|---|---|---|
| 170-024-572 | HES3D-V135-TMP | Methacrylic Resin | Clear |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP 3-WAY ADJUSTABLE CONCEALED HINGE HES3D-E160

Latest Info

HES Hinge + Esprit

Passed Private 300K Cycle Test





Without covers

- Thin profile allows for shallow mortise.
- 3D Adjustment Post Installation: Adjust vertically, horizontally, and in depth.
- For simplified door hanging, the hinge divides into two parts: one for the door-side and one for the jamb-side.
- Can temporarily be hung before fixing with screws.
- The structure is designed to prevent the door from sagging.
- Screw covers can be purchased separately in the event that the original covers are broken or lost. Contact us for details.

INSTRUCTION | SCREW

## Remarks

- Read all remarks on handling thoroughly before use.
- Please use the Selection Tool for HES Concealed Hinges to select a hinge.
- When using with a door damper and/or closer, select LDD-S (P.566), LDD-V (P.568) and/or LDC-N2 (P.572). Choose a door weight within the specified range for both the hinge and door damper/closer to ensure proper performance. Verify all conditions before installation.
- When using a closer with a stopper, be sure to use a door stopper too (floor mounting type, wall mounting type, etc.). Install the door stopper in a position further forward than the stopper of the closer, and between the centre and end of the door.

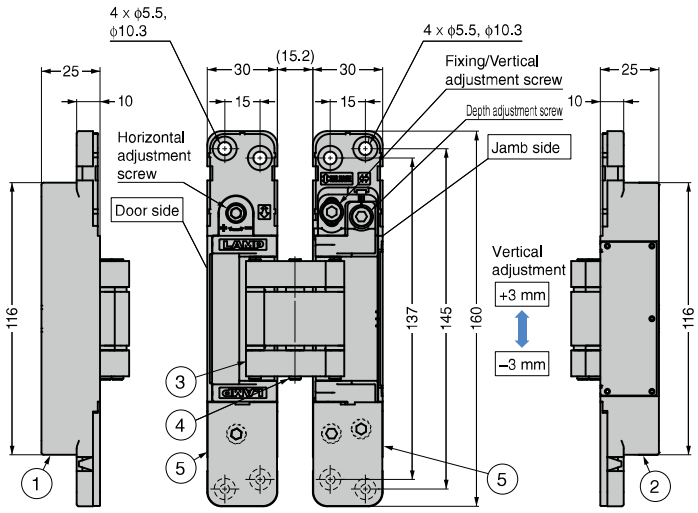
## Parts Included

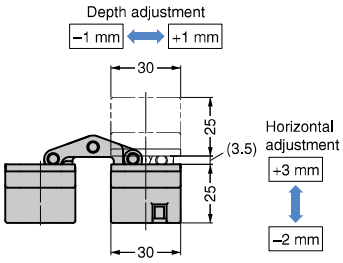
- Size 5 x 25 cross-recessed flat head tapping screws (stainless steel) (8 screws per hinge)
- Nominal size 4 hex bar spanner

Installation | Selection Tool

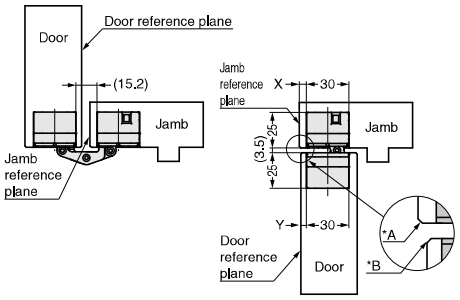
HES Hinge

This figure shows this product with the upper screw cover removed.




## Installation Drawing

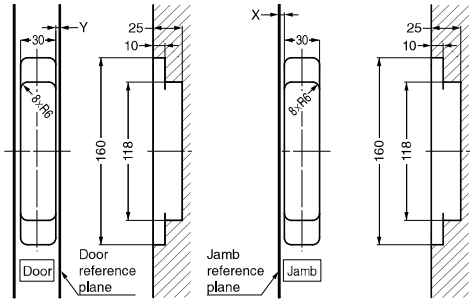



*The door and jamb need to be chamfered based on the machining margin.

| Y: Door machining margin | B: Door chamfering | X: Jamb machining margin | A: Jamb chamfering |
|---|---|---|---|
| 4 and under | 1 | 5 and under | 1 |
| 4 and under | 2 | 6 | 2 |
| 4 and under | 2 | 7 | 3 |
| 5 | 3 | 5 and under | 3 |
| 5 | 3 | 6 | 4 |

(Reference values)

## Cut Out Dimensions




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

| Item Code | Item Name | Colour | Door Specs | | | Load Capacity | | | | Opening Angle |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Width (mm) | Height (mm) | Thickness (mm) | N / 2 pcs | kgf / 2 pcs | N / 3 pcs | kgf / 3 pcs | |
| – | HES3D-E160DC | Silver | Max. 900 | Max. 2400 | Min. 36 | 539 | 55 | 686 | 70 | 180° |
| – | HES3D-E160DN | Champagne Gold | | | | | | | | |
| – | HES3D-E160BL | Black | | | | | | | | |

## Installation Template

This is sold singly, because they can be used on both the door and jamb.

| Item Code | Item Name | Material | Colour |
|---|---|---|---|
| 170-047-841 | HES3D-E160-TMP | Methacrylic Resin (PMMA) | Clear |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.



Update: 03.10.2025

# LAMP STAINLESS STEEL CONCEALED HINGE HGS3D-S160SH With 3-way Adjustable Function NEW

Latest Info



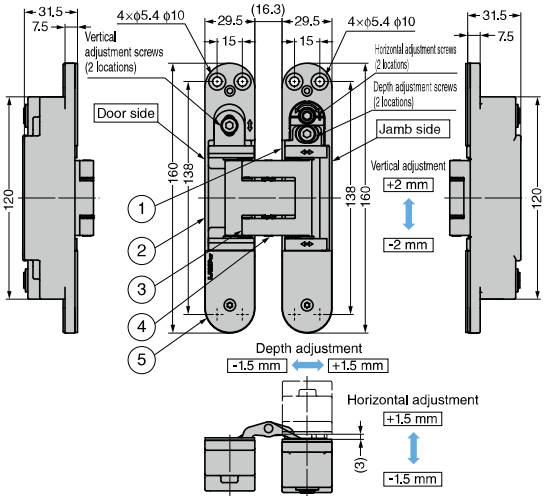
Passed Private 300K Cycle Test





With square screw cover (optional)

Figure shows top screw cover removed.




- Stainless steel structure with excellent corrosion resistance.
- 3D Adjustment Post Installation: Adjust vertically, horizontally, and depth.
- For simplified door hanging, the hinge divides into two parts: one for the door-side and one for the jamb-side.

INSTRUCTION | SUS

## Application

- Residential doors, fire doors, facility doors, etc.

## Parts Included

- Flat head tapping screw 5×40 (stainless steel)
- Hex key 4, 3, 2.5

## Optional Parts

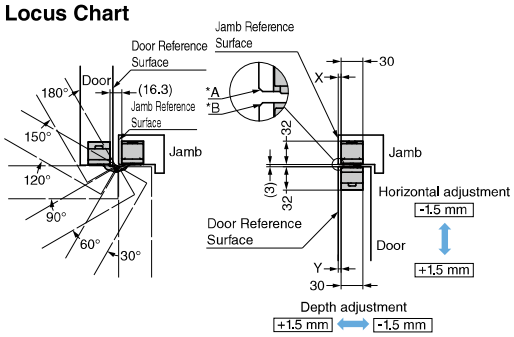
- Square screw cover: Order when cut out is square (steel fittings, etc.).

## Remarks

- Be sure to read the “Precautions for Use” (P.23).
- Please use the Selection Tool for HES Concealed Hinges to select a hinge.
- When using with a door damper and/or closer, select LDD-S (P.566), LDD-V(P.568), or LDC-N2 (P.572). Select a door weight within a range satisfying the conditions of both the hinge and the door damper and/or closer. Verify all conditions before installation.
- When using a closer with a stopper, be sure to use a door stopper as well (floor mounting type, wall mounting type, etc.). Install the door stopper further forward than the closer stopper, between the centre and edge of the door.
- If noise is generated during use, apply lubricant (grease) as needed.

## Locus Chart

Selection Tool
HES Hinge

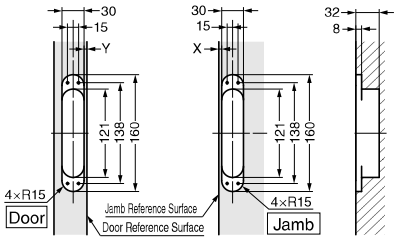



*The door and jamb must be chamfered in accordance with the machining margin, in order to open and close the door.

| Y: Door machining margin | B: Door chamfering | X: Jamb machining margin | A: Jamb chamfering |
|---|---|---|---|
| 4 or below | 1 | 5 or below | 1 |
| | 2 | 6 | 2 |
| | | 7 | 3 |
| 5 | 3 | 5 or below | |
| | | 6 | 4 |

(Reference values)

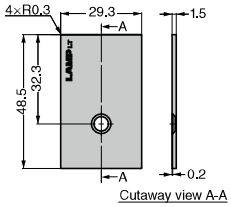
## Cut Out Dimensions




*When using the optional square screw cover, drill the first oval hole in both the door and the jamb as a square hole of width 30 × length 160 × depth 8.

## Square Screw Cover (Optional Parts)






| No. | Part Name | Material | Finish |
|---|---|---|---|
| ① | Body | Stainless Steel (SUS304) | Plain |
| ② | Base frame | | |
| ③ | Arm | | |
| ④ | Rotating Shaft | | |
| ⑤ | Screw Cover (round type) | | Satin |

## Body

| Item Code | Item Name | Finish | Door Specs | | | Load Capacity | | | | Opening Angle |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Width | Height | Thickness | N/2 pcs | kgf/2 pcs | N/3 pcs | kgf/3 pcs | |
| 170-050-961 | HGS3D-S160SH | Satin | Max. 900 | Max. 2400 | Min. 36 | 784 | 80 | 981 | 100 | 180° |

## Square Screw Cover (Optional Parts)

Sold as a set (4 pcs).

| Item Code | Item Name | Material | Finish |
|---|---|---|---|
| 170-050-962 | HGS3D-S160SH-SQPLATE | Stainless Steel (SUS304) | Satin |

Please contact your local agent or nearest Sugatsune subsidiary for detail and availability.



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP 3-WAY ADJUSTABLE CONCEALED HINGE HES3D-E190

Latest Info

HES Hinge + Esprit

Passed Private 300K Cycle Test





Without covers.

Feature | Installation | Selection Tool

HES Hinge

- Thin profile allows for shallow mortise.
- 3D Adjustment Post Installation: Adjust vertically, horizontally, and depth.
- For simplified door hanging, the hinge divides into two parts: one for the door-side and one for the jamb-side.
- Can temporarily be hung before fixing with screws.
- Has a fire safety rating of ANSI/UL 10C, CAN/ULC-S104
- Custom colours available on request. Please contact us for details.

INSTRUCTION | SCREW

## Remarks

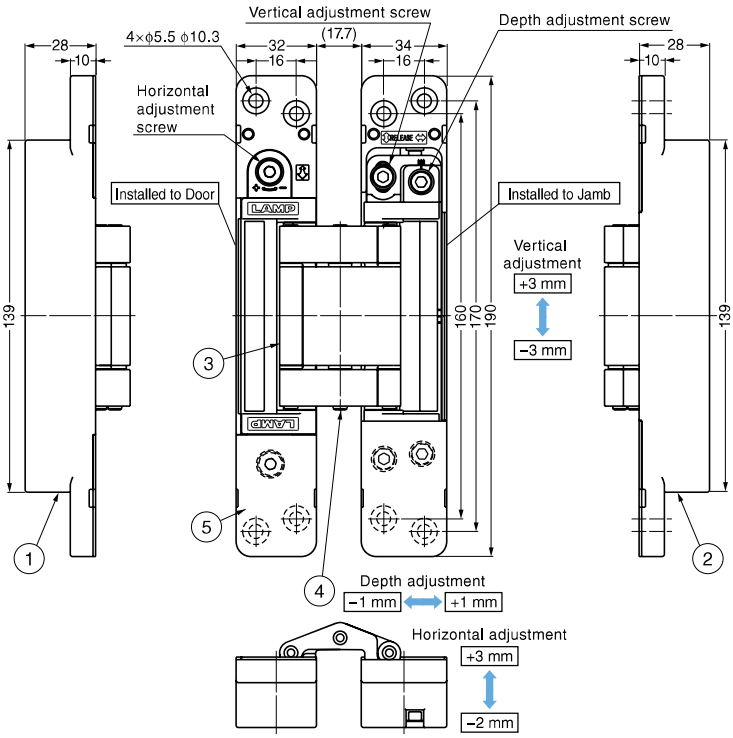
- Read all remarks on handling thoroughly before use.
- Please use the Selection Tool for HES Concealed Hinges to select a hinge.

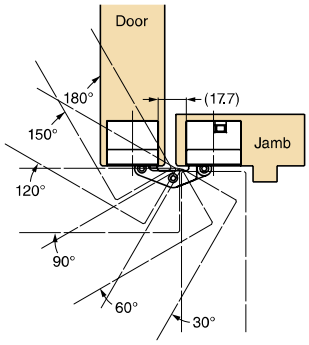
## Parts Included

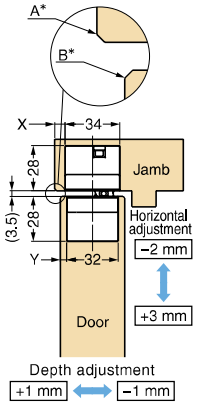
- Countersunk head screw 5×30 (4 pcs/hinge)
- Allen key size 4

## Sold Separately

- Installation template HES3D-E190-TMP (P.60)
- Metal door bracket E190BKT (P.60)



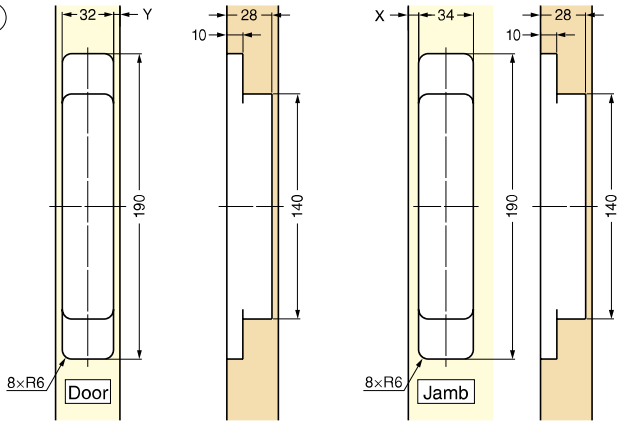




Please process the part (corner of door/jamb) of * marked on the drawing to C1 or more (or R1 or more).

| Y: Door machining margin | B: Door chamfering | X: Jamb machining margin | A: Jamb chamfering |
|---|---|---|---|
| 4 and under | 1 | 6.5 and under | 1 |
| | 2 | 7 | 2 |
| | | 8 | 3 |
| 5 | 3 | 6.5 and under | 2 |
| | | 7 | 3 |
| | | 8 | 4 |

## Cut Out Dimensions




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

| Item Code | Item Name | Colour | Door Specs | | | | | Opening Angle | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Width | Height | Thickness | Weight | | | | | |
| – | HES3D-E190DC | Silver | Max. 900 | Max. 2400 | Min. 38 mm | Max. 100 kg/2 pcs | Max. 125 kg/3 pcs | 180° | 1,100 g | 2 pcs | 12 pcs |
| – | HES3D-E190DN | Champagne Gold | Max. 900 | Max. 2400 | Min. 38 mm | Max. 100 kg/2 pcs | Max. 125 kg/3 pcs | 180° | 1,100 g | 2 pcs | 12 pcs |
| – | HES3D-E190BL | Black | Max. 900 | Max. 2400 | Min. 38 mm | Max. 100 kg/2 pcs | Max. 125 kg/3 pcs | 180° | 1,100 g | 2 pcs | 12 pcs |
| 170-033-568 | HES3D-E190NI | Nickel | Max. 900 | Max. 2400 | Min. 38 mm | Max. 100 kg/2 pcs | Max. 125 kg/3 pcs | 180° | 1,100 g | 2 pcs | 12 pcs |

**Installation Template** This is sold in pairs, one for the door and one for the jamb.

| Item Code | Item Name | Material | Colour |
|---|---|---|---|
| 170-028-808 | HES3D-E190-TMP | Methacrylic Resin (PMMA) | Clear |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

# LAMP. INSTALLATION TEMPLATE HES3D-TMP

Latest Info




For door For jamb

HES3D-120-TMP

- Installation template for HES3D hinges.

## Remarks

- The HES3D-120TMP, HES3D-160-TMP, HES3D-E190-TMP, and HES3D-V135-TMP are sold in pairs, one for the door and one for the jamb.
- The HES3D-70TMP and HES3D-90-TMP are sold singly, because they can be used on both the door and jamb.
- Recommended working tool is a straight bit with guide bearings of which guide diameter and bit diameter are the same.

## Sold Separately

- HES3D-70 (P.49)
- HES3D-90 (P.50)
- HES3D-120 (P.52)
- HES3D-E160 (P.57)
- HES3D-E190 (P.59)
- HES3D-W190 (P.62)
- HES3D-V135LGR (P.56)

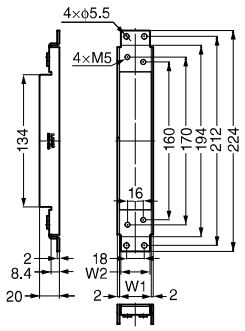
Installation

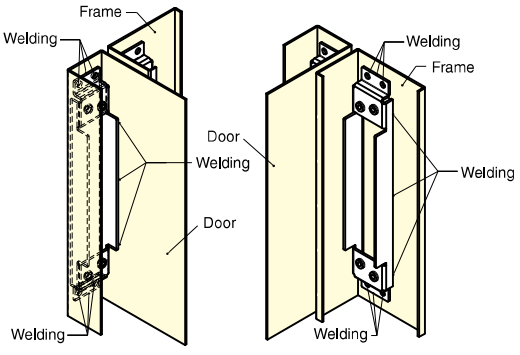
| Item Code | Item Name | Applicable Hinge | Material | Colour |
|---|---|---|---|---|
| 170-040-988 | HES3D-70-TMP | HES3D-70 | Methacrylic Resin (PMMA) | Clear |
| 170-029-034 | HES3D-90-TMP | HES3D-90 | Methacrylic Resin (PMMA) | Clear |
| 170-024-569 | HES3D-120-TMP | HES3D-120 | Methacrylic Resin (PMMA) | Clear |
| 170-047-841 | HES3D-E160-TMP | HES3D-E160 | Methacrylic Resin (PMMA) | Clear |
| 170-028-808 | HES3D-E190-TMP | HES3D-E190 | Methacrylic Resin (PMMA) | Clear |
| 170-047-842 | HES3D-W190-TMP | HES3D-W190 | Methacrylic Resin (PMMA) | Clear |
| 170-024-572 | HES3D-V135-TMP | HES3D-V135LGR | Methacrylic Resin (PMMA) | Clear |

# LAMP. BRACKET OF HES3D-E190 FOR SHEET METAL HES3D-E190BKT

Latest Info

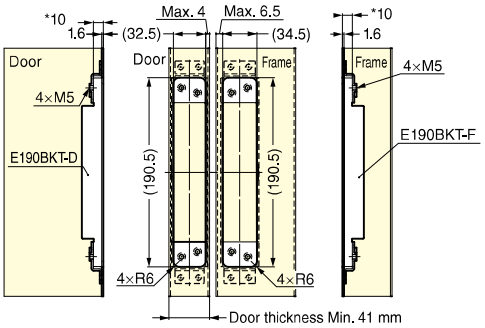





- Bracket to use HES3D-E190 hinge (P.59) with sheet metal.

## Installation




*Dimensions: For flat surface in case of 1.6 mm thick sheet metal.

| Item Code | Item Name | Type | Material | Finish/Colour | W1 | W2 | Weight | Carton |
|---|---|---|---|---|---|---|---|---|
| 170-032-741 | HES3D-E190BKT-D | For Door | Steel (SPCC) | Zinc Chromate | 32.3 | 29.5 | 135 g | 50 pcs |
| 170-032-742 | HES3D-E190BKT-F | For Frame | | | 34.3 | 31.5 | 135 g | 50 pcs |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

# Discover What Sugatsune's Website Has to Offer!

sugatsune global Search

## Our site offers...

- Keyword Search + Product Filters
- Installation Instructions
- New Product Information
- CAD Data (2D, 3D)
- Customer Solution Case Studies
- Product Videos
- Hardware Basics
- Selection Tools

# LAMP 3-WAY ADJUSTABLE CONCEALED HINGE HES3D-W190 Wide Throw NEW

Latest Info



Passed Private 300K Cycle Test


Silver


Champagne Gold

c UL us LISTED


Without covers


Black


Nickel


With Angular Edge Cover

- Has a long arm for a wider throw. This allows for use on clad and thick doors.
- Thin profile allows for shallow mortise.
- 3D Adjustment Post Installation: Adjust vertically, horizontally, and depth.
- For simplified door hanging, the hinge divides into two parts: one for the door-side and one for the jamb-side.
- Can temporarily be hung before fixing with screws.
- Custom colours available on request. Please contact us for details.
- Replacement screw covers are also available. Please contact us.
- UL Rated, up to 3 Hours (DC, DN, and BL models only).
- Angular Edge Cover is now available.

INSTRUCTION | SCREW

## Remarks

- Read all remarks on handling thoroughly before use.
- Please use the Selection Tool for HES Concealed Hinges to select a hinge.

## Parts Included

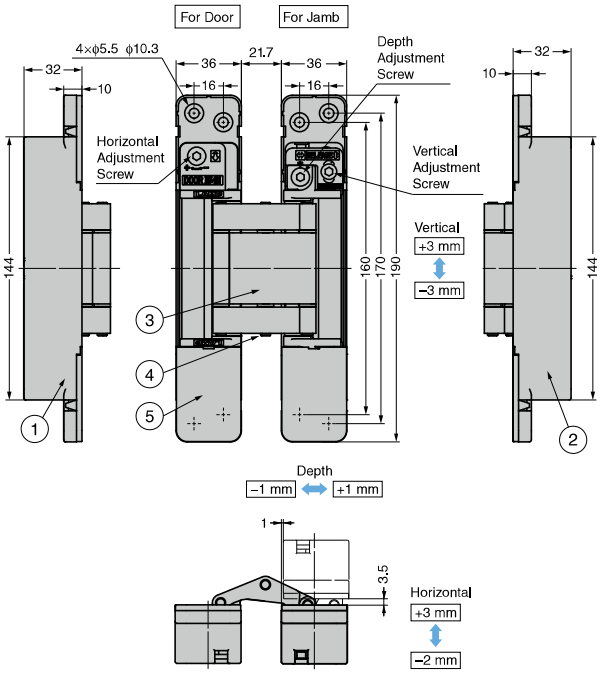
- Cross-recessed countersunk tapping screw 5 × 30 (8 pcs / hinge) stainless steel
- Hex key 4
- Cutout template

## Optional Parts

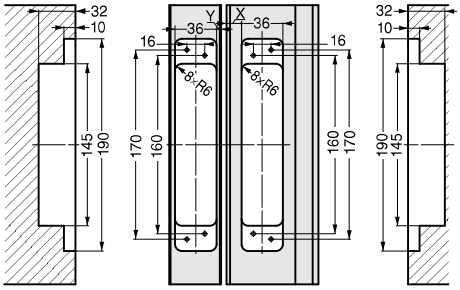
- Installation jig HES3D-W190-TMP (P.60)
- Angular Edge Cover
- Stainless steel screw cover (made to order)

Installation

Selection Tool
HES Hinge

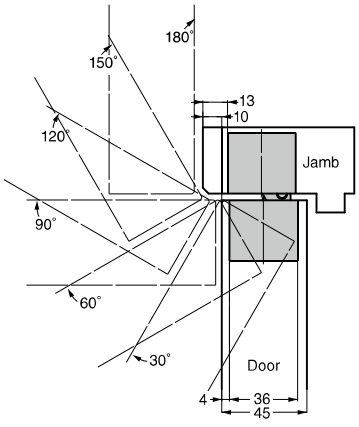



## Cut Out Dimension




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

## Locus Chart

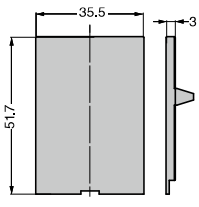



The example drawing shows the case that there is a step of 10 mm between the door and the jamb.

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

## Angular Edge Cover (Optional Parts)



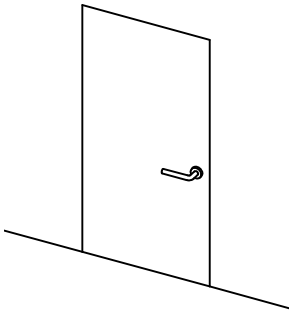




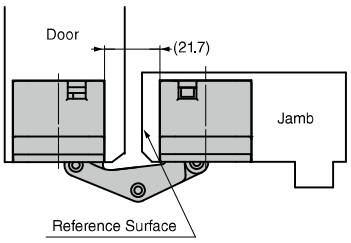



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

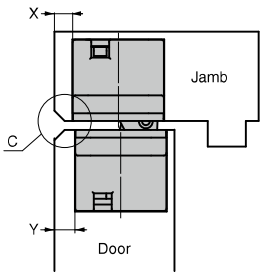
## Flush Installation



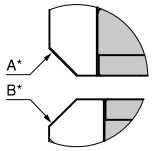
• Open




• Closed



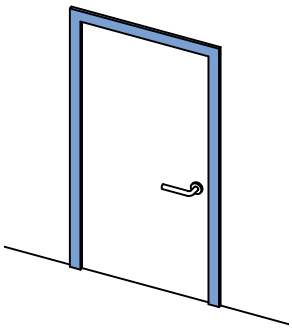

C (detail)




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

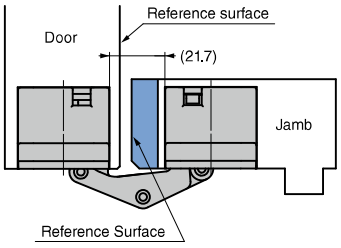
| Y | B | X | A |
|---|---|---|---|
| Door Clearance | Door Chamfering | Jamb Clearance | Jamb Chamfering |
| 4 and under | 0 | 3 and under | 0 |
| 5 | 1 | 4 | 1 |
| 6 | 2 | 5 | 2 |
| 7 | 3 | 6 | 3 |
| 8 | 4 | 7 | 4 |
| 9 | 6 | 8 | 6 |

## Cladded Installation



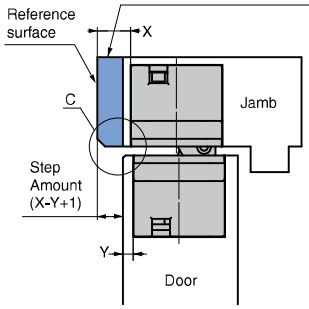
Available on doors which are not aligned flush to the wall or jamb.

• Open

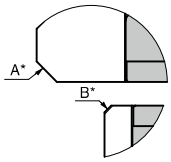



• Closed

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




C (detail)




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

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

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

| 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 | | | | |
| – | HES3D-W190DC | Silver | Max. 915 | Max. 2440 | Min. 42 | 981 | 100 | 1230 | 125 | 180° | – | 2 | 12 |
| – | HES3D-W190DN | Champagne Gold | | | | | | | | | | 2 | 12 |
| – | HES3D-W190BL | Black | | | | | | | | | | 2 | 12 |
| 170-047-904 | HES3D-W190NI | Nickel | | | | | | | | | | 2 | 12 |

### Installation Template

This is sold singly, because they can be used on both the door and jamb.

| Item Code | Item Name | Material | Colour |
|---|---|---|---|
| 170-047-842 | HES3D-W190-TMP | Methacrylic Resin (PMMA) | Clear |

### Angular Edge Cover

| Item Code | Item Name | Material | Colour |
|---|---|---|---|
| 170-052-813 | HES3D-W190SQC-DC | ABS | Silver |
| 170-052-814 | HES3D-W190SQC-BL | | Black |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

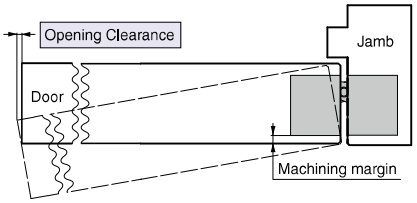
# Required Opening Clearance for HES Hinges

### About Opening Clearance

Opening clearance is the gap between the jamb and door required for door operation.
The HES hinges require it on the door's leading edge, and the required space varies depending on the door thickness (DT).

*The value does not consider changes over time. Please use this guide or referential purposes

## HES3D




●HES3D-W190 (P.62)

| Door Thickness | Machining Margin | Opening Clearance DT 600 | DT 700 | DT 800 | DT 850 | DT 915 |
|---|---|---|---|---|---|---|
| 42 | 3 | 1.4 | 1.2 | 1.0 | 1.0 | 0.9 |
| 50 | 4 | 1.9 | 1.6 | 1.4 | 1.3 | 1.2 |
| 60 | 4 | 2.7 | 2.3 | 2.1 | 1.9 | 1.8 |
| 70 | 4 | 3.8 | 3.2 | 2.8 | 2.6 | 2.5 |
| 80 | 4 | 5.0 | 4.3 | 3.7 | 3.5 | 3.3 |

●HES3D-V135LGR (P.56)

| Door Thickness | Machining Margin | Opening Clearance DT 600 | DT 700 | DT 800 | DT 850 | DT 900 |
|---|---|---|---|---|---|---|
| 30 | 4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 |
| 33 | 4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 |
| 36 | 4 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 |
| 40 | 4 | 0.7 | 0.6 | 0.6 | 0.5 | 0.5 |
| 50 | 4 | 1.3 | 1.1 | 1 | 0.9 | 0.9 |

●HES3D-E190 (P.59)

| Door Thickness | Machining Margin | Opening Clearance DT 600 | DT 700 | DT 800 | DT 850 | DT 900 |
|---|---|---|---|---|---|---|
| 38 | 3 | 1.0 | 0.9 | 0.7 | 0.7 | 0.7 |
| 50 | 4 | 1.8 | 1.5 | 1.3 | 1.2 | 1.2 |
| 60 | 4 | 2.6 | 2.2 | 2.0 | 1.8 | 1.7 |
| 70 | 4 | 3.6 | 3.1 | 2.7 | 2.5 | 2.4 |
| 80 | 4 | 4.8 | 4.1 | 3.6 | 3.4 | 3.2 |

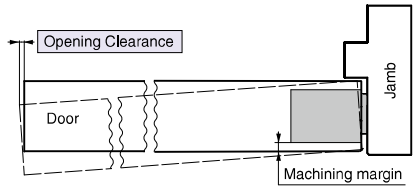
●HES3D-E160 (P.57)

| Door Thickness | Machining Margin | Opening Clearance DT 600 | DT 700 | DT 800 | DT 850 | DT 900 |
|---|---|---|---|---|---|---|
| 36 | 3 | 0.9 | 0.8 | 0.7 | 0.6 | 0.6 |
| 40 | 4 | 1.0 | 0.9 | 0.8 | 0.7 | 0.7 |
| 50 | 4 | 1.7 | 1.5 | 1.3 | 1.2 | 1.2 |

●HES3D-120 (P.52)
●HES3D-120-A100 (P.53)
●HES3D-H120-36 (P.55)

| Door Thickness | Machining Margin | Opening Clearance DT 600 | DT 700 | DT 800 | DT 850 | DT 900 |
|---|---|---|---|---|---|---|
| 29 | 3 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 |
| 33 | 4 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 |
| 36 | 4 | 0.9 | 0.7 | 0.6 | 0.6 | 0.6 |
| 40 | 4 | 1.1 | 0.9 | 0.8 | 0.8 | 0.7 |
| 50 | 4 | 1.8 | 1.5 | 1.3 | 1.3 | 1.2 |

## HES2S



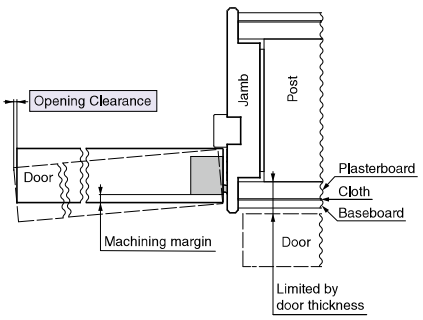

●HES2S-140-A125 (P.47)

| Door Thickness | Machining Margin | Opening Clearance DT 600 | DT 700 | DT 800 | DT 850 | DT 900 |
|---|---|---|---|---|---|---|
| 38 | 4 | 0.8 | 0.6 | 0.6 | 0.5 | 0.5 |
| 40 | 5 | 0.8 | 0.7 | 0.6 | 0.6 | 0.5 |
| 50 | 5 | 1.4 | 1.2 | 1.1 | 1.0 | 0.9 |

●HES2S-150-A110 (P.48)

| Door Thickness | Machining Margin | Opening Clearance DT 600 | DT 700 | DT 800 | DT 850 | DT 900 |
|---|---|---|---|---|---|---|
| 35 | 4 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 |
| 36 | 4.5 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 |
| 40 | 4.5 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 |

## HES1F




●HES1F-140 (P.42)

| Door Thickness | Machining Margin | Opening Clearance DT 600 | DT 700 | DT 800 | DT 850 | DT 900 | Baseboard (reference) |
|---|---|---|---|---|---|---|---|
| 36 | 4 | 1.5 | 1.3 | 1.1 | 1.0 | 1.0 | Max. 9 |
| 40 | 6 | 1.6 | 1.4 | 1.2 | 1.1 | 1.1 | Max. 9 |
| 45 | 8.5 | 1.8 | 1.5 | 1.3 | 1.3 | 1.2 | Max. 7 |
| 50 | 11 | 2.0 | 1.7 | 1.5 | 1.4 | 1.3 | Max. 4.5 |

* The values are calculated with the assumption that the mortise is positioned at the centre of the door, considering that the machining margin for the door should be 13 or less.
* When using the hinge on thick doors, the baseboard thickness may be limited.


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

## Suggested Options // OEM Colour Coordination



### Custom colours are available for the following models (min. 500 pcs required)

**Available Models**

- HES3D-70
- HES3D-90
- HES3D-120
- HES3D-E160
- HES3D-E190
- HES3D-W190

**Please contact local representatives for details.**



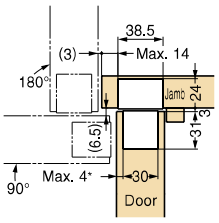
## LAMP CONCEALED HINGE HES-3038BK

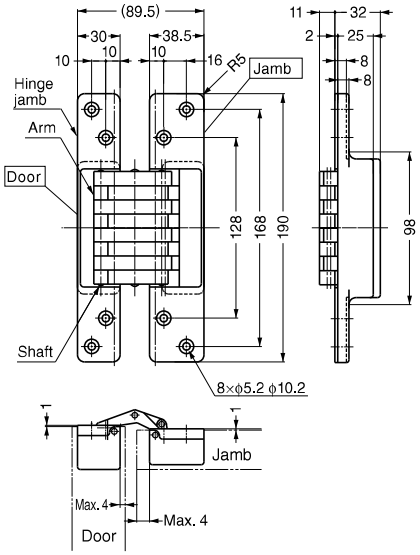
Latest Info

HES Hinge + Esprit

Passed Private 200K Cycle Test






- Finish available in rich polished brass or sleek stain chrome.

SCREW

### Remarks

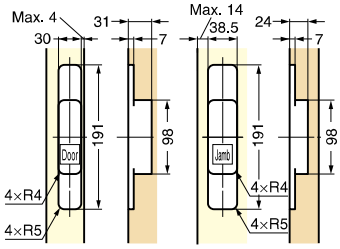
- Recommended to use 3 pieces per door.
- Secure to check the dimension of * marked on bellow drawings.

### Parts Included

- Countersunk head tapping screw 5×26

Selection Tool
HES Hinge

### Cut Out Dimensions




| Item Code | Item Name | Material | Finish | Door Width | Door Height | Door Thickness | Door Weight | Opening Angle | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 170-091-013 | HES-3038BK PB | Brass | Polished | Max. 900 | Max. 2000 | Min. 36 | Max. 45 kg/3 pcs | 180° | 1360 g | 2 pcs | 20 pcs |
| 170-091-015 | HES-3038BK SC | Brass | Satin Chrome | Max. 900 | Max. 2000 | Min. 36 | Max. 45 kg/3 pcs | 180° | 1360 g | 2 pcs | 20 pcs |

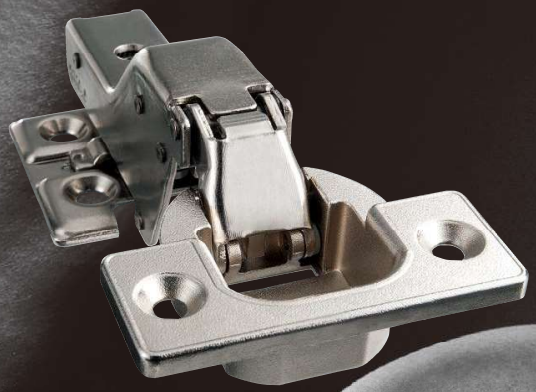
This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

# Powerful Hinges.

LAMP®

## Heavy-Duty Concealed Hinge





NEW

**J95**
- Opening Angle 95°

**J160**
- Opening Angle 160°
- With Soft Close

Can also be used with mirrored doors

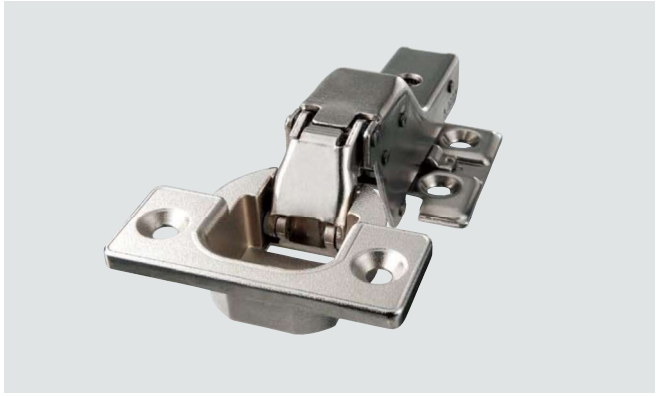
2pieces support 25kg doors

3pieces handle 40kg!




Max. 2400 mm

# LAMP. HEAVY-DUTY CONCEALED HINGES J95 PAT



**Max. 25 kg with 2 pcs**

**Max. 40 kg with 3 pcs**

## Perfect for Large Doors !

*Max.35kg with Glass Doors



## Face Plate for Glass Doors

Optional plates are available for use on glass doors.



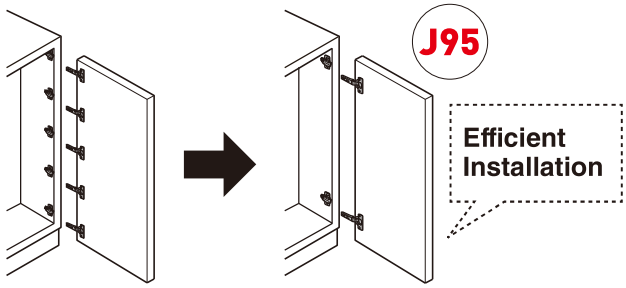

or







Feature




Normal Hinges: 5 pcs

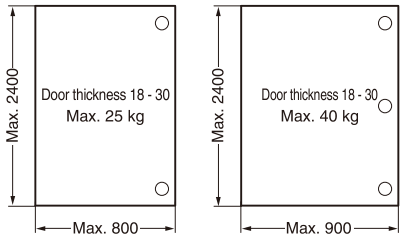
J95 Hinges: 2 pcs

### Less Hinges, More Efficiency.

Reduce installation time and provide clean appearance

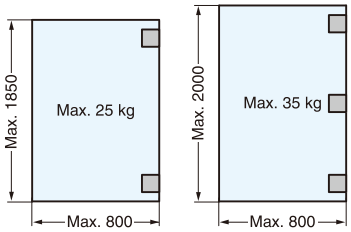
## [Door Dimensions and Number of Hinges Mounted]

- For wooden doors

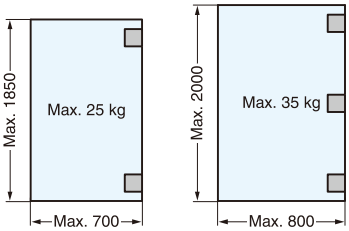



- For glass doors

Glass thickness 8 mm




Glass thickness 10 mm




Mount the top and bottom hinges within 200 mm from the door edges. When using 3 pieces, keep the mounting pitch uniform.



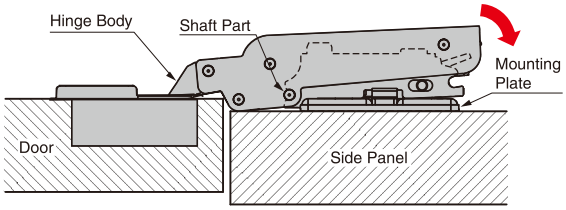
This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

# Simple Installation and Detachment by One-Touch

**[How to Install]**

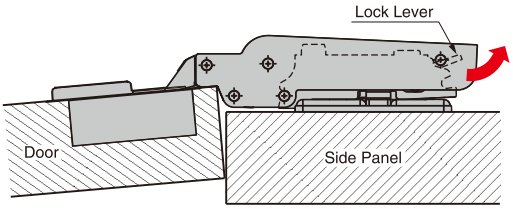
Align the hinge body shaft with the edge of the mounting plate and fit it in, pushing the hinge body bottom edge down until it clicks.



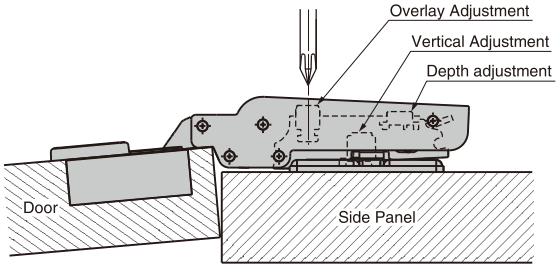

Check that the hinge body is correctly installed on the mounting plate.

**[How to Remove]**

Push the lock lever up in the direction and remove the hinge body from the mounting plate.




# Easy and Fast Adjustment



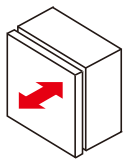
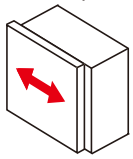
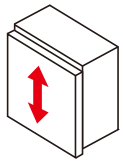
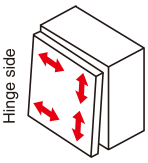

*The adjustment method above involves a No.2 Phillips screwdriver.

The eccentric cam mechanism enables door adjustment in each direction simply by turning the depth and vertical adjustment screws. Door position adjustment is easier because the process of loosening the adjustment screws, deciding on a position, and fixing the door is not required. Overlay and tilt can be adjusted with the overlay adjustment screw.

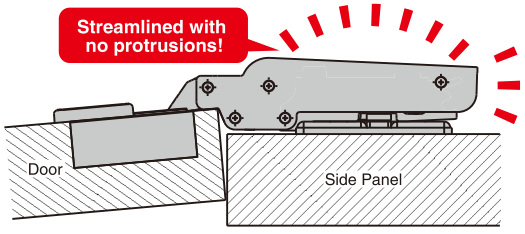
**[Caution]**

- Be sure to use a manual screwdriver for each adjustment screw, making fine adjustments within the screw adjustment range. Do not use an air/electric/chargeable screwdriver to rotate screws beyond the adjustment range limits, as this will damage the adjustment mechanism and lead to dysfunction.

**[Adjustment Direction/Amount/Method]**

| | | |
|---|---|---|
| **Depth Adjustment**  | +1.5 mm, -2.5 mm | Rotate the depth adjustment screw to the left ↶ to bring the door forward and to the right ↷ to move it back. |
| **Overlay Adjustment (Horizontal Adjustment)**  | +0 mm, -4 mm | Rotate the overlay adjustment screw to the right ↷ for smaller overlay and to the left ↶ for larger. |
| **Vertical Adjustment**  | ±3 mm | For right-hanging types, rotate the vertical adjustment screw to the left ↶ to bring the door up and to the right ↷ to move it down.<br>*For left-hanging types, the door moves in the opposite direction. |
| **Tilt Adjustment**   | – | Rotate the overlay adjustment screw to the left and right to adjust. |

# Slim shape




Slim design with no adjustment screw protrusions on the body top. The lock lever does not protrude from the body bottom, ensuring safety.

**[Caution]**

- Different sizes of the Heavy-Duty Concealed Hinge J95 are required for glass doors and wooden doors.
- Prioritize the door weight when determining the glass size.
- Mount the hinges as far apart as possible. When using 3 pieces, keep the mounting pitch uniform. Also, take into account door warping.
- Because the door dimensions and number of hinges mounted are guidelines, confirm through actual mounting.
- Apply lubricant periodically as maintenance when in use.
- When opening and closing the hinges before mounting the door, be careful not to snag fingers, as the hinge has a powerful catch.
- Do not repeatedly open and close the concealed hinge as an individual product before mounting. Damage may result.
- When using glass, use tempered glass. It is also recommended to use shatter-proof film on the glass. Be sure to remove the shatter-proof film in the areas where the product contacts the glass.


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP CONCEALED HINGE J95 95°Opening / 25 mm Overlay

Latest Info




Picture above is the combination of concealed hinge and mounting plate.

- 3-way-adjustment function by mounting plate (depth + 1.5, - 2.5 mm, vertical ± 3 mm, overlay [horizontal] + 0, - 4 mm).
- Snap on mount.

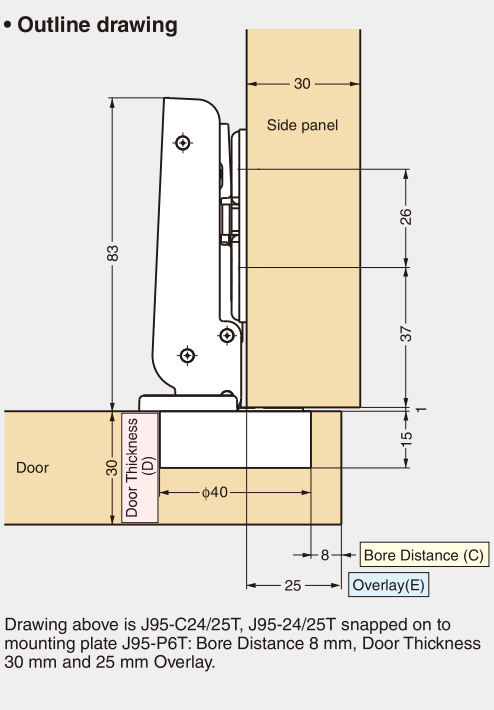
### Sold Separately

- Mounting plate (P.72)
- Face plate for glass door (P.74 - 75)
- Safety cover (P.73)
- Cover for mounting plate (P.73)

Feature Feature

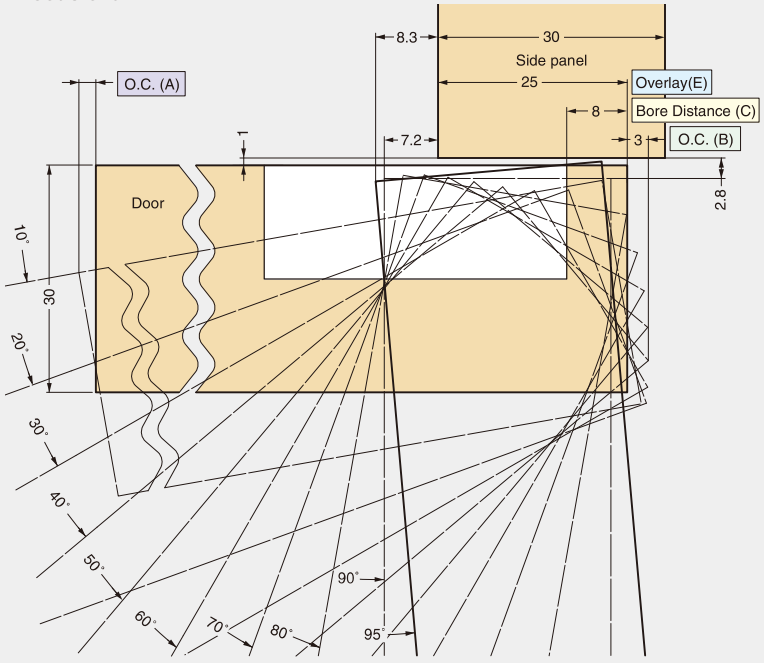
**95°Opening** **25 mm Overlay** **Door Thickness 18 - 30 mm**

### • Outline drawing




Drawing above is J95-C24/25T, J95-24/25T snapped on to mounting plate J95-P6T: Bore Distance 8 mm, Door Thickness 30 mm and 25 mm Overlay.

### • Locus chart




Drawing above is Bore Distance 8 mm, Door Thickness 30 mm, Side panel Thickness 30 mm and 25 mm Overlay.

### Bore Distance (C)

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

Overlay adjustment (- 4 mm) 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)

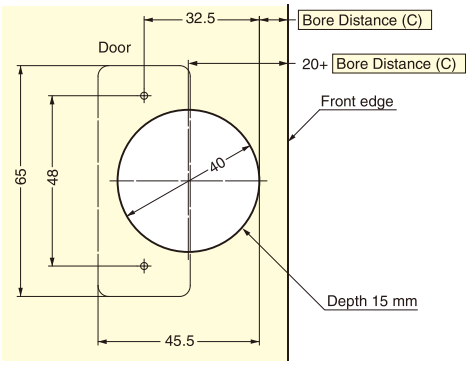
| Door Thickness (D) | Bore Distance (C) 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|
| 18 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| 20 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 22 | 0.8 | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 |
| 24 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.0 |
| 26 | 1.7 | 1.6 | 1.6 | 1.5 | 1.5 | 1.5 |
| 28 | 3.2 | 2.8 | 2.5 | 2.2 | 2.1 | 2.0 |
| 30 | 5.0 | 4.5 | 4.0 | 3.6 | 3.3 | 3.0 |
| 32 | 6.8 | 6.2 | 5.7 | 5.2 | 4.8 | 4.4 |
| 34 | 8.6 | 8.0 | 7.5 | 6.9 | 6.5 | 6.0 |
| | O.C. (B) | | | | | |

Please refer to the locus chart if door thickness is over 30 mm.

### O.C. (A)

| Door Thickness (D) | Door Width 300 | 400 | 500 | 600 | 700 | 800 | 900 |
|---|---|---|---|---|---|---|---|
| 30 | 0.50 | 0.30 | 0.30 | 0.20 | 0.20 | 0.20 | 0.20 |
| | O.C. (A) | | | | | | |

### Cut Out Dimensions




- Recommended screw
  Size 5 raised countersunk head tapping screw or wood screw.

### Door Dimensions and Number of Hinges

Please refer to P.67.

| Item Code | Item Name | Type | Material | Finish | Weight | Carton |
|---|---|---|---|---|---|---|
| 160-026-905 | J95-24/25T | w/o Catch | Body/Steel, Cup/ Zinc Alloy (ZDC) | Nickel | 131 g | 100 pcs |
| 160-026-731 | J95-C24/25T | w/ Catch | | | 143 g | 100 pcs |
| 160-034-919 | J95-24-25T BN | w/o Catch | | Black Nickel | 134 g | 100 pcs |
| 160-034-916 | J95-C24-25T BN | w/ Catch | | | 146 g | 100 pcs |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP. CONCEALED HINGE J95 95°Opening / 16 mm Overlay

Latest Info






Picture above is the combination of concealed hinge and mounting plate.

- 3-way-adjustment function by mounting plate (depth + 1.5, - 2.5 mm, vertical ± 3 mm, overlay [horizontal] + 0, - 4 mm).
- Snap on mount.

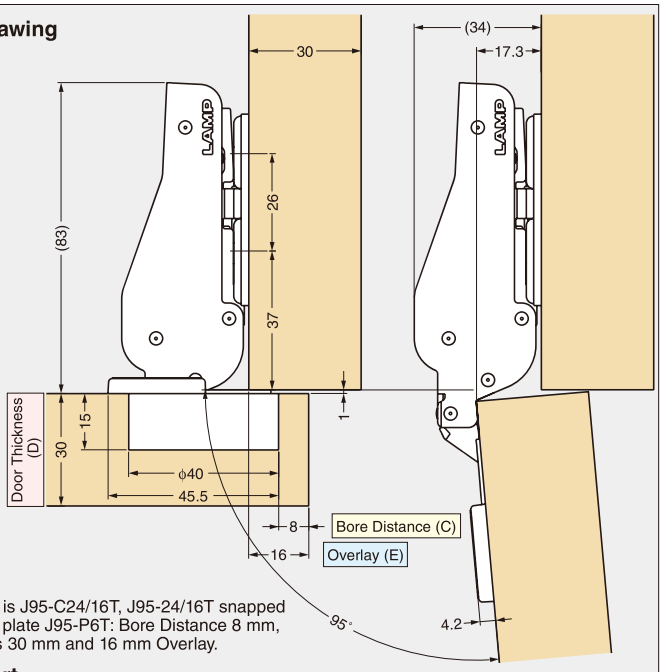
### Sold Separately

- Mounting plate (P.72)
- Face plate for glass door (P.74 - 75)
- Safety cover (P.73)
- Cover for mounting plate (P.73)

Feature Feature

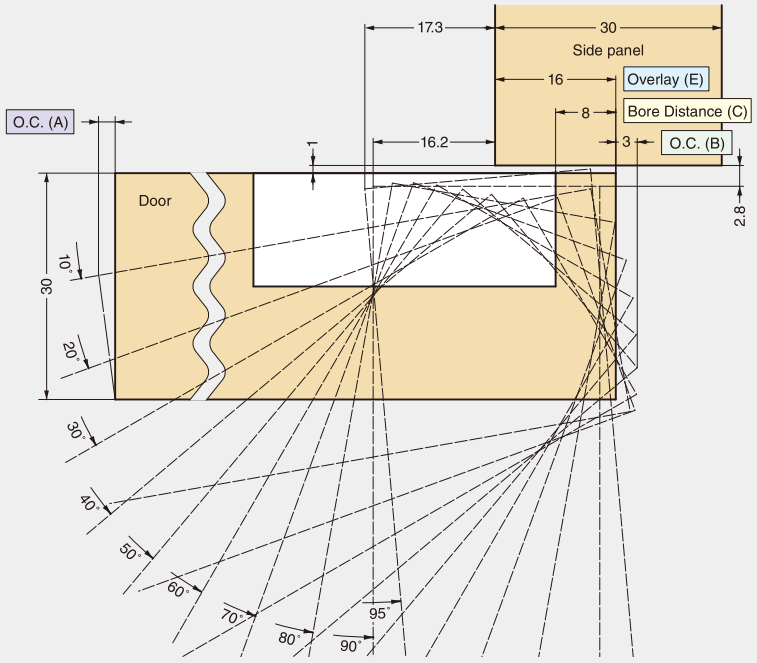
**95°Opening** **16 mm Overlay** **Door Thickness 18 - 30 mm**

### • Outline drawing




Drawing above is J95-C24/16T, J95-24/16T snapped on to mounting plate J95-P6T: Bore Distance 8 mm, Door Thickness 30 mm and 16 mm Overlay.

### • Locus chart




Drawing above is Bore Distance 8 mm, Door Thickness 30 mm, Side panel Thickness 30 mm and 16 mm Overlay.

### Bore Distance (C)

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

Overlay adjustment (Max. -4 mm) 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)

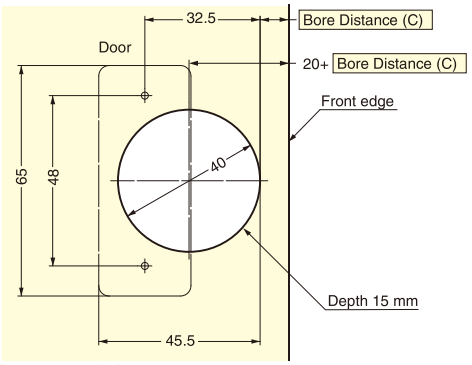
| Door Thickness (D) | Bore Distance (C) 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|
| 18 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| 20 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 22 | 0.8 | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 |
| 24 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.0 |
| 26 | 1.7 | 1.6 | 1.6 | 1.5 | 1.5 | 1.5 |
| 28 | 3.2 | 2.8 | 2.5 | 2.2 | 2.1 | 2.0 |
| 30 | 5.0 | 4.5 | 4.0 | 3.6 | 3.3 | 3.0 |
| 32 | 6.8 | 6.2 | 5.7 | 5.2 | 4.8 | 4.4 |
| 34 | 8.6 | 8.0 | 7.5 | 6.9 | 6.5 | 6.0 |
| | O.C. (B) | | | | | |

Please refer to the locus chart if door thickness is over 30 mm.

### O.C. (A)

| Door Thickness (D) | Door Width 300 | 400 | 500 | 600 | 700 | 800 | 900 |
|---|---|---|---|---|---|---|---|
| 20 | 0.50 | 0.30 | 0.30 | 0.20 | 0.20 | 0.20 | 0.20 |
| | O.C. (A) | | | | | | |

### Cut Out Dimensions




- Recommended screw

Size 5 raised countersunk head tapping screw or wood screw.

### Door Dimensions and Number of Hinges

Please refer to P.67.

| Item Code | Item Name | Type | Material | Finish | Weight | Carton |
|---|---|---|---|---|---|---|
| 160-033-658 | J95-24/16T | w/o Catch | Body/Steel, Cup/ Zinc Alloy (ZDC) | Nickel | 131 g | 50 pcs |
| 160-033-657 | J95-C24/16T | w/ Catch | | | 143 g | 50 pcs |
| 160-034-920 | J95-24-16T BN | w/o Catch | | Black Nickel | 143 g | 50 pcs |
| 160-034-917 | J95-C24-16T BN | w/ Catch | | | 155 g | 50 pcs |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP CONCEALED HINGE J95 93°Opening / Inset

Latest Info




Picture above is the combination of concealed hinge and mounting plate.

- 3-way-adjustment function by mounting plate (depth + 1.5, - 2.5 mm, vertical ± 3 mm, overlay [horizontal] + 0, - 4 mm).
- Snap on mount.

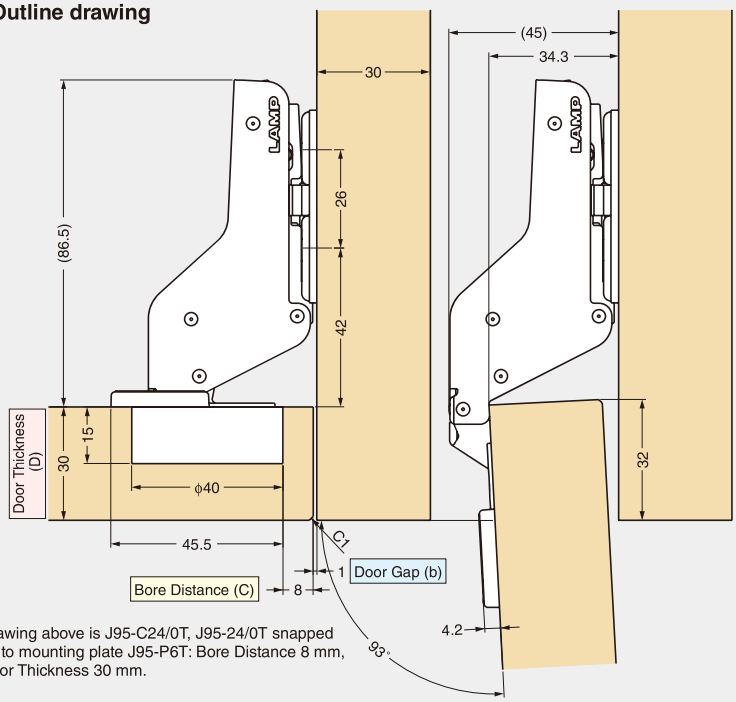
### Sold Separately

- Mounting Plate (P.72)
- Face plate for glass door (P.74 - 75)
- Safety cover (P.73)
- Cover for mounting plate (P.73)

Feature Feature

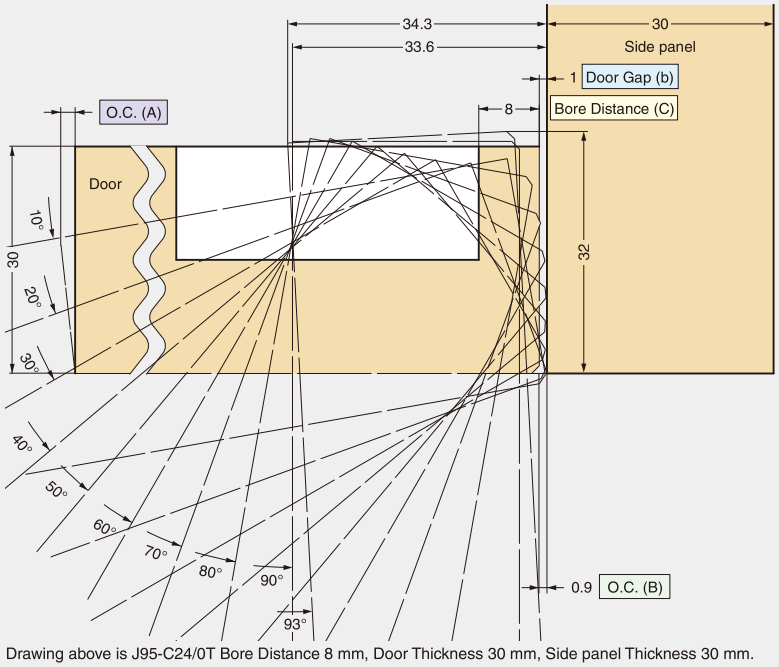
**93°Opening** **Inset** **Door Thickness 18 - 30 mm**

### • Outline drawing




Drawing above is J95-C24/0T, J95-24/0T snapped on to mounting plate J95-P6T: Bore Distance 8 mm, Door Thickness 30 mm.

### • Locus chart




Drawing above is J95-C24/0T Bore Distance 8 mm, Door Thickness 30 mm, Side panel Thickness 30 mm.

### Bore Distance (C)

| Bore Distance (C) | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|
| Door Gap (b) | 6 | 5 | 4 | 3 | 2 | 1 |

Overlay adjustment (Max. -4 mm) 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)

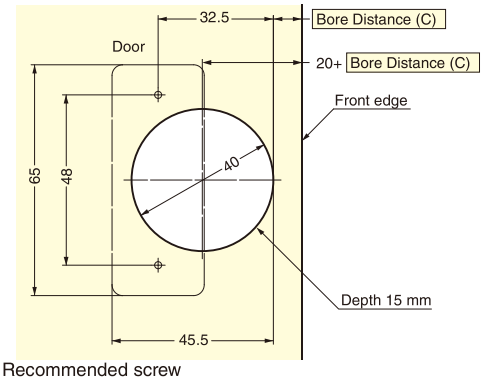
| Door Thickness (D) | Bore Distance (C) 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|
| 18 | 0 | 0 | 0 | 0 | 0 | 0 |
| 20 | 0 | 0 | 0 | 0 | 0 | 0 |
| 22 | 0.1 | 0.1 | 0.1 | 0.1 | 0 | 0.1 |
| 24 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 26 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| 28 | 1.7 | 1.1 | 0.6 | 0.5 | 0.5 | 0.5 |
| 30 | 3.5 | 2.9 | 2.3 | 1.8 | 1.0 | 0.9 |
| 32 | 5.4 | 4.7 | 4.1 | 3.6 | 3.0 | 2.5 |
| 34 | 7.3 | 6.6 | 6.0 | 5.4 | 4.8 | 4.3 |
| | O.C. (B) | | | | | |

Please refer to the locus chart if door thickness is over 30 mm.

### O.C. (A)

| Door Thickness (D) | Door Width 300 | 400 | 500 | 600 | 700 | 800 | 900 |
|---|---|---|---|---|---|---|---|
| 20 | 0.90 | 0.60 | 0.50 | 0.40 | 0.40 | 0.30 | 0.30 |
| | O.C. (A) | | | | | | |

### Cut Out Dimensions




- Recommended screw

Size 5 raised countersunk head tapping screw or wood screw.

### Door Dimensions and Number of Hinges

Please refer to P.67.

| Item Code | Item Name | Type | Material | Finish | Weight | Carton |
|---|---|---|---|---|---|---|
| 160-033-660 | J95-24/0T | w/o Catch | Body/Steel, Cup/ Zinc Alloy (ZDC) | Nickel | 148 g | 50 pcs |
| 160-033-659 | J95-C24/0T | w/ Catch | | | 160 g | 50 pcs |
| 160-034-921 | J95-24-0T BN | w/o Catch | | Black Nickel | 148 g | 50 pcs |
| 160-034-918 | J95-C24-0T BN | w/ Catch | | | 160 g | 50 pcs |

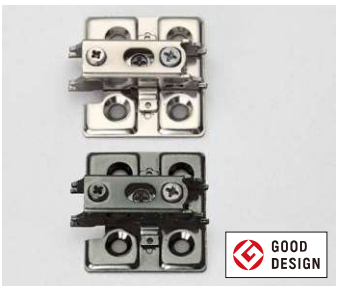


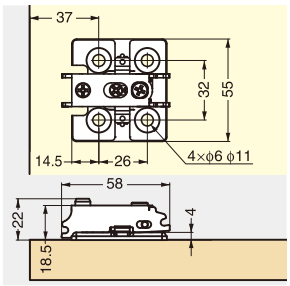
This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

## LAMP MOUNTING PLATE J95-P6T

Latest Info




- Depth adjustment : + 1.5 -2.5 mm
- Vertical adjustment : ± 3 mm
- Overlay distance adjustment : + 0, - 4 mm
- Thickness: 0 mm (Standard)

**Recommended Screw**
- Size 5 raised countersunk head tapping screw or wood screw.

| Item Code | Item Name | Material | Finish | Weight | Carton |
|---|---|---|---|---|---|
| 160-026-732 | J95-P6T | Steel/Zinc Alloy (ZDC) | Nickel | 94 g | 100 pcs |
| 160-034-927 | J95-P6T BN | | Black Nickel | 94 g | 100 pcs |

## FOR ONE-TOUCH SLIDING HINGE FOR HEAVY DOORS J95 SERIES TAP518

Latest Info



| Item Code | Item Name | Material | Finish |
|---|---|---|---|
| 160-032-356 | TAP518NI | Steel | Nickel |
| 160-043-496 | TAP518BN | | Black Nickel |

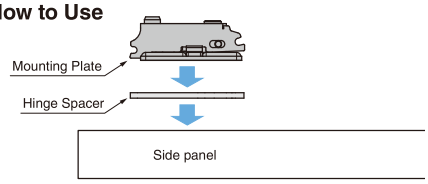
## LAMP HINGE SPACER J95-DP2 2 mm Thickness / For J95 Concealed Hinges NEW

Latest Info




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

**How to Use**




Set the spacer between the mounting plate and side panel.

**Available Mounting Plate**
- J96-P9T

**Sold Seperately**
- 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)

| 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 Seperately

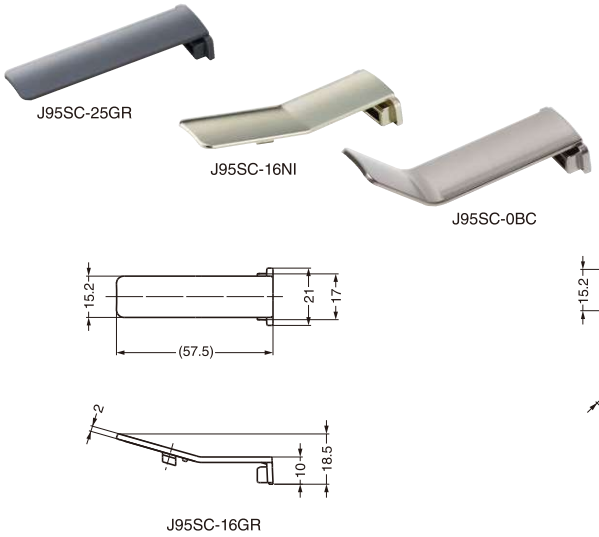
| Item Code | Item Name | Material | Finish |
|---|---|---|---|
| 160-048-096 | TAP525NI | Steel | Nickel |
| 160-048-097 | TAP525BN | | Black Nickel |



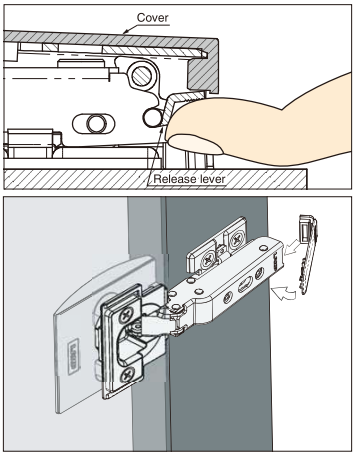
This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

## LAMP SAFETY COVER J95SC

J95SC-25GR J95SC-16GR J95SC-0GR



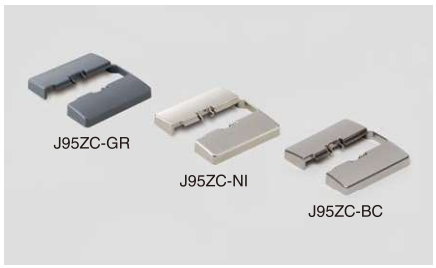

- The cover locks the release lever of J95 hinge to prevent accidental release.

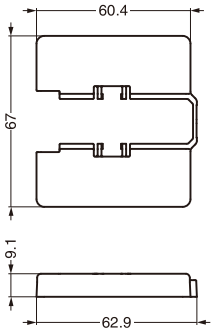



| Item Code | Item Name | Use With | Material | Weight | Finish/Color | Carton |
|---|---|---|---|---|---|---|
| 160-032-763 | J95SC-25GR | J95-(C)24/25 | ABS | 3 g | Gray | 500 pcs |
| 160-034-673 | J95SC-25NI | J95-(C)24/25 | ABS | 3 g | Nickel | 500 pcs |
| 160-044-249 | J95SC-25BC | J95-(C)24/25 | ABS | 3 g | Black Chrome | 500 pcs |
| 160-032-764 | J95SC-16GR | J95-(C)24/16 | ABS | 3 g | Gray | 500 pcs |
| 160-034-674 | J95SC-16NI | J95-(C)24/16 | ABS | 3 g | Nickel | 500 pcs |
| 160-044-250 | J95SC-16BC | J95-(C)24/16 | ABS | 3 g | Black Chrome | 500 pcs |
| 160-032-765 | J95SC-0GR | J95-(C)24/0 | ABS | 3 g | Gray | 500 pcs |
| 160-034-675 | J95SC-0NI | J95-(C)24/0 | ABS | 3 g | Nickel | 500 pcs |
| 160-044-251 | J95SC-0BC | J95-(C)24/0 | ABS | 3 g | Black Chrome | 500 pcs |

## LAMP COVER FOR MOUNTING PLATE J95ZC

Latest Info






| Item Code | Item Name | Use With | Material | Weight | Carton |
|---|---|---|---|---|---|
| 160-032-766 | J95ZC-GR | J95-P6T | ABS | 9 g | 500 pcs |
| 160-034-743 | J95ZC-NI | J95-P6T | ABS | 9 g | 500 pcs |
| 160-044-252 | J95ZC-BC | J95-P6T | ABS | 9 g | 500 pcs |

## LAMP CUP COVER J95CC For J95 Concealed Hinges NEW

Latest Info



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

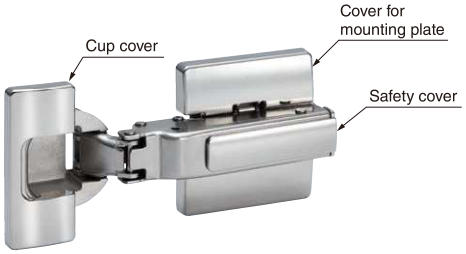
### Remarks

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

### No Visible Screws

- The following optional covers are used:

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




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



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

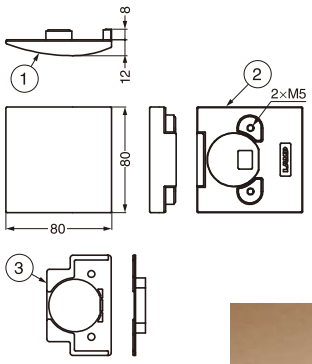
# LAMP FACE PLATE FOR GLASS DOOR GH-J95FP

Latest Info


GH-J95FP-CR


GH-J95FP-BL


GH-J95FP-SN




## J95 Application



SCREW

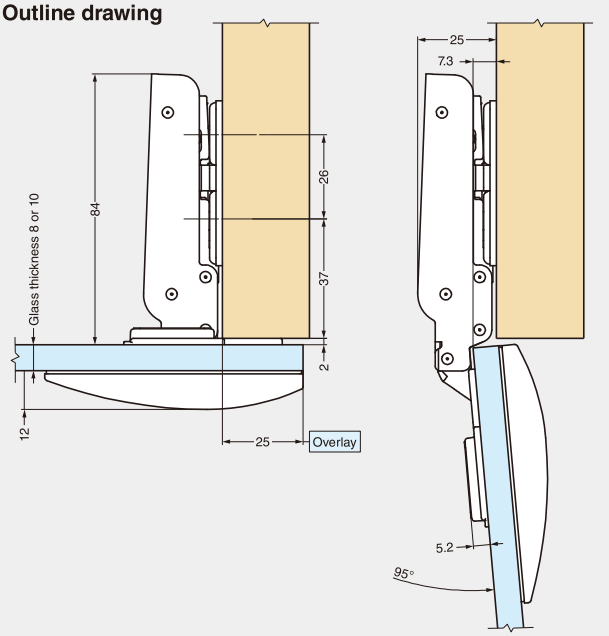
### Parts Included
- Countersunk head screw M5×18

### Sold Separately
- Heavy duty concealed hinge J95 (P.67).
- Mounting plate J95-P6T (P.72)

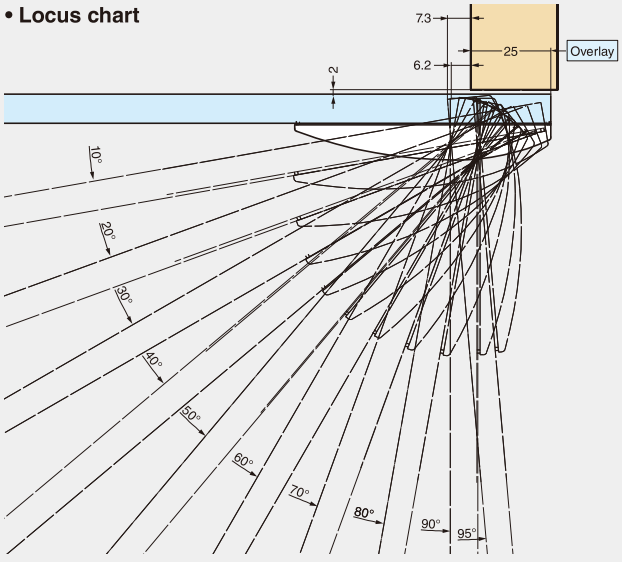
Selection Tool
Glass Hinge



## • Outline drawing



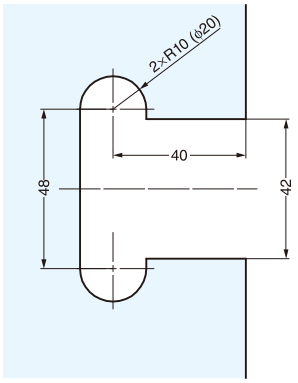

## • Locus chart




Example (glass thickness : 8 mm / side panel : 27 mm / overlay : 25 mm)

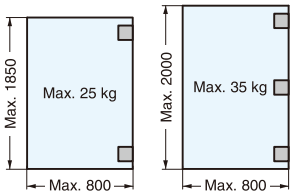
## Opening Clearance
Hinge side = 0 mm
Handle side = 0 mm

## Cut Out Dimensions

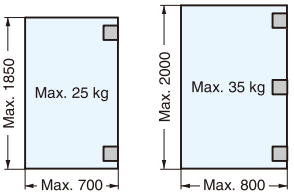



## Door Dimensions and Number of Hinges

### Glass thickness : 8 mm




### Glass thickness : 10 mm




| No. | Part Name | Material | Finish/Colour |
|---|---|---|---|
| ① | Face Plate | Zinc Alloy (ZDC) | Chrome/Satin Nickel |
| ② | Face Plate Spacer | Polyacetal (POM) | Black |
| ③ | Socket Spacer | | |

*Black Nickel will be available soon.

| Item Code | Item Name | Material | Finish | Weight | Carton |
|---|---|---|---|---|---|
| 160-032-418 | GH-J95FP-CR | Zinc Alloy (ZDC) | Chrome | 320 g | 20 pcs |
| 160-033-893 | GH-J95FP-SN | | Satin Nickel | | 20 pcs |
| 160-043-378 | GH-J95FP-BL | | Black | | 20 pcs |


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP FACE PLATE FOR GLASS DOOR GH-J95FP-Q1

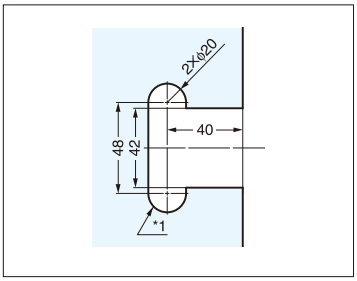
Latest Info



## Parts Included
- Countersunk head screw M5×18

## Sold Separately
- Heavy duty concealed hinge J95 (P.67).
- Mounting plate J95-P6T (P.72)

## [Door Machining] Glass Machining



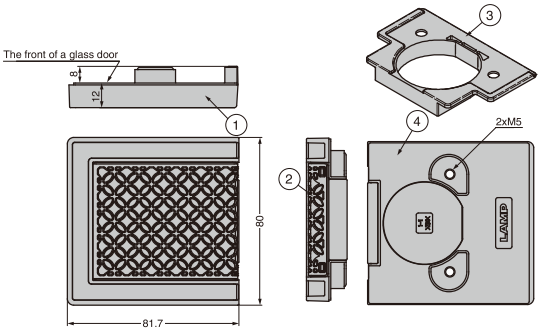

*1: Use tempered glass. It is also recommended to use shatter-proof film on the glass.

Selection Tool
Glass Hinge

## [Application Example]



*J95 (P.69), cover for mounting plate (P.73), and safety cover (P.73) are sold separately.




| No. | Part Name | Material | Finish/Colour |
|---|---|---|---|
| ① | Face Plate | Zinc Alloy (ZDC) | Chrome |
| | | | 24 Karat Gold Plated |
| | | | Antique Brass |
| | | | Black |
| ② | Decorative Plate | Brass | (As Left) |
| ③ | Socket Spacer | Polyacetal (POM) | Black |
| ④ | Face Plate Spacer | | |

## [Total Design Coordination Example]



Products enabling coordination with the face plate are available.
Hook (P.791), towel bar (P.852)

| Item Code | Item Name | Finish/Colour | Weight | Carton |
|---|---|---|---|---|
| 160-035-782 | GH-J95FP-Q1-SL | Nickel | 305 g | 20 pcs |
| 160-035-783 | GH-J95FP-Q1-GL | 24 Karat Gold Plated | | 20 pcs |
| 160-035-784 | GH-J95FP-Q1-BR | Antique Brass | | 20 pcs |
| 160-035-785 | GH-J95FP-Q1-BL | Black Nickel | | 20 pcs |



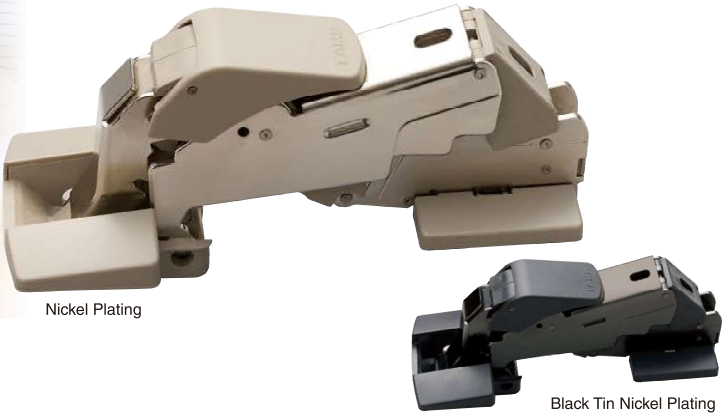
This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP HEAVY-DUTY WIDE ANGLE CONCEALED HINGES J160 Built-in Damper PAT






## Wide Opening and Gentle Closing for Large Doors



Nickel Plating

Black Tin Nickel Plating

## Wide Angle Opening: No Obstructions, Even for Large Doors

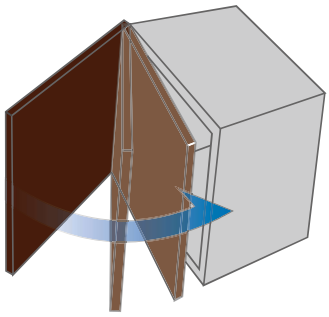


Because the door can be opened up to 160°, even large doors stay out of the way when open.




Mount the top and bottom hinges within 200 mm from the door edges. When using 3 pieces, keep the mounting pitch uniform.

## Elevate Luxury with Soft Close Functionality

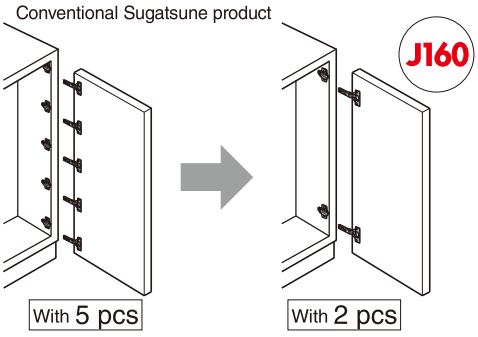


Because the hinge contains a damper, the door can be closed gradually, quietly, and safely, enabling movement with a touch of class.

Feature

## Higher installation efficiency as well

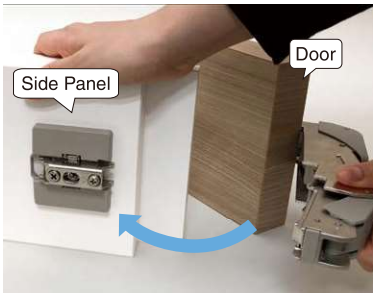
### Number of pieces reduced (mounting time shortened)



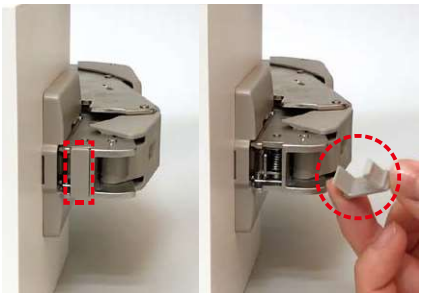

Fewer required pieces than the conventional concealed hinge reduce installation time and provide a clean appearance.

## Easy Operation:

### One-Touch Mounting and Removal




### Equipped with Door Anti-Drop Feature



Fallout prevention cover keeps the door in place in the case of misoperation.



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP WIDE-ANGLE HEAVY-DUTY CONCEALED HINGE J160 Built-in Damper NEW

Latest Info




160°Opening | Overlay: 25 mm | Door Thickness 18 - 36 mm

- 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

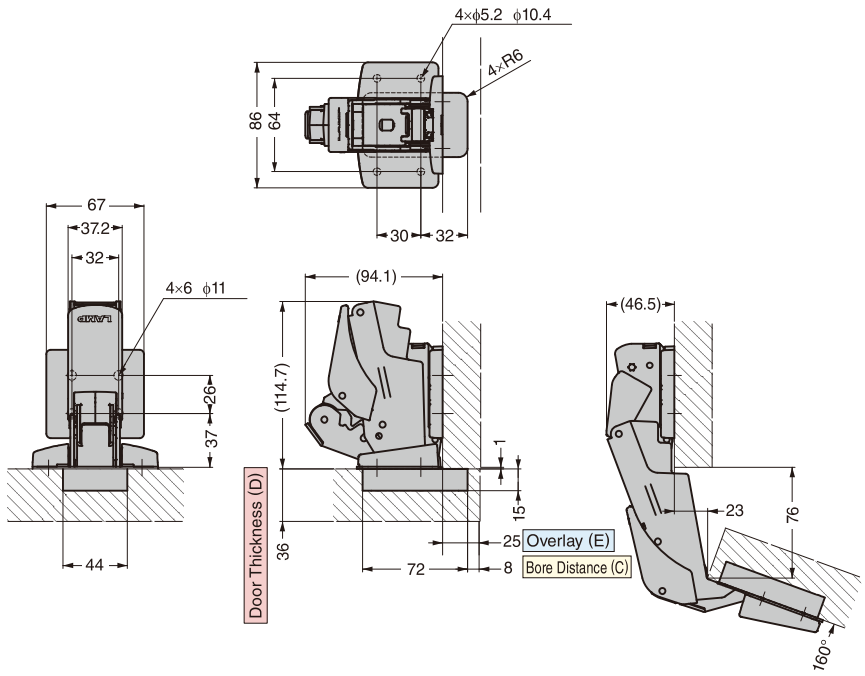
- Comes with a red holding pin which holds the hinge angle. Please do not detach it until the hinge is installed
- Please do not open and close the hinge while the holding pin is attached.

## Parts Included

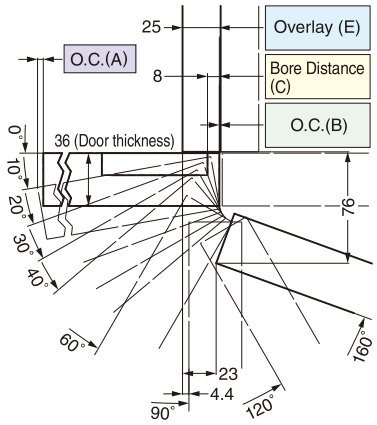
- Cross-recessed raised countersunk tapping screw 5×18

Feature Feature

## Drawing




## Locus Chart




## [ 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) | | | | | |

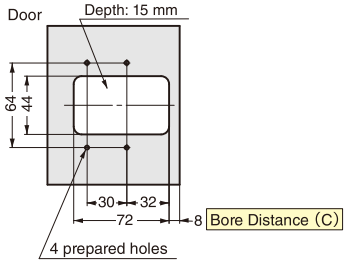
*Please refer to the locus chart if door thickness is over 36 mm. (O.C. (B) can be made smaller by R chamfering (round chamfer) or C chamfering (chamfer plane) on the door)

## [ 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] (P.67)

| 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 |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# A NEW STEP FOR HINGE TECHNOLOGY

# OLYMPIA

360 POWERED BY Lapcon

concept.04
Ingenious 3-way adjustment

concept.03
Easy, time-saving installation

concept.02
Extreme durability

concept.01
5-speed adjustabable soft close

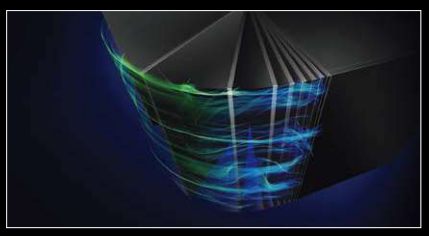


Feature

5-speed adjustable soft close.
The first Sugatsune concealed hinge ever built
with Lapcon technology.

## concept.01



**5-speed adjustable soft close.**
**The first Sugatsune concealed hinge ever built with Lapcon technology.**

The first time Sugatsune's unique Lapcon technology has ever been used inside a concealed hinge. The innovative rotary damper is not only extremely compact, for sleek overall design, its force can also be adjusted in 5 steps for a perfect match regardless of the door size or weight.

## concept.02



**Successfully passed 200,000 cycles test.**

For a piece of furniture to last a lifetime, the hinge must perform flawlessly the whole time. Despite official requirements by JIS (Japanese Standards) asking for only 40,000 cycles, the Olympia hinge has cleared 5 times as many to ensure that you will always be able to open and close your doors without worry.
(The H360 successfully passed 100,000 private cycle test)

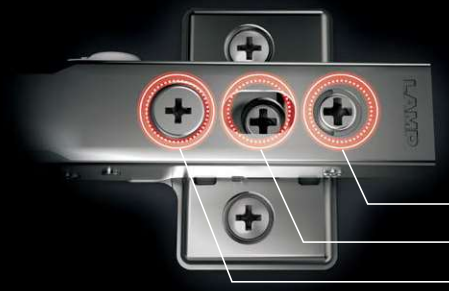
## concept.03



**Smooth assembly for a time-saving installation.**

Using an original design of the Turn-Lock system, Olympia can be installed by simply pushing it from the top.
This simplifies the installation compared to a traditional Front-First installation, especially in cases where multiple hinges are used.

## concept.04



**One screwdriver for a one-handed 3D adjustment.**

Depth, vertical, horizontal adjustment screws are all located on top. This was made possible because of our original damper.

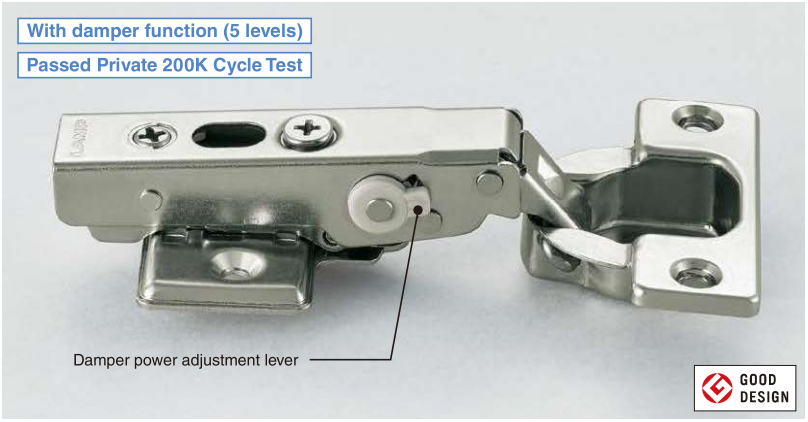
Depth adjustment +1.5 mm, -2.5 mm (For standard doors, 360) /
+1.7 mm, -2.8 mm (For thick doors, H360)
Vertical adjustment ±2.5 mm
Overlay (horizontal adjustment) +0 mm, -4 mm

# LAMP CONCEALED HINGE 360 19mm overlay / 105°opening, 85°opening NEW

105° opening 85° opening



With damper function (5 levels)
Passed Private 200K Cycle Test




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

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

**Cup size: ϕ35 / Bore Depth: 11 mm / Door Thickness: 15-20 mm**

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

### Sold separately
- Mounting plates
- Glass door face plate
- Countersank head tapping screw 3.5 × 15NI
- Other

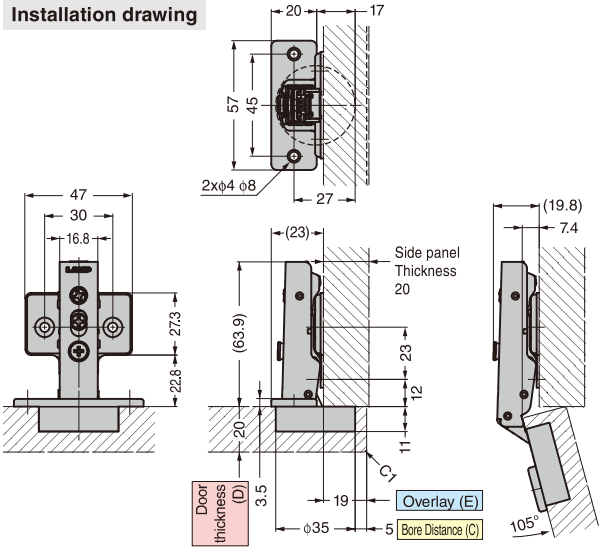
### Recommended screws
- Countersank head wood/tapping screw 3.5

Feature Installation

**105°opening, 85°opening** | **19mm Overlay** | **Door Thickness 15 - 20mm**

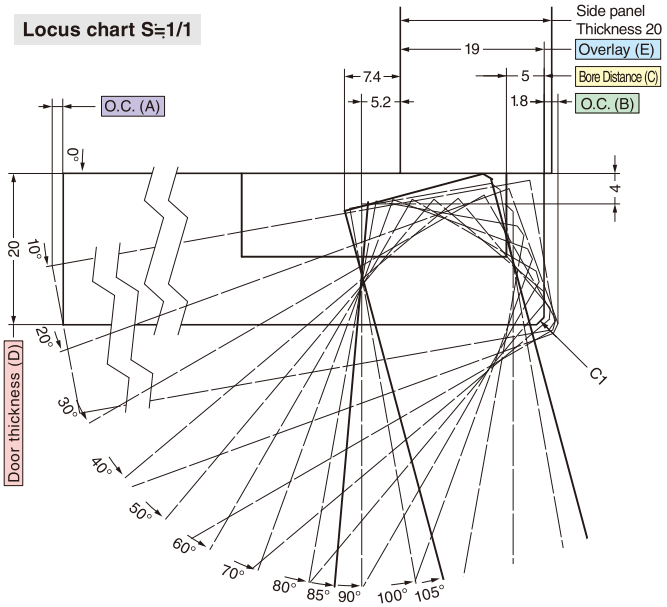
▶ The installation drawing and locus chart shown are for a 20 mm thick door and side panel, 19mm overlay and a 5mm bore distance. Opening angle is 105°.

### Installation drawing




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

### Locus chart S≒1/1




### Opening Clearance (O.C.)

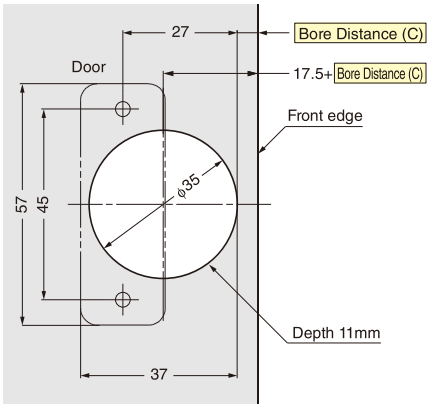
Clearances for door edge O.C. (A) and hinge side O.C. (B) are necessary. O.C. (A) and (B) change depending on door thickness and bore distance (C). Refer to locus chart and tables below when designing cabinets.

**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 |

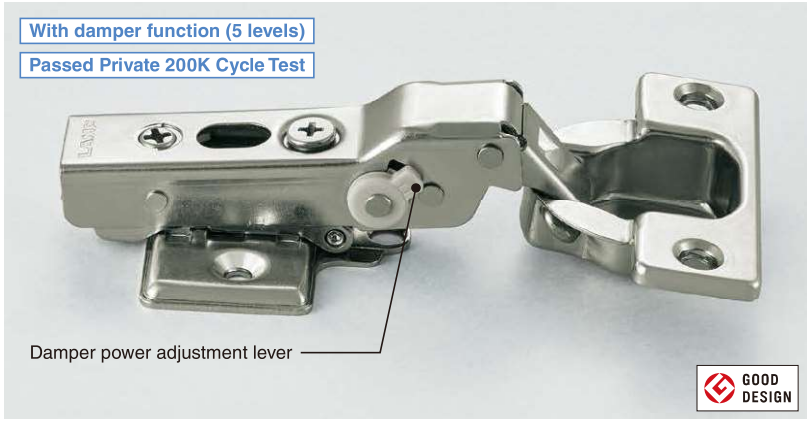
| Item Code | Item Name | Opening Angle | Type | Material | Finish | Carton |
|---|---|---|---|---|---|---|
| 160-026-840 | 360-D26-19T | 105° | With damper (5 levels) | Steel | Nickel | 100 pcs |
| 160-026-836 | 360-26-19T | | Without catch | | | 200 pcs |
| 160-026-832 | 360-C26-19T | | With catch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


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP CONCEALED HINGE 360 14mm overlay / 105°opening, 85°opening NEW

105° opening 85° opening

With damper function (5 levels)
Passed Private 200K Cycle Test




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

**Overlay: 10-14 mm (when bore distance is 5 mm.)**

**Cup size: ϕ35 / Bore Depth: 11 mm / Door Thickness: 15-20 mm**

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

### Sold separately
- Mounting plates
- Glass door face plate
- Countersank head tapping screw 3.5 × 15NI
- Other

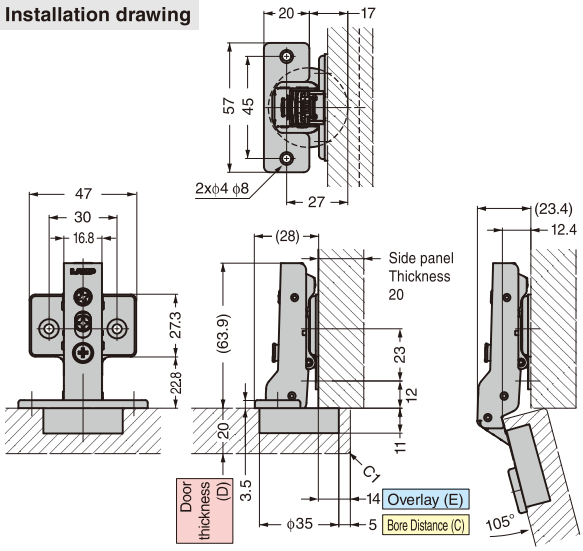
### Recommended screws
- Countersank head wood/tapping screw 3.5

Feature Installation

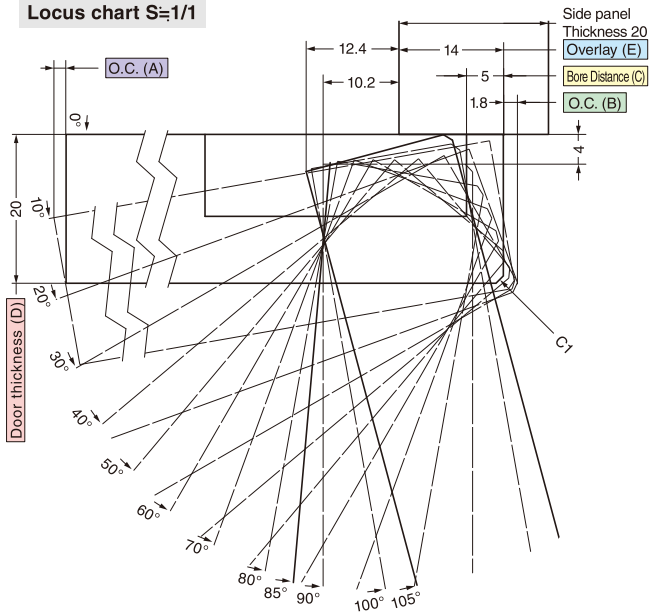
**105°opening, 85°opening** | **14mm Overlay** | **Door Thickness 15 - 20mm**

▶ The installation drawing and locus chart shown are for a 20 mm thick door and side panel, 14mm 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.)

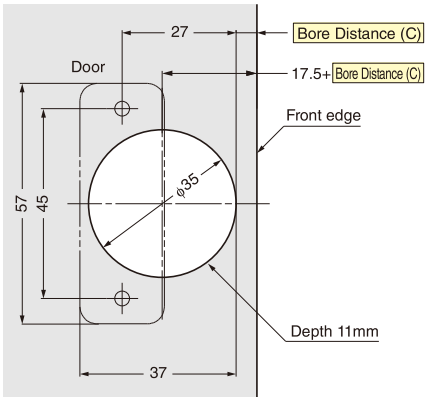
Clearances for door edge O.C. (A) and hinge side O.C. (B) are necessary. O.C. (A) and (B) change depending on door thickness and bore distance (C). Refer to locus chart and tables below when designing cabinets.

**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) | 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 | 100 pcs |
| 160-026-837 | 360-26-14T | | Without catch | | | 200 pcs |
| 160-026-833 | 360-C26-14T | | With catch | | | |
| 160-042-390 | 360-U26-14T | | Sprung-open | | | |
| 160-034-890 | 360-D26-14T85 | 85° | With damper (5 levels) | | | 100 pcs |
| 160-034-887 | 360-26-14T85 | | Without catch | | | 200 pcs |
| 160-034-884 | 360-C26-14T85 | | With catch | | | |



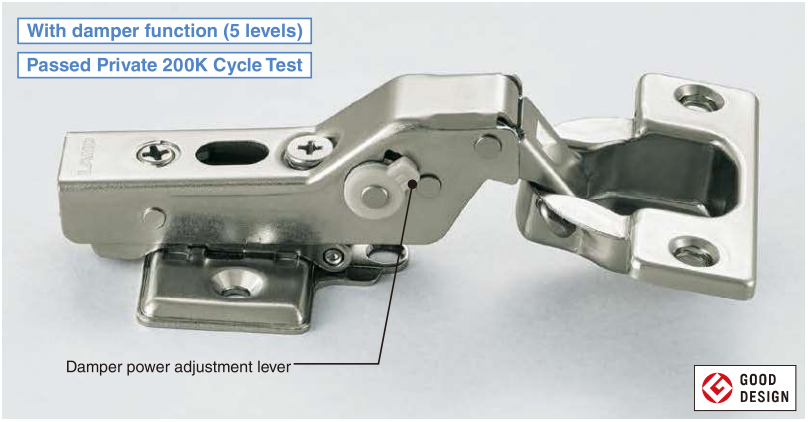
This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP CONCEALED HINGE 360 9mm overlay / 105°opening, 85°opening NEW

105° opening 85° opening



With damper function (5 levels)
Passed Private 200K Cycle Test




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

**Overlay: 5-9 mm (when bore distance is 5 mm.)**

**Cup size: ϕ35 / Bore Depth: 11 mm / Door Thickness: 15-20 mm**

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

### Sold separately
- Mounting plates
- Glass door face plate
- Countersank head tapping screw 3.5 × 15NI
- Other

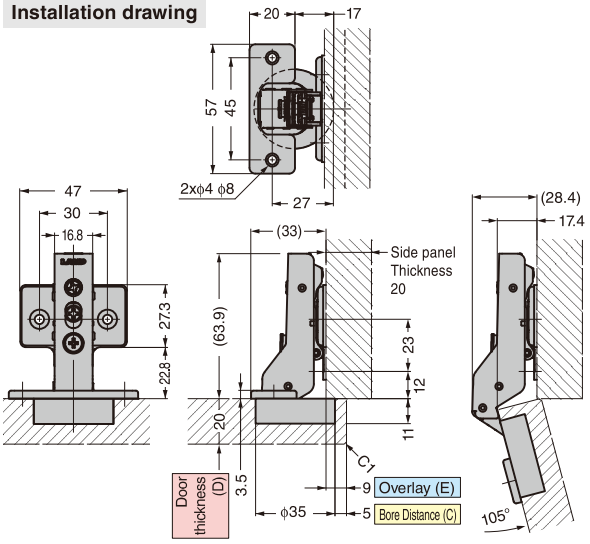
### Recommended screws
- Countersank head wood/tapping screw 3.5

Feature Installation

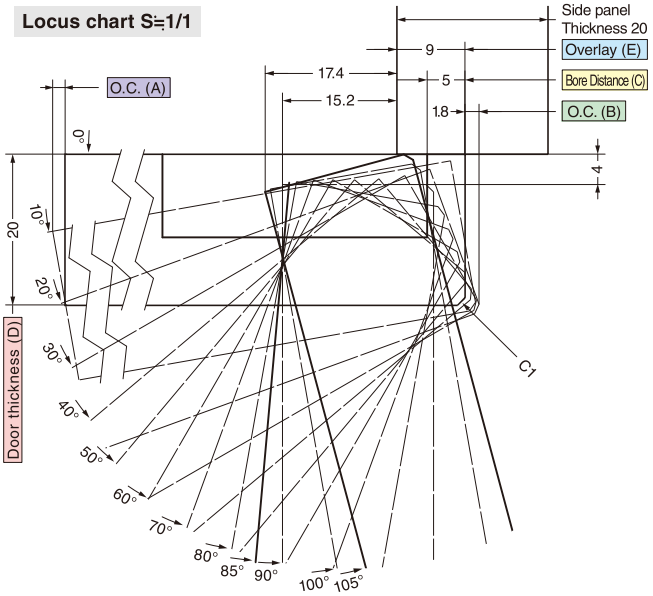
**105°opening, 85°opening** | **9mm Overlay** | **Door Thickness 15 - 20mm**

▶ The installation drawing and locus chart shown are for a 20 mm thick door and side panel, 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.)

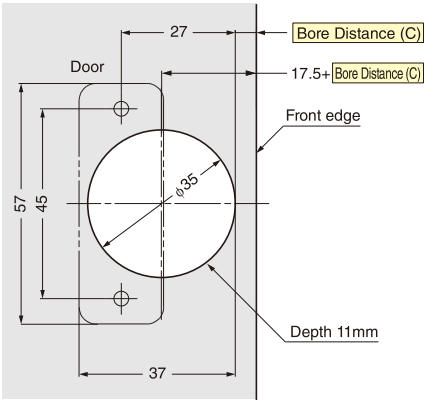
Clearances for door edge O.C. (A) and hinge side O.C. (B) are necessary. O.C. (A) and (B) change depending on door thickness and bore distance (C). Refer to locus chart and tables below when designing cabinets.

### 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)

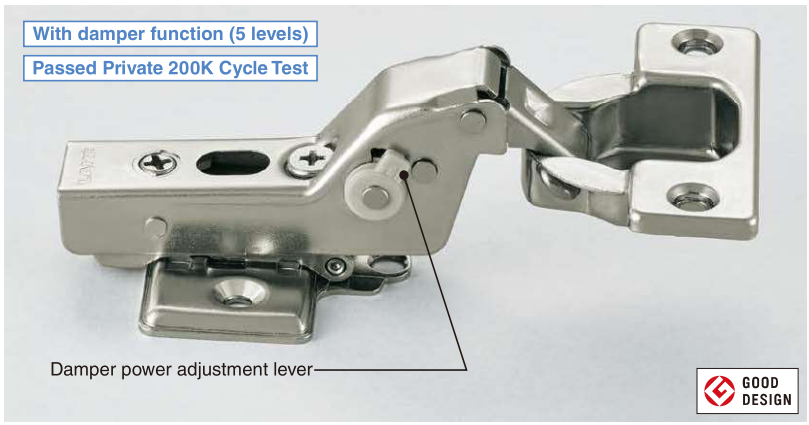
| Door Width | 300 | 400 | 500 | 600 |
|---|---|---|---|---|
| O.C. (A) | 0.13 | 0.09 | 0.07 | 0.06 |

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


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP CONCEALED HINGE 360 Inset / 93°opening NEW

Latest Info




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

**Cup size: ϕ35 / Bore Depth: 11 mm / Door Thickness: 15-20 mm**

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

### Sold separately
- Mounting plates
- Glass door face plate
- Countersank head tapping screw 3.5 × 15NI
- Other

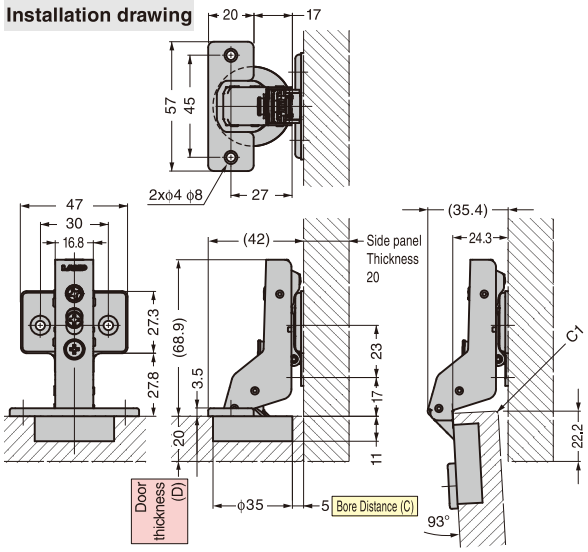
### Recommended screws
- Countersank head wood/tapping screw 3.5

Feature Installation

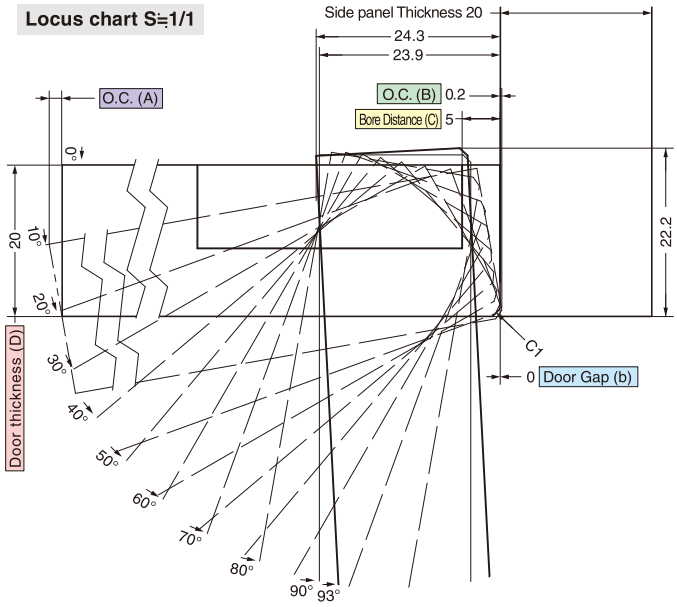
**93°opening** **Inset** **Door Thickness 15 - 20mm**

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

### Installation drawing




### Locus chart S≒1/1

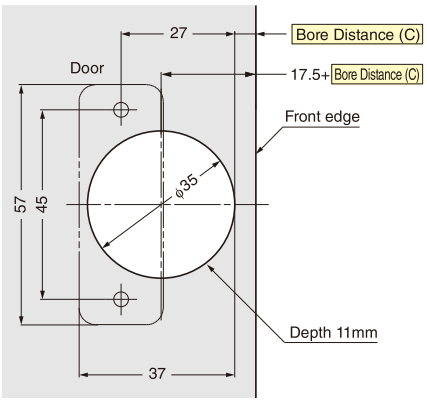



Drawings show a hinge, face plate and 360-P4W-30T mounting plate (sold separately).

### 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.

### Cut out dimensions (wooden doors)




### 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.

### 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 |
|---|---|---|---|---|---|---|
| 160-026-843 | 360-D26-0T | 93° | With damper (5 levels) | Steel | Nickel | 100 pcs |
| 160-026-839 | 360-26-0T | | Without catch | | | 200 pcs |
| 160-026-835 | 360-C26-0T | | With catch | | | |
| 160-042-392 | 360-U26-0T | | Sprung-open | | | |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

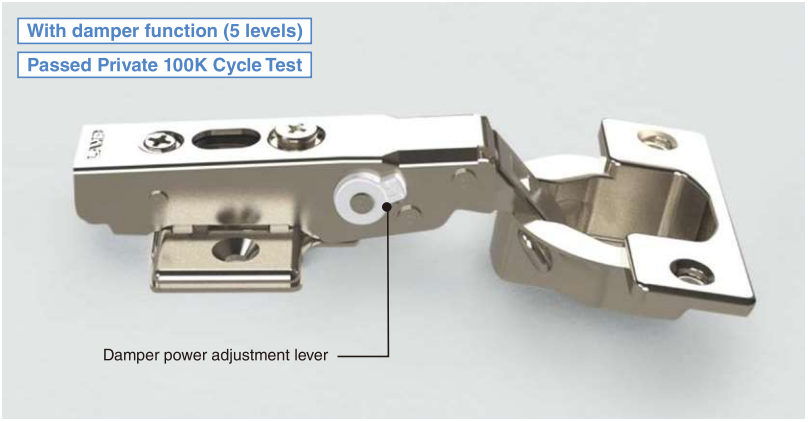
# LAMP CONCEALED HINGE H360 Thick doors 26mm overlay / 100°opening NEW

Latest Info



With damper function (5 levels)

Passed Private 100K Cycle Test




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

**Overlay: 22-26 mm (when bore distance is 8 mm.)**

**Cup size: ϕ40 / Bore Depth: 15 mm / Door Thickness: 18-30 mm**

**3D adjustment: Depth: +1.7, -2.8 mm, Vertical: ±2.5 mm, Overlay: +0, -4 mm**

### Sold separately

- Mounting plates
- Countersank head tapping screw 3.5 × 15NI

### Recommended screws

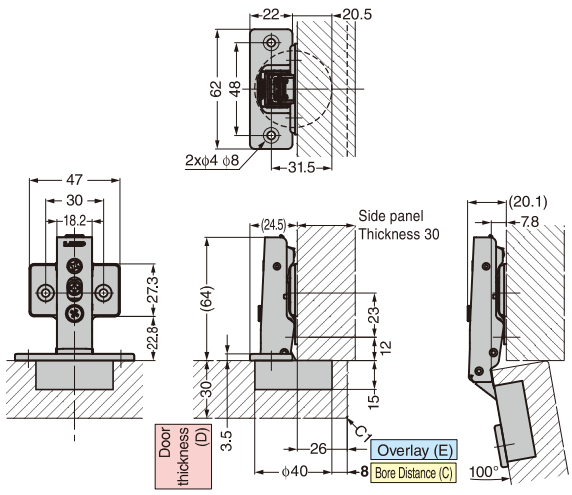
- Countersank head wood/tapping screw 3.5

Feature | Installation

**100°opening** | **26mm overlay** | **Thick doors** | **Door Thickness 18 - 30mm**

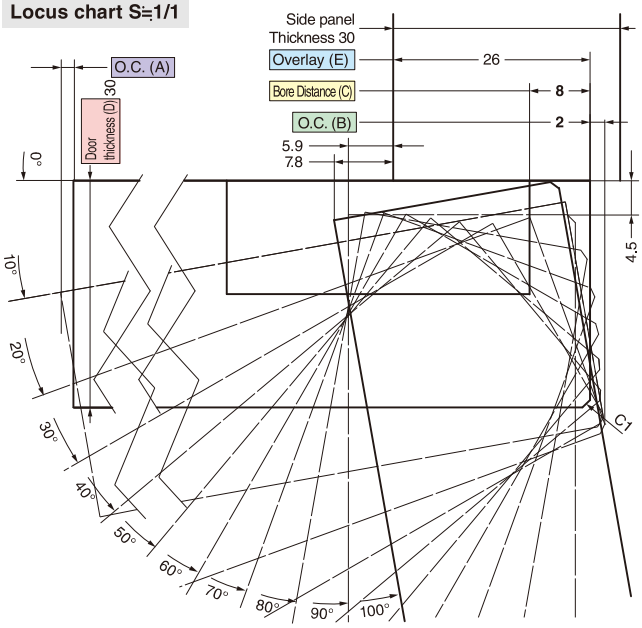
▶ The installation drawing and locus chart shown are for a 30 mm thick door and side panel, 26mm overlay and a 8mm bore distance.

## 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.

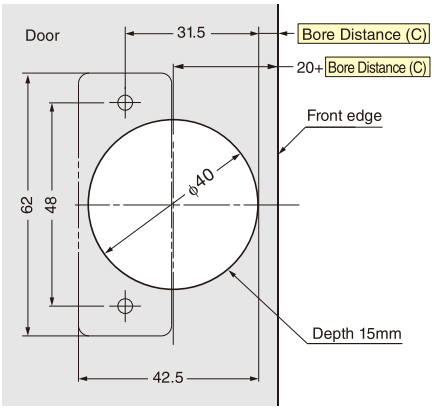
### Opening clearance (B), door thickness (D) and bore distance (C) relationship

| 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.

### Cut out dimensions (wooden doors)




### 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.

### 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 | 100 pcs |
| 160-029-081 | H360-26-26T | | Without catch | | | |
| 160-029-078 | H360-C26-26T | | With catch | | | |

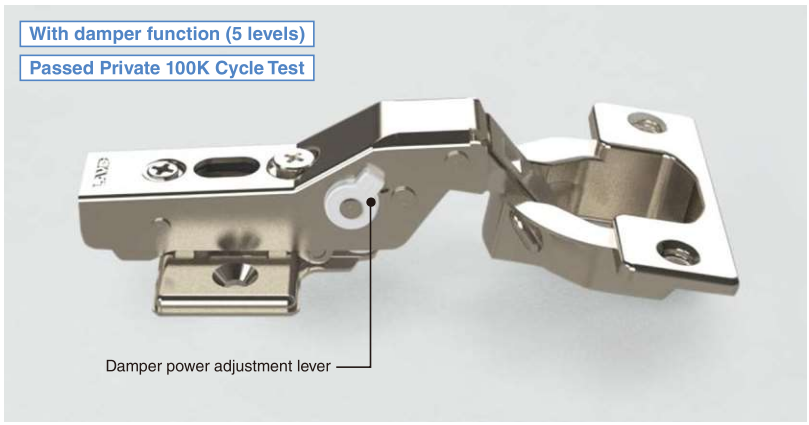


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP CONCEALED HINGE H360 Thick doors 16mm overlay / 100°opening NEW

Latest Info

With damper function (5 levels)
Passed Private 100K Cycle Test




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

**Overlay: 12-16 mm (when bore distance is 8 mm.)**

**Cup size: ϕ40 / Bore Depth: 15 mm / Door Thickness: 18-30 mm**

**3D adjustment: Depth: +1.7, -2.8 mm, Vertical: ±2.5 mm, Overlay: +0, -4 mm**

**Sold separately**
- Mounting plates
- Countersank head tapping screw 3.5 × 15NI

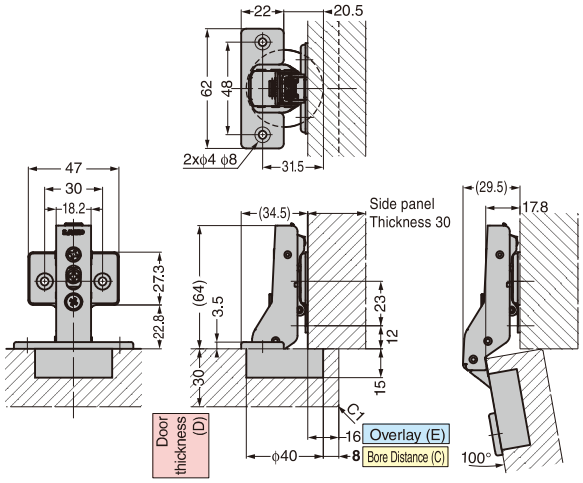
**Recommended screws**
- Countersank head wood/tapping screw 3.5

Feature | Installation

**100°opening** | **16mm overlay** | **Thick doors** | **Door Thickness 18 - 30mm**

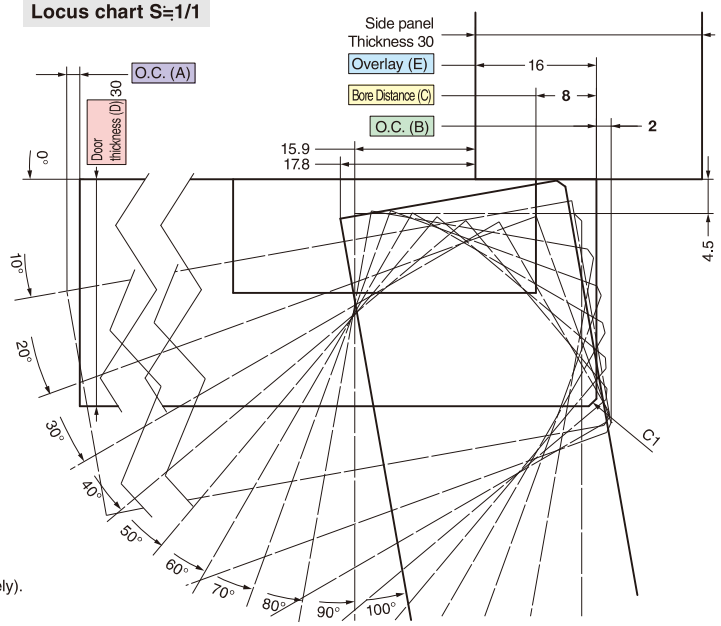
The installation drawing and locus chart shown are for a 30 mm thick door and side panel, 16mm overlay and a 8mm bore distance.

## 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.

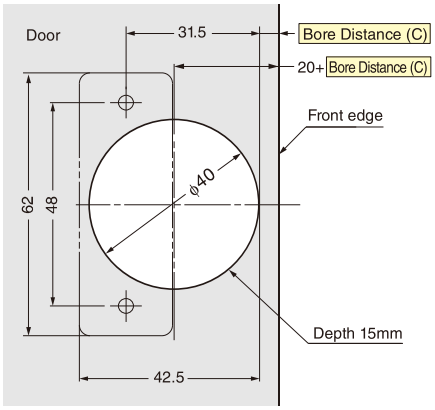
### Opening clearance (B), door thickness (D) and bore distance (C) relationship

| 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.

### Cut out dimensions (wooden doors)




### 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 |

| Item Code | Item Name | Opening Angle | Type | Material | Finish | Carton |
|---|---|---|---|---|---|---|
| 160-029-085 | H360-D26-16T | 100° | With damper (5 levels) | Steel | Nickel | 100 pcs |
| 160-029-082 | H360-26-16T | | Without catch | | | |
| 160-029-079 | H360-C26-16T | | With catch | | | |



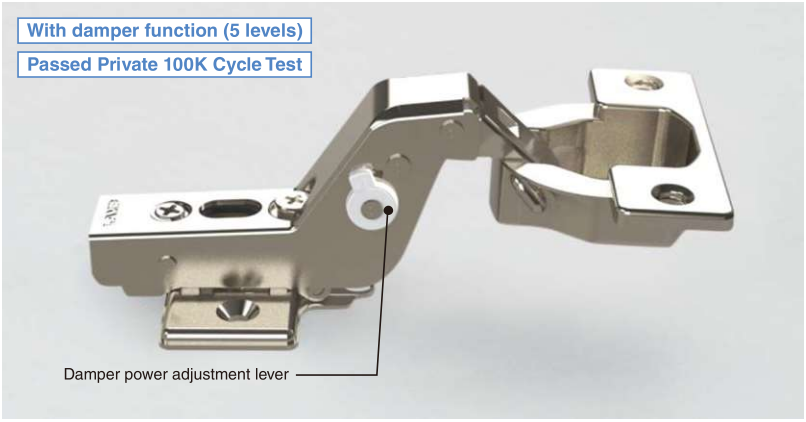
This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP CONCEALED HINGE H360 Thick doors Inset / 93°opening NEW

Latest Info



With damper function (5 levels)
Passed Private 100K Cycle Test




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

**Cup size: ϕ40 / Bore Depth: 15 mm / Door Thickness: 18-30 mm**

**3D adjustment: Depth: +1.7, -2.8 mm, Vertical: ±2.5 mm, Overlay: +0, -4 mm**

### Sold separately
- Mounting plates
- Countersank head tapping screw 3.5 × 15NI

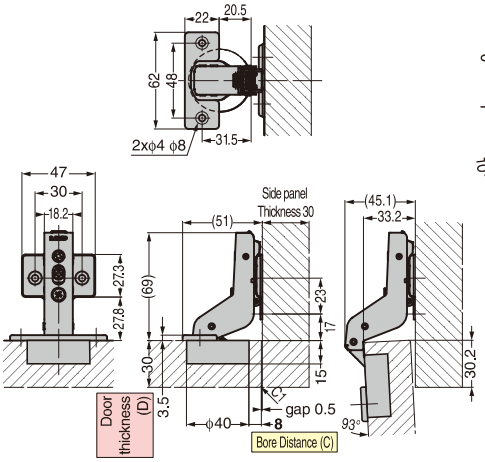
### Recommended screws
- Countersank head wood/tapping screw 3.5

Feature | Installation

**93°opening** | **Inset** | **Thick doors** | **Door Thickness 18 - 30mm**

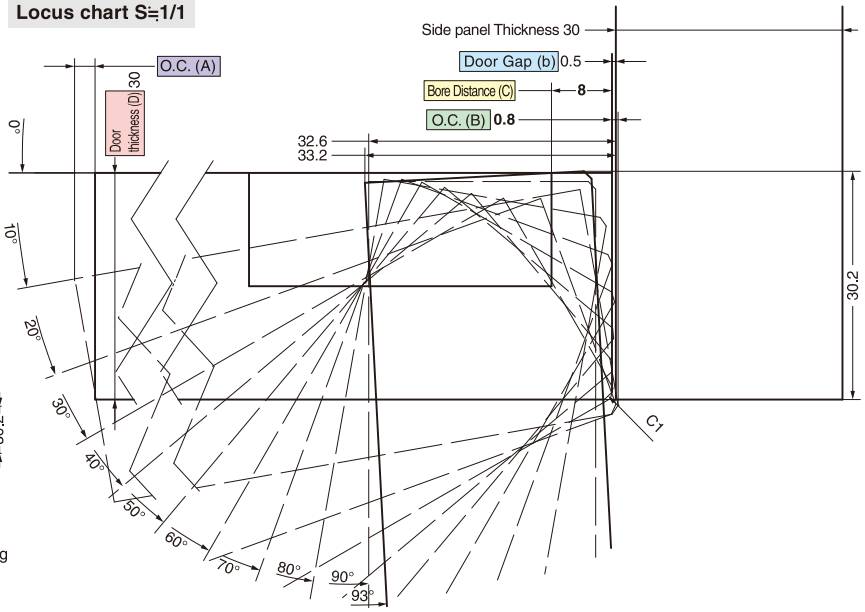
▶ The installation drawing and locus chart shown are for a 30 mm thick door and side panel, a 8mm bore distance and inset installation.

### 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.)

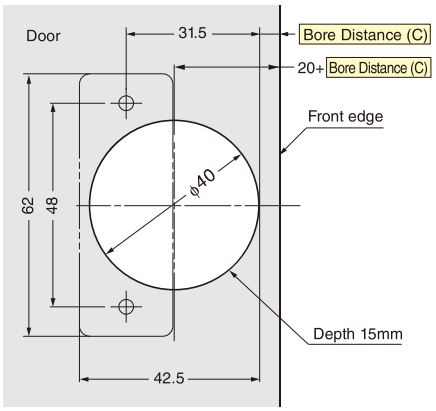
Clearances for door edge O.C. (A) and hinge side O.C. (B) are necessary. O.C. (A) and (B) change depending on door thickness and bore distance (C). Refer to locus chart and tables below when designing cabinets.

### 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 | 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) | | | | | |

- 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.

### Cut out dimensions (wooden doors)




### 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 | 100 pcs |
| 160-029-083 | H360-26-0T | | Without catch | | | |
| 160-029-080 | H360-C26-0T | | With catch | | | |

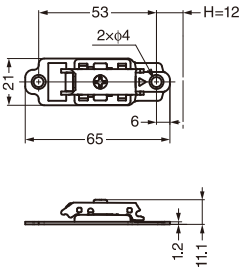


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

## LAMP MOUNTING PLATE 360-P3W-53T Straight Type NEW

Latest Info






- 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. (P.92)

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

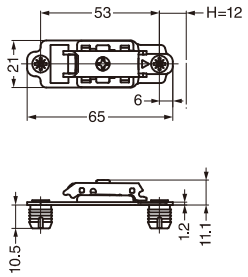
### Sold Separately
- Raised countersunk head tapping screw 3.5 x 15

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

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

Latest Info






- 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. (P.92)
- Mounting hole : φ10 (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



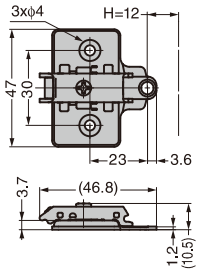

| Item Code | Item Name | Material | Finish | Dowel Material | Weight (g) | Box (pcs) |
|---|---|---|---|---|---|---|
| 160-046-698 | 360-P3W-53T-D10 | Steel | Nickel Plating | Polyamide (PA) | 24 | 400 |

## LAMP MOUNTING PLATE 360-P4W-30T System 30 NEW

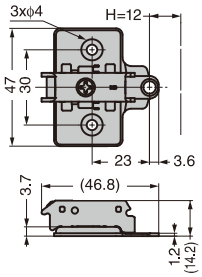
Standard +5mm Pre-mounted screw




Standard



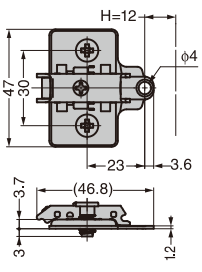

+5mm







Pre-mounted screw (holes ϕ5, min. 8.5 depth)




○ 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 | ±2.5mm | Steel | Nickel | 400 pcs |
| 160-035-077 | 360-P4W-30T+5 | +5mm | | | | |
| 160-042-394 | 360-P4W-30T-DS | Pre-mounted screw | | | | |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

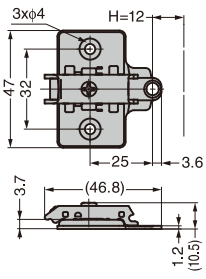
SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

## LAMP. MOUNTING PLATE 360-P4W-32T System 32 NEW

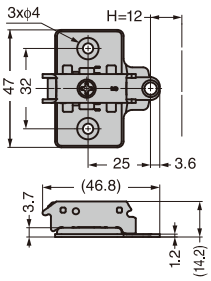
Standard +5mm Pre-mounted screw




Standard



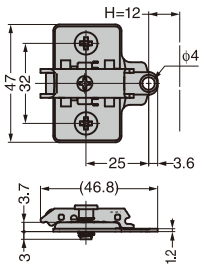

+5mm







Pre-mounted screw (holes ϕ5, min. 8.5 depth)




○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".

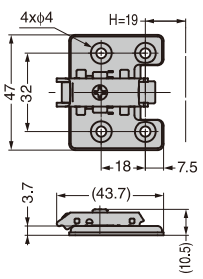
| Item Code | Item Name | Type | Height adjustment | Material | Finish | Carton |
|---|---|---|---|---|---|---|
| 160-026-845 | 360-P4W-32T | Standard | ±2.5mm | Steel | Nickel | 400 pcs |
| 160-035-078 | 360-P4W-32T+5 | +5mm | | | | |
| 160-042-395 | 360-P4W-32T-DS | Pre-mounted screw | | | | |

## LAMP. MOUNTING PLATE 360-P6WT System 32 / 4 Holes NEW

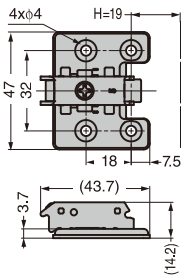
Standard +5mm




Standard




+5mm

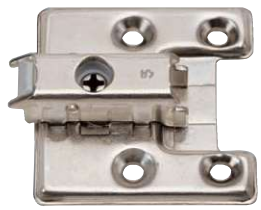



○For the standard and +5mm types:
- Value of H for inset installation is "door thickness + 24 mm".
- When using with the GH-360FP, value of H is "door thickness + 26 mm".

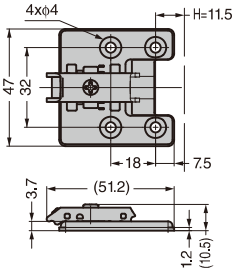
| Item Code | Item Name | Type | Height adjustment | Material | Finish | Carton |
|---|---|---|---|---|---|---|
| 160-026-846 | 360-P6WT | Standard | ±2.5mm | Steel | Nickel | 400 pcs |
| 160-035-079 | 360-P6WT+5 | +5mm | | | | |

## LAMP. MOUNTING PLATE 360-P6W-30-32T System 32 / 4 Holes / Special Specifications NEW

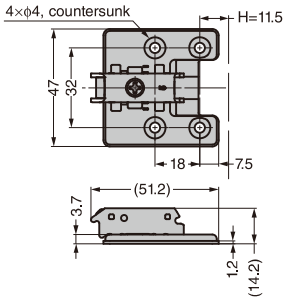
Standard +5mm



Standard




+5mm




### Specifications
- Thickness: 0 mm (standard thickness), 5 mm
- For the special specifications, the washer mounting position is shifted 7.5 mm forward. The side plate core material is reduced.
- For inset doors, the H dimension is the door thickness +16.5 mm.
- When using with GH-360FP(P.92), the H dimension is the door thickness +18.5 mm.

### Sold Separately
- Raised countersunk tapping screws 3.5×15(P.89)

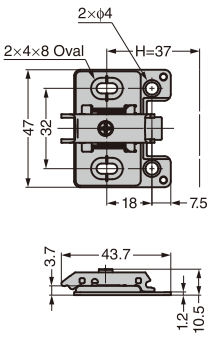
| Item Code | Item Name | Type | Height adjustment | Material | Finish | Weight g | Box |
|---|---|---|---|---|---|---|---|
| 160-042-393 | 360-P6W-30-32T | Standerd | ±2.5mm | Steel | Nickel | 30 | 400 pcs |
| 160-045-730 | 360-P6W-30-32T+5 | +5mm | | | | | |


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

## LAMP. MOUNTING PLATE 360-P6WT-NA Slotted Hole Type NEW

Latest Info






### Specifications
- Vertical adjustment (±3 mm), depth adjustment (±2 mm)
- Thickness: 0 mm (standard thickness)
- For inset specifications, the H dimension door thickness is +42 mm.
- When using GH-360FP (P.92), the door thickness is +44 mm.

### Sold Separately
- Raised countersunk head tapping screws 3.5×15

### Optional Parts
- Mounting Plate Mounting Jig 360-JIG (P.89)

### Remarks
- Fix the slot and then fix the round hole after adjustment.

| Item Code | Item Name | Material | Finish | Weight (g) | Box (pcs) |
|---|---|---|---|---|---|
| 160-050-436 | 360-P6WT-NA | Steel | Nickel | 26 | 400 |

## RAISED COUNTERSUNK HEAD TAPPING SCREW 3.5x15 For OLYMPIA and 230 Hinges NEW

Latest Info





Nickel Type : Sold in 400 pieces.
Black Nickel Type : Sold in one piece.

| Item Code | Item Name | Material | Finish |
|---|---|---|---|
| 160-070-030 | TAP3515NI | Steel | Nickel Plating |
| 160-034-786 | TAP3515BN | | Black Nickel Plating |

## LAMP. INSTALLATION JIG 360-JIG overlay installation NEW

Latest Info



- For easy installation and alignment of the Olympia hinge mounting plate.
- Cannot be used in combination with 360-P3W (P.87), 360-P6W-30-32T (P.88) and pre-mounted screw mounting plates.

| Item Code | Item Name | Box | Carton |
|---|---|---|---|
| 160-042-396 | 360-JIG | 50pc | 500 pcs |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

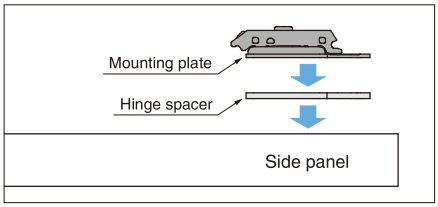
SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

## LAMP. HINGE SPACER 360-DP2-P4 2 mm Thick / 2 Holes / OLYMPIA Series NEW

Latest Info



### How to Use




Set the spacer between the mounting plate and side panel.

- 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

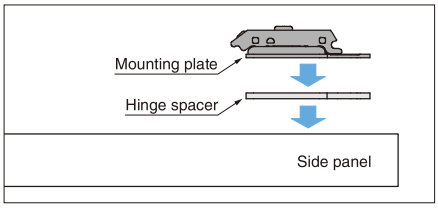
| Item Code | Item Name | Material | Colour | Weight (g) | Box (pcs) | Carton (pcs) |
|---|---|---|---|---|---|---|
| 160-046-075 | 360-DP2-P4 | POM | Grey | 2.6 | 50 | 500 |

## LAMP. HINGE SPACER 360-DP2-P6-NA 2 mm Thick / OLYMPIA Series NEW

Latest Info



### How to Use




Set the spacer between the mounting plate and side panel.

- 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 Plates

- 360-P6WT
- 360-P6WT+5
- 360-P6WT-NA

| Item Code | Item Name | Material | Colour | Weight (g) | Pack (pcs) | Box (pcs) |
|---|---|---|---|---|---|---|
| 160-050-437 | 360-DP2-P6-NA | POM | Grey | 2.9 | 50 | 500 |

## LAMP. 85° ANGLE LIMITER 360-85 NEW

Latest Info



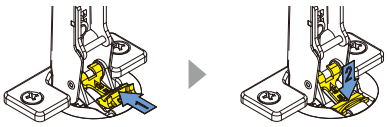
- Limits the opening angle from 105° to 85° of the 360 hinge.

### Remarks

- Not available for inset use.

Installation

### How to Use



| Item Code | Item Name | Material | Colour | Box(pcs) |
|---|---|---|---|---|
| 160-042-335 | 360-85 | PBT | Light gray | 2,000 |

## LAMP. 85° ANGLE LIMITER H360-85 For Thick Doors NEW

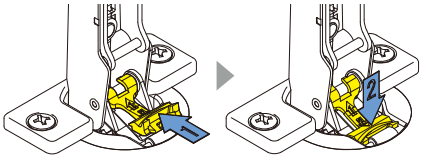
Latest Info



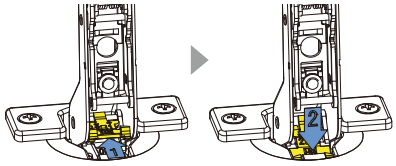
H360-85 H360-85-0

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

### How to Use (H360-85)



### How to Use (H360-85-0)



| Item Code | Item Name | Type | Material | Colour | Box (pcs) |
|---|---|---|---|---|---|
| 160-044-151 | H360-85 | 26mm Overlay / 16mm Overlay | PBT | Grey | 1,000 |
| 160-053-494 | H360-85-0 | Inset | | | 1,000 |

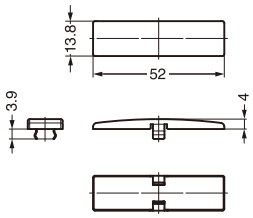


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

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

Latest Info






- Hides screws for a sleek look.

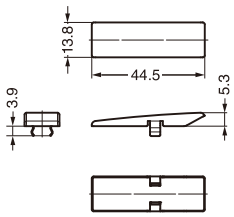
**Available Hinge**
- 360 (19 mm overlay type)
- H360 (26 mm overlay type)

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

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

Latest Info






- Hides screws for a sleek look.

**Available Hinge**
- 360 (9 mm overlay type)
- H360 (16 mm overlay type)

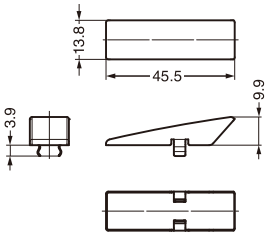
**Remarks**
- Cannot be used in 14 mm overlay installation.

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

## LAMP BODY COVER 360HC-0H0-NI For Inset NEW

Latest Info






- Hides screws for a sleek look.

**Available Hinge**
- 360 (inset type)
- H360 (inset type)

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



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP GLASS DOOR FACE PLATE GH-360FP NEW

Latest Info

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES


GH-360FP-SN


GH-360FP-CR


GH-360FP-GP


GH-360FP-BL

- Glass door face plate designed specifically for the Olympia hinge. (Not suitable for the H360 hinge).
- For tempered glass doors.

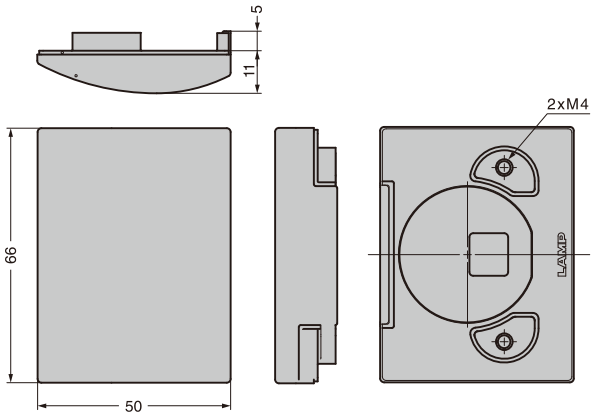
### Accessory

- Cross Recessed Flat Head Machine Screw M4 × 14

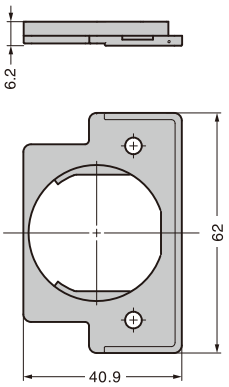
### Remarks

- Use the screws supplied and tighten to 0.75~1.5N.m

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



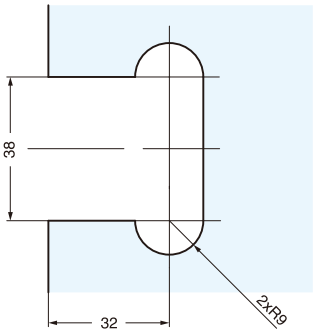
Faceplate



Socket spacer

### Cut Out Dimensions

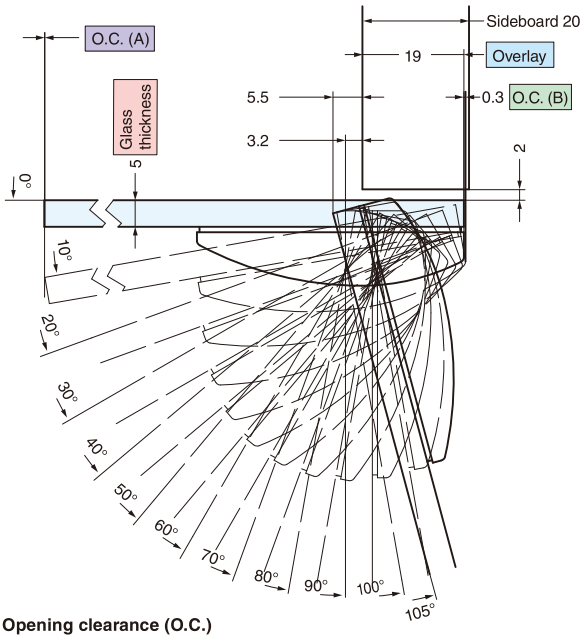
- Please use 4 - 6mm tempered glass.
- Use of shatterproof film is recommended.




## Side board and face plate relationship

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

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




**Opening clearance (O.C.)**

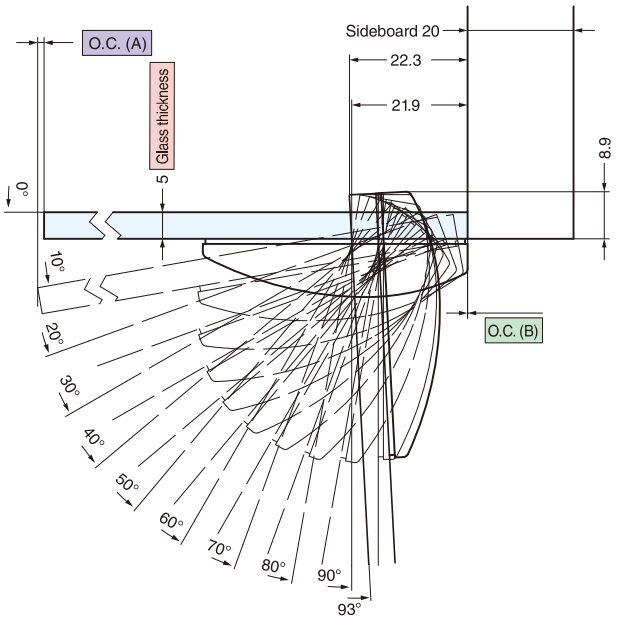
| Glass thickness | 4 | 5 | 6 |
|---|---|---|---|
| O.C. (B) | 0.2 | 0.3 | 0.5 |

**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 |

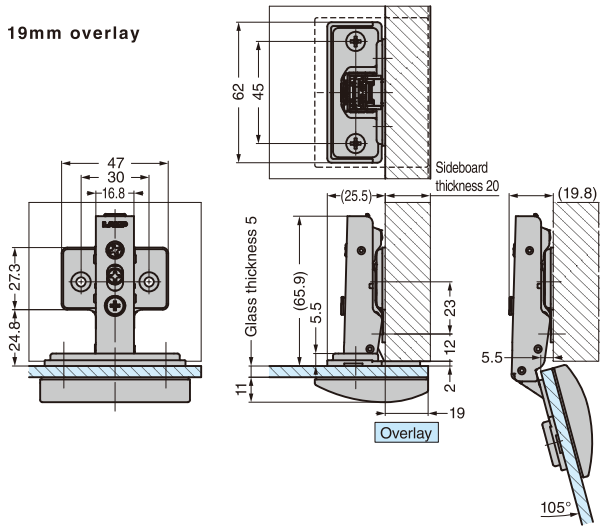
**Opening clearance (A) and door width relationship (for 5mm door)**

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

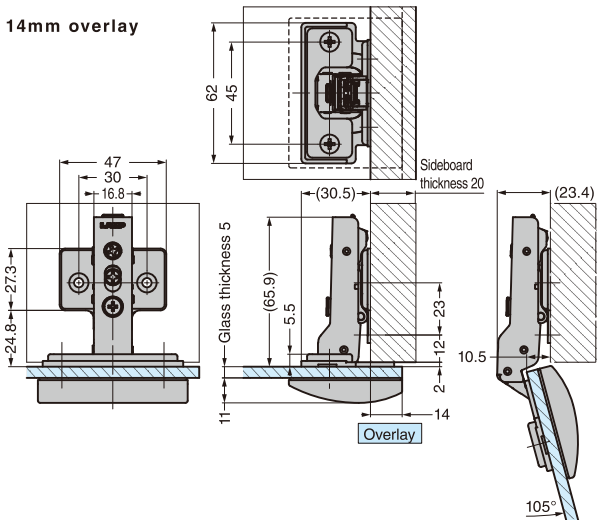

This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

## Installation drawing

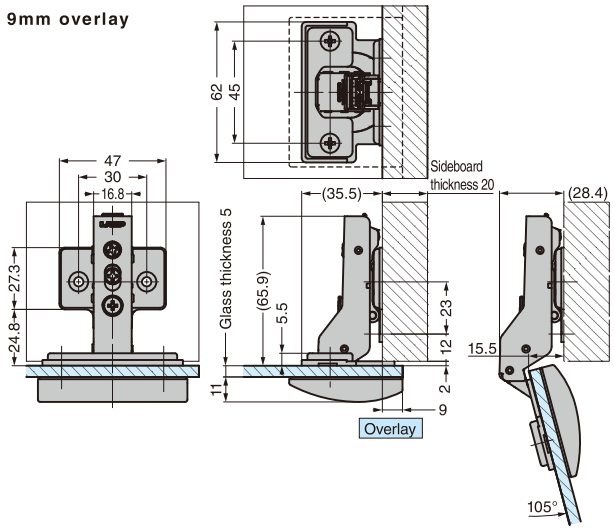
### 19mm overlay



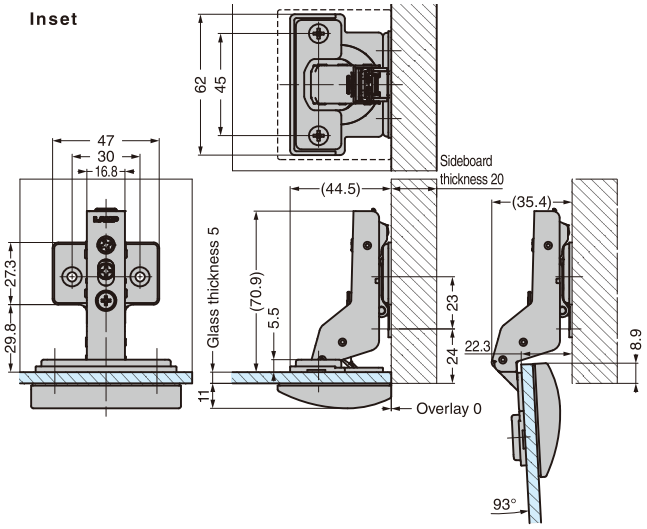

### 14mm overlay




### 9mm overlay




### Inset




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

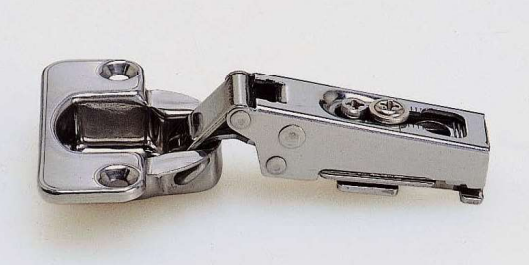
SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP CONCEALED HINGE (STAINLESS STEEL) 100 100°Opening / 19 mm Overlay

Latest Info





Picture above is the combination of concealed hinge and mounting plate.

- Screw mount.

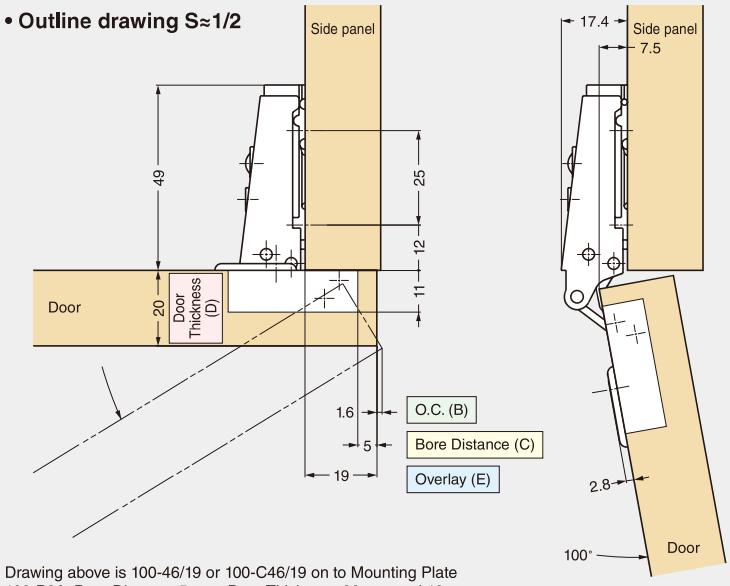
SUS

**Sold Separately**
- Stainless steel 100 series mounting plate (P.97)

Feature

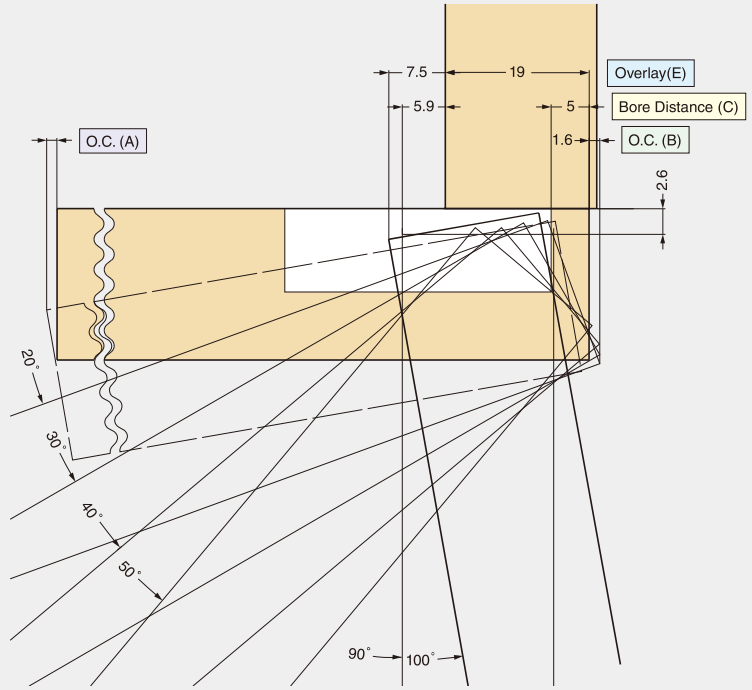
**100°Opening** **19 mm Overlay** **Door Thickness 15 - 20 mm**

## • Outline drawing S≈1/2




Drawing above is 100-46/19 or 100-C46/19 on to Mounting Plate 100-P3A: Bore Distance 5 mm, Door Thickness 20 mm and 19 mm Overlay.

## • Locus chart S≈1/1




Drawing above is Bore Distance 5 mm, Door Thickness 20 mm, Side Panel Thickness 20 mm and 19 mm Overlay.

## Bore Distance (C)

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

For standard type mounting plate 0 mm thickness.
Turning the overlay adjustment screw or using distance plate (2 mm thickness) to adjust overlay (Max. - 6 mm).

## 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)

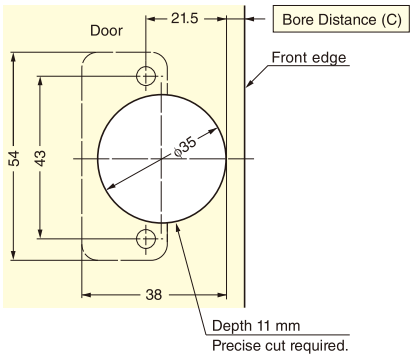
| Door Thickness (D) | Bore Distance (C) | | |
|---|---|---|---|
| | 3 | 4 | 5 |
| 15 | 0.5 | 0.5 | 0.4 |
| 16 | 0.6 | 0.6 | 0.6 |
| 17 | 0.9 | 0.8 | 0.8 |
| 18 | 1.1 | 1.1 | 1.0 |
| 19 | 1.4 | 1.3 | 1.3 |
| 20 | 1.7 | 1.6 | 1.6 |
| 21 | 2.1 | 2.0 | 1.9 |
| 22 | 2.5 | 2.4 | 2.3 |
| | O.C. (B) | | |

Please refer to the locus chart if door thickness is over 20 mm.

## O.C. (A)

| Door Thickness (D) | Door Width | | | |
|---|---|---|---|---|
| | 300 | 400 | 500 | 600 |
| 20 | 0.2 | 0.1 | 0.1 | 0.1 |
| | O.C. (A) | | | |

## Cut Out Dimensions




- Recommended screw

Size 3.5 raised countersunk head tapping screw or wood screw.

## Door Dimensions and Number of Hinges

Please refer to P.106.

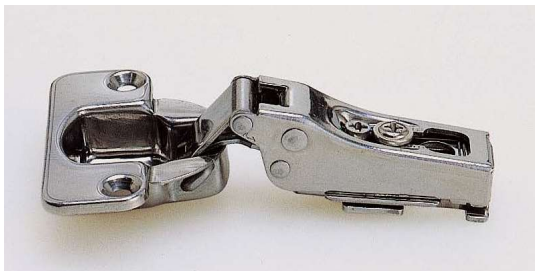
| Item Code | Item Name | Type | Material | Finish | Weight | Carton |
|---|---|---|---|---|---|---|
| 160-073-865 | 100-46/19 SUS304B | w/o Catch | Stainless Steel (SUS304) | Polished | 39 g | 200 pcs |
| 160-073-870 | 100-C46/19 SUS304B | w/ Catch | Stainless Steel (SUS304) | Polished | 44 g | 200 pcs |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP. CONCEALED HINGE (STAINLESS STEEL) 100 100°Opening / 14 mm Overlay

Latest Info



Picture above is the combination of concealed hinge and mounting plate.

- Screw mount.

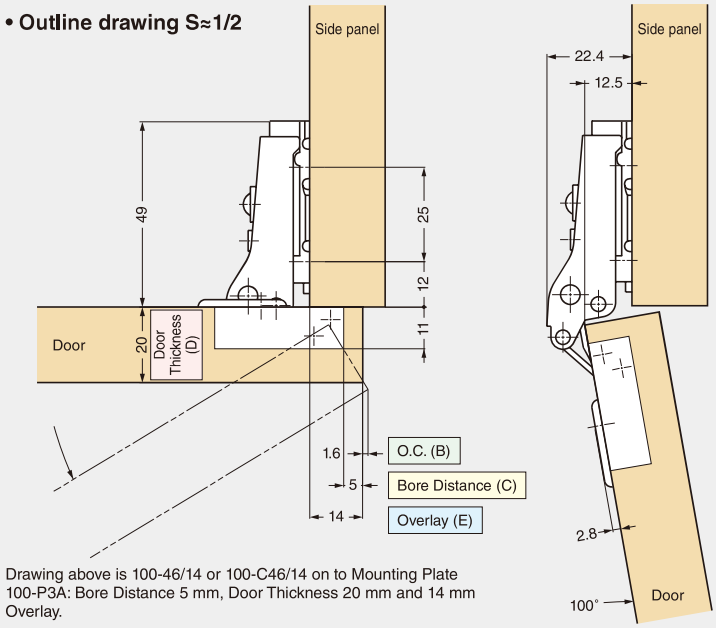
SUS

**Sold Separately**
- Stainless steel 100 series mounting plate (P.97)

Feature

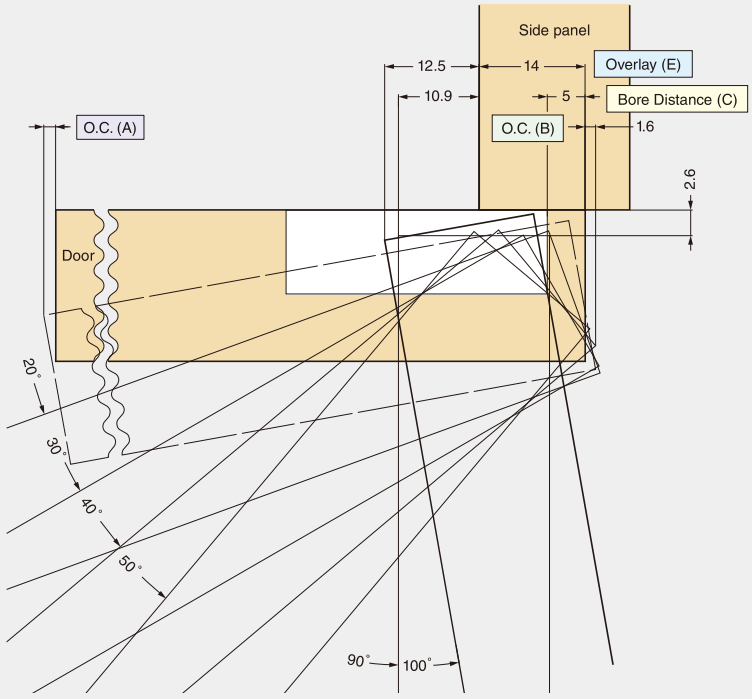
**100°Opening** **14 mm Overlay** **Door Thickness 15 - 20 mm**

## • Outline drawing S≈1/2




Drawing above is 100-46/14 or 100-C46/14 on to Mounting Plate 100-P3A: Bore Distance 5 mm, Door Thickness 20 mm and 14 mm Overlay.

## • Locus chart S≈1/1




Drawing above is Bore Distance 5 mm, Door Thickness 20 mm, Side Panel Thickness 20 mm and 14 mm Overlay.

### Bore Distance (C)

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

For standard type mounting plate 0 mm thickness.
Turning the overlay adjustment screw or using distance plate (2 mm thickness) to adjust overlay (Max. - 6 mm).

### 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)

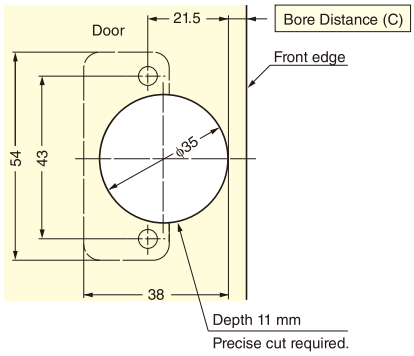
| Door Thickness (D) | Bore Distance (C) | | |
|---|---|---|---|
| | 3 | 4 | 5 |
| 15 | 0.5 | 0.5 | 0.4 |
| 16 | 0.6 | 0.6 | 0.6 |
| 17 | 0.9 | 0.8 | 0.8 |
| 18 | 1.1 | 1.1 | 1.0 |
| 19 | 1.4 | 1.3 | 1.3 |
| 20 | 1.7 | 1.6 | 1.6 |
| 21 | 2.1 | 2.0 | 1.9 |
| 22 | 2.5 | 2.4 | 2.3 |
| | O.C. (B) | | |

Please refer to the locus chart if door thickness is over 20 mm.

### O.C. (A)

| Door Thickness (D) | Door Width | | | |
|---|---|---|---|---|
| | 300 | 400 | 500 | 600 |
| 20 | 0.2 | 0.1 | 0.1 | 0.1 |
| | O.C. (A) | | | |

### Cut Out Dimensions




- Recommended screw

Size 3.5 raised countersunk head tapping screw or wood screw.

### Door Dimensions and Number of Hinges

Please refer to P.106.

| Item Code | Item Name | Type | Material | Finish | Weight | Carton |
|---|---|---|---|---|---|---|
| 160-073-875 | 100-46/14 SUS304B | w/o Catch | Stainless Steel (SUS304) | Polished | 41 g | 200 pcs |
| 160-073-880 | 100-C46/14 SUS304B | w/ Catch | Stainless Steel (SUS304) | Polished | 45 g | 200 pcs |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP CONCEALED HINGE (STAINLESS STEEL) 100 100°Opening / 9 mm Overlay

Latest Info



Picture above is the combination of concealed hinge and mounting plate.

- Screw mount.

SUS

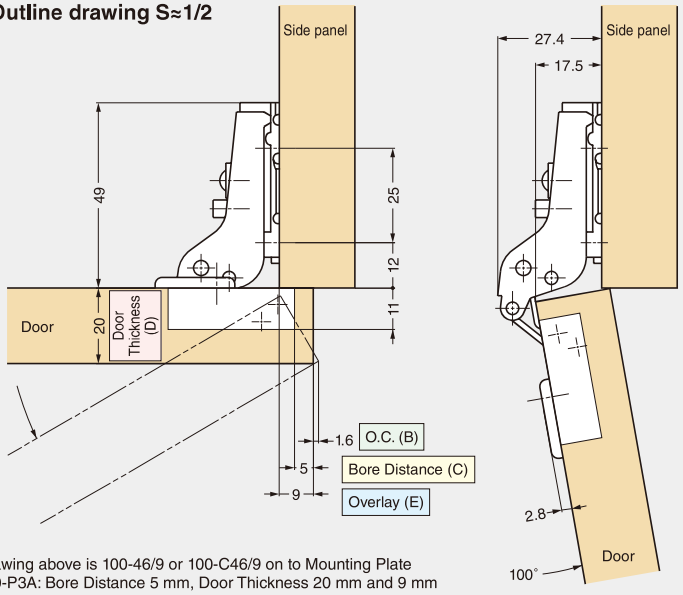
**Sold Separately**
- Stainless steel 100 series mounting plate (P.97)

Feature

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

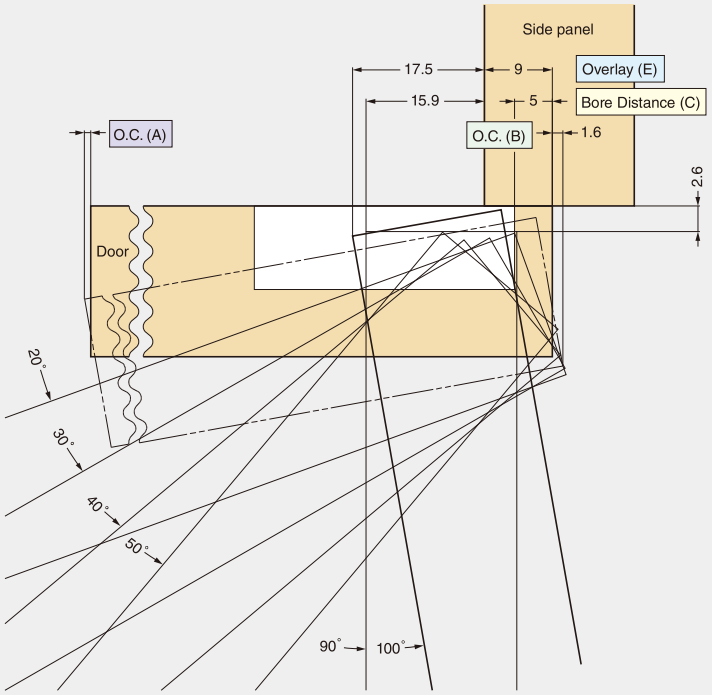
**100°Opening** **9 mm Overlay** **Door Thickness 15 - 20 mm**

## • Outline drawing S≈1/2




Drawing above is 100-46/9 or 100-C46/9 on to Mounting Plate 100-P3A: Bore Distance 5 mm, Door Thickness 20 mm and 9 mm Overlay.

## • Locus chart S≈1/1




Drawing above is Bore Distance 5 mm, Door Thickness 20 mm, Side Panel Thickness 20 mm and 9 mm Overlay.

### Bore Distance (C)

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

For standard type mounting plate 0 mm thickness.
Turning the overlay adjustment screw or using distance plate (2 mm thickness) to adjust overlay (Max. - 6 mm).

### 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 tables and charts below when designing cabinets.

### O.C. (B)

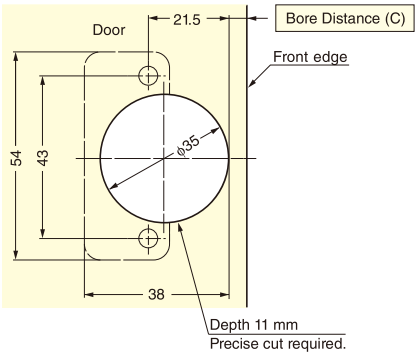
| Door Thickness (D) | Bore Distance (C) | | |
|---|---|---|---|
| | 3 | 4 | 5 |
| 15 | 0.5 | 0.5 | 0.4 |
| 16 | 0.6 | 0.6 | 0.6 |
| 17 | 0.9 | 0.8 | 0.8 |
| 18 | 1.1 | 1.1 | 1.0 |
| 19 | 1.4 | 1.3 | 1.3 |
| 20 | 1.7 | 1.6 | 1.6 |
| 21 | 2.1 | 2.0 | 1.9 |
| 22 | 2.5 | 2.4 | 2.3 |
| | O.C. (B) | | |

Please refer to the locus chart if door thickness is over 20 mm.

### O.C. (A)

| Door Thickness (D) | Door Width | | | |
|---|---|---|---|---|
| | 300 | 400 | 500 | 600 |
| 20 | 0.2 | 0.1 | 0.1 | 0.1 |
| | O.C. (A) | | | |

### Cut Out Dimensions




- Recommended screw

Size 3.5 raised countersunk head tapping screw or wood screw.

### Door Dimensions and Number of Hinges

Please refer to P.106.

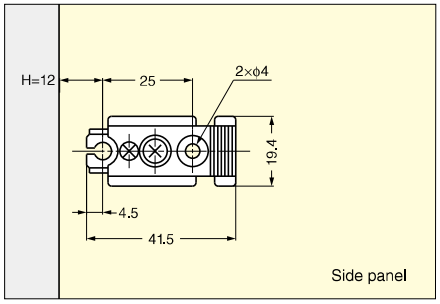
| Item Code | Item Name | Type | Material | Finish | Weight | Carton |
|---|---|---|---|---|---|---|
| 160-073-883 | 100-46/9 SUS304B | w/o Catch | Stainless Steel (SUS304) | Polished | 42 g | 200 pcs |
| 160-073-884 | 100-C46/9 SUS304B | w/ Catch | Stainless Steel (SUS304) | Polished | 46 g | 200 pcs |


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# STAINLESS STEEL MOUNTING PLATE 100 SERIES

## LAMP. STANDARD TYPE 100-P3A-SUS304B

Latest Info





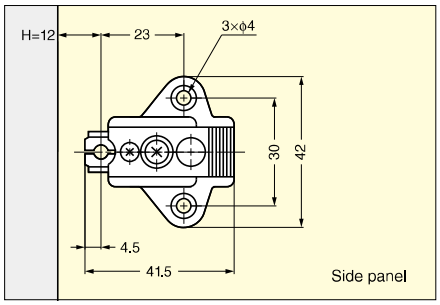

- Standard height: 0 mm

SUS

| Item Code | Item Name | Material | Finish | Weight | Carton |
|---|---|---|---|---|---|
| 160-074-155 | 100-P3A-SUS304B | Stainless Steel (SUS304) | Polished | 21.3 g | 400 pcs |

## LAMP. SYSTEM 30 TYPE 100-P4A-30-SUS304B

Latest Info





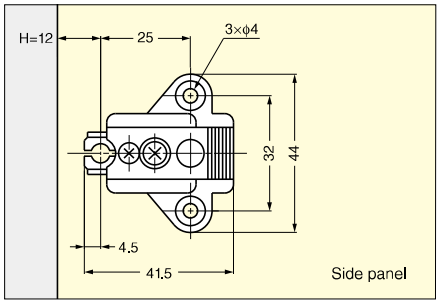

- Standard height: 0 mm

SUS

| Item Code | Item Name | Material | Finish | Weight | Carton |
|---|---|---|---|---|---|
| 160-074-152 | 100-P4A-30-SUS304B | Stainless Steel (SUS304) | Polished | 26.4 g | 400 pcs |

## LAMP. SYSTEM 32 TYPE 100-P4A-32-SUS304B

Latest Info





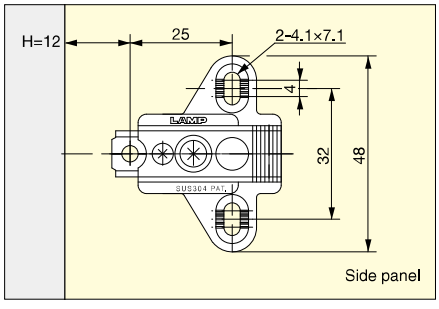

- Standard height: 0 mm

SUS

| Item Code | Item Name | Material | Finish | Weight | Carton |
|---|---|---|---|---|---|
| 160-074-149 | 100-P4A-32-SUS304B | Stainless Steel (SUS304) | Polished | 26 g | 400 pcs |

## SYSTEM 32 TYPE 100-P4A/32-3WAY-SUS304B

Latest Info






- Standard height: 0 mm

SUS

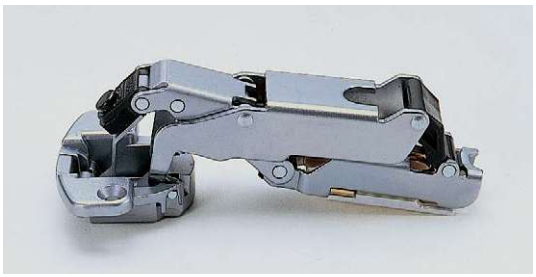
| Item Code | Item Name | Material | Finish | Weight | Carton |
|---|---|---|---|---|---|
| 160-079-044 | 100-P4A/32-3WAY-SUS304B | Stainless Steel (SUS304) | Polished | 26 g | 400 pcs |

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP. CONCEALED HINGE 170 170°Opening / 19 mm Overlay

Latest Info



Picture above is the combination of concealed hinge and mounting plate.

- Opening angle can be adjusted 140 - 170 degrees by turning the dial on the hinge.
- Screw mount.

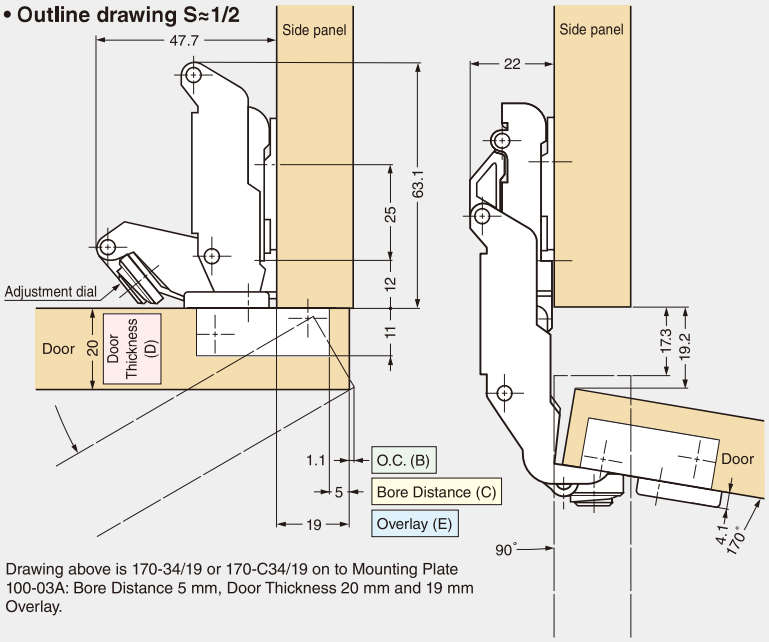
**Sold Separately**
- 100 series mounting plate (P.105-106).

Feature

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

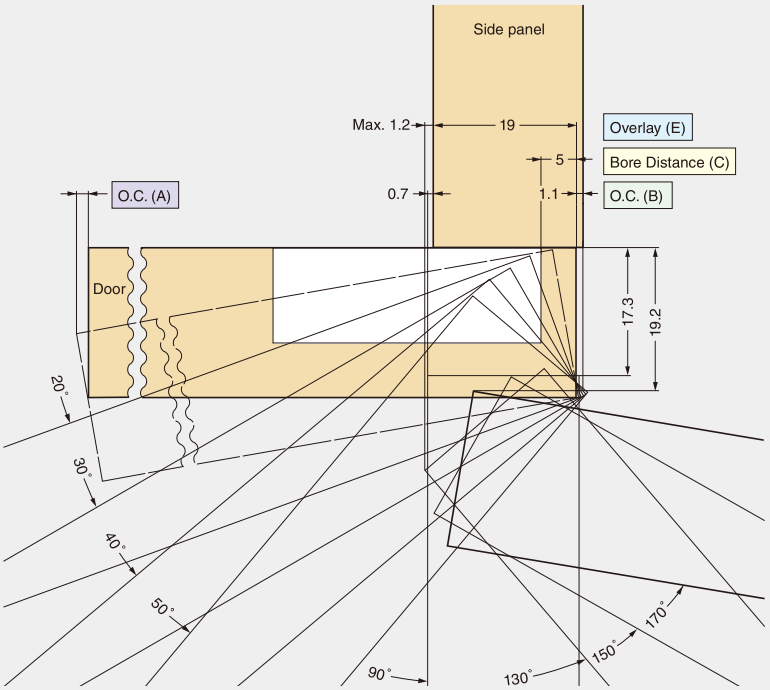
**170°Opening** **19 mm Overlay** **Door Thickness 15 - 20 mm**

## • Outline drawing S≈1/2




Drawing above is 170-34/19 or 170-C34/19 on to Mounting Plate 100-03A: Bore Distance 5 mm, Door Thickness 20 mm and 19 mm Overlay.

## • Locus chart S≈1/1




Drawing above is Bore Distance 5 mm, Door Thickness 20 mm, Side Panel Thickness 20 mm and 19 mm Overlay.

## Bore Distance (C)

| Bore Distance (C) | 3 | 4 | 5 | 6 |
|---|---|---|---|---|
| Overlay (E) | 17 | 18 | 19 | 20 |

For standard type mounting plate 0 mm thickness.
Turning the overlay adjustment screw or using distance plate (2 mm thickness) to adjust overlay (Max. - 6 mm).

## 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)

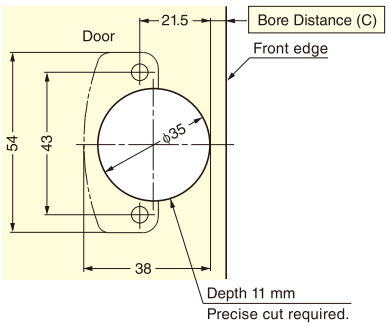
| Door Thickness (D) | Bore Distance (C) 3 | 4 | 5 | 6 |
|---|---|---|---|---|
| 15 | 0 | 0 | 0 | 0 |
| 16 | 0 | 0 | 0 | 0 |
| 17 | 0.1 | 0.1 | 0.1 | 0.1 |
| 18 | 0.1 | 0.1 | 0.1 | 0.1 |
| 19 | 1.1 | 0.8 | 0.3 | 0.1 |
| 20 | 2.5 | 1.7 | 1.1 | 0.6 |
| 21 | 3.5 | 2.7 | 2.0 | 1.5 |
| 22 | 4.5 | 3.7 | 2.9 | 2.3 |
| | O.C. (B) | | | |

Please refer to the locus chart if door thickness is over 20 mm.

### O.C. (A)

| Door Thickness (D) \ Door Width | 300 | 400 | 500 |
|---|---|---|---|
| 15 | 0.7 | 0.6 | 0.5 |
| 20 | 0.7 | 0.6 | 0.5 |
| 22 | 0.7 | 0.6 | 0.5 |
| | O.C. (A) | | |

## Cut Out Dimensions




- Recommended screw

Size 3.5 raised countersunk head tapping screw or wood screw.

## Door Dimensions and Number of Hinges

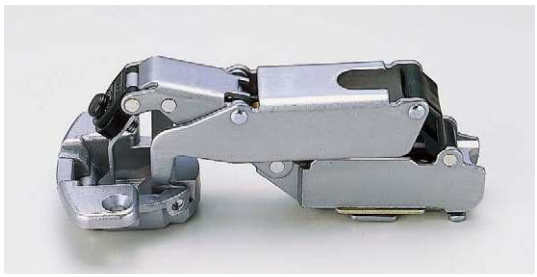
Please refer to P.106.

| Item Code | Item Name | Type | Material | Finish | Weight | Carton |
|---|---|---|---|---|---|---|
| 160-073-390 | 170-34/19 | w/o Catch | Body/Steel, Cup/Zinc Alloy (ZDC) | Chrome | 117 g | 100 pcs |
| 160-073-400 | 170-C34/19 | w/ Catch | Body/Steel, Cup/Zinc Alloy (ZDC) | Chrome | 125 g | 100 pcs |


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP CONCEALED HINGE 170 170°Opening / 9 mm Overlay

Latest Info



Picture above is the combination of concealed hinge and mounting plate.

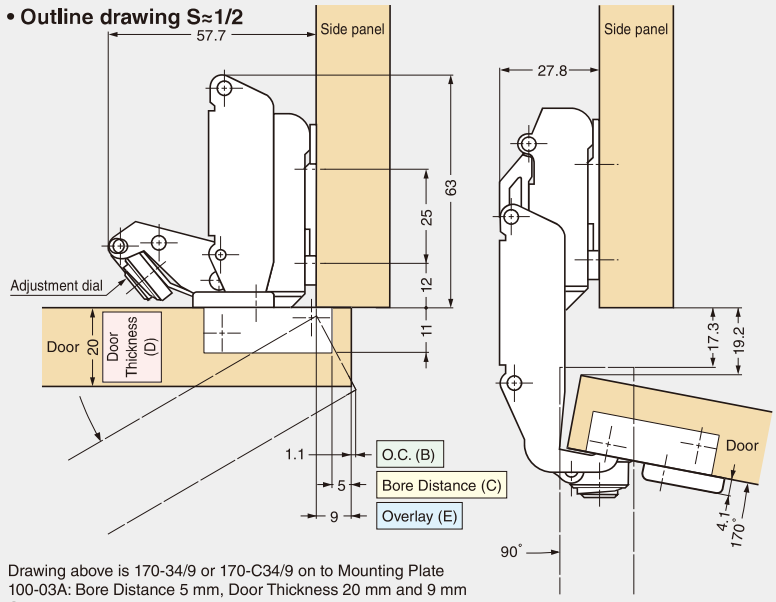
- Opening angle can be adjusted 140 - 170 degrees by turning the dial on the hinge.
- Screw mount.

**Sold Separately**
- 100 series mounting plate (P.105-106).

Feature

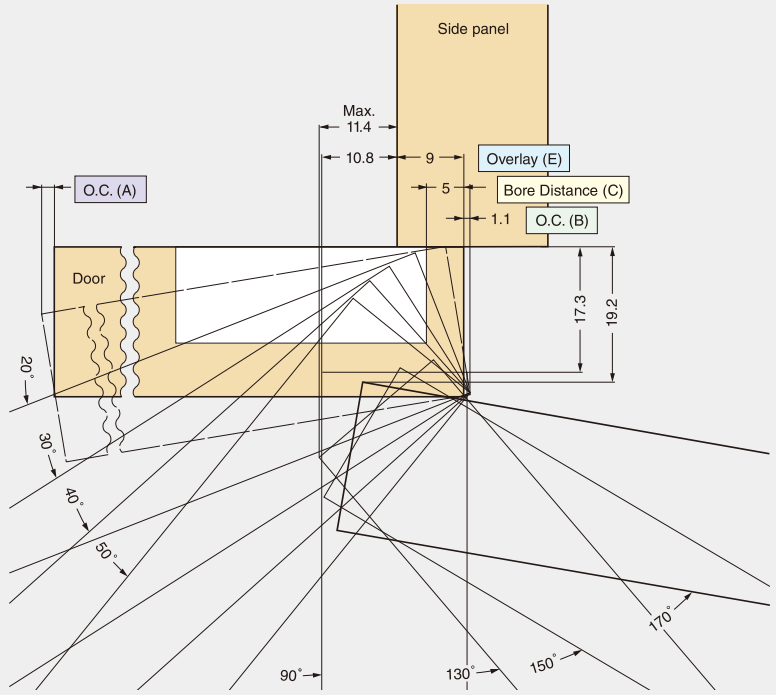
**170°Opening** **9 mm Overlay** **Door Thickness 15 - 20 mm**

## • Outline drawing S≈1/2




Drawing above is 170-34/9 or 170-C34/9 on to Mounting Plate 100-03A: Bore Distance 5 mm, Door Thickness 20 mm and 9 mm Overlay.

## • Locus chart S≈1/1




Drawing above is Bore Distance 5 mm, Door Thickness 20 mm, Side Panel Thickness 20 mm and 9 mm Overlay.

## Bore Distance (C)

| Bore Distance (C) | 3 | 4 | 5 | 6 |
|---|---|---|---|---|
| Overlay (E) | 7 | 8 | 9 | 10 |

For standard type mounting plate 0 mm thickness.
Turning the overlay adjustment screw or using distance plate (2 mm thickness) to adjust overlay (Max. - 6 mm).

## 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)

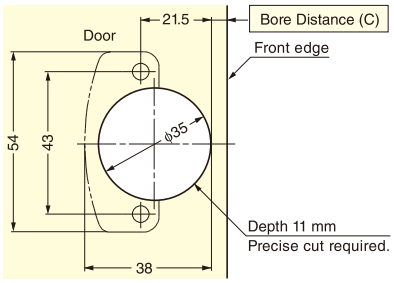
| Door Thickness (D) | Bore Distance (C) 3 | 4 | 5 | 6 |
|---|---|---|---|---|
| 15 | 0 | 0 | 0 | 0 |
| 16 | 0 | 0 | 0 | 0 |
| 17 | 0 | 0 | 0 | 0 |
| 18 | 0.1 | 0.1 | 0 | 0 |
| 19 | 1.0 | 0.6 | 0.2 | 0 |
| 20 | 2.3 | 1.7 | 1.1 | 0.6 |
| 21 | 3.5 | 2.6 | 2.0 | 1.5 |
| 22 | 4.4 | 3.5 | 2.9 | 2.2 |
| | O.C. (B) | | | |

Please refer to the locus chart if door thickness is over 20 mm.

### O.C. (A)

| Door Thickness (D) \ Door Width | 300 | 400 | 500 |
|---|---|---|---|
| 15 | 0.7 | 0.5 | 0.5 |
| 20 | 0.7 | 0.5 | 0.5 |
| 22 | 0.7 | 0.5 | 0.5 |
| | O.C. (A) | | |

## Cut Out Dimensions




- Recommended screw

Size 3.5 raised countersunk head tapping screw or wood screw.

## Door Dimensions and Number of Hinges

Please refer to P.106.

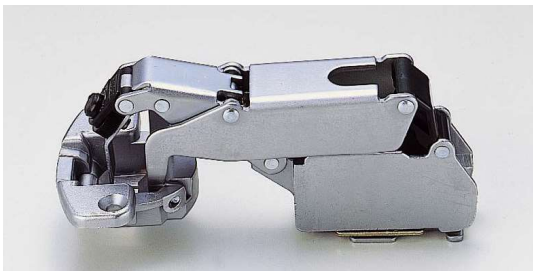
| Item Code | Item Name | Type | Material | Finish | Weight | Carton |
|---|---|---|---|---|---|---|
| 160-073-392 | 170-34/9 | w/o Catch | Zinc Alloy (ZDC) | Chrome | 133 g | 100 pcs |
| 160-073-402 | 170-C34/9 | w/ Catch | Zinc Alloy (ZDC) | Chrome | 141 g | 100 pcs |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP CONCEALED HINGE 170 170°Opening / Inset

Latest Info



Picture above is the combination of concealed hinge and mounting plate.

- Opening angle can be adjusted 140 - 170 degrees by turning the dial on the hinge.
- Screw mount.

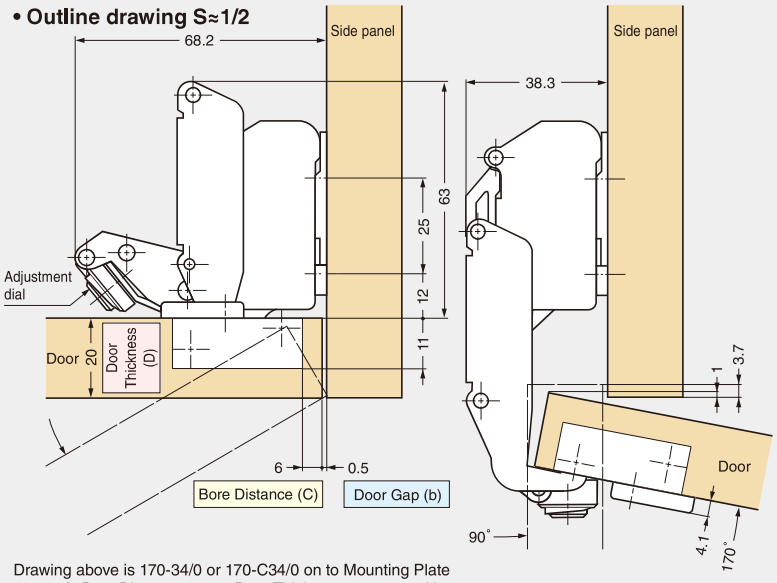
**Sold Separately**
- 100 series mounting plate (P.105-106).

Feature

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

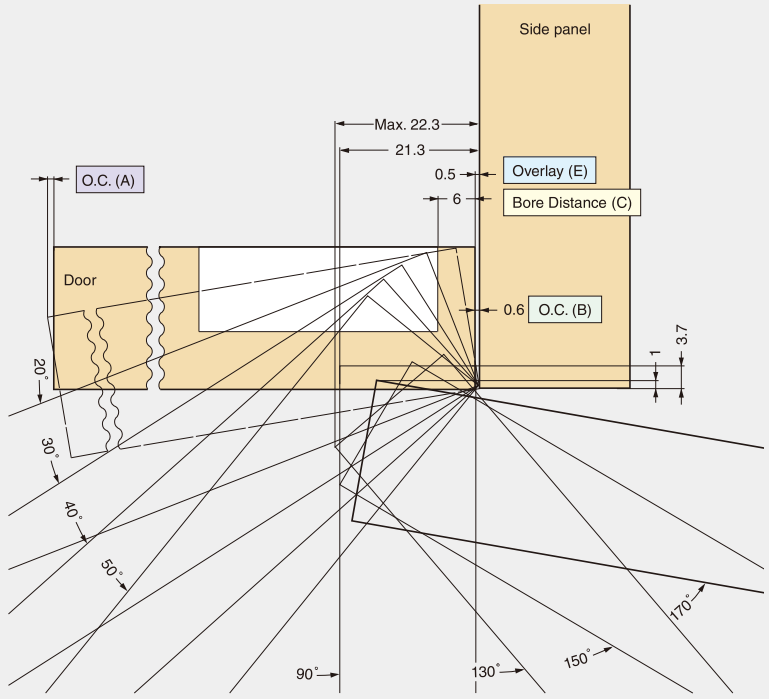
**170°Opening** **Inset** **Door Thickness 15 - 20 mm**

## • Outline drawing S≈1/2




Drawing above is 170-34/0 or 170-C34/0 on to Mounting Plate 100-03A: Bore Distance 6 mm, Door Thickness 20 mm and inset type.

## • Locus chart S≈1/1




Drawing above is Bore Distance 6 mm, Door Thickness 20 mm, Side Panel Thickness 20 mm and inset type.

### Bore Distance (C)

| Bore Distance (C) | 3 | 4 | 5 | 6 |
|---|---|---|---|---|
| Door Gap (b) | 3.5 | 2.5 | 1.5 | 0.5 |

For standard type mounting plate 0 mm thickness.
Turning the overlay adjustment screw to adjust the gap.

### 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)

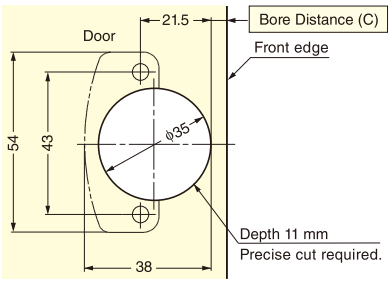
| Door Thickness (D) | Bore Distance (C) 3 | 4 | 5 | 6 |
|---|---|---|---|---|
| 15 | 0 | 0 | 0 | 0 |
| 16 | 0 | 0 | 0 | 0 |
| 17 | 0 | 0 | 0 | 0 |
| 18 | 0.1 | 0.1 | 0 | 0 |
| 19 | 1.0 | 0.6 | 0.2 | 0 |
| 20 | 2.3 | 1.7 | 1.1 | 0.6 |
| 21 | 3.5 | 2.6 | 2.0 | 1.5 |
| 22 | 4.4 | 3.5 | 2.9 | 2.2 |
| | O.C. (B) | | | |

Please refer to the locus chart if door thickness is over 20 mm.

### O.C. (A)

| Door Thickness (D) \ Door Width | 300 | 400 | 500 |
|---|---|---|---|
| 15 | 0.7 | 0.5 | 0.5 |
| 20 | 0.7 | 0.5 | 0.5 |
| 22 | 0.7 | 0.5 | 0.5 |
| | O.C. (A) | | |

### Cut Out Dimensions




- Recommended screw

Size 3.5 raised countersunk head tapping screw or wood screw.

### Door Dimensions and Number of Hinges

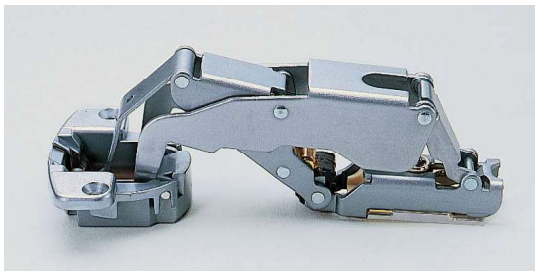
Please refer to P.106.

| Item Code | Item Name | Type | Material | Finish | Weight | Carton |
|---|---|---|---|---|---|---|
| 160-073-393 | 170-34/0 | w/o Catch | Zinc Alloy (ZDC) | Chrome | 153 g | 100 pcs |
| 160-073-403 | 170-C34/0 | w/ Catch | Zinc Alloy (ZDC) | Chrome | 161 g | 100 pcs |


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP CONCEALED HINGE H160 160°Opening / 28 mm Overlay

Latest Info



Picture above is the combination of concealed hinge and mounting plate.

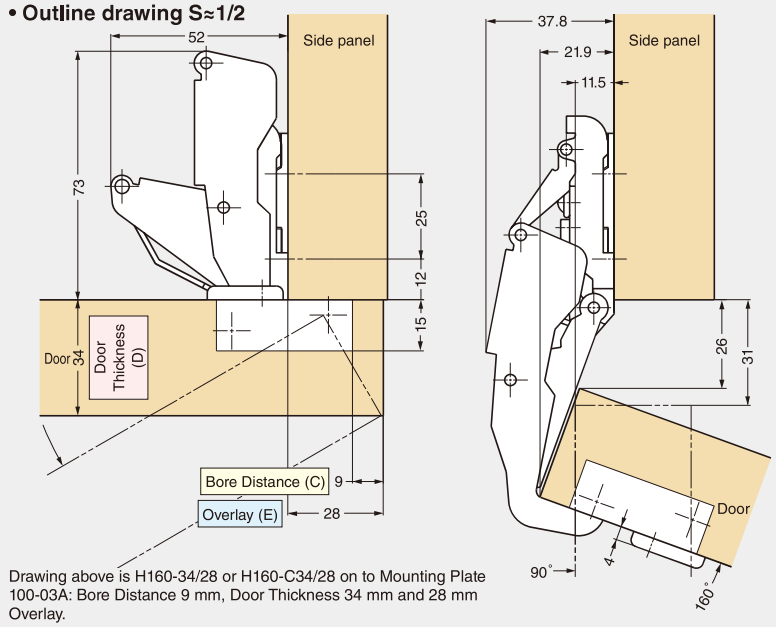
- Screw mount.

**Sold Separately**
- 100 series mounting plate (P.105-106).

Feature

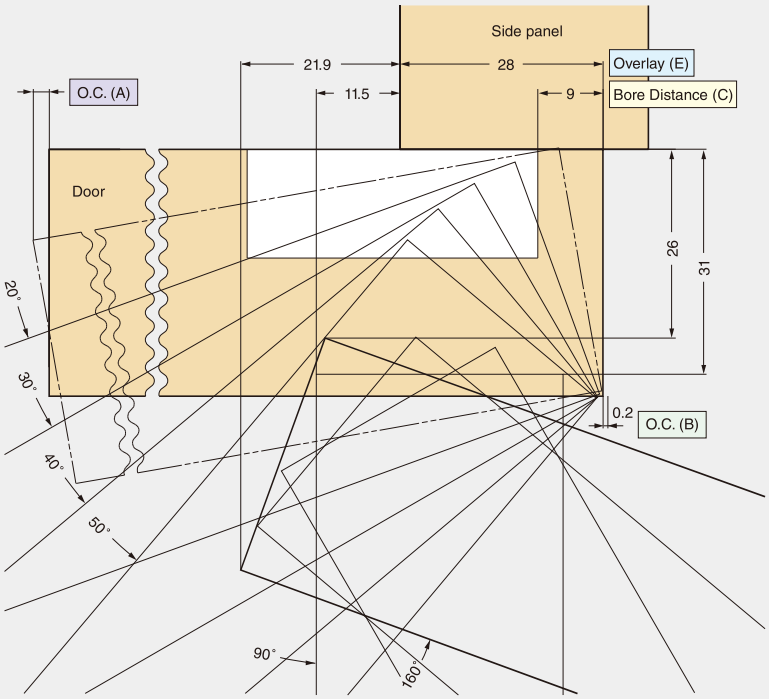
**160°Opening** **28 mm Overlay** **Door Thickness 18 - 34 mm**

- **Outline drawing S≈1/2**




Drawing above is H160-34/28 or H160-C34/28 on to Mounting Plate 100-03A: Bore Distance 9 mm, Door Thickness 34 mm and 28 mm Overlay.

- **Locus chart S≈1/1**




Drawing above is Bore Distance 9 mm, Door Thickness 34 mm, Side Panel Thickness 34 mm and 28 mm Overlay.

## Bore Distance (C)

| Bore Distance (C) | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|
| Overlay (E) | 22 | 23 | 24 | 25 | 26 | 27 | 28 |

For standard type mounting plate 0 mm thickness.
Turning the overlay adjustment screw or using distance plate (2 mm thickness) to adjust overlay (Max. - 6 mm).

## 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)

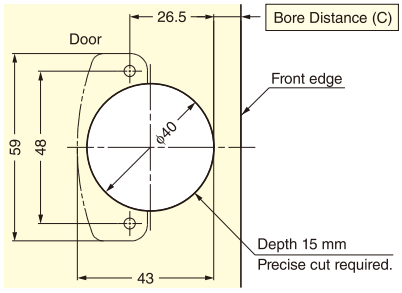
| Door Thickness (D) | Bore Distance (C) 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|
| Max. 33 | Max. 0.1 | | | | | | |
| 34 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 35 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| 36 | 2.0 | 1.6 | 1.5 | 1.4 | 1.0 | 0.7 | 0.5 |
| 37 | 3.7 | 3.1 | 2.7 | 2.4 | 2.0 | 1.4 | 0.9 |
| 38 | 5.0 | 4.4 | 3.8 | 3.3 | 2.8 | 2.2 | 1.7 |
| 39 | 6.2 | 5.4 | 4.9 | 4.3 | 3.7 | 3.0 | 2.6 |
| 40 | 7.2 | 6.4 | 5.7 | 5.3 | 4.6 | 3.9 | 3.4 |
| | O.C. (B) | | | | | | |

Please refer to the locus chart if door thickness is over 34 mm.

### O.C. (A)

| Door Thickness (D) \ Door Width | 300 | 400 | 500 | 600 |
|---|---|---|---|---|
| 20 | 1.6 | 1.1 | 1.0 | 0.9 |
| 30 | 2.2 | 1.4 | 1.1 | 1.0 |
| 34 | 2.2 | 1.5 | 1.1 | 1.0 |
| | O.C. (A) | | | |

## Cut Out Dimensions




- Recommended screw

Size 3.5 raised countersunk head tapping screw or wood screw.

## Door Dimensions and Number of Hinges

Please refer to P.106.

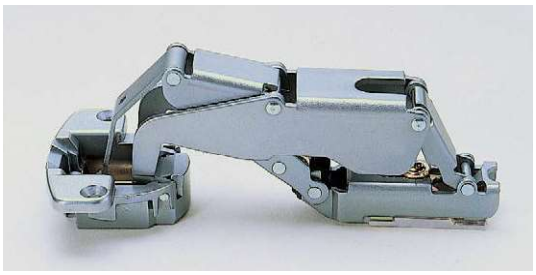
| Item Code | Item Name | Type | Material | Finish | Weight | Carton |
|---|---|---|---|---|---|---|
| 160-073-620 | H160-34/28 | w/o Catch | Body/Steel, Cup/Zinc Alloy (ZDC) | Chrome | 182 g | 100 pcs |
| 160-073-630 | H160-C34/28 | w/ Catch | Body/Steel, Cup/Zinc Alloy (ZDC) | Chrome | 195 g | 100 pcs |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP CONCEALED HINGE H160 160°Opening / 23 mm Overlay

Latest Info



Picture above is the combination of concealed hinge and mounting plate.

- Screw mount.

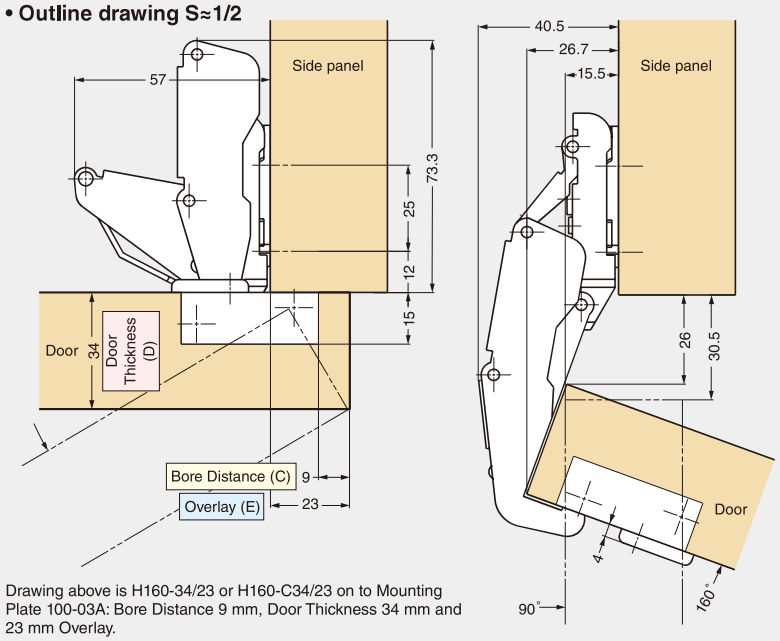
**Sold Separately**
- 100 series mounting plate (P.105-106).

Feature

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

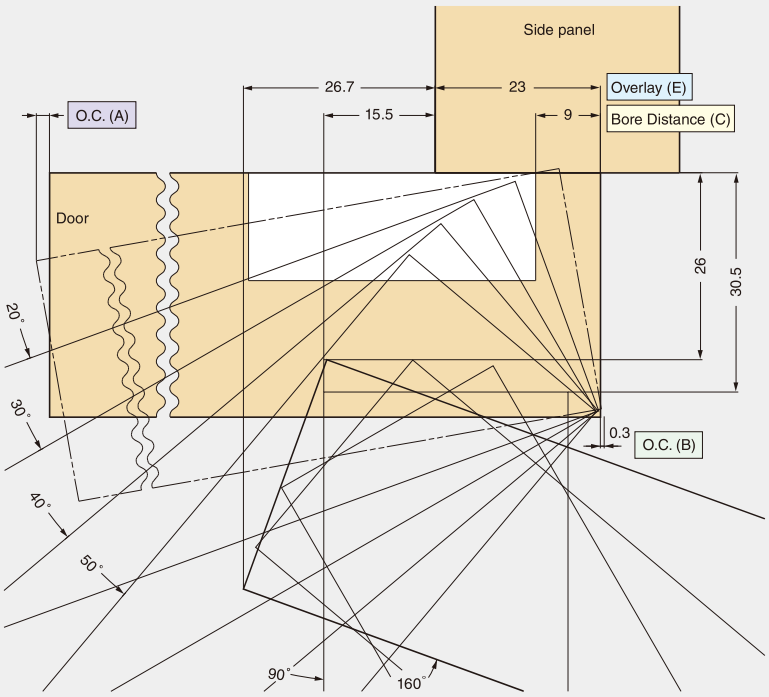
**160°Opening** | **23 mm Overlay** | **Door Thickness 18 - 34 mm**

## • Outline drawing S≈1/2




Drawing above is H160-34/23 or H160-C34/23 on to Mounting Plate 100-03A: Bore Distance 9 mm, Door Thickness 34 mm and 23 mm Overlay.

## • Locus chart S≈1/1




Drawing above is Bore Distance 9 mm, Door Thickness 34 mm, Side Panel Thickness 34 mm and 23 mm Overlay.

## Bore Distance (C)

| Bore Distance (C) | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|
| Overlay (E) | 17 | 18 | 19 | 20 | 21 | 22 | 23 |

For standard type mounting plate 0 mm thickness.
Turning the overlay adjustment screw or using distance plate (2 mm thickness) to adjust overlay (Max. - 6 mm).

## 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)

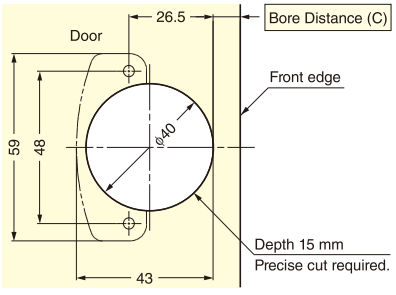
| Door Thickness (D) | Bore Distance (C) 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|
| Max. 33 | Max. 0.2 | | | | | | |
| 34 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| 35 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.6 | 0.5 |
| 36 | 3.2 | 3.0 | 2.7 | 2.3 | 1.6 | 1.3 | 0.9 |
| 37 | 5.0 | 4.4 | 3.8 | 3.2 | 2.6 | 2.1 | 1.6 |
| 38 | 6.2 | 5.5 | 4.8 | 4.2 | 3.5 | 2.9 | 2.4 |
| 39 | 7.2 | 6.4 | 5.7 | 5.1 | 4.4 | 3.9 | 3.3 |
| 40 | 8.3 | 7.3 | 6.6 | 6.0 | 5.4 | 4.7 | 4.2 |
| | O.C. (B) | | | | | | |

Please refer to the locus chart if door thickness is over 34 mm.

### O.C. (A)

| Door Thickness (D) \ Door Width | 300 | 400 | 500 | 600 |
|---|---|---|---|---|
| 20 | 1.4 | 1.1 | 0.8 | 0.7 |
| 30 | 1.8 | 1.3 | 1.0 | 0.8 |
| 34 | 1.8 | 1.3 | 1.0 | 0.8 |
| | O.C. (A) | | | |

## Cut Out Dimensions




- Recommended screw
  Size 3.5 raised countersunk head tapping screw or wood screw.

## Door Dimensions and Number of Hinges

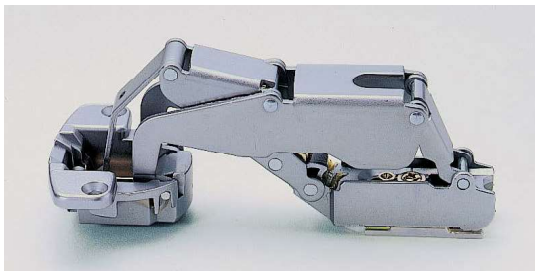
Please refer to P.106.

| Item Code | Item Name | Type | Material | Finish | Weight | Carton |
|---|---|---|---|---|---|---|
| 160-073-621 | H160-34/23 | w/o Catch | Body/Steel, Cup/Zinc Alloy (ZDC) | Chrome | 186 g | 100 pcs |
| 160-073-631 | H160-C34/23 | w/ Catch | Body/Steel, Cup/Zinc Alloy (ZDC) | Chrome | 200 g | 100 pcs |


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP CONCEALED HINGE H160 160°Opening / 18 mm Overlay

Latest Info



Picture above is the combination of concealed hinge and mounting plate.

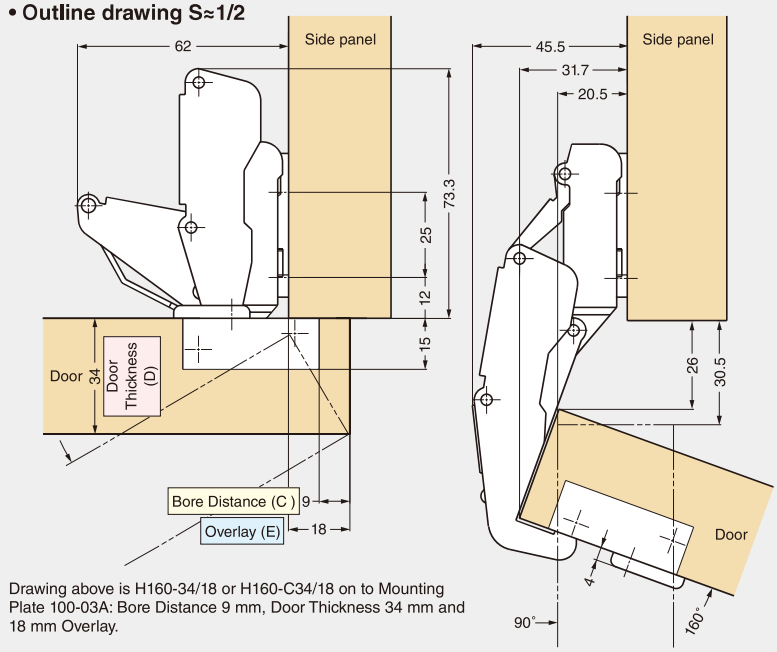
- Screw mount.

**Sold Separately**
- 100 series mounting plate (P.105-106).

Feature

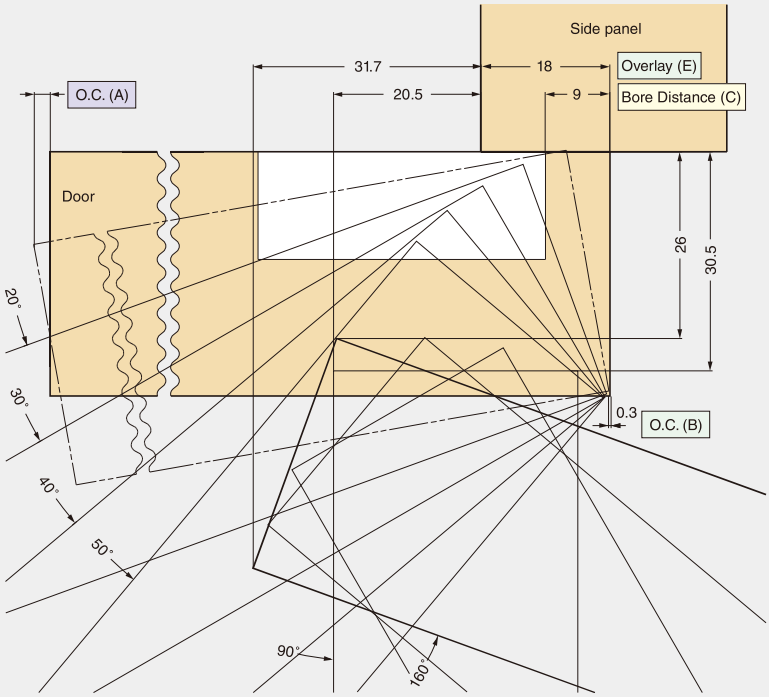
**160°Opening** **18 mm Overlay** **Door Thickness 18 - 34 mm**

## • Outline drawing S≈1/2




Drawing above is H160-34/18 or H160-C34/18 on to Mounting Plate 100-03A: Bore Distance 9 mm, Door Thickness 34 mm and 18 mm Overlay.

## • Locus chart S≈1/1




Drawing above is Bore Distance 9 mm, Door Thickness 34 mm, Side Panel Thickness 34 mm and 18 mm Overlay.

## Bore Distance (C)

| Bore Distance (C) | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|
| Overlay (E) | 12 | 13 | 14 | 15 | 16 | 17 | 18 |

For standard type mounting plate 0 mm thickness.
Turning the overlay adjustment screw or using distance plate (2 mm thickness) to adjust overlay (Max. - 6 mm).

## 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)

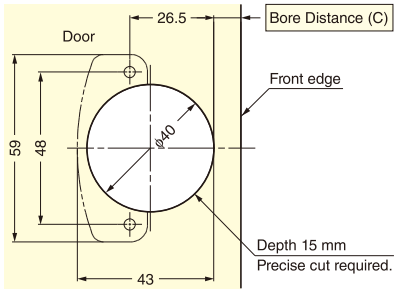
| Door Thickness (D) | Bore Distance (C) 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|
| Max. 33 | Max. 0.2 | | | | | | |
| 34 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| 35 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.6 | 0.5 |
| 36 | 3.2 | 3.0 | 2.7 | 2.3 | 1.6 | 1.3 | 0.9 |
| 37 | 5.0 | 4.4 | 3.8 | 3.2 | 2.6 | 2.1 | 1.6 |
| 38 | 6.2 | 5.5 | 4.8 | 4.2 | 3.5 | 2.9 | 2.4 |
| 39 | 7.2 | 6.4 | 5.7 | 5.1 | 4.4 | 3.9 | 3.3 |
| 40 | 8.3 | 7.3 | 6.6 | 6.0 | 5.4 | 4.7 | 4.2 |
| | O.C. (B) | | | | | | |

Please refer to the locus chart if door thickness is over 34 mm.

### O.C. (A)

| Door Thickness (D) \ Door Width | 300 | 400 | 500 | 600 |
|---|---|---|---|---|
| 20 | 1.4 | 1.1 | 0.8 | 0.7 |
| 30 | 1.8 | 1.3 | 1.0 | 0.8 |
| 34 | 1.8 | 1.3 | 1.0 | 0.8 |
| | O.C. (A) | | | |

## Cut Out Dimensions




- Recommended screw

Size 3.5 raised countersunk head tapping screw or wood screw.

## Door Dimensions and Number of Hinges

Please refer to P.106.

| Item Code | Item Name | Type | Material | Finish | Weight | Carton |
|---|---|---|---|---|---|---|
| 160-073-622 | H160-34/18 | w/o Catch | Zinc Alloy (ZDC) | Chrome | 193 g | 100 pcs |
| 160-073-632 | H160-C34/18 | w/ Catch | Zinc Alloy (ZDC) | Chrome | 205 g | 100 pcs |

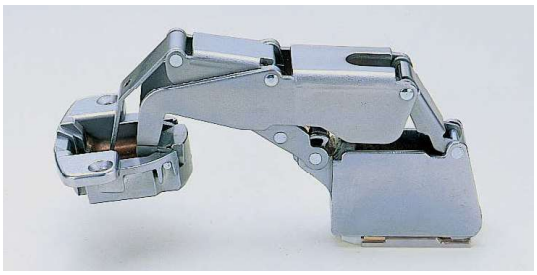


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP CONCEALED HINGE H160 160°Opening / Inset

Latest Info





Picture above is the combination of concealed hinge and mounting plate.

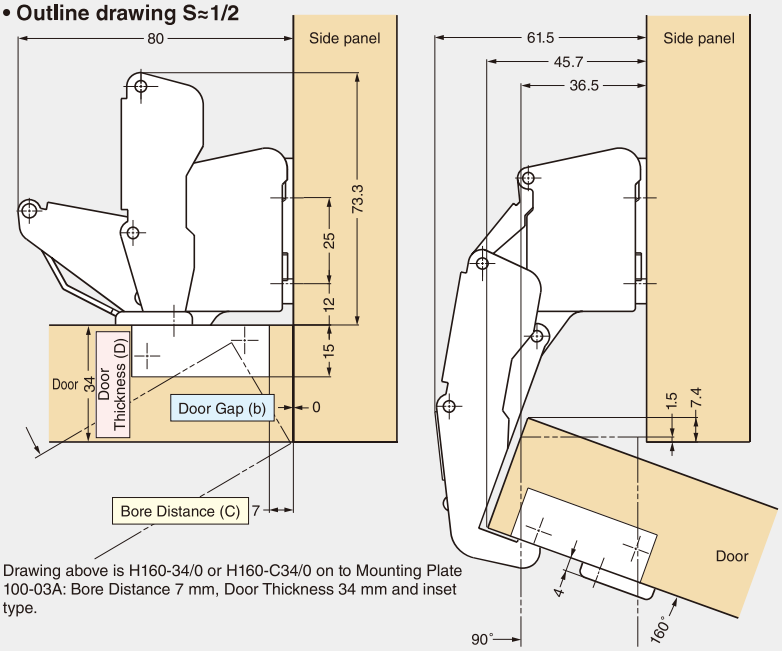
## Option

- 100 series mounting plate (P.105-106).

Feature

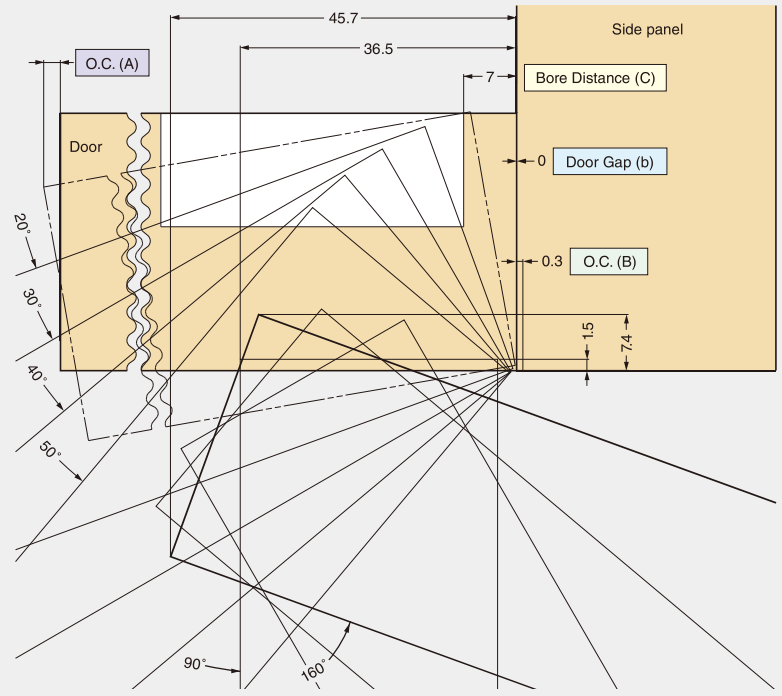
**160°Opening** **Inset** **Door Thickness 18 - 34 mm**

### • Outline drawing S≈1/2




Drawing above is H160-34/0 or H160-C34/0 on to Mounting Plate 100-03A: Bore Distance 7 mm, Door Thickness 34 mm and inset type.

### • Locus chart S≈1/1




Drawing above is Bore Distance 7 mm, Door Thickness 34 mm, Side Panel Thickness 34 mm and inset type.

### Bore Distance (C)

| Bore Distance (C) | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|
| Door Gap (b) | 4 | 3 | 2 | 1 | 0 |

For standard type mounting plate 0 mm thickness.
Turning the overlay adjustment screw to adjust the gap.

### 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)

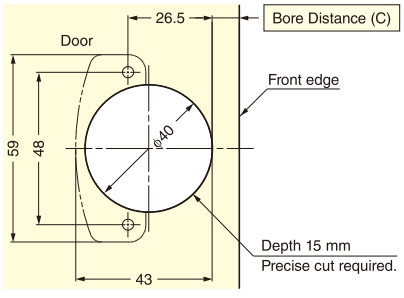
| Door Thickness (D) | Bore Distance (C) 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|
| Max. 30 | Max. 0.1 | | | | |
| 31 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 32 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 33 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 34 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| 35 | 0.9 | 0.9 | 0.9 | 0.8 | 0.8 |
| 36 | 3.4 | 3.1 | 2.8 | 2.2 | 1.6 |
| | O.C. (B) | | | | |

Please refer to the locus chart if door thickness is over 34 mm.

### O.C. (A)

| Door Thickness (D) \ Door Width | 300 | 400 | 500 | 600 |
|---|---|---|---|---|
| 20 | 1.4 | 1.1 | 0.8 | 0.7 |
| 30 | 1.7 | 1.3 | 1.0 | 0.8 |
| 34 | 1.7 | 1.3 | 1.0 | 0.8 |
| | O.C. (A) | | | |

### Cut Out Dimensions




- Recommended screw

Size 3.5 raised countersunk head tapping screw or wood screw.

### Door Dimensions and Number of Hinges

Please refer to P.106.

| Item Code | Item Name | Type | Material | Finish | Weight | Carton |
|---|---|---|---|---|---|---|
| 160-073-623 | H160-34/0 | w/o Catch | Zinc Alloy (ZDC) | Chrome | 234 g | 100 pcs |
| 160-073-633 | H160-C34/0 | w/ Catch | Zinc Alloy (ZDC) | Chrome | 242 g | 100 pcs |

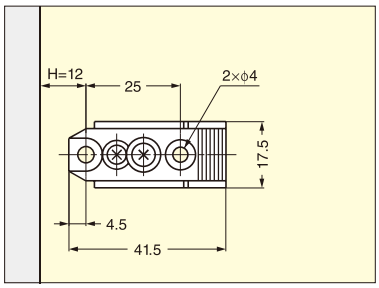


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# MOUNTING PLATE 100 SERIES

## LAMP. STANDARD TYPE 100-03A

Latest Info




Value of H: Door thickness + 17 mm in use of INSET type (Door thickness + 12 mm in use of INSET type of H160 or 170 hinge).



*The finish has been changed. Please check with actual item.

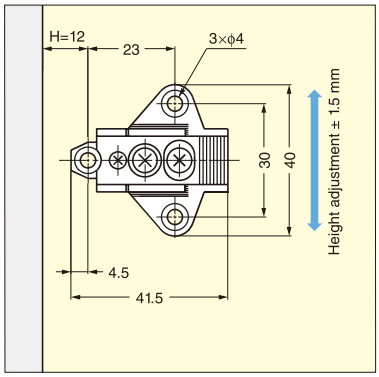
- Overlay adjustable.
- Standard height: 0 mm

**Recommended Screw**
- Size 3.5 tapping screw or wood screw (do not use flat head screws).

| Item Code | Item Name | Material | Finish | Weight | Carton |
|---|---|---|---|---|---|
| 160-074-083 | 100-03A | Zinc Alloy (ZDC)/Steel | Nickel/Yellow Zinc Chromate | 28 g | 800 pcs |

## LAMP. SYSTEM 30 TYPE 100-04A-W-30

Latest Info






*The finish has been changed. Please check with actual item.

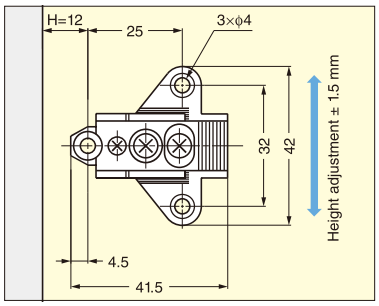
- Overlay and height adjustable.
- Standard height: 0 mm

**Recommended Screw**
- Size 3.5 tapping screw or wood screw (do not use flat head screws).

| Item Code | Item Name | Material | Finish | Weight | Carton |
|---|---|---|---|---|---|
| 160-074-115 | 100-04A-W-30 | Steel | Chrome/Yellow Zinc Chromate | 32 g | 800 pcs |

## LAMP. SYSTEM 32 TYPE 100-04A-W-32

Latest Info




Value of H: Door thickness + 17 mm in use of INSET type (Door thickness + 12 mm in use of INSET type of H160 or 170 hinge).



*The finish has been changed. Please check with actual item.

- Overlay and height adjustable.
- Standard height: 0 mm

**Recommended Screw**
- Size 3.5 tapping screw or wood screw (do not use flat head screws).

| Item Code | Item Name | Material | Finish | Weight | Carton |
|---|---|---|---|---|---|
| 160-074-116 | 100-04A-W-32 | Steel | Chrome/Yellow Zinc Chromate | 33 g | 800 pcs |

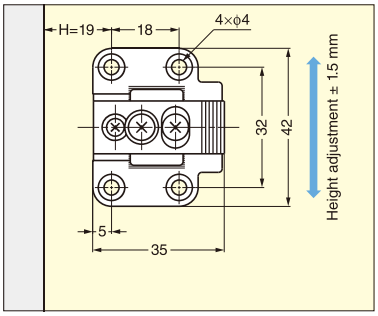


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# MOUNTING PLATE 100 SERIES

## LAMP. SYSTEM 32 TYPE 100-06AW

Latest Info




Value of H: Door thickness + 17 mm in use of INSET type (Door thickness + 12 mm in use of INSET type of H160 or 170 hinge).



*The finish has been changed. Please check with actual item.

- Overlay and height adjustable.
- Standard height: 0 mm

**Recommended Screw**
- Size 3.5 tapping screw or wood screw (do not use flat head screws).

| Item Code | Item Name | Material | Finish | Weight | Carton |
|---|---|---|---|---|---|
| 160-074-171 | 100-06AW | Steel | Chrome/Yellow Zinc Chromate | 37 g | 400 pcs |

## LAMP. SPACER FOR 100 SERIES MOUNTING PLATE 100-DP2-32

Latest Info



- Used to make overlay 2 mm smaller.

**Use with the following mounting plates:**

100-04A-32-3 100-04A-W-32
100-P4A-32-SUS304B

| Item Code | Item Name | Material | Colour | Weight | Box | Carton |
|---|---|---|---|---|---|---|
| 160-074-107 | 100-DP2-32 | Polyamide (PA) | Ivory | 2 g | 800 pcs | 3200 pcs |

## LAMP. SPACER FOR 100 SERIES MOUNTING PLATE 100-DP2-06

Latest Info



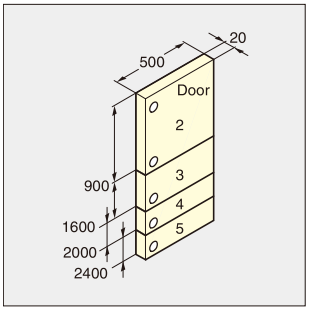
- Used to make overlay 2 mm smaller.

**Use with the following mounting plates:**

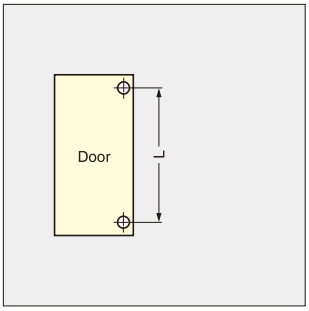
100-06 100-06AW
100-06A

| Item Code | Item Name | Material | Colour | Weight | Box | Carton |
|---|---|---|---|---|---|---|
| 160-074-145 | 100-DP2-06 | Polyamide (PA) | Ivory | 3 g | 800 pcs | 3200 pcs |

# RECOMMENDED NUMBER OF HINGES PER DOOR




This chart can serve as a guide for determing the number of hinges per door.

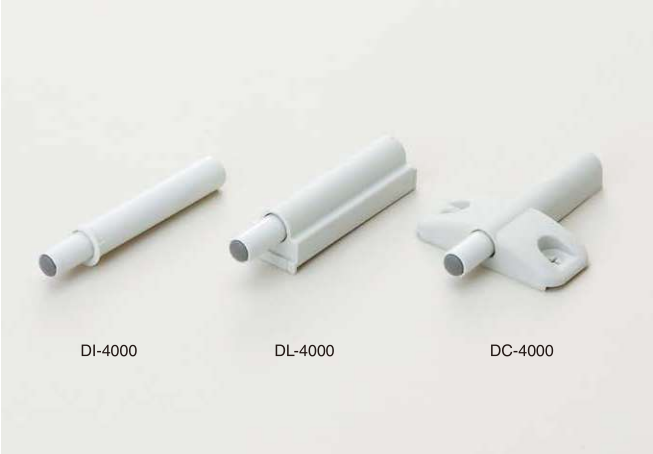



L: The distance between the top and bottom hinges must be greater than the width of the door.


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

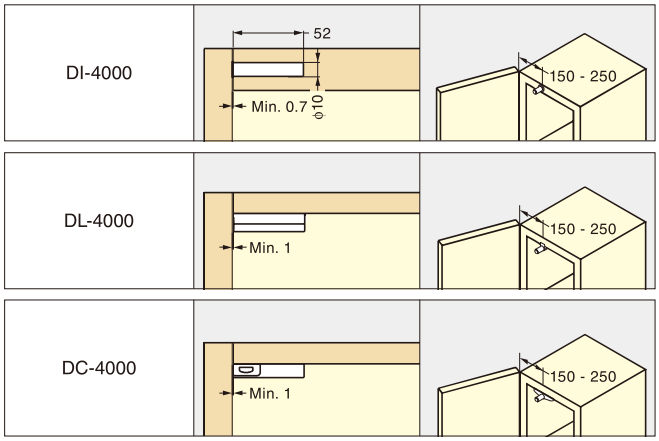
# CABINET DAMPER DI-4000, DL-4000, DC-4000

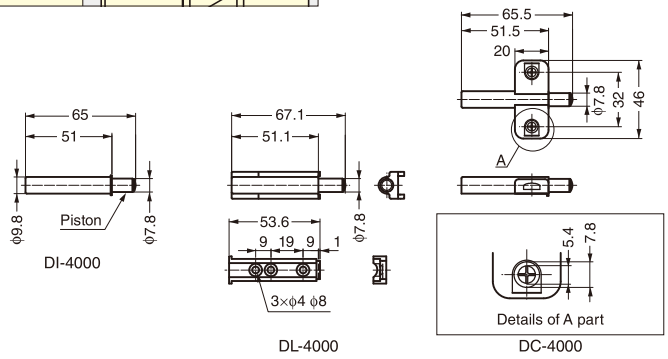
Latest Info




- Damper for overlay swing door which absorbs the impact when closing.
- Top mounting type
- Please use it with concealed hinge with catch. (Refer to P.24 on INDEX)
- Recommended door size: W300 - 500×Max.: H800×t18 mm (3 - 5 kg)

## Installation




| Item Code | Item Name | Material | Colour | Weight | Box | Carton |
|---|---|---|---|---|---|---|
| 210-030-319 | DI-4000 | Polyamide (PA) | White | 6 g | 500 pcs | 1000 pcs |
| 210-030-320 | DL-4000 | Polyamide (PA) | White | 12 g | 250 pcs | 500 pcs |
| 210-030-318 | DC-4000 | Polyamide (PA) | White | 9 g | 250 pcs | 500 pcs |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

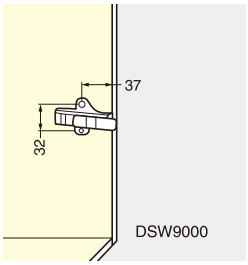
# CABINET DAMPER DSW

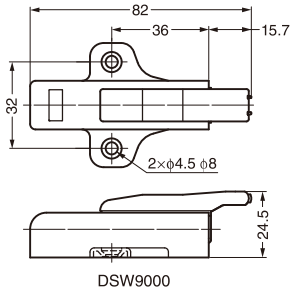
Latest Info




- Enables soft-close for swing doors.
- For full overlay.

## Installation




| Item Code | Item Name | Material | Finish/Colour | Weight | Box |
|---|---|---|---|---|---|
| 210-031-051 | DSW9000 | Zinc Alloy (ZDC) | Paint, Grey | 49 g | 200 pcs |

# CABINET DAMPER DS

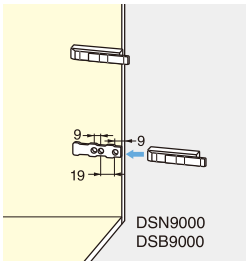
Latest Info

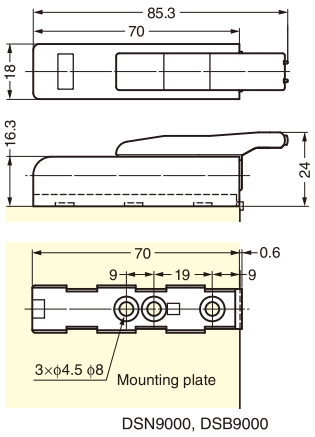



- Enables soft-close for swing doors.
- For full overlay.
- Can be used with ACC-DAM to support half overlay and inset type doors.

### Options
- Support plate ACC-DAM (Below)

## Installation

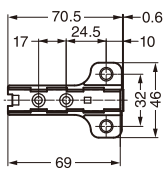


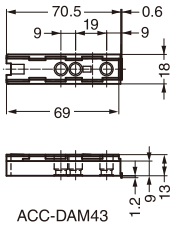



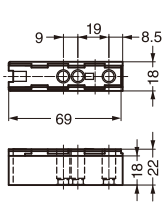

| Item Code | Item Name | Material | Finish/Colour | Weight | Box |
|---|---|---|---|---|---|
| 210-031-053 | DSN9000 | ABS | Paint, Grey | 18 g | 200 pcs |
| 210-031-052 | DSB9000 | ABS | Black | 20 g | 200 pcs |

## Options
### Support Plate ACC-DAM



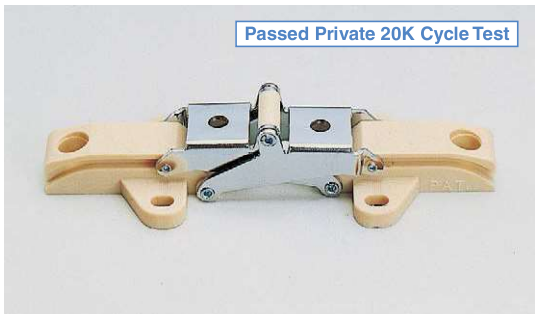




| Item Code | Item Name | Door Type | Material | Colour | Weight | Box |
|---|---|---|---|---|---|---|
| 210-011-287 | ACC-DAM40 | Full Overlay | ABS | Silver | 7 g | 300 pcs |
| 210-011-288 | ACC-DAM43 | Half Overlay | ABS | Silver | 7 g | 300 pcs |
| 210-011-877 | ACC-DAM43-BLACK | Half Overlay | ABS | Black | 7 g | 300 pcs |
| 210-011-289 | ACC-DAM44 | Inset | ABS | Silver | 10 g | 200 pcs |


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP CONCEALED HINGE (SURFACE MOUNT) T-90-200

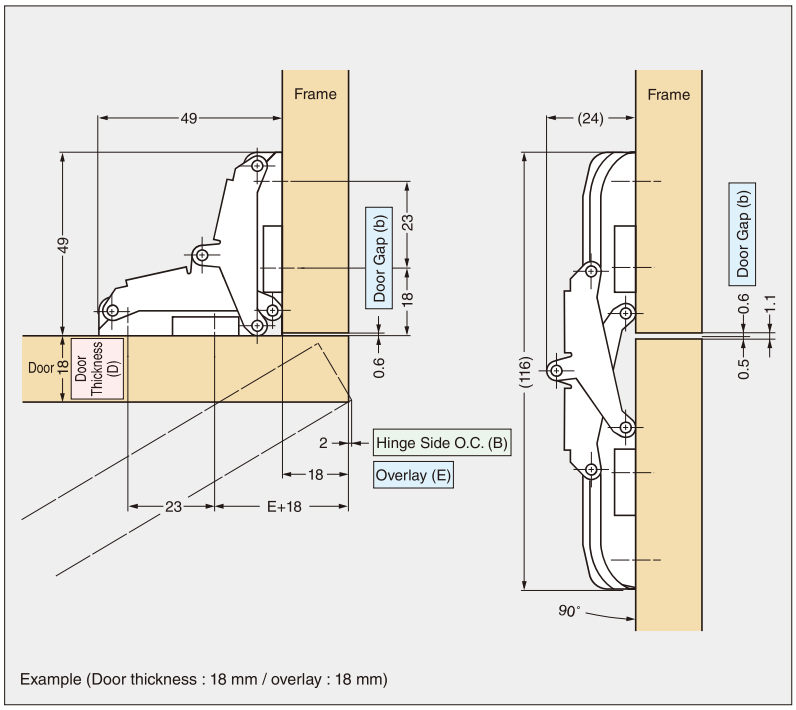
Latest Info




- Opening angle 90˚.
- Can be used both for inset and overlay doors.
- Without catch.

**Recommended Screws**
- Pan head screw size 4

| Part Name | Material | Finish/Colour |
|---|---|---|
| Body | Polyamide (PA) | Ivory |
| Arm | Steel | Chrome |




Example (Door thickness : 18 mm / overlay : 18 mm)

**Hinge Side O.C. (B)**

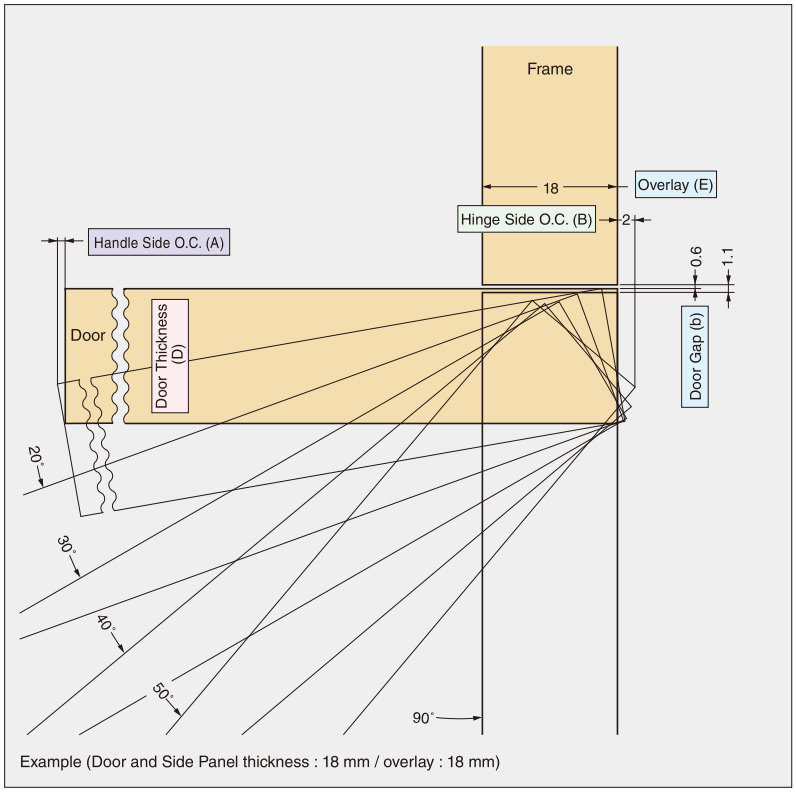
| Door Thickness (D) | Overlay (E) | | | |
|---|---|---|---|---|
| | 15 | 16 | 17 | 18 |
| 15 | 1.1 | 0.5 | 0 | 0 |
| 16 | 2.0 | 1.4 | 0.8 | 0.2 |
| 17 | 2.9 | 2.3 | 1.7 | 1.1 |
| 18 | 3.8 | 3.2 | 2.6 | 2.0 |
| | Hinge Side O.C. (B) | | | |

**Handle Side O.C. (A)**

| Door Thickness (D) | Door Width | | |
|---|---|---|---|
| | 300 | 400 | 500 |
| 15 | 0.5 | 0.4 | 0.3 |
| 16 | 0.5 | 0.4 | 0.4 |
| 17 | 0.5 | 0.4 | 0.4 |
| 18 | 0.5 | 0.4 | 0.4 |
| | Handle Side O.C. (A) | | |

**Overlay (E) and Door Gap (b)**

| Overlay (E) | 15 | 16 | 17 | 18 |
|---|---|---|---|---|
| Door Gap (b) | 0.2 | 0.3 | 0.5 | 0.6 |




Example (Door and Side Panel thickness : 18 mm / overlay : 18 mm)

| Item Code | Item Name | Type | Overlay | Door Thickness | Opening Angle | Weight | Carton |
|---|---|---|---|---|---|---|---|
| 170-090-090 | T-90-200 | Without Catch | 15 - 18 | 15 - 18 | 90˚ | 42 g | 200 pcs |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

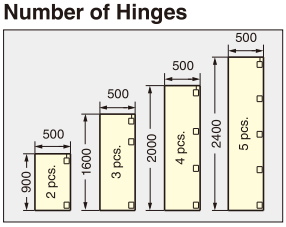
# CONCEALED HINGE (SURFACE MOUNT) 2000-150

Latest Info

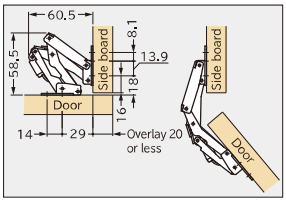


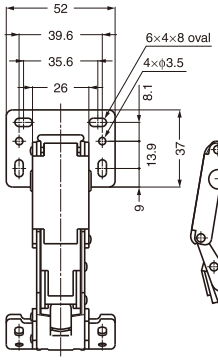


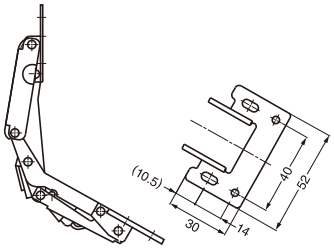

**Number of Hinges**




**Application Example**
**(t = 18.5 mm overlay, overlay doors)**




- No need to mortise doors.
- Can be used both for inset and overlay doors.
- Large offset.
- With catch.
- Overlay: Max. 20 mm
- Applicable overlay: 0 - 20 mm

| Item Code | Item Name | Material | Finish | Type | Door Thickness | Opening Angle | Weight | Carton |
|---|---|---|---|---|---|---|---|---|
| 170-042-046 | 2000-150-N | Steel | Nickel | Without Catch | Max. 20 | 130˚ | 137 g | 100 pcs |
| 170-090-884 | 2000-150 | Steel | Nickel | With Catch | Max. 20 | 130˚ | 130 g | 100 pcs |

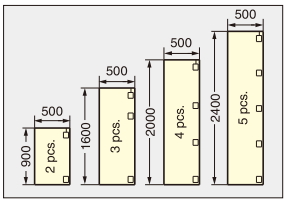
# CONCEALED HINGE (SURFACE MOUNT) 2000-MIGNON

Latest Info

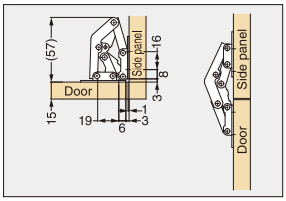


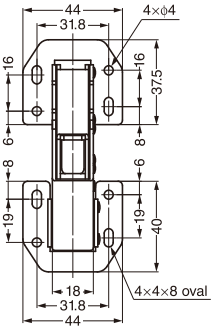


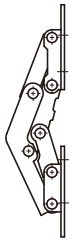

**Number of Hinges**




**Application Example**
**(t = 15 mm / Inset doors)**



- No need to mortise doors.
- Can be used both for inset and overlay doors.
- With catch.
- Overlay: Max. 20 mm
- Applicable overlay: 0 - 20 mm

| Item Code | Item Name | Material | Finish | Type | Door Thickness | Opening Angle | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|
| 170-042-047 | 2000-MIGNON-N | Steel | Nickel | Without Catch | Max. 20 | 90˚ | 65 g | 20 pcs | 200 pcs |
| 170-090-001 | 2000-MIGNON | Steel | Nickel | With Catch | Max. 20 | 90˚ | 69 g | 20 pcs | 200 pcs |


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

# Discover What Sugatsune's Website Has to Offer!

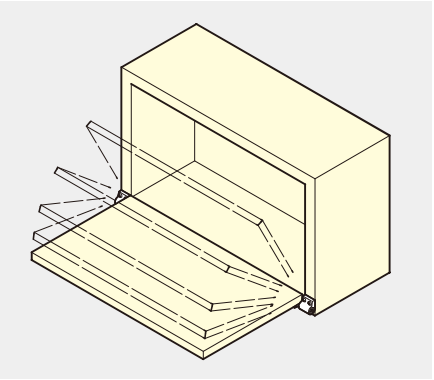
sugatsune global Search

## Our site offers...

- Keyword Search + Product Filters
- Installation Instructions
- New Product Information
- CAD Data (2D, 3D)
- Customer Solution Case Studies
- Product Videos
- Hardware Basics
- Selection Tools

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

# LAMP. DAMPER HINGE



- Hinge with soft-close damping mechanism controls the closing speed of the door and can reduce the door opening and closing shock.
- Wide range of soft-close damping hinges.

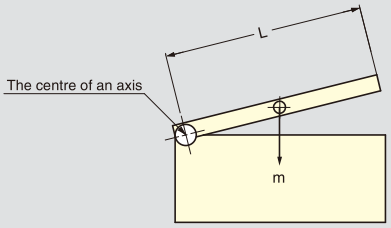
## Application

- Showcase, Piano, Dresser, Small lid in kitchen etc.

## How to Select

- Check the torque moment (T) by following the calculation of the figure on the right.
- Choose the hinge that the torque moment will be matched with torque moment (T).

**How to calculate the torque moment (in case the door has its centre of gravity positioned the centre of door).**



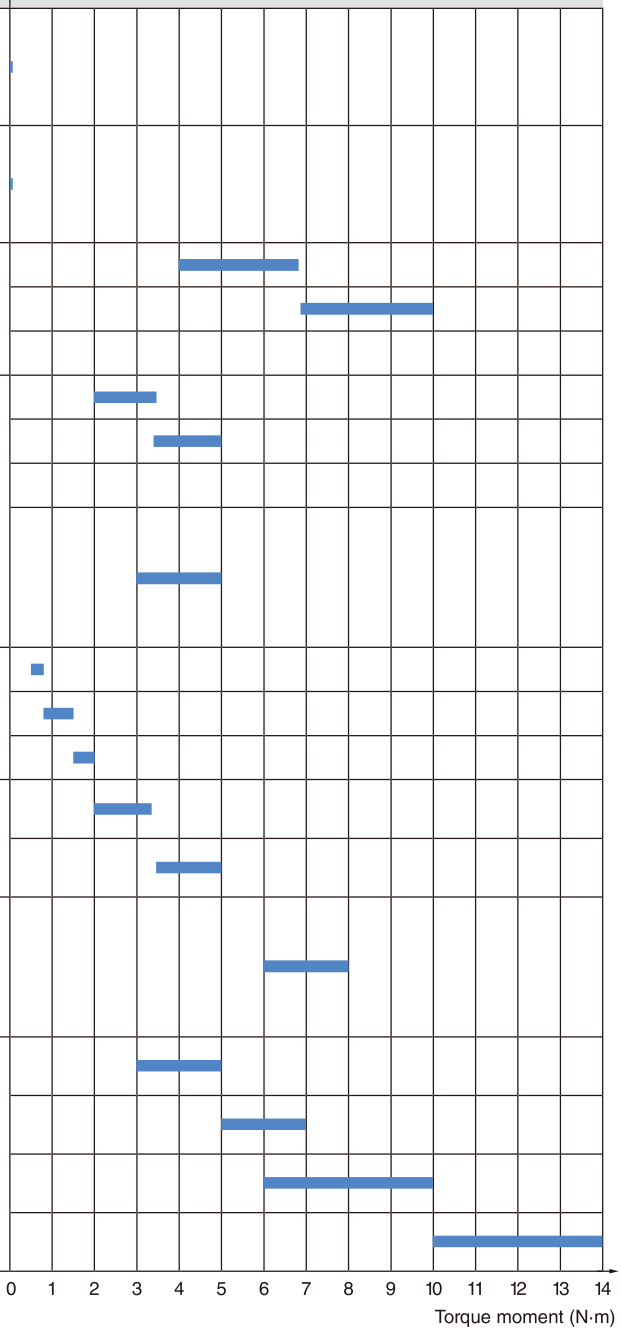

T: Door torque moment
m: Door weight (kg)
L: Length from the centre of an axis to door edge (m).

T (N·m)=m×9.8×L/2
T (kgf·cm)=m×L/2×100

SELECTION TOOL
MDT MOTION DESIGN TEC PRODUCTS

This tool can calculate flap/door moment,operating force and more.
Just input a few values,such as the weight and dimensions of the flap/door.

| Picture | Item Name | Torque Moment (Per pair) N·m | Torque Moment (Per pair) kgf·cm | Page |
|---|---|---|---|---|
|  | HG-JHS9-S(U)-BL(WT) | 0.027 - 0.043 | 0.28 - 0.44 | P.114 |
|  | HG-JHM9-S(U)-BL(WT) | 0.054 - 0.086 | 0.55 - 0.88 | P.115 |
|  | HG-JHW16S-34(G) | 4 - 6.8 | 40.8 - 69.4 | P.127 |
| | HG-JHW16S-50(G) | 6.8 - 10 | 69.4 - 102 | |
| | HG-JHW16S-00 | Without Soft-Close Damping Mechanism | | |
|  | HG-CSH63A(B)M | 2 - 3.4 | 20.4 - 34.6 | P.125 |
| | HG-CSH63A(B)H | 3.4 - 5 | 34.6 - 51 | |
| | HG-CSH63 | Without Soft-Close Damping Mechanism | | |
|  | HG-JH14-50 | 3 - 5 | 30.6 - 51 | |
|  | HG-JHM14-S-8BL(WT) | 0.5 - 0.8 | 5.09 - 8.15 | P.120 |
| | HG-JHM14-S-15BL(WT) | 0.8 - 1.5 | 8.15 - 15.29 | |
| | HG-JHM14-S-20BL(WT) | 1.5 - 2 | 15.29 - 20.39 | |
|  | HG-JHM16-34BL(WT) | 2 - 3.4 | 20.4 - 34.7 | P.122 |
| | HG-JHM16-50BL(WT) | 3.4 - 5 | 34.7 - 51 | |
|  | HG-JHM20-80BL(WT) | 6 - 8 | 61.2 - 81.6 | P.123 |
|  | HG-JH25 | 3 - 5 | 30.6 - 51 | P.128 |
| | HG-JH35 | 5 - 7 | 51 - 71.4 | |
|  | HG-JHW50(G) | 6 - 10 | 61.2 - 102 | |
| | HG-JHW70(G) | 10 - 14 | 102 - 142.8 | |

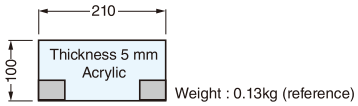
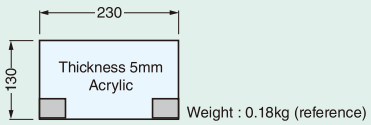
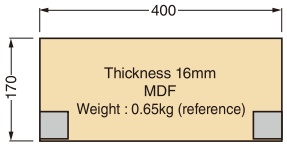
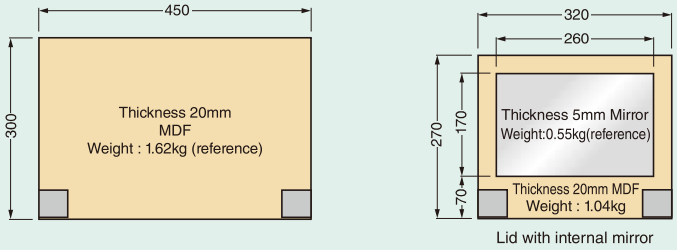
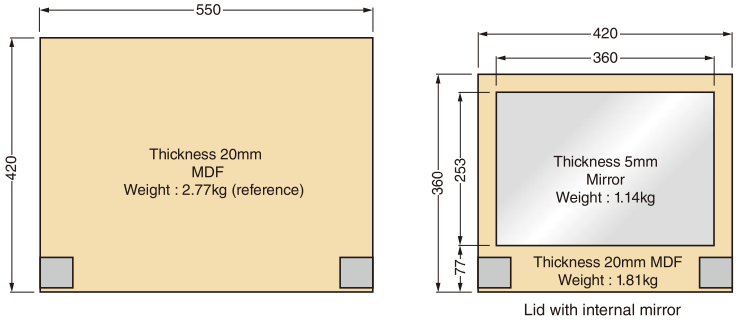
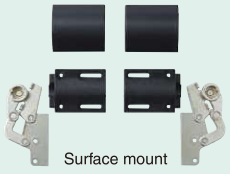
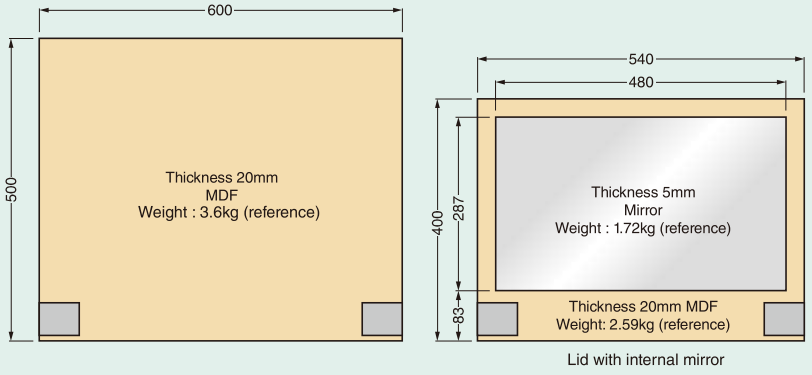





This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# 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)(P.115)<br> | 0.027 ～ 0.043 N・m<br>(0.275 ～ 0.44 kgf・cm) |  |
| HG-JHM9-S(U)(P.115)<br> | 0.054 ～ 0.086 N・m<br>(0.55 ～ 0.88 kgf・cm) |  |
| HG-JHM11(P.116)<br> | 0.05 ～ 0.4 N・m<br>(0.51 ～ 4.08 kgf・cm) |  |
| HG-JHM14(P.120)<br> | 0.5 ～ 2 N・m<br>(5.1 ～ 20.4 kgf・cm) |  |
| HG-JHM16(P.122)<br> | 2 ～ 5 N・m<br>(20.4 ～ 51 kgf・cm) |  |
| HG-JHM20(P.123)<br><br>HG-JHM20T(P.124)<br> | 6 ～ 8 N・m<br>(61.2 ～ 81.6 kgf・cm) |  |

## 【How to calculate the maximum torque moment】

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

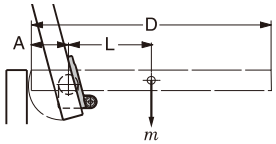
T = Maximum moment of the lid
$m$ = Lid weight [kg]
L = Distance from the rotation point to the centre of gravity of the lid (mm)
(In case the centre of gravity is situated in the middle of the lid)

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

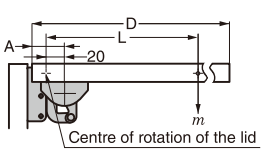
D = Lid length [mm]
A = Distance from the rotation point to the back edge of the lid [mm]
(For HG-JHM20T, A : Installation measurements of the bracket)

**Calculation example (for HG-JHM14)**

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




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




| Model | A |
|---|---|
| HG-JHM20T | 36～38 |

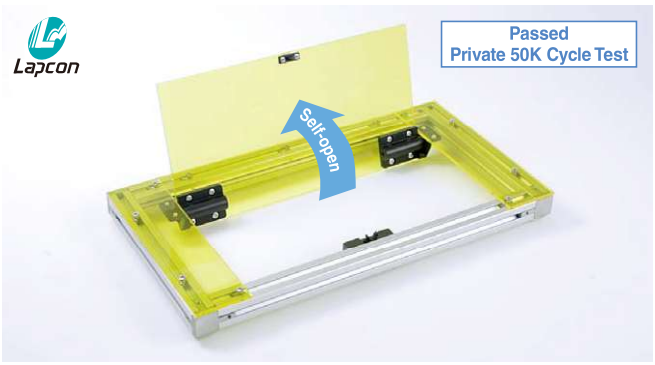
| Material | Specific gravity |
|---|---|
| Acrylic | 1.2 |
| MDF | 0.6 |
| Mirror | 2.5 |

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP SELF-OPEN MINI DAMPER HINGE HG-JHS9

HG-JHS9-S HG-JHS9-U




Application example with a push-latch.



HG-JHS9-S-BL (Side Mount)



HG-JHS9-U-WT (Under Mount)

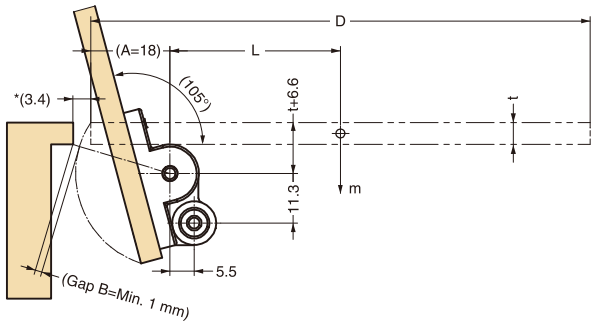
- Small damper hinge with self-opening function for top-opening lids.
- Using with a push-latch enables pop-up function of the lid.
- Inset use.
- Opening speed of the lid can easily be adjusted with a hex wrench.

## Maximum Lid Torque Calculation

Feature

- T=m×L×9.8

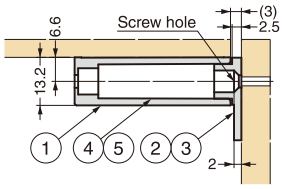
T : Maximum lid torque (cN·m)
m : Lid weight (kg)
L : Distance from rotation centre to lid centre of gravity (cm)
L = D/2-A
D : Lid length (cm)
A : Length of lid back from rotation centre (cm)
t : Door thickness

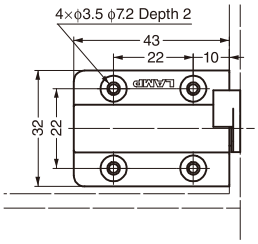


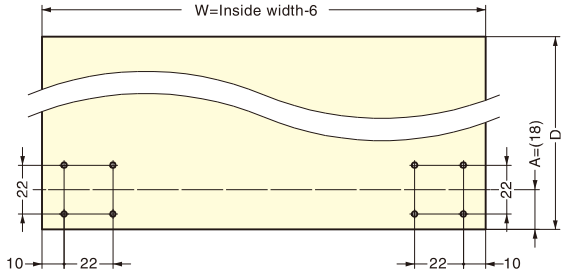

- Make sure that the gap B is Min. 1 mm.
- Please provide a stopper to hold the lid at the closed position.

*In case of t = 5 mm, B = 1 mm.

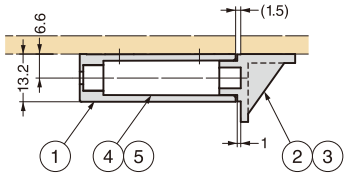
## Side Mount Type

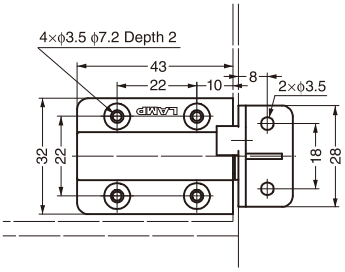


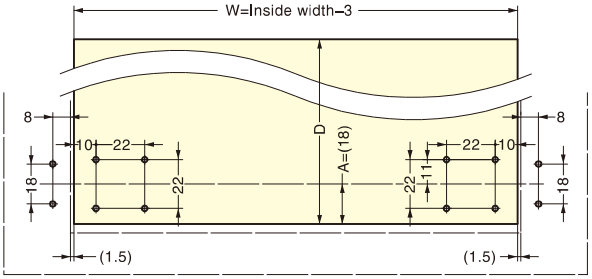




## Under Mount Type




| No. | Part Name | Material | Colour |
|---|---|---|---|
| ① | Body | Polyacetal (POM) | Black, White |
| ② | Bracket R | PBT | Black, White |
| ③ | Bracket L | PBT | Black, White |
| ④ | Damper Unit (R) | Polyacetal (POM) | – |
| ⑤ | Spring Unit (L) | Zinc Alloy (ZDC)/Stainless Steel | Chromate/– |

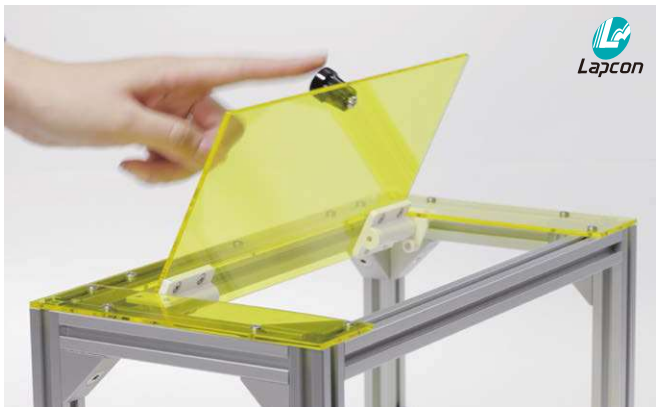
| Item Code | Item Name | Type | Colour | Torque Moment (Per pair) | | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|
| 170-028-293 | HG-JHS9-S-BL | Side Mount | Black | 2.7 - 4.3 cN·m | 0.28 - 0.44 kgf·cm | 39 g | 40 sets | 440 sets |
| 170-028-294 | HG-JHS9-S-WT | | White | 2.7 - 4.3 cN·m | 0.28 - 0.44 kgf·cm | 39 g | 40 sets | 440 sets |
| 170-028-295 | HG-JHS9-U-BL | Under Mount | Black | 2.7 - 4.3 cN·m | 0.28 - 0.44 kgf·cm | 42 g | 35 sets | 385 sets |
| 170-028-296 | HG-JHS9-U-WT | | White | 2.7 - 4.3 cN·m | 0.28 - 0.44 kgf·cm | 42 g | 35 sets | 385 sets |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP MINI DAMPER HINGE HG-JHM9

HG-JHM9-S HG-JHM9-U





HG-JHM9-S-BL (Side Mount)


HG-JHM9-U-WT (Under Mount)

- Hinge with built-in damper keeps lids from slamming shut.
- Ideal for small covers of desktop sockets.
- Sold in pairs.

## Recommended Screws

- Side Mount: Countersunk head screw M3, Binding head screw M3, Countersunk head tapping screw 3, Binding head tapping screw 3
- Under Mount: Binding head screw M3, Binding head tapping screw 3

## Maximum Lid Torque Calculation

- T=m×L×9.8

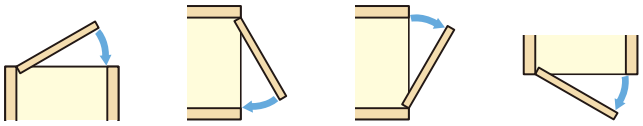
T : Maximum lid torque (cN·m)
m: Lid weight (kg)
L : Distance from rotation centre to lid centre of gravity (cm)
L = D/2-A
D : Lid length (cm)
A : Length of lid back from rotation centre (cm)
t : Door thickness

Feature

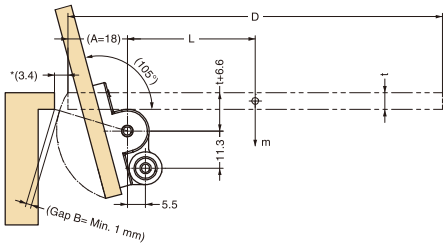
Selection Tool

Damper Hinge

## Damping Direction



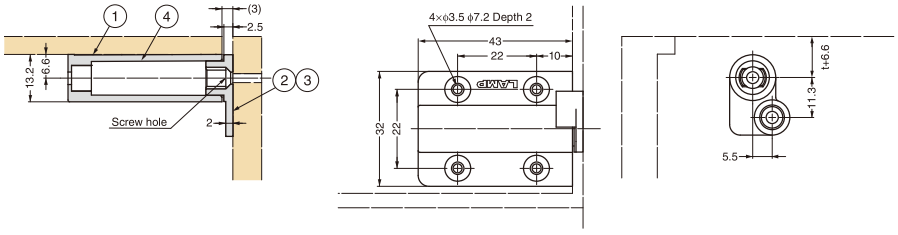
Top-opening Upward-opening Downward-opening Bottom-opening



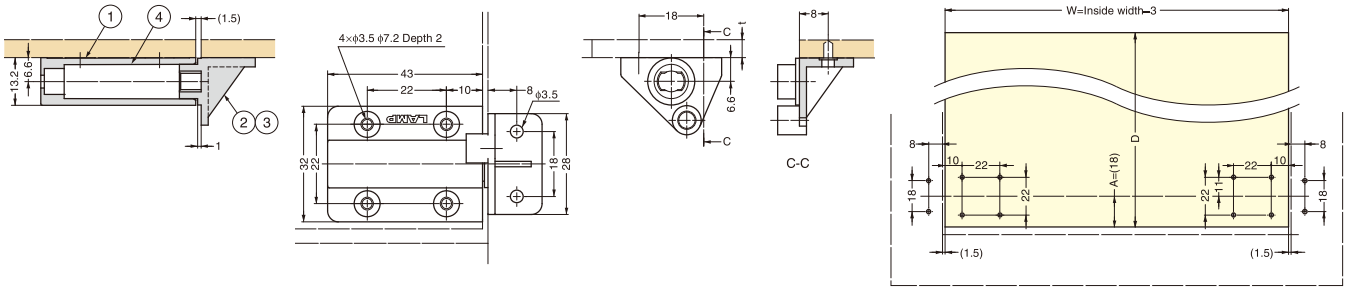

- Make sure that the gap B is Min. 1 mm.
- Please provide a stopper to hold the lid at the closed position.

*In case of t = 5 mm, B = 1 mm.

## Side Mount Type




## Under Mount Type




| No. | Part Name | Material | Colour |
|---|---|---|---|
| ① | Body | Polyacetal (POM) | Black, White |
| ② | Bracket R | PBT | Black, White |
| ③ | Bracket L | PBT | Black, White |
| ④ | Damper | Polyacetal (POM) | – |

| Item Code | Item Name | Type | Colour | Torque Moment (Per pair) | | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|
| 170-025-895 | HG-JHM9-S-BL | Side Mount | Black | 5.4 - 8.6 cN·m | 0.55 - 0.88 kgf·cm | 29 g | 40 sets | 440 sets |
| 170-025-896 | HG-JHM9-S-WT | | White | 5.4 - 8.6 cN·m | 0.55 - 0.88 kgf·cm | 29 g | 40 sets | 440 sets |
| 170-037-326 | HG-JHM9-S4-BL | | Black | 2.7 - 4.3 cN·m | 0.275 - 0.44 kgf·cm | 26 g | 40 sets | 440 sets |
| 170-037-327 | HG-JHM9-S4-WT | | White | 2.7 - 4.3 cN·m | 0.275 - 0.44 kgf·cm | 26 g | 40 sets | 440 sets |
| 170-025-897 | HG-JHM9-U-BL | Under Mount | Black | 5.4 - 8.6 cN·m | 0.55 - 0.88 kgf·cm | 31 g | 35 sets | 385 sets |
| 170-025-898 | HG-JHM9-U-WT | | White | 5.4 - 8.6 cN·m | 0.55 - 0.88 kgf·cm | 31 g | 35 sets | 385 sets |
| 170-037-328 | HG-JHM9-U4-BL | | Black | 2.7 - 4.3 cN·m | 0.275 - 0.44 kgf·cm | 28 g | 35 sets | 385 sets |
| 170-037-329 | HG-JHM9-U4-WT | | White | 2.7 - 4.3 cN·m | 0.275 - 0.44 kgf·cm | 28 g | 35 sets | 385 sets |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP DAMPER HINGE HG-JHM11

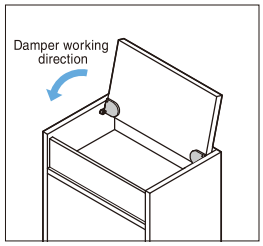
Latest Info

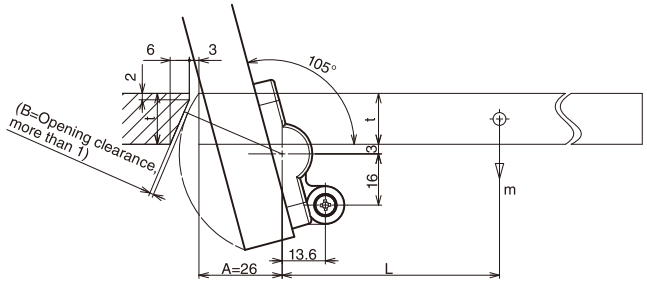




Black


White




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

- 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.

INSTRUCTION

## Specification
- Operation temperature: 0˚C - 40˚C

Selection Tool
Damper Hinge

## Application
- Small covers for machine or wire manager.

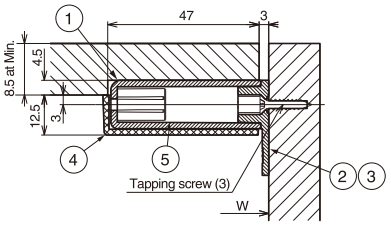
## Remarks
- Applicable moment of door: 0.05 - 0.4 N·m. Use a pair/door.
- When installing, ensure that both hinge shafts are levelled and alighted.
- Damper mechanism works when opening the lid by about 60˚ or more. Otherwise, damper may not work.
- Prepare stopper separately to keep the lid closed.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

## Sold Separately
- Bracket for Surface Mount UKZ11-BL

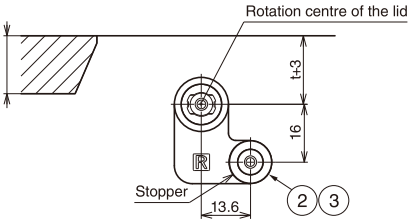
## Recommended Screw
- Countersunk tapping screw 3, bind tapping screw 4

## Installation

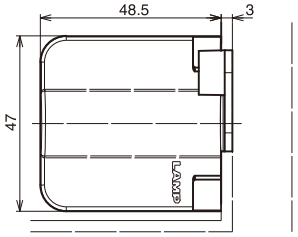
Cross-section View



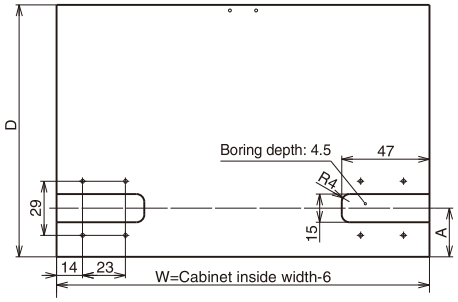

Installed Position of Bracket




Top View When closed door




Cut Out Dimensions



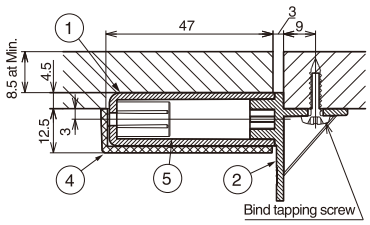

| No. | Part Name | Material | Colour |
|---|---|---|---|
| ① | Body | Polyacetal (POM) | Black |
| ② | Bracket for side mount R | PBT | |
| ③ | Bracket for side mount L | | |
| ④ | Cover | ABS | Black/White |
| ⑤ | Damper | – | – |


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

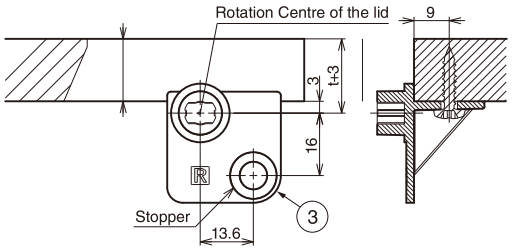
SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

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

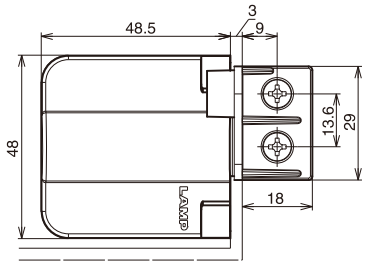
Cross-section View



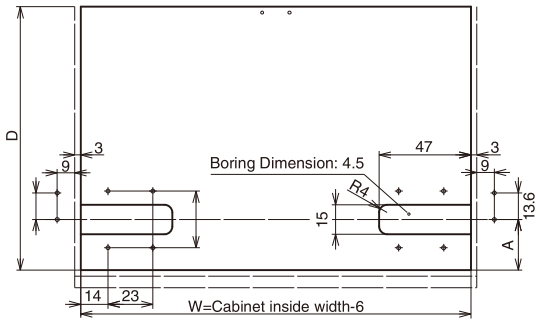

Installation Position of Bracket




Top View




Cut Out Dimensions




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

## Hinge

Sold by set.

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



## Bracket for Surface Mount

| Item Code | Item Name | Colour | Box (set) | Carton (set) |
|---|---|---|---|---|
| 170-041-218 | UKZ11-BL | Black | 50 | 500 |

This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

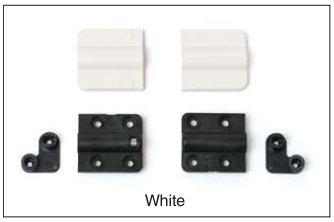
# LAMP SELF-OPEN DAMPER HINGE HG-JHS11 NEW

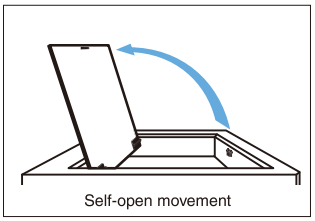
Latest Info





Black


White


Self-open movement

- 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.

INSTRUCTION

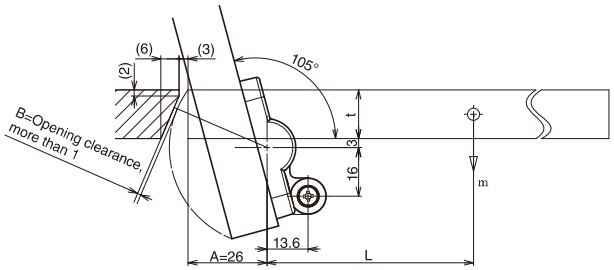
## Specification
- Operation temperature: 0 – 40℃

## 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 alighted.
- Please install with touch latch separately to keep the door closed.

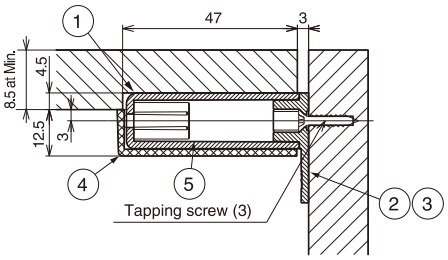
## Sold Separately
- Bracket for HG-JHS11 Surface Mount UKZ11-BL

## Recommended Screws
- Countersunk tapping screw3, bind tapping screw 4

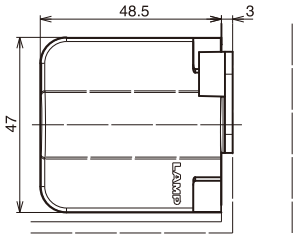


*t=16. Prepare more than 1 for Gap B of Opening clearance.

## Installation
Cross-section Drawing




## Top View
When closed door




## 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)

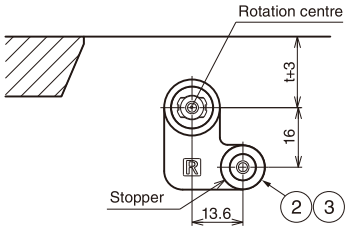
$L = \frac{D}{2} - A$ (Formula for assuming that the centre of gravity is in the centre of door)

D:Door length (mm)
A:Bracket installation dimension (mm)

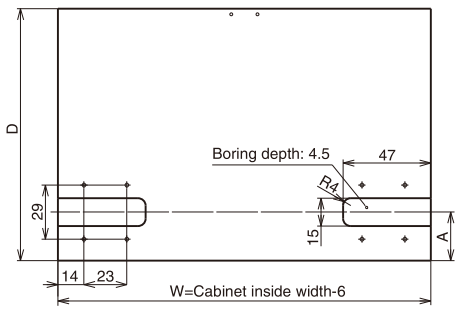
[Example] D=180 mm、A=26 mm、m=0.63kg

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

## 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 | | |
| ④ | Cover | ABS | Black/White |
| ⑤ | Damper | – | – |

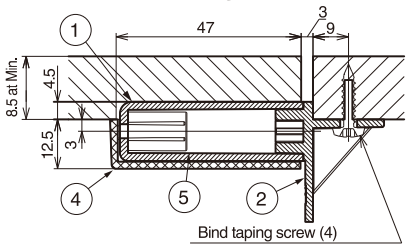

This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

## Surface Mount Type

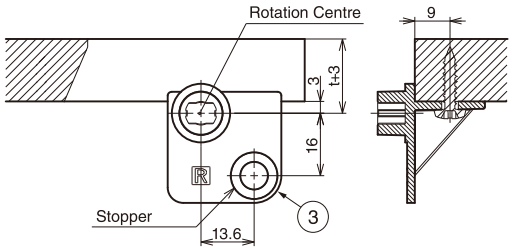
**(Installed with Bracket for Surface Mount UKZ11-BL)**

### Cross-section Drawing

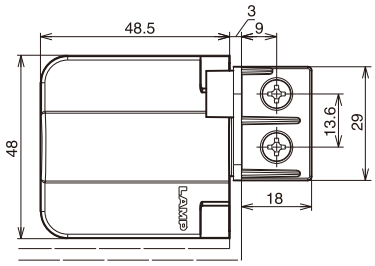



### Installation

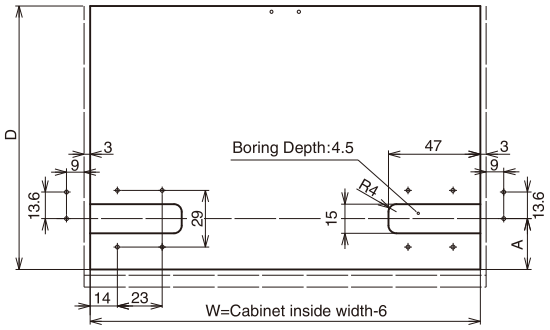
Bracket




### Top View




### Cut Out Dimensions

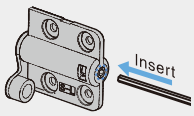



| No. | Part Name | Material | Colour |
|---|---|---|---|
| ① | Body | Polyacetal (POM) | Black |
| ② | Bracket for side mount R | PBT | |
| ③ | Bracket for side mount L | | |
| ④ | Cover | ABS | Black / White |
| ⑤ | Damper | – | – |

## Adjustment of Lid Opening Speed

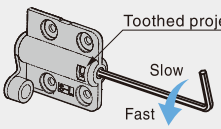
**When increasing lid opening speed**

**1**



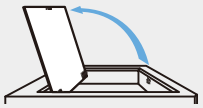

Insert a hex key (size 3) into the hole of spring unit (L side)

**2**




Push in the hex key *until toothed projection is disengaged, while rotating counter clockwise by 30°, and then pull it out.

**3**



Close the lid, and check if the lid can be opened smoothly. Repeat steps 1 - 3 (maximum 5 times) if the lid opening speed is still slow.

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

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

Loosen the force following the hex key rotating clockwise.

## Body

Sold by set.

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



## Bracket for Surface Mount

Sold by set.

| Item Code | Item Name | Colour | Weight | Box | Carton |
|---|---|---|---|---|---|
| 170-041-218 | UKZ11-BL | Black | 12 g | 50 set | 500 set |

This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP DAMPER HINGE HG-JHM14

Latest Info

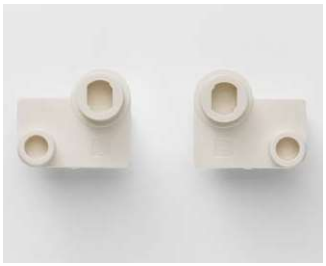












- Hinge with built-in damper to keep lid from slamming shut.
- Mortise and side mount type.
- Screws are concealed with the cover.
- Bracket for under mount also available (with optional parts).
- Ideal for lid of dressers and office tables.
- With marking colour on the edge to recognize the model.

### Remarks

- Sold in pairs.

Example

Selection Tool

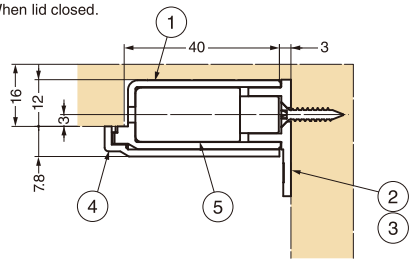
Damper Hinge

### Criterion of Door Weight

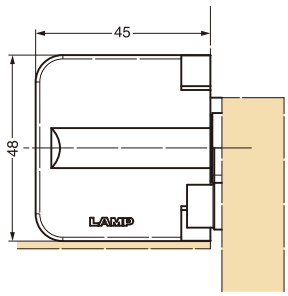
| Lid Length D | Lid Weight *m* | | |
|---|---|---|---|
| | HG-JHM14-S-8 | HG-JHM14-S-15 | HG-JHM14-S-20 |
| 150 | 1.04 - 1.66 kg | 1.66 - 3.12 kg | 3.12 - 4.16 kg |
| 200 | 0.69 - 1.10 kg | 1.10 - 2.07 kg | 2.07 - 2.76 kg |
| 250 | 0.51 - 0.82 kg | 0.82 - 1.54 kg | 1.54 - 2.06 kg |
| 300 | 0.41 - 0.66 kg | 0.66 - 1.23 kg | 1.23 - 1.64 kg |
| 350 | 0.34 - 0.55 kg | 0.55 - 1.03 kg | 1.03 - 1.37 kg |

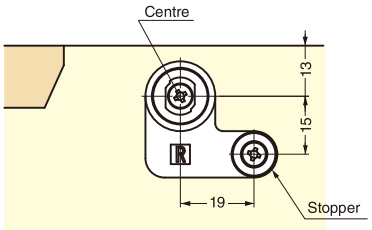
### Side Mount Type

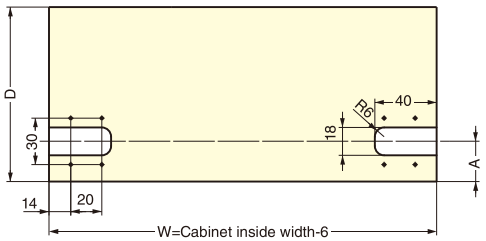
When lid closed.




When lid opened 90 degrees.




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

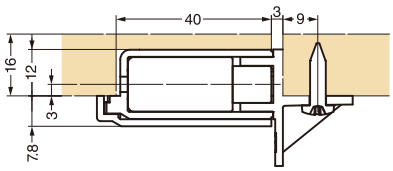
| Item Code | Item Name | Colour | Torque Moment (Per pair) | | Marking Colour | Weight |
|---|---|---|---|---|---|---|
| 170-031-930 | HG-JHM14-S-8BL | Black | 0.5 - 0.8 N·m | 5.09 - 8.15 kgf·cm | Purple | 43 g |
| 170-031-931 | HG-JHM14-S-8WT | White | | | | 43 g |
| 170-031-932 | HG-JHM14-S-15BL | Black | 0.8 - 1.5 N·m | 8.15 - 15.29 kgf·cm | Blue | 43 g |
| 170-031-933 | HG-JHM14-S-15WT | White | | | | 43 g |
| 170-031-934 | HG-JHM14-S-20BL | Black | 1.5 - 2.0 N·m | 15.29 - 20.39 kgf·cm | Green | 43 g |
| 170-031-935 | HG-JHM14-S-20WT | White | | | | 43 g |

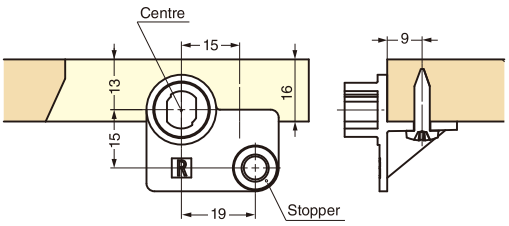


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

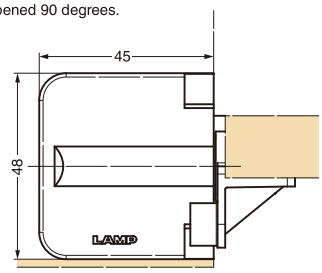
## Under Mount Type (With Optional Parts)

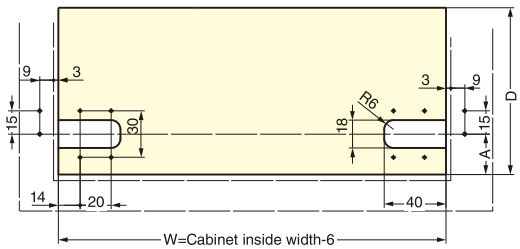
When lid closed.




When lid opened 90 degrees.

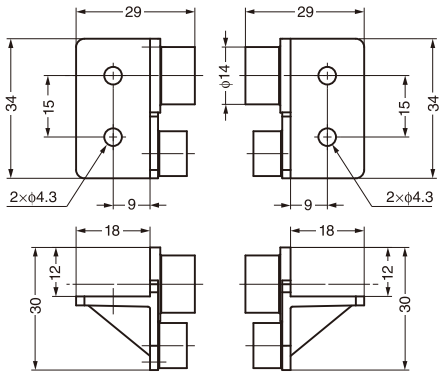



## Bracket for Under Mount (Optional Parts)

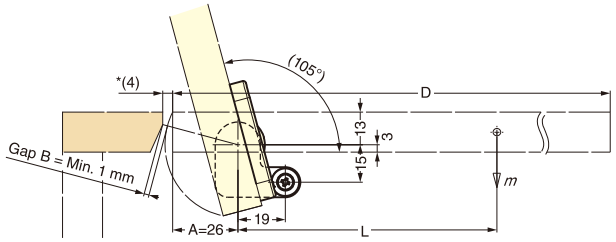







Bracket for under mount L　　Bracket for under mount R

## Torque Calculation




- Make sure that the gap B is Min. 1 mm.
- Provide a stopper to hold the lid at the closed position.

*In case of t = 16 mm, B = 1 mm.

- T=*m* × 9.8 × L
  - T : Maximum lid torque (N·m)
  - *m*: Lid weight (kg)
  - L : Distance from rotation centre to lid centre of gravity (m)
    L=D/2-A
  - D : Lid length (m)
  - A : Length of lid back from rotation centre (m)

| Item Code | Item Name | Material | Colour |
|---|---|---|---|
| 170-031-936 | UKZ14-BL | PBT | Black |
| 170-031-937 | UKZ14-WT | | White |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP DAMPER HINGE HG-JHM16

Latest Info





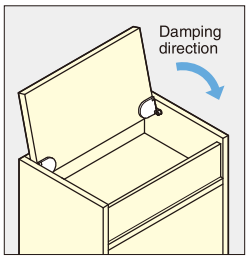

- Hinge with built-in damper to keep lid from slamming shut.
- Mortise mount type.
- With marking colour on the edge to recognize the model.

SCREW

**Remarks**
- Sold in pairs.

**Parts Included**
- Countersunk head tapping screw 4×20

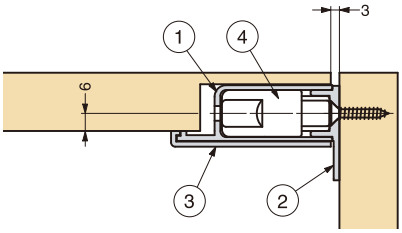
Selection Tool
Damper Hinge

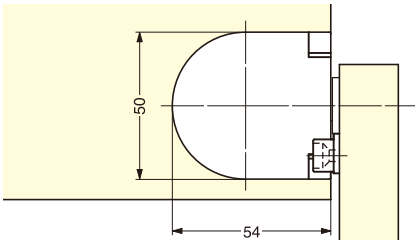




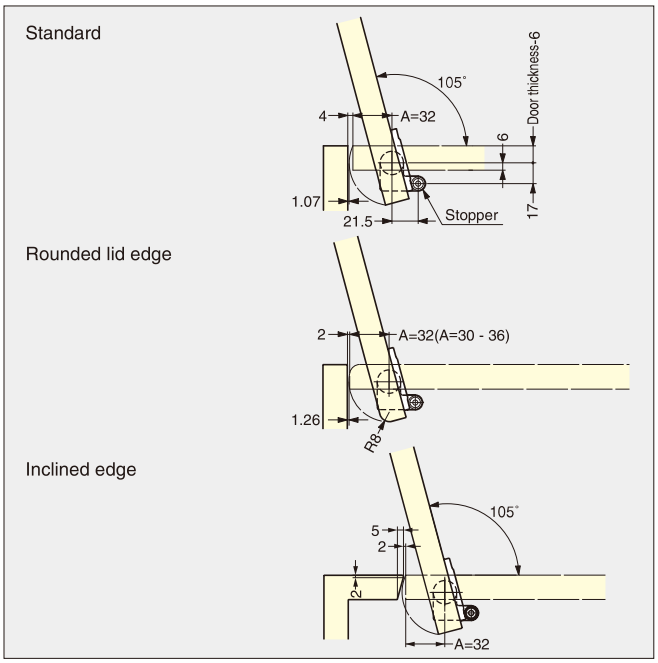
W/black cover


W/white cover




## Installation




## Criterion of Door Weight

| Door Height D | Door Weight m | |
|---|---|---|
| | HG-JHM16-34 | HG-JHM16-50 |
| 250 | 2.19 - 3.73 kg | 3.73 - 5.48 kg |
| 300 | 1.73 - 2.94 kg | 2.94 - 4.32 kg |
| 350 | 1.43 - 2.42 kg | 2.42 - 3.57 kg |
| 400 | 1.21 - 2.06 kg | 2.06 - 3.03 kg |
| 450 | 1.06 - 1.80 kg | 1.80 - 2.64 kg |

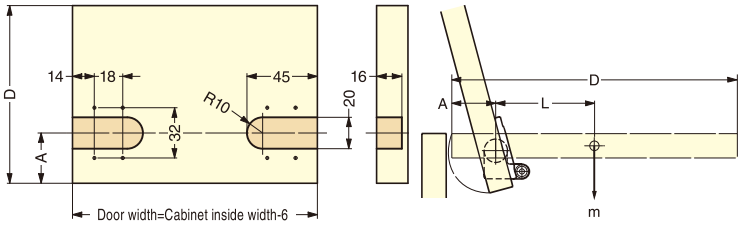
## Calculation of Torque Moment

T = m × 9.80665 × L
T : Door torque moment (N·m)
m : Door weight (kg)
L : Length from the centre of an axis to centre of gravity (mm)

$L = \frac{D}{2} - A$
D: Door height (mm)
A: Length from centre of axis to back edge of the door (mm)

(Example) D=430 mm, A=32 mm, m=2.78 kg
$T = 2.78 \times 9.80665 \times (\frac{430}{2} - 32)$ =4990 (N·mm)
=5.0 (N·m)

## Cut Out Dimensions




| No. | Part Name | Material | Finish/Colour |
|---|---|---|---|
| ① | Body | Polyacetal (POM) | Black |
| ② | Bracket | Aluminium Alloy | Black |
| ③ | Cover | ABS | Black/White |
| ④ | Damper | – | – |

| Item Code | Item Name | Colour | Torque Moment (Per pair) | | Marking Colour | Weight |
|---|---|---|---|---|---|---|
| 170-092-221 | HG-JHM16-34BL | Black | 2 - 3.4 N·m | 20.4 - 34.7 kgf·cm | Green | 126 g |
| 170-092-222 | HG-JHM16-34WT | White | 2 - 3.4 N·m | 20.4 - 34.7 kgf·cm | Green | 126 g |
| 170-092-223 | HG-JHM16-50BL | Black | 3.4 - 5 N·m | 34.7 - 51 kgf·cm | Black | 126 g |
| 170-092-224 | HG-JHM16-50WT | White | 3.4 - 5 N·m | 34.7 - 51 kgf·cm | Black | 126 g |


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP DAMPER HINGE HG-JHM20

Latest Info





W/black cover



W/white cover

- Hinge with built-in damper to keep lid from slamming shut.
- Mortise mount type.
- With marking colour on the edge to recognize the model.

SCREW

## Remarks

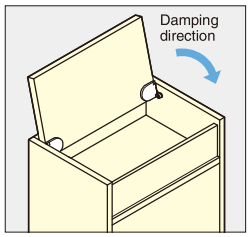
- Sold in pairs.

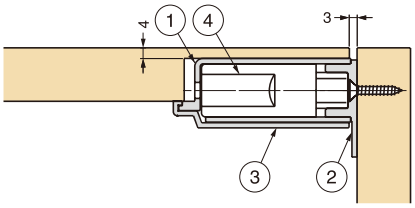
## Parts Included

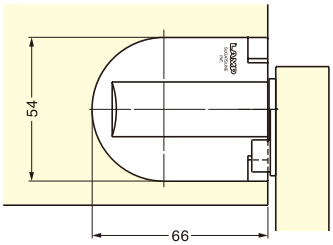
- Countersunk head tapping screw 4×20

Selection Tool

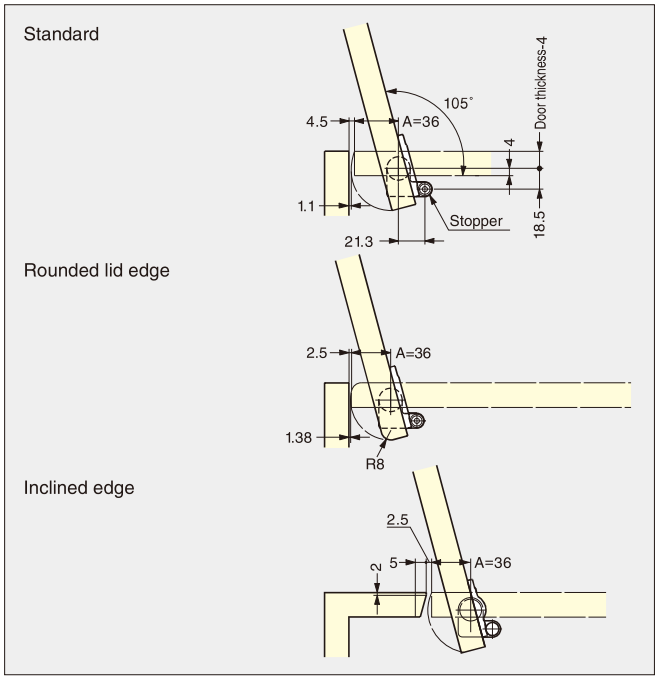
Damper Hinge




## Installation




## Criterion of Door Weight

| Door Height D | Door Weight m |
|---|---|
| 250 | 6.58 - 8.77 kg |
| 300 | 5.18 - 6.91 kg |
| 350 | 4.28 - 5.70 kg |
| 400 | 3.64 - 4.86 kg |
| 450 | 3.17 - 4.23 kg |

## Calculation of Torque Moment

T = m × 9.80665 × L

T : Door torque moment (N·m)

m: Door weight (kg)

L : Length from the centre of an axis to centre of gravity (mm)

$$L = \frac{D}{2} - A$$

D: Door Height (mm)

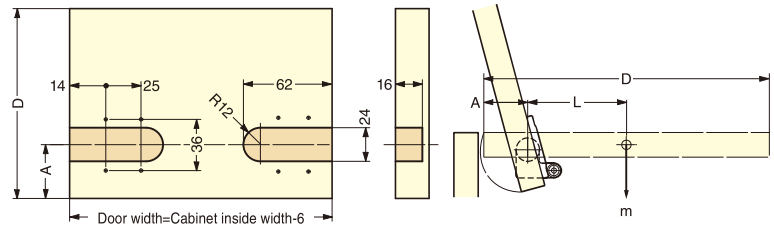
A: Length from centre of axis to back edge of the door (mm)

(Example) D=450 mm, A=36 mm, m=4.3 kg

$T = 4.3 \times 9.80665 \times \left(\frac{450}{2} - 36\right)$ =7970 (N·mm)

=8.0 (N·m)

## Cut Out Dimensions




| No. | Part Name | Material | Finish/Colour |
|---|---|---|---|
| ① | Body | Polyacetal (POM) | Black |
| ② | Bracket | Aluminium Alloy | Black |
| ③ | Cover | ABS | Black/White |
| ④ | Damper | – | – |

| Item Code | Item Name | Colour | Torque Moment (Per pair) | | Marking Colour | Weight |
|---|---|---|---|---|---|---|
| 170-012-854 | HG-JHM20-80BL | Black | 6 - 8 N·m | 61.2 - 81.6 kgf·cm | Yellow | 206 g |
| 170-012-855 | HG-JHM20-80WT | White | 6 - 8 N·m | 61.2 - 81.6 kgf·cm | Yellow | 206 g |

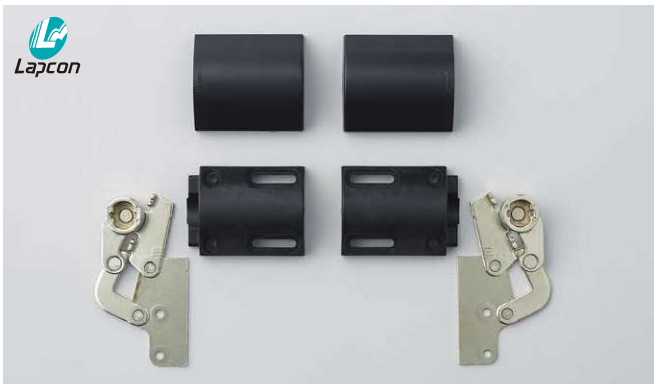


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP DAMPER HINGE (SURFACE MOUNT TYPE) HG-JHM20T

Latest Info





W/ black cover

Sold in pairs.



W/ white cover



Assembly example

- Newly-added surface mount type: Easy to install without the need of recessing.
- Hinge with built-in damper UDH.
- Soft-close and smooth-open features.
- For Inset Lid.
- Cover hides mounting screws.

INSTRUCTION

Selection Tool

Damper Hinge

## Remarks

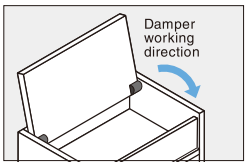
- Sold in pairs.
- Below torque range is the value when using a pair of hinges (left and right) per lid.
- When installing, ensure that both hinge shafts are levelled and aligned.
- Damper mechanism works when opening the top-opening lid by about 60° or more. Otherwise, the damper may not work.

## Parts Included

- Hinge plate mounting screws: binding head tapping screw 3.5 x 14 (nickel) 4 pcs
- Bracket mounting screws: binding head tapping screw 3.5 x 20 (nickel) 8 pcs

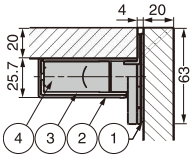


Chrome finished cover

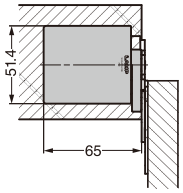



## Front View

Top-opening lid closed



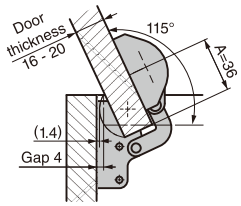

Top-opening lid opened by 90°



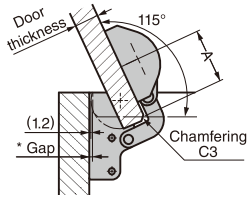

* Right-handed type shown. Left-handed type is symmetrical.

## Installation

Standard

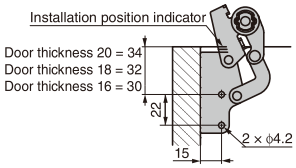



Chamfered lid edge

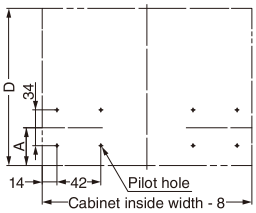



* Gap is decreased compared with standard when chamfered.

## Hinge Plate Installation Position




## Cut Out Dimensions

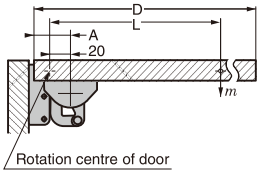



| Door thickness | Standard | | Chamfered Lid Edge | |
|---|---|---|---|---|
| | Size A | Gap | Size A | Gap |
| 16 | 36 | 4 | 38 | 2 |
| 18 | | | 37 | 3 |
| 20 | | | – | – |

## Door Weight Selection

| Door Length (D) | Door Weight (*m*) |
|---|---|
| 250 | 5.61 - 7.48 kg |
| 300 | 4.57 - 6.09 kg |
| 350 | 3.85 - 5.13 kg |
| 400 | 3.33 - 4.43 kg |
| 450 | 2.93 - 3.90 kg |

### Calculation of maximum door moment (for homogeneous material)




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

T : Max. door torque (N·m)
*m* : Door weight (kg)
L : Distance from rotation centre to door centre of gravity (mm)

$$L = \frac{D}{2} - A + 20\ *$$

D : Door length (mm)
A : Bracket installation dimension (mm) (The range of A is about 36mm - 38mm)

* (Formula for assuming that the centre of gravity is in the centre of door)

* For heterogeneous door (e.g., attached with a mirror), please refer to our website > Selection Tool Sasuga-kun > "What is the centre of gravity? What is moment?" page.

| No. | Part Name | Material | Finish/Colour |
|---|---|---|---|
| ① | Hinge Plate | Steel (SPCC)/Zinc Alloy (ZDC) | Nickel |
| ② | Bracket | POM | Black |
| ③ | Cover | ABS | Black/White/Chrome |
| ④ | Damper | – | Bearing Right-handed: Grey, Left-handed: Natural |

| Item Code | Item Name | Finish/Colour | Torque N·m/pair | Torque kgf·cm/pair | Marking Colour (Base Side) | Weight (g) | Box (pairs) | Carton (pairs) |
|---|---|---|---|---|---|---|---|---|
| 170-036-328 | HG-JHM20T-80BL | Black | 6 - 8 | 61.2 - 81.6 | Yellow | – | – | – |
| 170-036-329 | HG-JHM20T-80WT | White | | | | – | – | – |
| 170-036-839 | HG-JHM20T-80CR | Chrome | | | | – | – | – |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

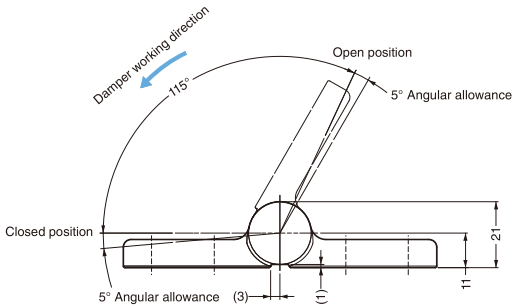
# LAMP STAINLESS STEEL DAMPER HINGE HG-JH14-50

Latest Info



Selection Tool
Damper Hinge

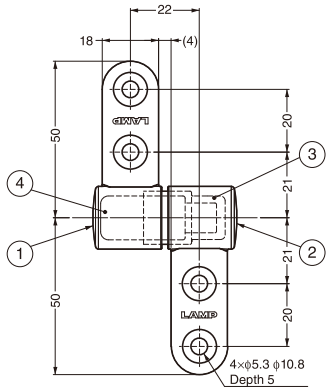
- Surface mount type.
- Light and smooth opening and soft closing.
- Torque moment 1.6 - 3.0 N·m type can also be produced.
- Sold in pairs.



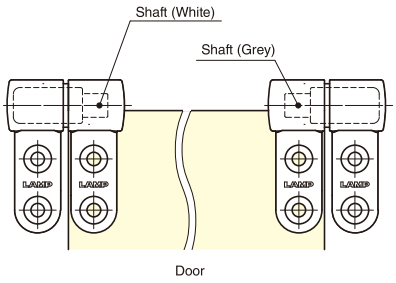

SUS

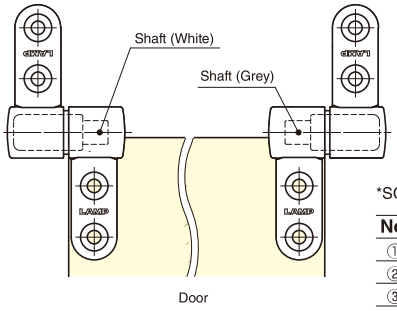
## Remarks

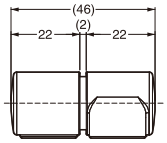
- Door stopper is necessary for soft-close damping angle (0 - 115 degree or less).




## Installation




Left-hand damper shown.

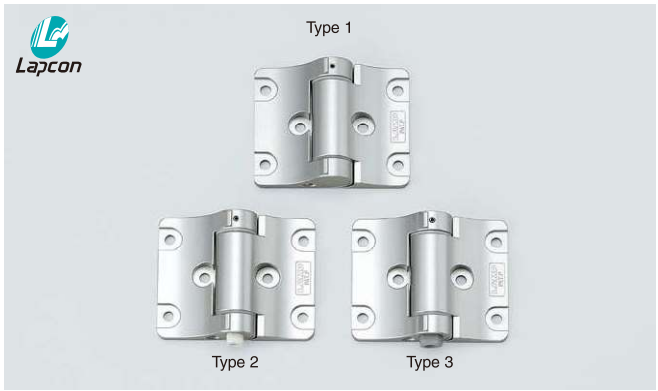
*SCS13 is equivalent of SUS304.

| No. | Part Name | Material | Finish/Colour |
|---|---|---|---|
| ① | Bracket (L) | Stainless Steel (SCS13) | Mirror |
| ② | Bracket (R) | Stainless Steel (SCS13) | Mirror |
| ③ | Bush | Polyacetal (POM) | White |
| ④ | Damper | Stainless Steel/PBT Resin | – |

| Item Code | Item Name | Torque Moment (Per pair) | | Weight | Box | Carton |
|---|---|---|---|---|---|---|
| 170-021-173 | HG-JH14-50 | 3 - 5 N·m | 30.6 - 51 kgf·cm | 275 g/set | 1 set | 48 sets |

# LAMP DETENT HINGE (WITH/WITHOUT DAMPER) HG-CSH63

Latest Info

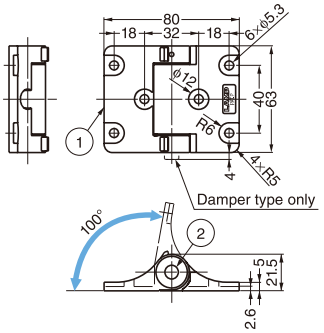



- Detent hinge with built-in damper as an option.
- Detent will hold lid in open/closed position without secondary support, and optional damper will provide soft-closing.
- Operating angle: 100°. (Detent at both 0° and 100°)

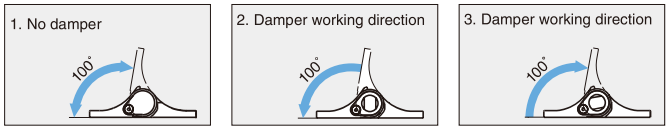
## Remarks

- Recommended for use in pairs.

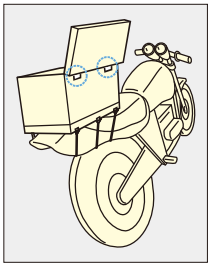
Selection Tool
Damper Hinge



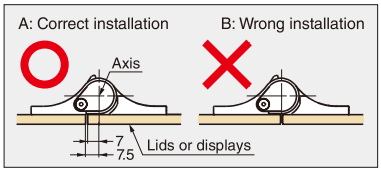

## Types




## Application Example



## Installation




| No. | Part Name | Material | Finish |
|---|---|---|---|
| ① | Body | Aluminium Alloy | Silver |
| ② | Shaft·Spring | Stainless Steel (SUS304) | – |

| Item Code | Item Name | Type | Damping Direction | Torque Moment (Per piece) | | Retaining Force Torque Moment | | Opening Angle | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 170-090-044 | HG-CSH63 | 1 | With Detent Only | With Detent Only | With Detent Only | 0.98 N·m | 10 kgf·cm | 100° | 115 g | 10 pcs | 120 pcs |
| 170-090-109 | HG-CSH63AM | 2 | Counter Clockwise | 1 - 1.7 N·m | 10.2 - 17.3 kgf·cm | 0.98 N·m | 10 kgf·cm | 100° | 104 g | 10 pcs | 120 pcs |
| 170-090-108 | HG-CSH63AH | 2 | Counter Clockwise | 1.7 - 2.5 N·m | 17.3 - 25.5 kgf·cm | 0.98 N·m | 10 kgf·cm | 100° | 104 g | 10 pcs | 120 pcs |
| 170-090-111 | HG-CSH63BM | 3 | Clockwise | 1 - 1.7 N·m | 10.2 - 17.3 kgf·cm | 0.98 N·m | 10 kgf·cm | 100° | 117 g | 10 pcs | 120 pcs |
| 170-090-110 | HG-CSH63BH | 3 | Clockwise | 1.7 - 2.5 N·m | 17.3 - 25.5 kgf·cm | 0.98 N·m | 10 kgf·cm | 100° | 117 g | 10 pcs | 120 pcs |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# DISK DAMPER UDD

Latest Info




- Designed to be installed at the centre axis of rotating flap doors.
- Simple design integrates well with frames for a sleek look.
- 3 different torque settings to accommodate a wide range of flap doors.
- Great solution for food showcases and acrylic displays.
- When combined with the UDD-BKT, it can be used for upward-opening doors.

## Sold Separately

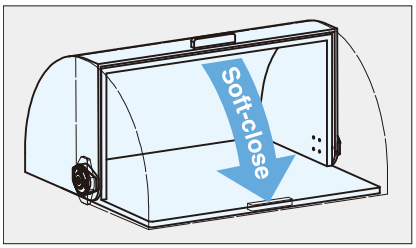
- Bracket UDD-BKT (P.127)

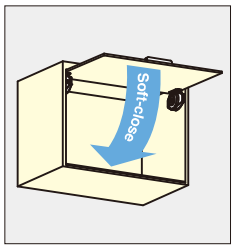
Feature

Selection Tool
Damper Hinge

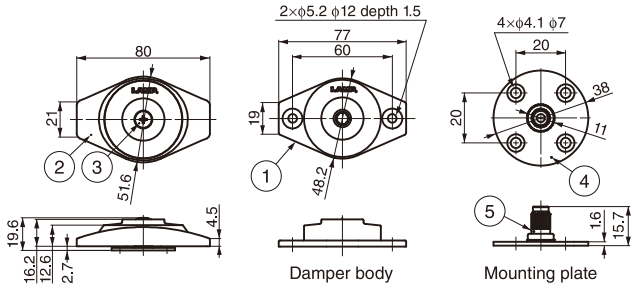
SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

## Application Example



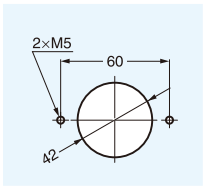

With the bracket UDD-BKT



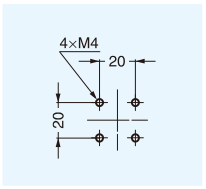

Damper body

Mounting plate

## Cut Out Dimensions



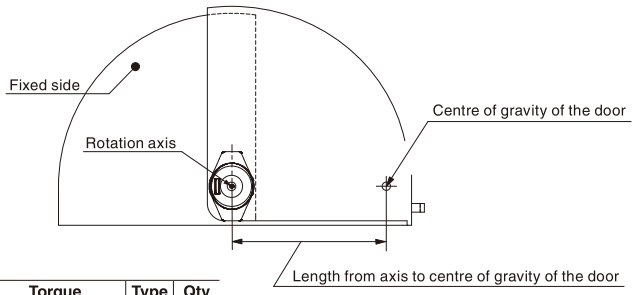

Door side




Fixed side

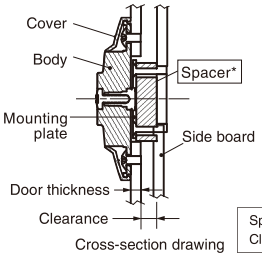
## Torque Calculation

Torque =
Door weight (kg) × 9.8 × Length from axis to centre of gravity of the door

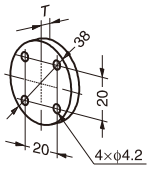



| Torque | Type | Qty |
|---|---|---|
| 1.0 - 2.0 N·m | S | 2 pcs |
| 2.0 - 4.0 N·m | M | 2 pcs |
| 4.0 - 6.0 N·m | H | 2 pcs |

## Spacer



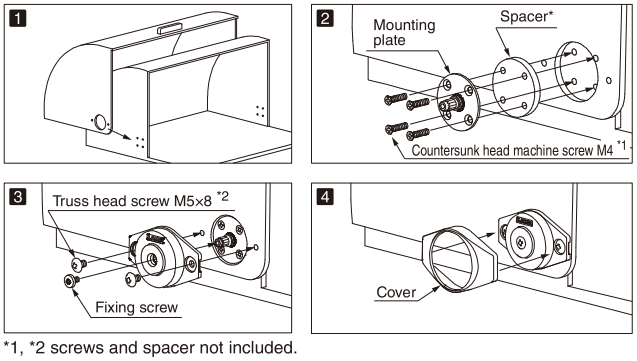

Cross-section drawing




Spacer thickness (T) =
Clearance + Door thickness - 2.7 mm

*Spacer is not included.

## How to Install




*1, *2 screws and spacer not included.

| Item Code | Item Name | Damping Direction | Torque Moment/piece | Weight | Box |
|---|---|---|---|---|---|
| 180-022-306 | UDD-S-L | Anticlockwise | 0.5 - 1.0 N·m (5.1 - 10.2 kgf·cm) | 99 g | 20 pcs |
| 180-022-307 | UDD-S-R | Clockwise | | 99 g | 20 pcs |
| 180-022-308 | UDD-M-L | Anticlockwise | 1.0 - 2.0 N·m (10.2 - 20.4 kgf·cm) | 99 g | 20 pcs |
| 180-022-309 | UDD-M-R | Clockwise | | 99 g | 20 pcs |
| 180-022-310 | UDD-H-L | Anticlockwise | 2.0 - 3.0 N·m (20.4 - 30.6 kgf·cm) | 99 g | 20 pcs |
| 180-022-311 | UDD-H-R | Clockwise | | 99 g | 20 pcs |

| No. | Part Name | Material | Finish/Colour |
|---|---|---|---|
| ① | Damper Body | ABS | Light Grey |
| ② | Cover | ABS | Light Grey |
| ③ | Screw | Steel | Nickel |
| ④ | Mounting Plate | Steel | Nickel |
| ⑤ | Shaft | Steel | Zinc Chromate |



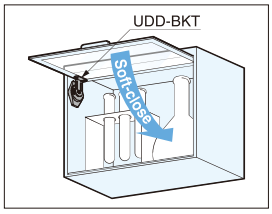
This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# BRACKET FOR DISK DAMPER UDD UDD-BKT

Latest Info



## Application Example




- Bracket of disk damper UDD (P.126) for upward-opening doors.

SUS

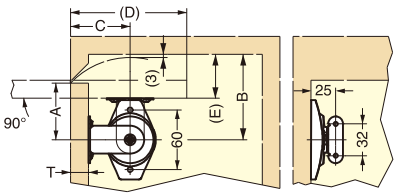
### Remarks

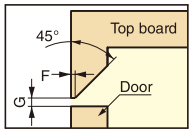
- Catch is needed for holding door in open position.
- SDS-50G (P.276) face plate available for glass/acrylic doors.

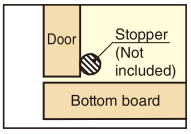
| No. | Door Thickness T | A | B | C | D | E |
|---|---|---|---|---|---|---|
| ① | 5 | 46 | 70 | 49 | (95) | (26) |
| ② | 15 | 54 | 82 | 57 | (111) | (40) |
| ③ | 18 | 57 | 86 | 60 | (117) | (44) |

*① is for glass/acrylic door with SDS-50G.
②, ③ is for wooden door.

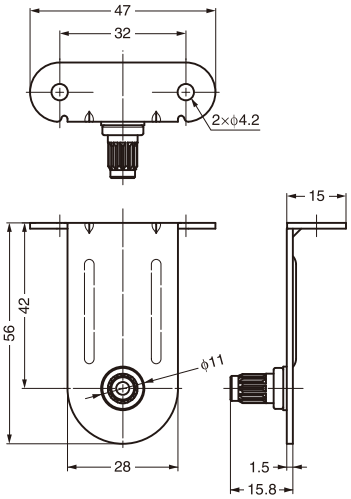
## Cut Out Dimensions




| F | G |
|---|---|
| 1 | 3 |
| 2 | 4 |
| 3 | 5 |




| Item Code | Item Name | Material | Finish | Weight | Carton |
|---|---|---|---|---|---|
| 180-026-764 | UDD-BKT | Stainless Steel (SUS304) | Plain | 33 g | 60 pcs |

# LAMP DAMPER HINGE HG-JHW16S

Latest Info

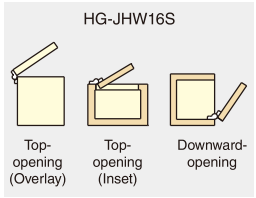


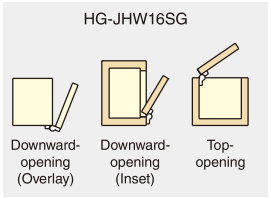

- Available with 3 different damping torques.
- Damping in opening or closing direction.
- Opening and damping angle: 0˚- 120˚.

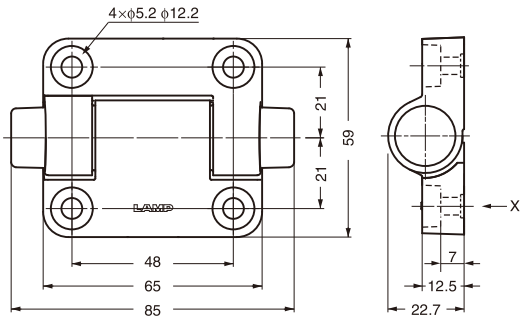
Feature | Selection Tool
Damper Hinge

### Recommended Screws

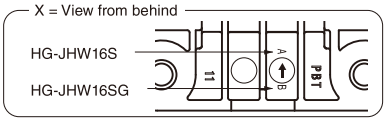
- M5 screw

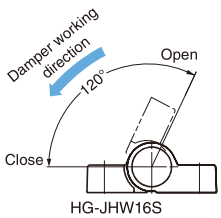


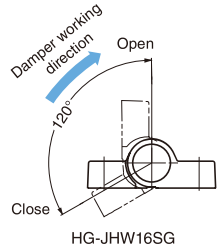




The model types can be distinguished by the mark on the back side.




*These pictures of opening and closing are of a surface mount installation.

| Item Code | Item Name | Damper Working Direction (When Surface Mount) | Torque Moment (Per piece) | | Weight | Box |
|---|---|---|---|---|---|---|
| 170-027-420 | HG-JHW16S-34 | For Closing | 2.0 - 3.4 N·m | 20.4 - 34.7 kgf·cm | 83 g | 30 pcs |
| 170-027-421 | HG-JHW16S-50 | | 3.4 - 5.0 N·m | 34.7 - 51.0 kgf·cm | 83 g | 30 pcs |
| 170-027-422 | HG-JHW16S-34G | For Opening | 2.0 - 3.4 N·m | 20.4 - 34.7 kgf·cm | 83 g | 30 pcs |
| 170-027-423 | HG-JHW16S-50G | | 3.4 - 5.0 N·m | 34.7 - 51.0 kgf·cm | 83 g | 30 pcs |
| 170-027-419 | HG-JHW16S-00 | Without Damper | - | - | 52 g | 30 pcs |

| Material | Finish/Colour |
|---|---|
| PBT | Dark Grey |

This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

# LAMP DAMPER HINGE HG-JH

Latest Info

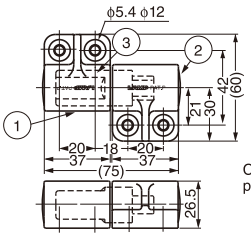



- Soft-close damper keeps lid from slamming shut.
- Surface mount type.
- Caps are removable, so it can be used for the right or left side.
- With marking colour on the edge to easily differentiate model.

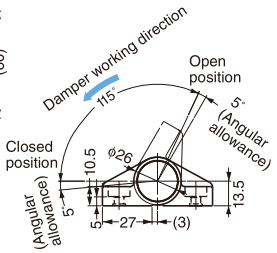
## Remarks

- Sold in pairs.
- Please install door stopper for soft-close damping angle (0 - 115 degree or less).

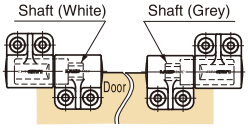
Selection Tool
Damper Hinge

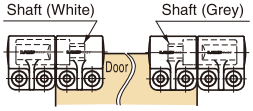



Left-hand damper shown.




## Installation




| No. | Part Name | Material | Finish/Colour |
|---|---|---|---|
| ① | Bracket | PBT Resin/Zinc Alloy (ZDC) | Dark Grey |
| ② | Cover | Polypropylene (PP) | Dark Grey |
| ③ | Damper | Stainless Steel | - |

| Item Code | Item Name | Torque Moment (Per pair) | | Marking Colour | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|
| 170-092-209 | HG-JH25 | 3 - 5 N·m | 30.6 - 51 kgf·cm | Blue | 200 g | 4 sets | 64 sets |
| 170-092-210 | HG-JH35 | 5 - 7 N·m | 51 - 71.4 kgf·cm | Red | 200 g | 4 sets | 64 sets |

# LAMP DAMPER HINGE HG-JHW, HG-JHWG

Latest Info


HG-JHW



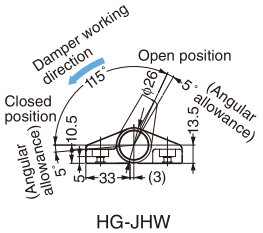
HG-JHWG

- Soft-close damper keeps lid from slamming shut.
- Surface mount type.
- With marking colour on the edge to easily differentiate model.

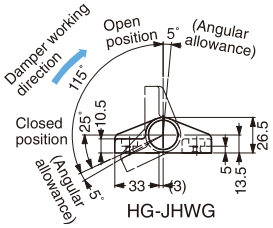
## Remarks

- Install door stopper for soft-close damping angle (0 - 115 degree or less).

Selection Tool
Damper Hinge

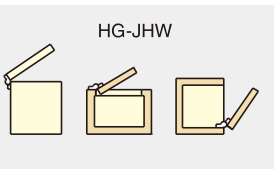


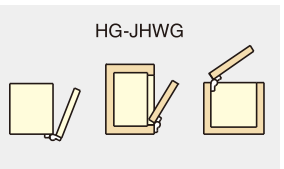
HG-JHW

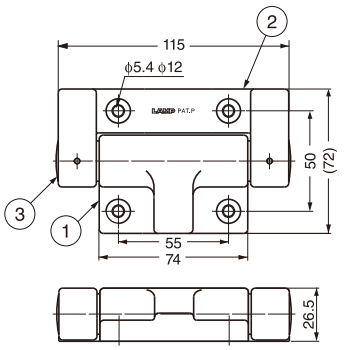


HG-JHWG

Note: The “open” and “close” directions in the diagram are for when it is externally attached.




| No. | Part Name | Material | Finish/Colour |
|---|---|---|---|
| ① | Bracket (body side) | PBT | Emboss/Dark Grey |
| ② | Bracket (shaft side) | | |
| ③ | Cap | PP | |

| Item Code | Item Name | Damper Working Direction | Torque Moment/pc | | Marking Colour | Box | Carton |
|---|---|---|---|---|---|---|---|
| 170-092-212 | HG-JHW50 | For Closing | 3 - 5 N·m | 30.6 - 51 kgf·cm | White | 4 pcs | 64 pcs |
| 170-092-211 | HG-JHW70 | | 5 - 7 N·m | 51 - 71.4 kgf·cm | Without | 4 pcs | 64 pcs |
| 170-092-215 | HG-JHW50G | For Opening | 3 - 5 N·m | 30.6 - 51 kgf·cm | White·Red | 4 pcs | 64 pcs |
| 170-092-216 | HG-JHW70G | | 5 - 7 N·m | 51 - 71.4 kgf·cm | Red | 4 pcs | 64 pcs |


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP COMBINATION HINGE HG-VH8

Damper Spring Torque




- Hinges for light weight lids, doors.
- Various motions in the same appearance.
- Various combinations such as self-opening hinge + damper hinge (refer to "Possible combinations").

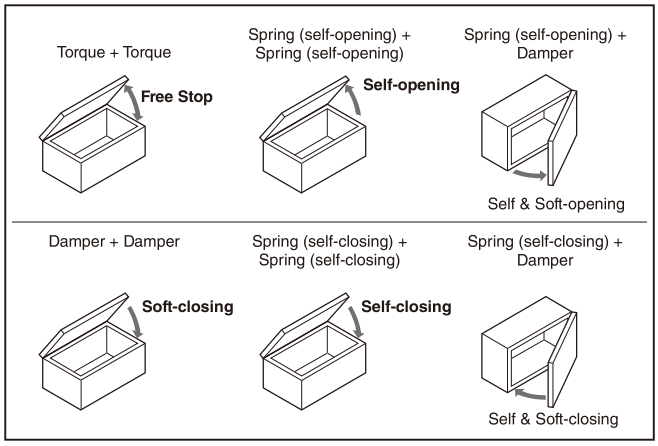
## Remarks

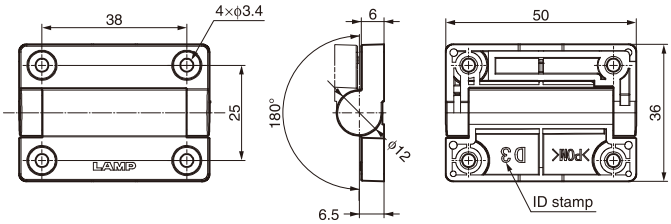
- Operating temperature: 0˚C - 40˚C
- Secure to align the centre of axis horizontally when used in pairs.

## Recommended Screws

- Bind head machine screw M3

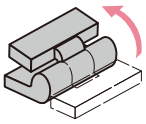
Feature | Selection Tool (Damper Hinge) | Selection Tool (Torque Hinge)



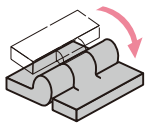

## Spning equipped hinges





Self-opening





Self-closing

**Possible Combinations**

| Type of Hinges | ID Stamp | Normal N | Damper D3 | Spring (self-opening) OP | Spring (self-closing) CL | Torque T1 | Torque T3 |
|---|---|---|---|---|---|---|---|
| Normal | N | ○ | ○ | ○ | ○ | ○ | ○ |
| Damper | D3 | ○ | ○ | ○ | ○ | - | - |
| Spring (self-opening) | OP | ○ | ○ | ○ | - | △ | △ |
| Spring (self-closing) | CL | △ | △ | - | ○ | △ | △ |
| Torque | T1 | ○ | - | △ | △ | ○ | ○ |
| Torque | T3 | ○ | - | △ | △ | ○ | ○ |

△ Please carry out thorough tests before using since performance with these combinations might vary depending on door size and weight.

| Item Code | Item Name | ID Stamp | Colour | Material | Part Built In | Torque Moment (Per piece) | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|
| 170-032-616 | HG-VH8-N-BL | N | Black | Polyacetal (POM) | - | - | 11 g | 40 pcs | 640 pcs |
| 170-032-617 | HG-VH8-N-WT | | White | | | | 11 g | 40 pcs | 640 pcs |
| 170-032-618 | HG-VH8-D3-BL | D3 | Black | | Damper | 2.2 - 3.8 cN·m (0.22 - 0.39 kgf·cm) | 14 g | 40 pcs | 640 pcs |
| 170-032-619 | HG-VH8-D3-WT | | White | | | | 14 g | 40 pcs | 640 pcs |
| 170-032-620 | HG-VH8-OP-BL | OP | Black | | Spring (self-opening) | *increase 1.53 cN·m (0.16 kgf·cm) by 30˚ of revolution | 18 g | 40 pcs | 640 pcs |
| 170-032-621 | HG-VH8-OP-WT | | White | | | | 18 g | 40 pcs | 640 pcs |
| 170-032-622 | HG-VH8-CL-BL | CL | Black | | Spring (self-closing) | *increase 1.53 cN·m (0.16 kgf·cm) by 30˚ of revolution | 18 g | 40 pcs | 640 pcs |
| 170-032-623 | HG-VH8-CL-WT | | White | | | | 18 g | 40 pcs | 640 pcs |
| 170-032-624 | HG-VH8-T15-BL | T1 | Black | | Torque | 15±5 cN·m (1.53 kgf·cm ±0.51) | 19 g | 60 pcs | 240 pcs |
| 170-032-625 | HG-VH8-T15-WT | | White | | | | 19 g | 60 pcs | 240 pcs |
| 170-032-626 | HG-VH8-T35-BL | T3 | Black | | Torque | 35±10 cN·m (3.57 kgf·cm ±1.02) | 19 g | 60 pcs | 240 pcs |
| 170-032-627 | HG-VH8-T35-WT | | White | | | | 19 g | 60 pcs | 240 pcs |

*Spring hinge is adjustable by the screw on the edge.



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP GRAVITY SOFT-CLOSE HINGE HG-JG150 Self and Soft Close NEW

Latest Info



**Passed Private 50K Cycle 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).

INSTRUCTION

Feature

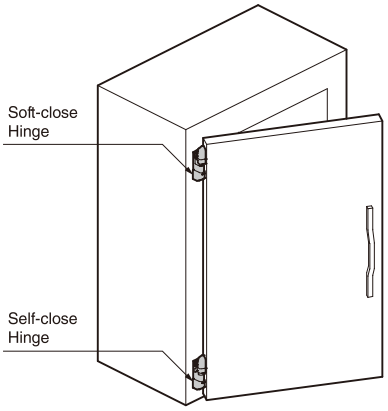
## Specification
- Temperature : 0 - 40 ℃

## 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

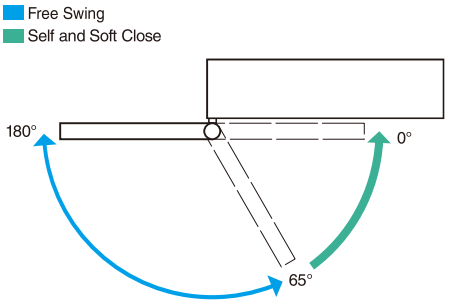
## Recommended Screw
- M6 Binding head screw / Pan head screw
- M6 Hexagon socket head bolt / Button bolt

## Installation of Left-handed Type

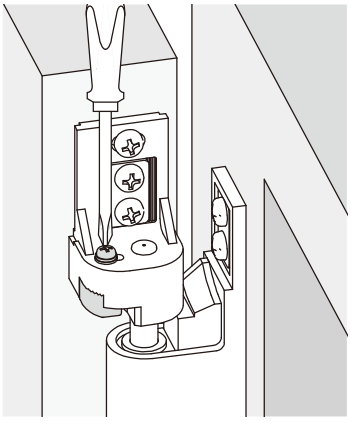



* Pitch between hinges: Min. 1200 mm

## Door Motion

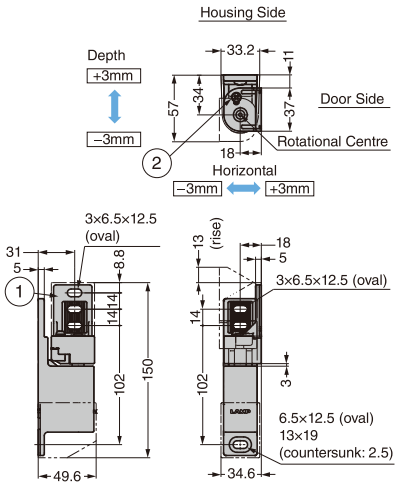



## Speed Adjustment

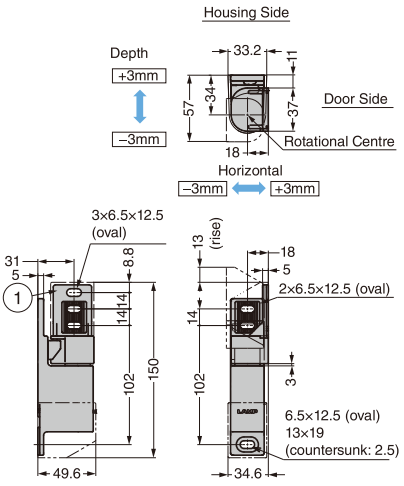


Closing speed can be adjusted with the screw of the soft-close hinge which is for the upper side.

**[Soft-close Hinge]**

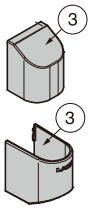



**[Self-close Hinge]**

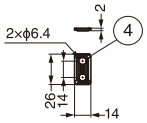



* Left-handed type is shown.

**[Covers]**




**[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) | |

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

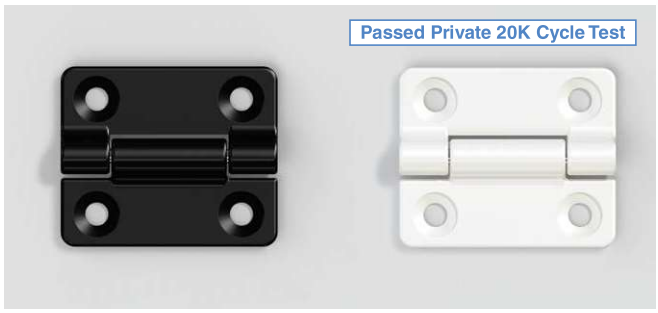
| Item Code | Item Name | Position | Finish | Door Width | Door Height | Load Capacity kgf / set | Weight (g) | Carton (set) |
|---|---|---|---|---|---|---|---|---|
| 170-048-340 | HG-JG150R-CR | Right-handed | Chrome | Max. 900 | Max. 2400 | 10 to 20 | 995 | 10 |
| 170-048-341 | HG-JG150L-CR | Left-handed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



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

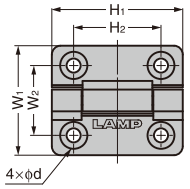
## LAMP MINI TORQUE HINGE HG-MF

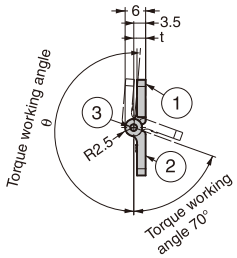
Latest Info



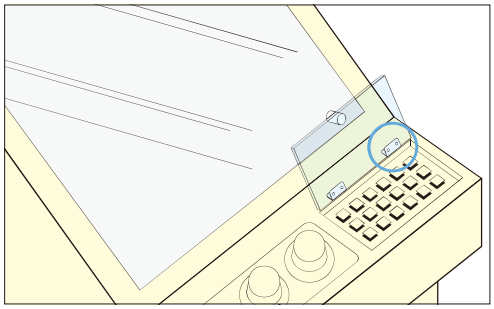

- Hinge with friction torque holds lid/door in desired position.

Selection Tool
Torque Hinge




### Application Example



| No. | Part Name | Material | Colour |
|---|---|---|---|
| ① | Body A | Polyacetal (POM) | Black, White |
| ② | Body B | Polyacetal (POM) | Black, White |
| ③ | Shaft | Stainless Steel (SUS303) | - |

| Item Code | Item Name | Colour | $W_1$ | $W_2$ | $H_1$ | $H_2$ | t | θ | d | Torque Moment (Per piece) | | Weight | Box |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 170-023-854 | HG-MF08-BL | Black | 25 | 16 | 20 | 10 | 2 | 190° | ϕ2.4, ϕ4.2 | 7.84 ±25% cN·m | 0.8 ±25% kgf·cm | 2 g | 400 pcs |
| 170-023-855 | HG-MF08-WT | White | 25 | 16 | 20 | 10 | 2 | 190° | ϕ2.4, ϕ4.2 | 7.84 ±25% cN·m | 0.8 ±25% kgf·cm | 2 g | 400 pcs |
| 170-023-856 | HG-MF15-BL | Black | 25 | 16 | 30 | 20 | 2 | 190° | ϕ3.2, ϕ6.2 | 14.7 ±20% cN·m | 1.5 ±20% kgf·cm | 3 g | 300 pcs |
| 170-023-857 | HG-MF15-WT | White | 25 | 16 | 30 | 20 | 2 | 190° | ϕ3.2, ϕ6.2 | 14.7 ±20% cN·m | 1.5 ±20% kgf·cm | 3 g | 300 pcs |
| 170-023-858 | HG-MF25-BL | Black | 28 | 18 | 40 | 25 | 2.5 | 185° | ϕ3.2, ϕ6.2 | 24.5 ±20% cN·m | 2.5 ±20% kgf·cm | 5 g | 200 pcs |
| 170-023-859 | HG-MF25-WT | White | 28 | 18 | 40 | 25 | 2.5 | 185° | ϕ3.2, ϕ6.2 | 24.5 ±20% cN·m | 2.5 ±20% kgf·cm | 5 g | 200 pcs |

## LAMP TORQUE HINGE HG-TS

Latest Info



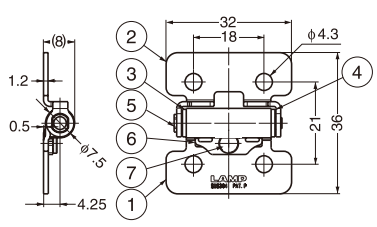

- Hinge has free-stop between 0 - 180˚: It holds its position at any desired angle
- Grease free
- Simplified internal structure
- Initial torque may vary -20 % - +40 %.

### Remarks

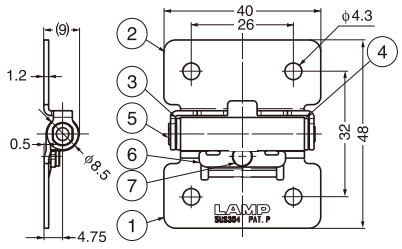
- Operating temperature : -10˚ - 50˚
- Operating humidity : 90 % RH or less
- Recommended for use in pairs.

Selection Tool
Torque Hinge

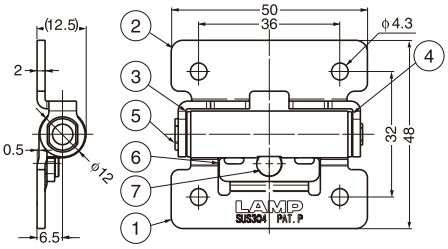
HG-TS03




HG-TS07




HG-TS15




| Item Code | Item Name | Torque Moment (Per pair) | | Weight | Box | Carton |
|---|---|---|---|---|---|---|
| 170-018-501 | HG-TS03 | 0.35 +40% -20% N·m | 3.6 +40% -20% kgf·cm | 15.0 g | 50 pcs | 500 pcs |
| 170-018-502 | HG-TS07 | 0.7 +40% -20% N·m | 7.1 +40% -20% kgf·cm | 27.5 g | 50 pcs | 500 pcs |
| 170-018-503 | HG-TS15 | 1.5 +40% -20% N·m | 15.3 +40% -20% kgf·cm | 64.1 g | 20 pcs | 200 pcs |

| No. | Part Name | Material | Finish/Colour |
|---|---|---|---|
| ① | Body | Stainless Steel (SUS304) | Mirror |
| ② | Base | Stainless Steel (SUS304) | Mirror |
| ③ | Fixing Tube L | Polyacetal (POM) | Black |
| ④ | Fixing Tube R | Polyacetal (POM) | Black |
| ⑤ | Shaft | Stainless Steel (SUS303) | - |
| ⑥ | Press Washer | Stainless Steel (SUS304) | Mirror |
| ⑦ | Pin | Stainless Steel | - |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP TORQUE HINGE HG-TE NEW

Latest Info

Free stop

Passed Private 20K Cycle Test

- Holds the lid or cover at any angle.
- Can be used horizontally or vertically.
- Optional cover conceals the screw part.



HG-TE03



HG-TE08



HG-TE15



With optional cover mounted

## Specifications

- Operating temperature: -10°C ~ 50°C

## Applications

- Acoustic equipment, FA equipment, various automatic devices, medical equipment, analytical instruments

## Remarks

- Be sure to read the “Precautions for Use” (P.23).
- When installing, ensure that both hinge shafts are aligned.
- Mount the lid on the movable body.

## Optional Parts

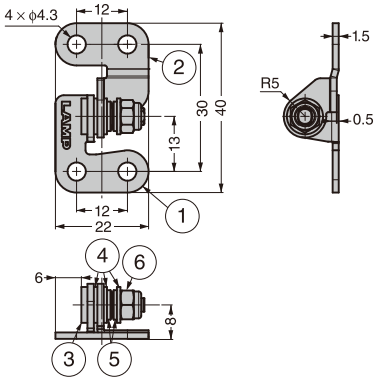
- Cover

Selection Tool

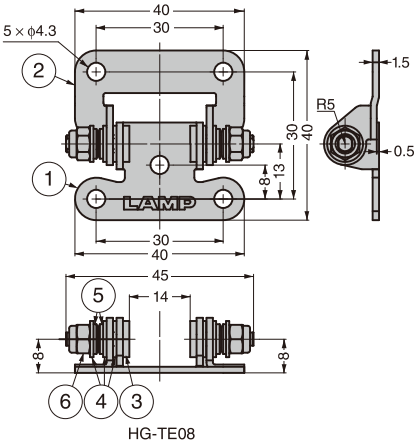
Torque Hinge

## Application Example

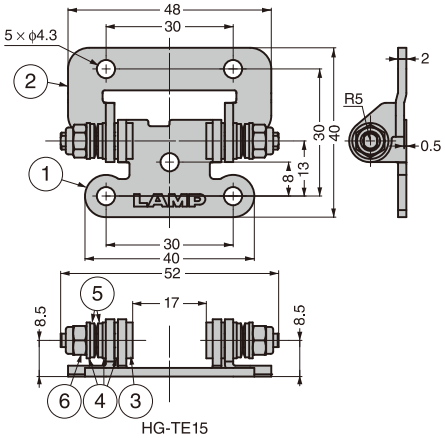



HG-TE03

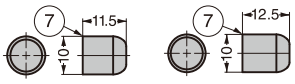



HG-TE08



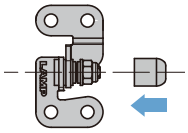

HG-TE15

## Options (Cover)




HG-TEC1 HG-TEC2

## Cover Installation Dimensions



Mount covering the screw part

| No. | Part Name | Material | Finish/Colour |
|---|---|---|---|
| ① | Body A | Stainless Steel (SUS304) | Barrel Polished |
| ② | Body B | | |
| ③ | Shaft | Steel | - |
| ④ | Friction Plate | Stainless Steel (SUS304) | |
| ⑤ | Disc Spring | Steel | |
| ⑥ | Lock Nut M4 | Stainless Steel (SUS304) | |
| ⑦ | Cover | PBT Resin | Grey |

## Body

| Item Code | Item Name | Torque N·m | Torque kgf·cm | Weight (g) |
|---|---|---|---|---|
| 170-048-663 | HG-TE03 | $0.3^{+40\%}_{-20\%}$ | $3.1^{+40\%}_{-20\%}$ | 13 |
| 170-048-664 | HG-TE08 | $0.8^{+40\%}_{-20\%}$ | $8.2^{+40\%}_{-20\%}$ | 25 |
| 170-048-665 | HG-TE15 | $1.5^{+40\%}_{-20\%}$ | $15.3^{+40\%}_{-20\%}$ | 34 |

## Cover (Optional Parts)

Sold in units of 1 pc. When using on the right and left screw parts of HG-TE08 and HG-TE15, purchase 2 pcs.

| Item Code | Item Name | Corresponding Hinge | Weight (g) |
|---|---|---|---|
| 170-048-666 | HG-TEC1 | HG-TE03, HG-TE08 | 0.4 |
| 170-048-667 | HG-TEC2 | HG-TE15 | 0.4 |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP TORQUE HINGE HG-TP NEW

Latest Info



Free stop
Greaseless
Passed Private 20K Cycle Test

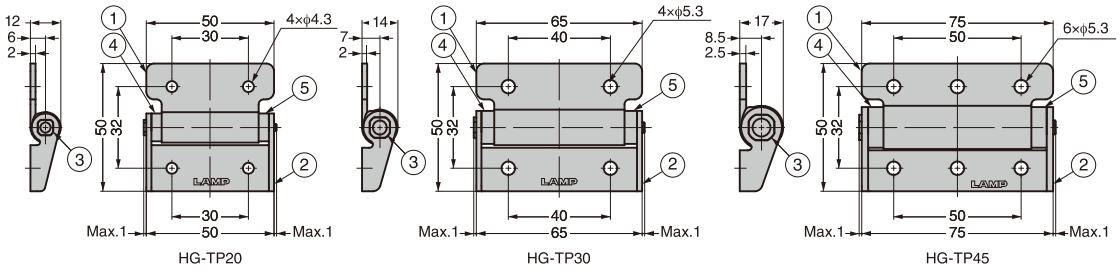
**A combination of plastic and metal is used for friction in order to prevent metallic dust caused by metal on metal contact.**

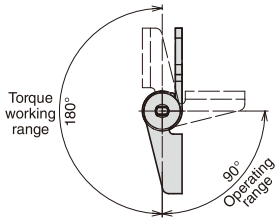
## Specifications
- Operating temperature: 0° - 40°
- Can be used in both vertical and horizontal directions.

## Applications
- Stereo equipment, FA equipment, and various automatic equipment

## Remarks
- Be sure to read the “Precautions for Use”(P.23).
- Ensure that hinge shafts are leveled and aligned.
- Install a lid to the bracket A.

Selection Tool
Torque Hinge



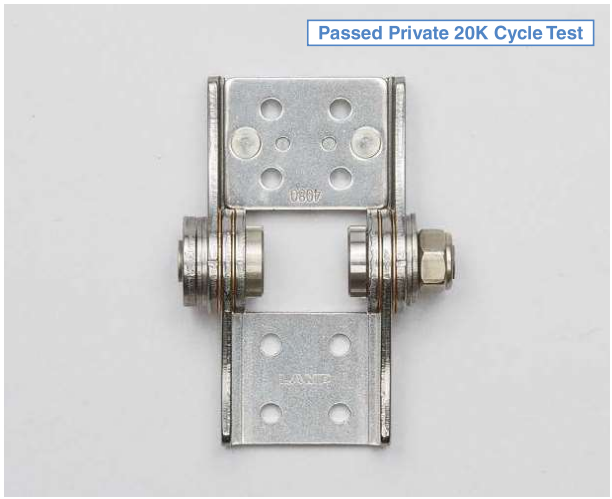




| No. | Part Name | Material | Finish / Colour |
|---|---|---|---|
| ① | Bracket | Stainless Steel (SUS304) | Barrel Polished |
| ② | Base | | |
| ③ | Shaft | Stainless Steel (SUS303) | — |
| ④ | Plug | POM | Black |
| ⑤ | Washer | | |

| 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 |

# LAMP ADJUSTABLE TORQUE HINGE HG-ITJ4080

Latest Info

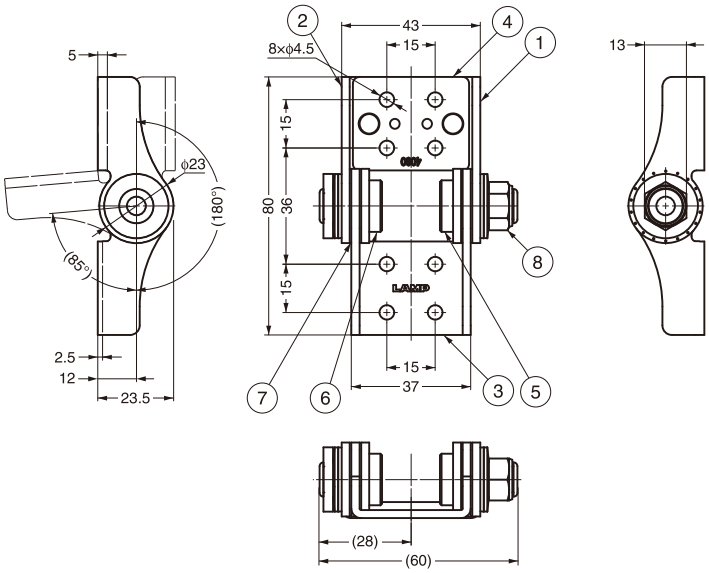


Passed Private 20K Cycle Test

- Free stop: can hold position at any angle.
- Adjustable torque: from 4 to 8 N·m.
- High torque strength on compact body for effective use of space.
- Minimum torque set at 4 N·m to prevent against accidental falling or slamming of flap.

## Remarks
- Recommended for use in pairs.

Feature
Selection Tool
Torque Hinge




| No. | Part Name | Material | Finish |
|---|---|---|---|
| ① | Bracket A | Stainless Steel (SUS430) | Mirror |
| ② | Bracket B | | |
| ③ | Bracket C | | |
| ④ | Connecting Plate | | |
| ⑤ | Shaft A | Stainless Steel | – |
| ⑥ | Shaft B | | |
| ⑦ | Washer | Bronze | Polished |
| ⑧ | Torque Adjustment Nut M8 | Stainless Steel (SUSXM7) | – |

| Item Code | Item Name | Torque Moment (Per piece) | Weight | Box | Carton |
|---|---|---|---|---|---|
| 170-029-802 | HG-ITJ4080 | 4±20% - 8 N·m (41±20% - 82 kgf·cm) | 163 g | 10 pcs | 80 pcs |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP TORQUE HINGE HG-SFTH

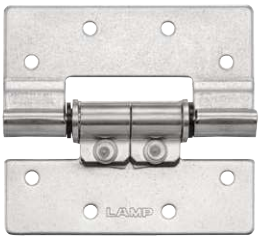
Latest Info

Free stop | Greaseless | Passed Private 30K Cycle Test


HG-SFTH-01-3


HG-SFTH-02-5


HG-SFTH-03


HG-SFTH-05

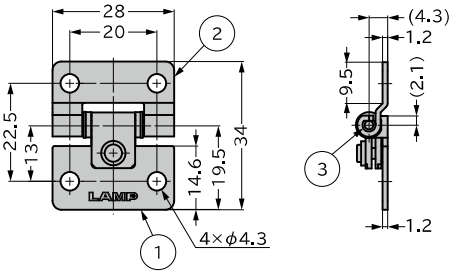
## Specifications
- Operating temperature: 5°C ~ 40°C

## Applications
- FA equipment, various automated equipment, OA equipment, monitor angle adjustment, etc.

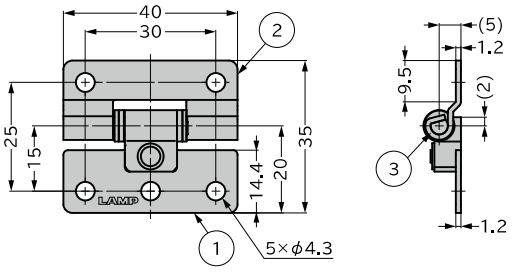
## Remarks
- Be sure to read the “Precautions for Use” (P.23).

Selection Tool
Torque Hinge

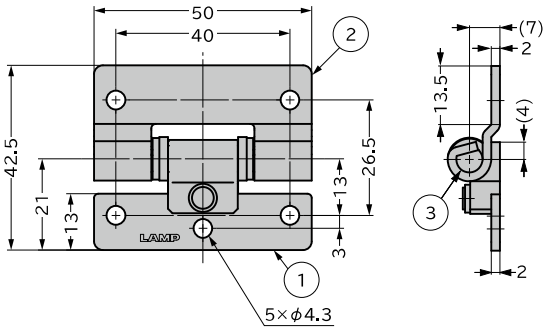
SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES



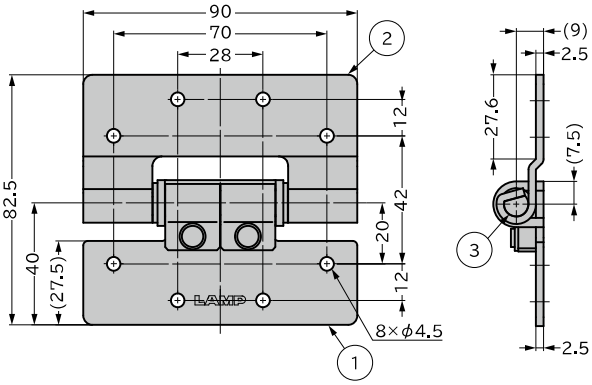
HG-SFTH-01-3



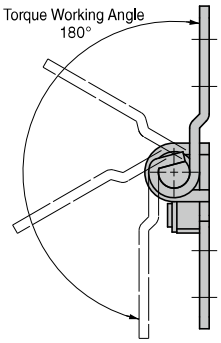
HG-SFTH-02-5



HG-SFTH-03



HG-SFTH-05




| No. | Part Name | Material | Finish |
|---|---|---|---|
| ① | Hinge A | Stainless Steel (SUS304) | Barrel Polished |
| ② | Hinge B | | |
| ③ | Shaft | Stainless Steel (SUS303) | – |

| Item Code | Item Name | Torque N·m | Torque kgf·cm | Opening Angle | Weight (g) | Box (pcs) | Carton (pcs) |
|---|---|---|---|---|---|---|---|
| 170-056-320 | HG-SFTH-01-3 | 0.343 ±15% | 3.5 ±15% | 180° | 12 | 50 | 500 |
| 170-098-199 | HG-SFTH-02-5 | 0.491 ±20% | 5.0 ±20% | | 21 | | |
| 170-098-198 | HG-SFTH-03-9 | 0.882 ±23% | 9.0 ±23% | | 51 | 30 | 300 |
| 170-098-197 | HG-SFTH-03-19 | 1.863 ±11% | 19 ±11% | | | | |
| 170-098-196 | HG-SFTH-05-35 | 3.431 ±15% | 35 ±15% | | 195 | 10 | 100 |
| 170-098-200 | HG-SFTH-05-58 | 5.686 ±9% | 58 ±9% | | | | |


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

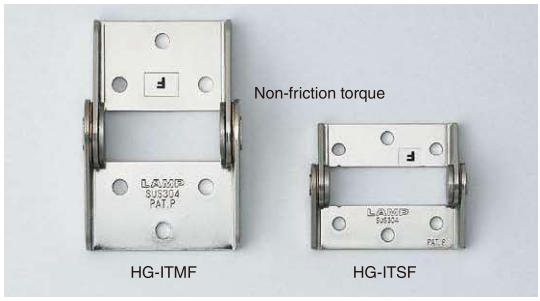
# LAMP TORQUE HINGE HG-IT

Latest Info










- Hinge has free stop: It holds its position at any desired angle
- Optional cover available for a clean appearance.
- Torque free type also available (HG-ITSF, HG-ITMF)
- When using several hinges, by using a combination of torque and torque free types, the torque strength can be adjusted.

## Remarks

- Operating angle: HG-ITM…193˚/HG-ITS…190˚
- Operating temperature : -10˚ - 50˚

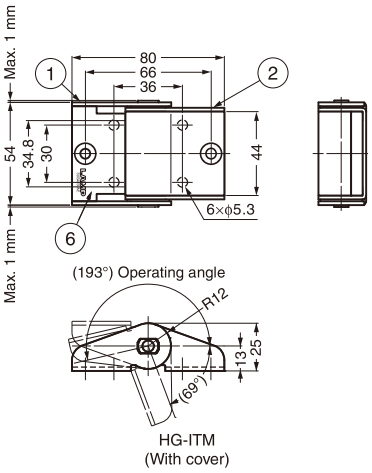
Selection Tool
Torque Hinge

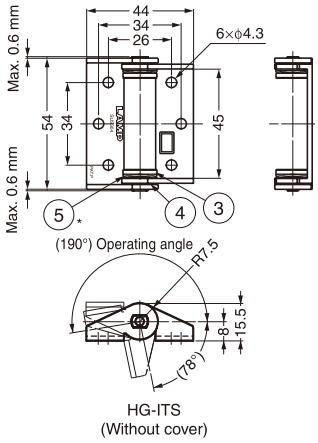
## Caution

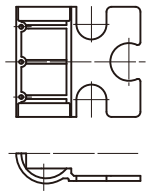
- Recommended for use in pairs.

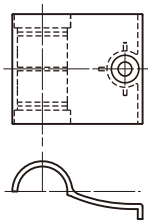
## Sold Separately

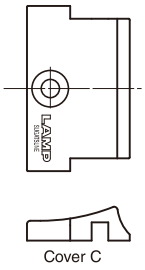
- Cover (Below)



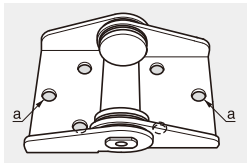





Cover A

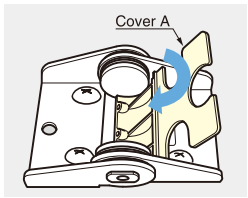

Cover B


Cover C

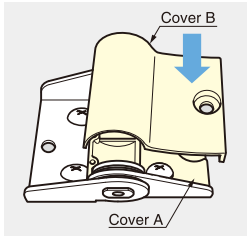
## Installation



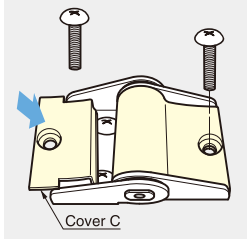

1. Install hinge body to the cabinet. (screw hole "a" is for cover)




2. Insert the cover A under the hinge axis.




3. Put cover B on the cover A.




4. Put cover C as the left figure and fix with screw.

| No. | Part Name | Material | Finish/Colour |
|---|---|---|---|
| ① | Base | Stainless Steel (SUS304) | Mirror |
| ② | Bracket | Stainless Steel (SUS304) | Mirror |
| ③ | Shaft | Stainless Steel (SUS303) | Plain |
| ④ | Washer | Bronze | Mirror |
| ⑤ | Spring Washer | Steel | Nickel |
| ⑥ | Cover | ABS | Matte Silver/Clear |

*⑤: Only for HG-ITS and HG-ITM.

## Hinge

| Item Code | Item Name | Torque Moment (Per piece) | | Weight | Box | Carton |
|---|---|---|---|---|---|---|
| 170-090-106 | HG-ITS25 | $2.5^{\pm 20\%}$ N·m | $25.49^{\pm 20\%}$ kgf·cm | 50 g | 20 pcs | 160 pcs |
| 170-090-115 | HG-ITS35 | $3.5^{\pm 20\%}$ N·m | $35.69^{\pm 20\%}$ kgf·cm | 50 g | 20 pcs | 160 pcs |
| 170-090-114 | HG-ITM50 | $5.0^{\pm 20\%}$ N·m | $50.98^{\pm 20\%}$ kgf·cm | 130 g | 10 pcs | 80 pcs |
| 170-090-113 | HG-ITM70 | $7.0^{\pm 20\%}$ N·m | $71.38^{\pm 20\%}$ kgf·cm | 130 g | 10 pcs | 80 pcs |
| 170-090-999 | HG-ITSF | – | – | 50 g | 20 pcs | 160 pcs |
| 170-090-998 | HG-ITMF | – | – | 130 g | 10 pcs | 80 pcs |

## Cover (Sold Separately)

| Item Code | Item Name | Cover for | Weight | Box | Carton |
|---|---|---|---|---|---|
| 170-091-002 | HG-ITSC | HG-ITS Type | 10 g | 40 pcs | 960 pcs |
| 170-091-001 | HG-ITMC | HG-ITM Type | 18 g | 20 pcs | 480 pcs |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

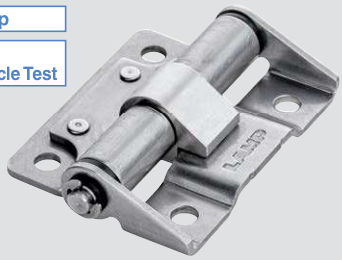
# LAMP ONE WAY TORQUE HINGE HG-TQS15 NEW

Latest Info



Free stop

Passed Private 20K Cycle Test



- Friction in one direction only: Allows for frictionless handling of the doors in the opposite direction.
- Can be used horizontally or vertically.

## Applications

- Medical equipment, inspection equipment, various automatic devices

## Remarks

- Be sure to read the “Precautions for Use” (P.23).
- Set a stopper in free-swing range (see the figure below for details).
- When installing, ensure that both hinge shafts are aligned.
- In consideration of torque decrease due to aging, temperature, humidity, etc., the torque at shipping is set relatively high.
- A caution sticker is attached to keep the hinge from opening and closing during transport. Remove when installing the product.
- Install a catch or latch as well to keep lids or doors from sagging open.

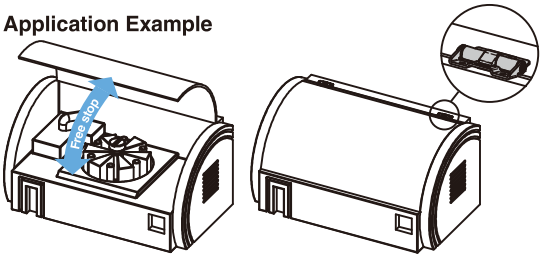
## Recommended Screws

- M5 screws

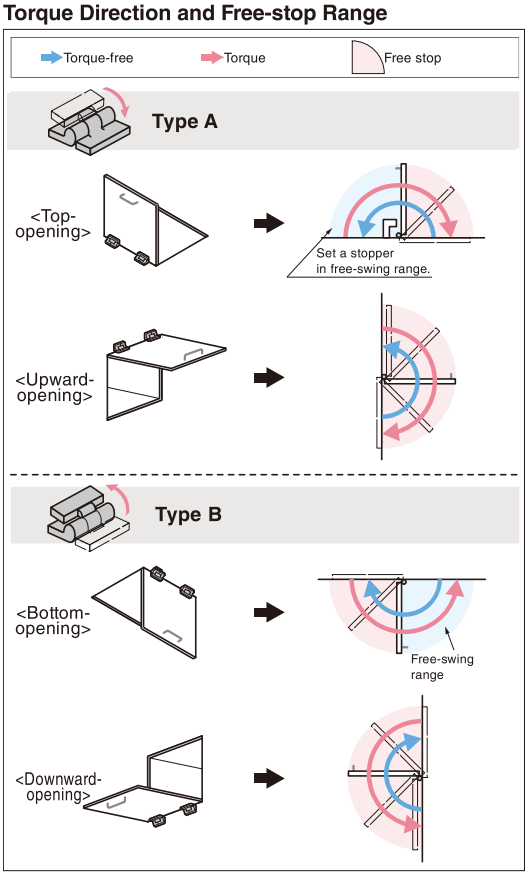
Feature | Selection Tool

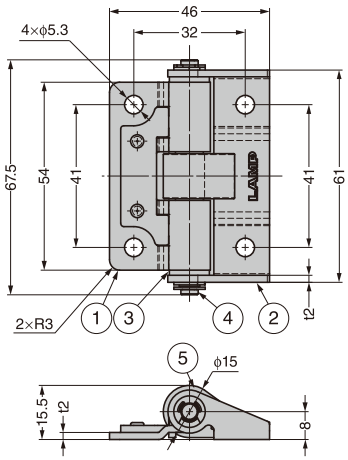
Torque Hinge

## Application Example

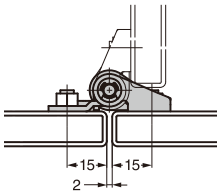



## Torque Direction and Free-stop Range

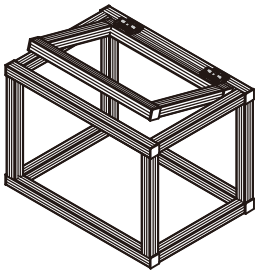



## Dimensions




## Aluminium Installation Frame



Available for installation on aluminium frames of □30 or less.

| No. | Part Name | Material | Finish/Colour |
|---|---|---|---|
| ① | Body | Stainless Steel (SUS304) | Barrel Polished |
| ② | Base | | |
| ③ | Fixing Tube | Polyacetal (POM) | Black |
| ④ | Shaft | Stainless Steel | - |
| ⑤ | Housing | Zinc Alloy | Nickel |

| Item Code | Item Name | Torque Working Direction | Torque N·m | Torque kgf·cm | Weight (g) |
|---|---|---|---|---|---|
| 170-049-851 | HG-TQS15-A | Hinge Opening Direction | $1.5^{+40\%}_{-20\%}$ | $15.3^{+40\%}_{-20\%}$ | 89 |
| 170-046-655 | HG-TQS15-B | Hinge Closing Direction | | | |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP ADJUSTABLE ONE WAY TORQUE HINGE HG-TQJ100

Latest Info

Passed Private 20K Cycle Test



- Hinge with torque in only one direction. There is almost no torque in the other direction. This allows for smooth operation.
- Adjustable torque: from 0 to 10 N·m.
- Both opening direction torque type and closing direction torque type available.
- Section to adjust torque is normally covered with a cap for a sleek appearance.

### Remarks

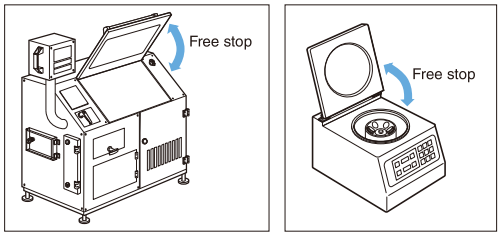
- Recommended for use in pairs.
- Use hex key (size 5) for adjustment.
- If the torque resistance decreases, please tighten the torque adjustment nut.

Feature

Selection Tool

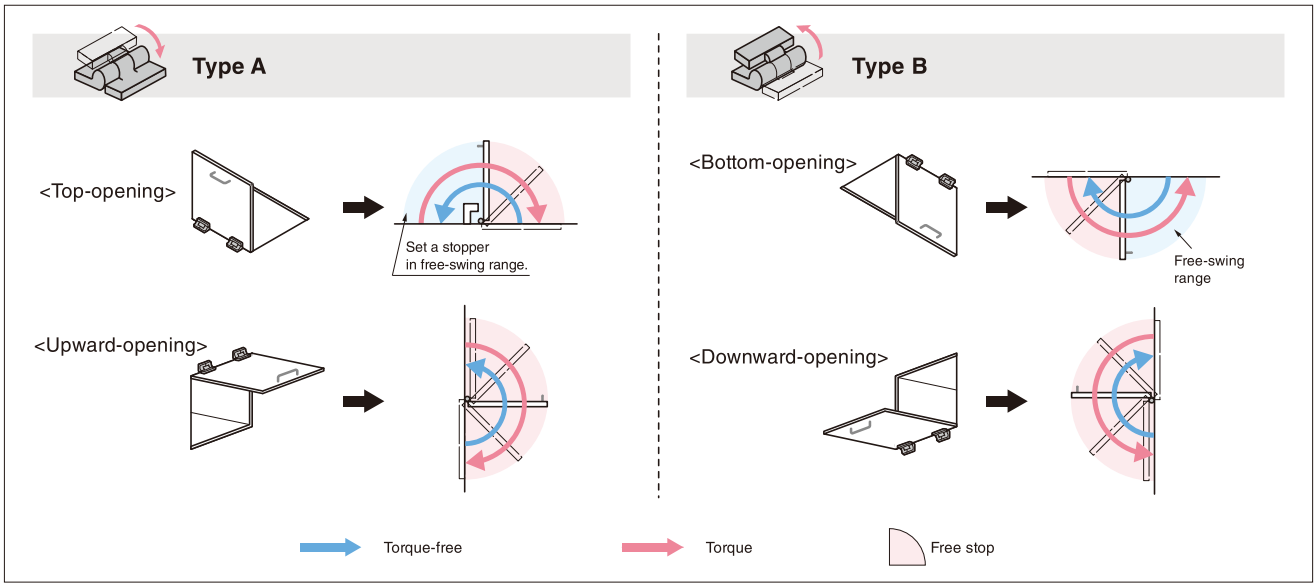
Torque Hinge

## Application Example

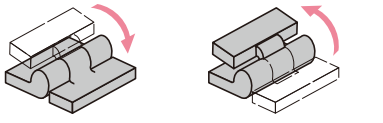



Since torque is adjustable from 0 to 10N·m, applicable to various doors.

## Torque Direction and Free-stop Range

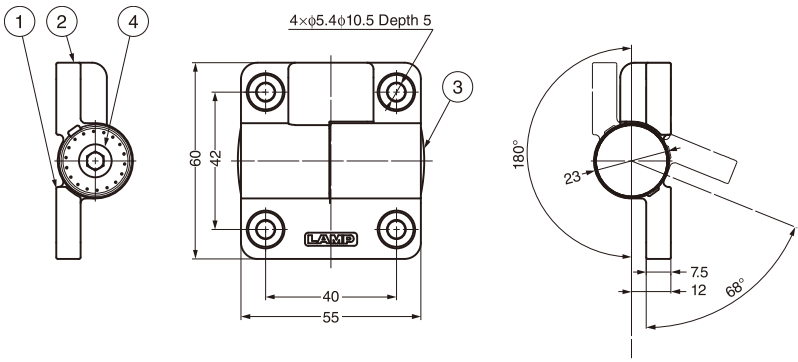



## Torque Working Direction



Opening direction
Item name suffixed with "A"

Closing direction
Item name suffixed with "B"




| No. | Part Name | Material | Finish/Colour |
|---|---|---|---|
| ① | Bracket A | Zinc Alloy | Silver (baking paint) |
| ② | Bracket B | | |
| ③ | Cover | Polypropylene (PP) | Dark Grey |
| ④ | Torque Adjustment Nut | Stainless Steel | - |

| Item Code | Item Name | Torque Working Direction | Torque Moment | Weight | Box | Carton |
|---|---|---|---|---|---|---|
| 170-032-969 | HG-TQJ100-A | Opening | 0 - 10 N·m (0 - 102 kgf·cm) | 242 g | 12 pcs | 96 pcs |
| 170-032-970 | HG-TQJ100-B | Closing | | | | |



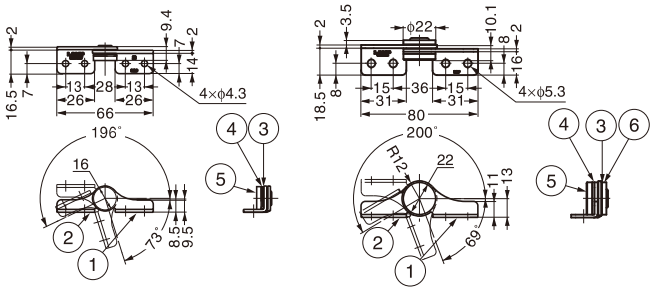
This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

# LAMP. TORQUE HINGE HG-TA

Latest Info




HG-TA20L, HG-TA30L　　HG-TA45L

Left-handed type shown.

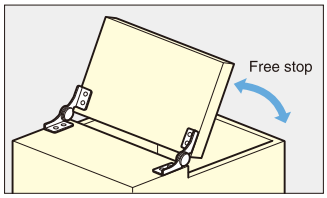
## Remarks

- Operating temperature : 0° - 40°
- For pair using: Please use the same torque moment in both hinges.

Feature　Selection Tool

Torque Hinge

## Application Example




| No. | Part Name | Material | Finish |
|---|---|---|---|
| ① | Body | Stainless Steel (SUS430) | Mirror |
| ② | Base | Stainless Steel (SUS430) | Mirror |
| ③ | Plate | Bronze | – |
| ④ | Spring Washer | Steel | – |
| ⑤ | Shaft | Stainless Steel (SUS303) | – |
| ⑥ | Washer | Stainless Steel (SUS303) | Mirror |

*HG-TA45: ③×2pcs

| Item Code | Item Name | Type | Torque Moment | | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|
| 170-012-403 | HG-TA20R | Right | 2.0±20% N·m | 20.4±20% kgf·cm | 33 g | 40 pcs | 320 pcs |
| 170-012-404 | HG-TA20L | Left | 2.0±20% N·m | 20.4±20% kgf·cm | 33 g | 40 pcs | 320 pcs |
| 170-012-405 | HG-TA30R | Right | 3.0±20% N·m | 30.6±20% kgf·cm | 33 g | 40 pcs | 320 pcs |
| 170-012-406 | HG-TA30L | Left | 3.0±20% N·m | 30.6±20% kgf·cm | 33 g | 40 pcs | 320 pcs |
| 170-012-407 | HG-TA45R | Right | 4.5±20% N·m | 45.9±20% kgf·cm | 65 g | 20 pcs | 160 pcs |
| 170-012-408 | HG-TA45L | Left | 4.5±20% N·m | 45.9±20% kgf·cm | 65 g | 20 pcs | 160 pcs |

# LAMP. DETENT TORQUE HINGE HG-DTA

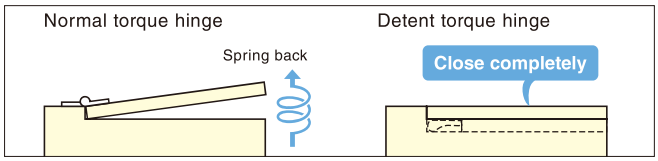
Latest Info

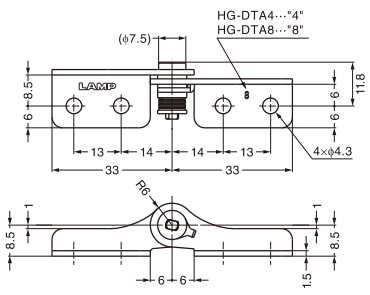


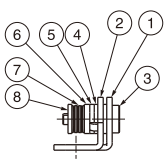

- Has free-stop: holds position at any angle.
- Detent function prevents spring-back in closed position.
- No additional catch needed.
- All stainless steel body provides corrosion resistance.

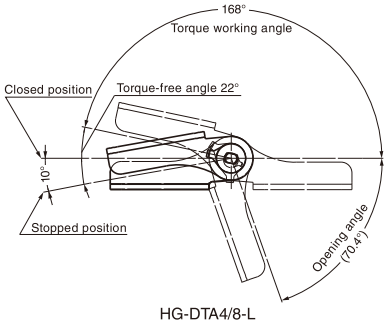
## Remarks

- For pair using: Please use the same torque moment in both hinges.
- Becomes torque-free right before closing to prevent spring-back.






HG-DTA4/8-L

Selection Tool

Torque Hinge

| No. | Part Name | Material | Finish |
|---|---|---|---|
| ① | Body | Stainless Steel (SUS304) | Mirror |
| ② | Bracket | Stainless Steel (SUS304) | Mirror |
| ③ | Shaft | Stainless Steel (SUS303) | – |
| ④ | Washer | Stainless Steel | – |
| ⑤ | Cam A | Stainless Steel | – |
| ⑥ | Cam B | Stainless Steel | – |
| ⑦ | Spring Washer | Stainless Steel | – |
| ⑧ | Plate | Stainless Steel (SUS304) | – |

| Item Code | Item Name | Type | Torque Moment (Per piece) | | Release Torque * | | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|
| 170-026-457 | HG-DTA4-R | Right | 0.4±20% N·m | 4.08±20% kgf·cm | 0.7±20% N·m | 7.14±20% kgf·cm | 19 g | 50 pcs | 400 pcs |
| 170-026-458 | HG-DTA4-L | Left | 0.4±20% N·m | 4.08±20% kgf·cm | 0.7±20% N·m | 7.14±20% kgf·cm | 19 g | 50 pcs | 400 pcs |
| 170-026-459 | HG-DTA8-R | Right | 0.8±20% N·m | 8.16±20% kgf·cm | 1.5±20% N·m | 15.31±20% kgf·cm | 19 g | 50 pcs | 500 pcs |
| 170-026-460 | HG-DTA8-L | Left | 0.8±20% N·m | 8.16±20% kgf·cm | 1.5±20% N·m | 15.31±20% kgf·cm | 19 g | 50 pcs | 500 pcs |

*Torque required to release detent.



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP TORQUE HINGE HG-TAC Black Type NEW

Latest Info

Free Stop

Passed Private 20K Cycle Test

Under Development



- A black version of the HG-TA TORQUE HINGE without a wiring hole. (P.138)

## Specifications
- Operating temperature: 0°C~40°C

## Applications
- Liquid crystal monitors, surveillance cameras, etc.

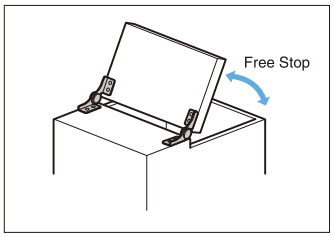
## Remarks
- Be sure to read the “Precautions for Use” (P.23).
- Please use the left and right sets with the same torque value.
- Please ensure that the axes of the hinges are horizontal and installed so that they do not shift.

Feature

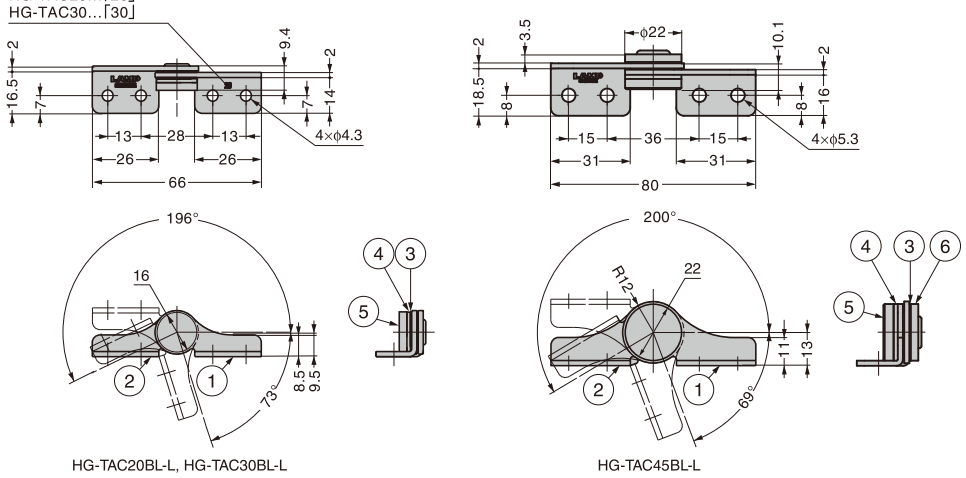
Selection Tool

Torque Hinge

## Application Example




Item Name Engraved:
HG-TAC20…⌈20⌋
HG-TAC30…⌈30⌋




HG-TAC20BL-L, HG-TAC30BL-L

HG-TAC45BL-L

Left-handed type shown. Right-handed type is symmetrical.

| No. | Part Name | Material | Finish |
|---|---|---|---|
| ① | Bracket | Stainless Steel (SUS430) | Black |
| ② | Base | | |
| ③ | F Plate | Bell Bronze | – |
| ④ | Spring Lock Washers | Steel | |
| ⑤ | Shaft | Stainless Steel (SUS303) | Black |
| ⑥ | Holding Mounting Plate | Stainless Steel (SUS430) | |

| Item Code | Item Name | Type | Torque N·m | Torque kgf·cm | Weight (g) | Box (pcs) | Carton (pcs) |
|---|---|---|---|---|---|---|---|
| 170-050-299 | HG-TAC20BL-R | Right-handed | 2.0±20% | 20.4±20% | 30 | 40 | 320 |
| 170-050-300 | HG-TAC20BL-L | Left-handed | | | | | |
| 170-050-301 | HG-TAC30BL-R | Right-handed | 3.0±20% | 30.6±20% | | | |
| 170-050-302 | HG-TAC30BL-L | Left-handed | | | | | |
| 170-050-303 | HG-TAC45BL-R | Right-handed | 4.5±20% | 45.9±20% | 65 | 20 | 160 |
| 170-050-304 | HG-TAC45BL-L | Left-handed | | | | | |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP TORQUE HINGE HG-TA45H

Latest Info



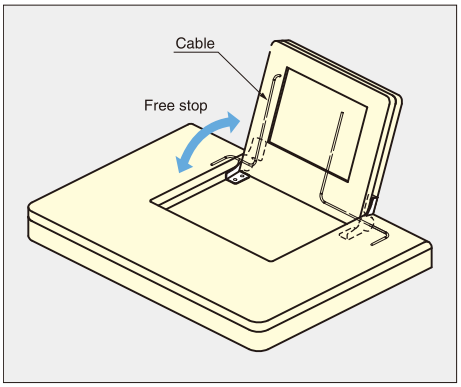

- Has free-stop: holds position at any angle.
- Hole in the shaft allows cables to be passed through for easy cable management.
- Great solution for mounting LCD screens and monitoring devices.

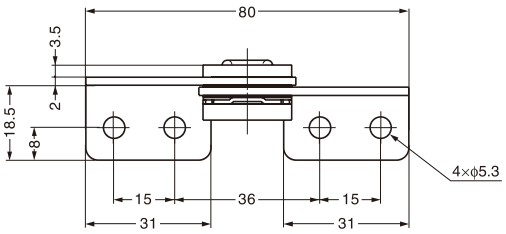
**Remarks**
- Operating temperature: 0˚ - 40˚
- For pair using: Please use the same torque moment in both hinges.

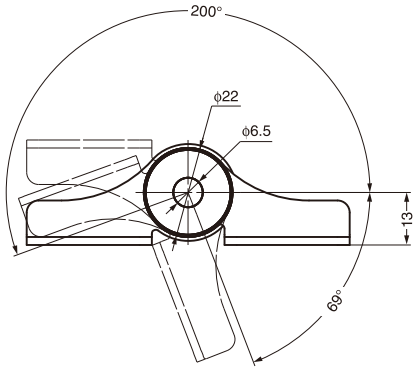
Feature | Selection Tool
Torque Hinge

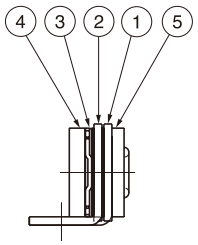
SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

## Application Example




HG-TA45HL

| No. | Part Name | Material | Finish |
|---|---|---|---|
| ① | Bracket | Stainless Steel (SUS430) | Mirror |
| ② | Base | | |
| ③ | Plate | Steel | - |
| ④ | Shaft | Stainless Steel (SUS303) | |
| ⑤ | Washer | Stainless Steel (SUS430) | Mirror |

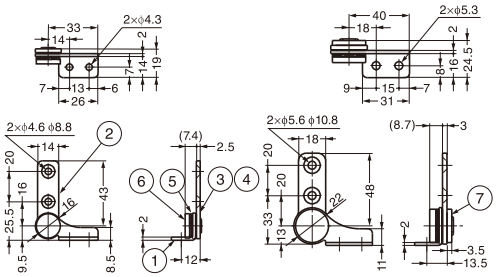
| Item Code | Item Name | Type | Torque Moment (Per piece) | Weight | Box | Carton |
|---|---|---|---|---|---|---|
| 170-034-215 | HG-TA45HR | Right/Wiring Hole | $4.5^{\pm 20\%}$N·m ($45.9^{\pm 20\%}$kgf·cm) | 60 g | 20 pcs | 160 pcs |
| 170-034-216 | HG-TA45HL | Left/Wiring Hole | | | | |


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP TORQUE HINGE HG-TB

Latest Info




Left-handed type shown.

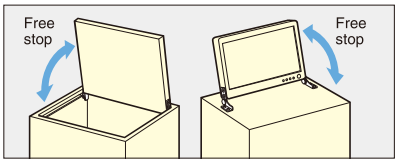
## Remarks

- Operating temperature : 0° - 40°
- Operating angle : 360°
- For pair using: Please use the same torque moment in both hinges.

Feature | Selection Tool

Torque Hinge

## Application Example




| No. | Part Name | Material | Finish |
|---|---|---|---|
| ① | Body | Stainless Steel (SUS430) | Mirror |
| ② | Base | Stainless Steel (SUS430) | Mirror |
| ③ | Plate A | Bronze | – |
| ④ | Plate B | Bronze | – |
| ⑤ | Spring Washer | Steel | – |
| ⑥ | Shaft | Stainless Steel (SUS303) | – |
| ⑦ | Washer | Stainless Steel (SUS303) | Mirror |

*HG-TB45: ③×2pcs

| Item Code | Item Name | Type | Torque Moment | | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|
| 170-022-142 | HG-TB7R | Right | 0.7±20% N·m | 7.1±20% kgf·cm | 31 g | 40 pcs | 320 pcs |
| 170-022-143 | HG-TB7L | Left | 0.7±20% N·m | 7.1±20% kgf·cm | 31 g | 40 pcs | 320 pcs |
| 170-012-413 | HG-TB20R | Right | 2.0±20% N·m | 20.4±20% kgf·cm | 32 g | 40 pcs | 320 pcs |
| 170-012-414 | HG-TB20L | Left | 2.0±20% N·m | 20.4±20% kgf·cm | 32 g | 40 pcs | 320 pcs |
| 170-012-415 | HG-TB30R | Right | 3.0±20% N·m | 30.6±20% kgf·cm | 32 g | 40 pcs | 320 pcs |
| 170-012-416 | HG-TB30L | Left | 3.0±20% N·m | 30.6±20% kgf·cm | 32 g | 40 pcs | 320 pcs |
| 170-012-417 | HG-TB45R | Right | 4.5±20% N·m | 45.9±20% kgf·cm | 67 g | 20 pcs | 160 pcs |
| 170-012-418 | HG-TB45L | Left | 4.5±20% N·m | 45.9±20% kgf·cm | 67 g | 20 pcs | 160 pcs |

# LAMP DETENT TORQUE HINGE HG-DTB

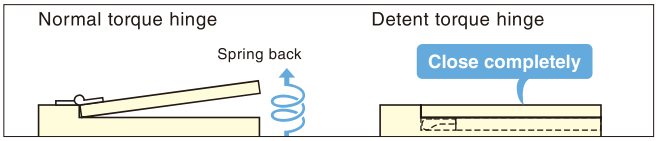
Latest Info

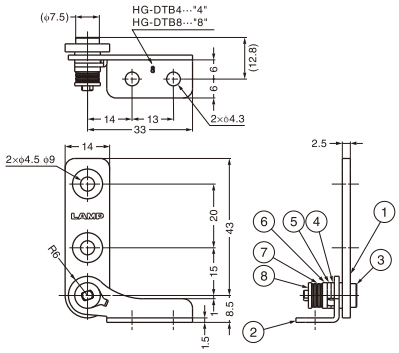


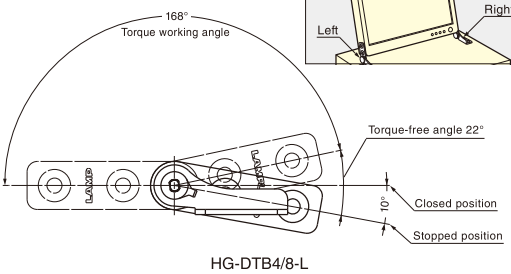

- Has free-stop: holds position at any angle.
- Detent function prevents spring-back in closed position.
- No additional catch needed.
- All stainless steel body provides corrosion resistance.

## Remarks

- For pair using: Please use the same torque moment in both hinges.
- Becomes torque-free right before closing to prevent spring-back.

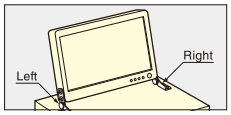



HG-DTB4/8-L

## Application Example




Feature | Selection Tool

Torque Hinge

| No. | Part Name | Material | Finish |
|---|---|---|---|
| ① | Body | Stainless Steel (SUS304) | Mirror |
| ② | Bracket | Stainless Steel (SUS304) | Mirror |
| ③ | Shaft | Stainless Steel (SUS303) | – |
| ④ | Washer | Stainless Steel | – |
| ⑤ | Cam A | Stainless Steel | – |
| ⑥ | Cam B | Stainless Steel | – |
| ⑦ | Spring Washer | Stainless Steel | – |
| ⑧ | Plate | Stainless Steel (SUS304) | – |

| Item Code | Item Name | Type | Torque Moment (Per piece) | | Release Torque * | | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|
| 170-026-461 | HG-DTB4-R | Right | 0.4±20% N·m | 4.08±20% kgf·cm | 0.7±20% N·m | 7.14±20% kgf·cm | 23 g | 50 pcs | 400 pcs |
| 170-026-462 | HG-DTB4-L | Left | 0.4±20% N·m | 4.08±20% kgf·cm | 0.7±20% N·m | 7.14±20% kgf·cm | 23 g | 50 pcs | 400 pcs |
| 170-026-463 | HG-DTB8-R | Right | 0.8±20% N·m | 8.16±20% kgf·cm | 1.5±20% N·m | 15.31±20% kgf·cm | 23 g | 50 pcs | 500 pcs |
| 170-026-464 | HG-DTB8-L | Left | 0.8±20% N·m | 8.16±20% kgf·cm | 1.5±20% N·m | 15.31±20% kgf·cm | 23 g | 50 pcs | 500 pcs |

*Torque required to release detent.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP TORQUE HINGE HG-TBC Black Type NEW

Latest Info




- A black version of the HG-TB TORQUE HINGE. (P.141)

## Specifications
- Operating temperature: 0°C~40°C

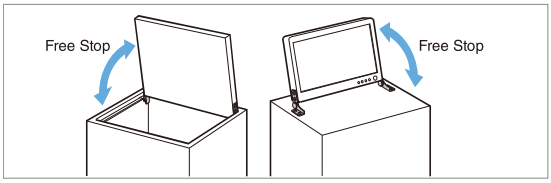
## Applications
- Liquid crystal monitors, surveillance cameras, etc.

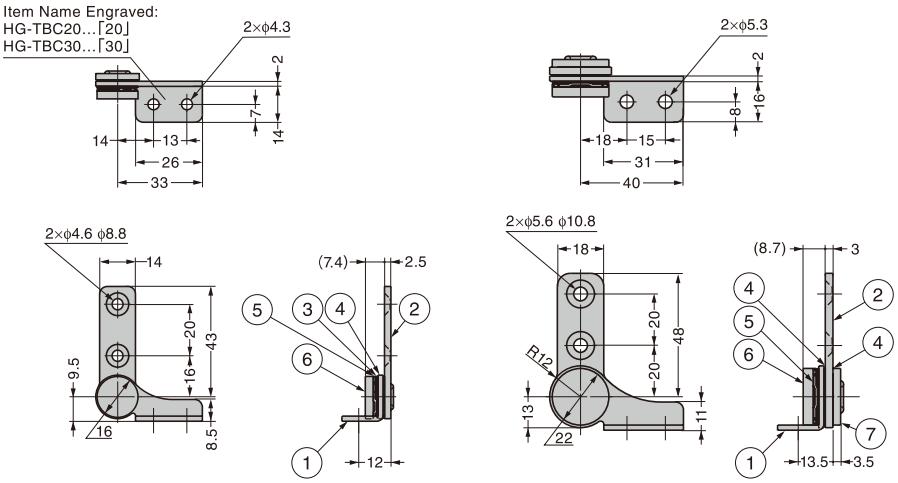
## Remarks
- Be sure to read the “Precautions for Use” (P.23).
- Please use the left and right sets with the same torque value.
- Please ensure that the axes of the hinges are horizontal and installed so that they do not shift.

Feature | Selection Tool
Torque Hinge

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

## Application Example




HG-TBC20BL-L, HG-TBC30BL-L

HG-TBC45BL-L

Left-handed type shown. Right-handed type is symmetrical.

| No. | Part Name | Material | Finish |
|---|---|---|---|
| ① | Bracket | Stainless Steel (SUS430) | Black |
| ② | Base | | |
| ③ | F Plate A | Bell Bronze | – |
| ④ | F Plate B | | |
| ⑤ | Spring Lock Washers | Steel | |
| ⑥ | Shaft | Stainless Steel (SUS303) | Black |
| ⑦ | Holding Mounting Plate | Stainless Steel (SUS430) | |

| Item Code | Item Name | Type | Torque N·m | Torque kgf·cm | Opening Angle | Weight (g) | Box (pcs) | Carton (pcs) |
|---|---|---|---|---|---|---|---|---|
| 170-050-305 | HG-TBC20BL-R | Right-handed | 2.0±20% | 20.4±20% | 360° | 32 | 40 | 320 |
| 170-050-306 | HG-TBC20BL-L | Left-handed | | | | | | |
| 170-050-307 | HG-TBC30BL-R | Right-handed | 3.0±20% | 30.6±20% | | | | |
| 170-050-308 | HG-TBC30BL-L | Left-handed | | | | | | |
| 170-050-309 | HG-TBC45BL-R | Right-handed | 4.5±20% | 45.9±20% | | 67 | 20 | 160 |
| 170-050-310 | HG-TBC45BL-L | Left-handed | | | | | | |


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP ALL STAINLESS STEEL TORQUE HINGE HG-TBS

Latest Info




- Stainless steel construction suitable for corrosive environments.

SUS

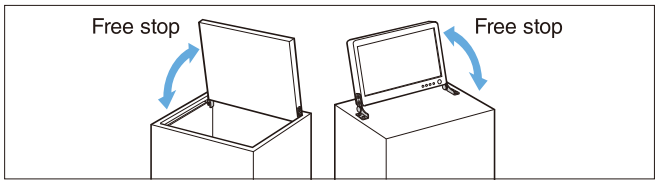
## Specifications
- Operating temperature: 0˚C - 40˚C

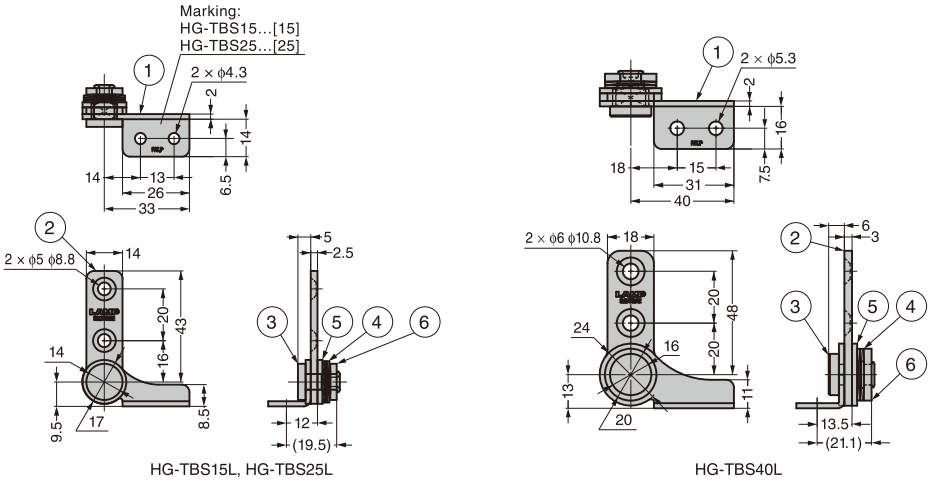
## Applications
- LCD, monitoring camera, etc.

## Remarks
- Torque hinge made entirely from stainless steel, making it suitable for use in corrosive environments.

Selection Tool
Torque Hinge

## Application Example




Left-handed type shown. Right-handed type is symmetrical.

| No. | Part Name | Material | Finish |
|---|---|---|---|
| ① | Body | Stainless Steel (SUS304) | Barrel Polished |
| ② | Base | | |
| ③ | Shaft | Stainless Steel (SUS303) | – |
| ④ | Spring Washer | Stainless Steel (SUS304) | |
| ⑤ | Plate | | Barrel Polished |
| ⑥ | Washer | Stainless Steel (SUS430) | |

| Item Code | Item Name | Type | Torque N·m/pc | Torque kgf·cm/pc | Opening Angle | Weight (g) | Box (pcs) | Carton (pcs) |
|---|---|---|---|---|---|---|---|---|
| 170-037-300 | HG-TBS15R | Right | 1.5±20% | 15.3±20% | 360° | 37 | 40 | 320 |
| 170-037-301 | HG-TBS15L | Left | | | | 37 | 40 | 320 |
| 170-037-302 | HG-TBS25R | Right | 2.5±20% | 25.5±20% | | 38 | 40 | 320 |
| 170-037-303 | HG-TBS25L | Left | | | | 38 | 40 | 320 |
| 170-037-304 | HG-TBS40R | Right | 4.0±20% | 40.8±20% | | 67 | 20 | 160 |
| 170-037-305 | HG-TBS40L | Left | | | | 67 | 20 | 160 |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP ADJUSTABLE ALL STAINLESS STEEL TORQUE HINGE HG-TBSJ40

Latest Info






- Torque adjustable from 0 to 4 N·m.
- Stainless steel construction suitable for corrosive environments.

SUS

## Specifications

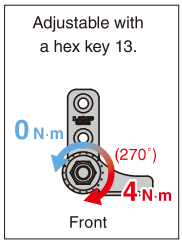
- Operating temperature: 0˚C - 40˚C

## Remarks

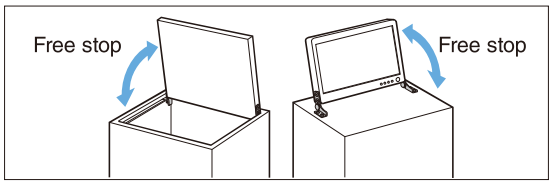
- Torque adjustable from 0 to 4 N·m.
- Torque hinge made entirely from stainless steel, making it suitable for use in corrosive environments.

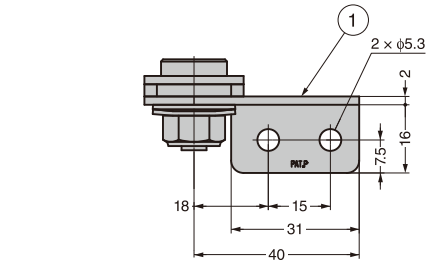
Feature

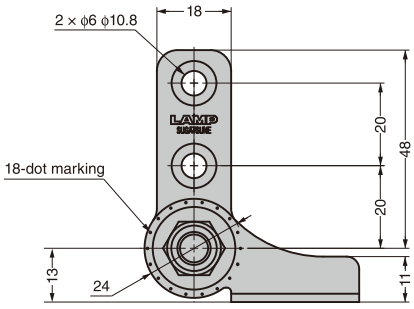
Selection Tool
Torque Hinge



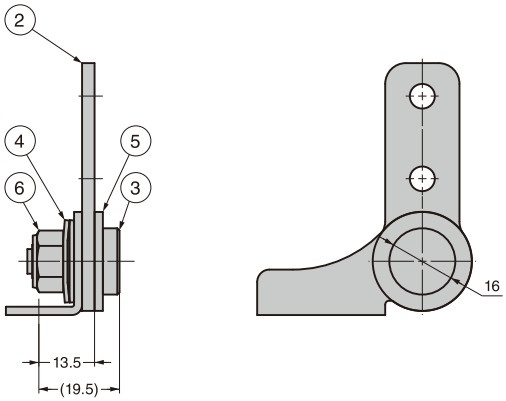

## Application Example




Left-handed type shown. Right-handed type is symmetrical.




| No. | Part Name | Material | Finish |
|---|---|---|---|
| ① | Body | Stainless Steel (SUS304) | Barrel Polished |
| ② | Base | | |
| ③ | Shaft | Stainless Steel (SUS303) | – |
| ④ | Spring Washer | Stainless Steel (SUS304) | |
| ⑤ | Plate | | Barrel Polished |
| ⑥ | Lock Nut | Stainless Steel | – |

| Item Code | Item Name | Type | Torque N·m/pc | Torque kgf·cm/pc | Opening Angle | Weight (g) | Box (pcs) | Carton (pcs) |
|---|---|---|---|---|---|---|---|---|
| 170-037-308 | HG-TBSJ40R | Right | 0 - 4.0 | 0 - 40.8 | 360° | 67 | 20 | 160 |
| 170-037-309 | HG-TBSJ40L | Left | | | | 67 | 20 | 160 |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

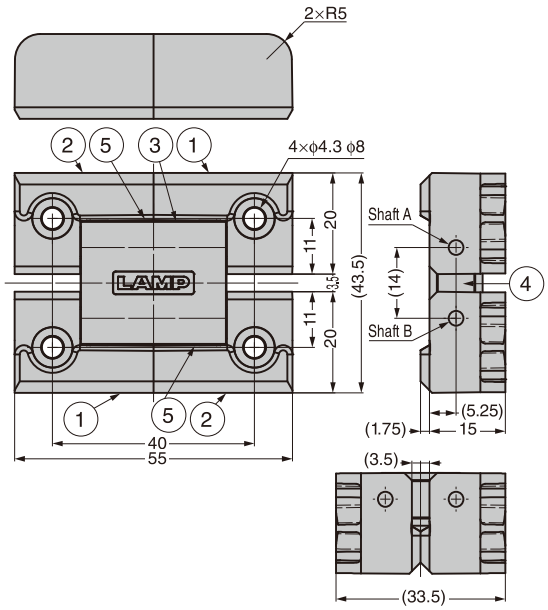
# LAMP DUAL AXIS TORQUE HINGE HG-TMH

Latest Info

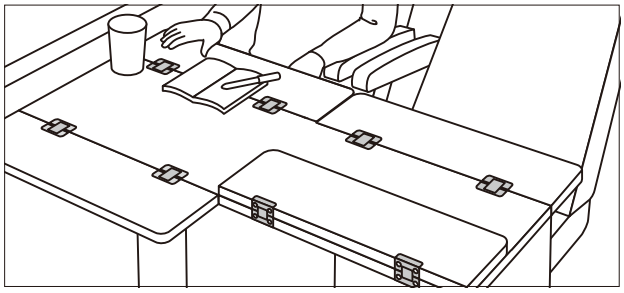






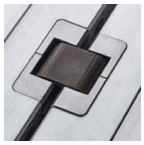




## Application Example





When fully opened



Flat and shafts do not protrude.

- 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

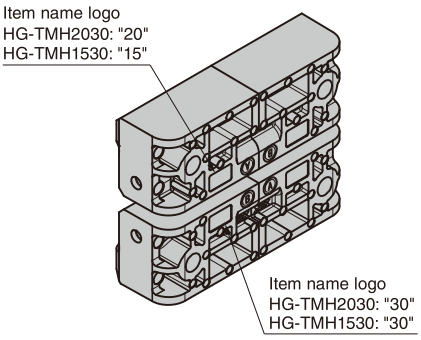
- Folding tables in shops, trains, caravans, etc.

## 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.

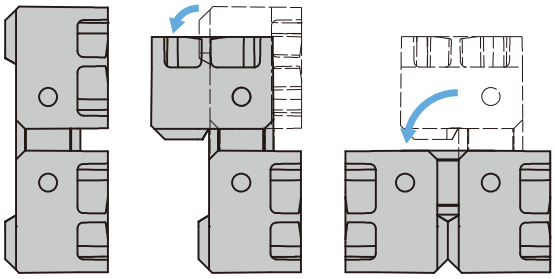
## Recommended Screws

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

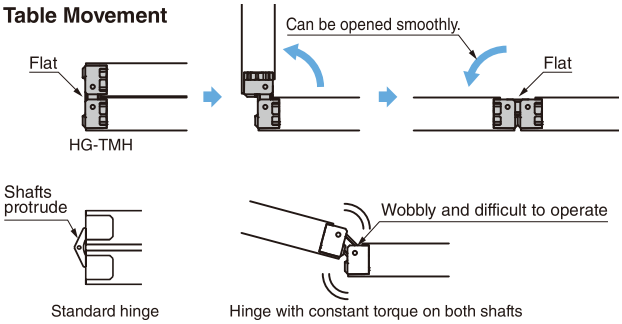



Feature Feature

## Hinge Motions



## Table Movement




| 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 | | |

| Item Code | 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) | | | |
| 170-034-907 | HG-TMH1530-CR | Chrome | 1.5±20% | 15.3±20% | 3.0±20% | 30.6±20% | 165 | 10 | 50 |
| 170-034-908 | HG-TMH2030-CR | | 2.0±20% | 20.4±20% | | | | 10 | 50 |
| 170-045-006 | HG-TMH1530-SN | Satin Nickel | 1.5±20% | 15.3±20% | | | | 10 | 50 |
| 170-045-007 | HG-TMH2030-SN | | 2.0±20% | 20.4±20% | | | | 10 | 50 |
| 170-045-008 | HG-TMH1530-BL | Plain/Black | 1.5±20% | 15.3±20% | | | | 10 | 50 |
| 170-045-009 | HG-TMH2030-BL | | 2.0±20% | 20.4±20% | | | | 10 | 50 |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP DETACHABLE TORQUE HINGE HG-RNM30

Latest Info






| | |
|---|---|
| Window Width | Max. 900 mm |
| Window Height | Max. 450 mm |
| Window Thickness | 28 - 35 mm |
| Window Weight | Max. 5.5 kg |

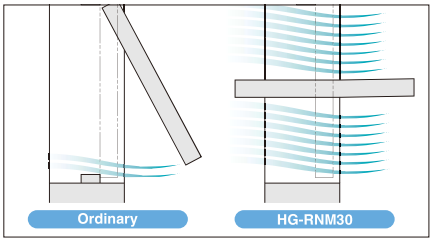
- Hinge recommended for use on the sides of windows to allow ventilation.
- Free stop: can hold position at any angle.
- Can easily be removed without the need for tools in order to perform maintenance.
- Safety arm can lock hinge shaft in place, preventing unintentional removal.

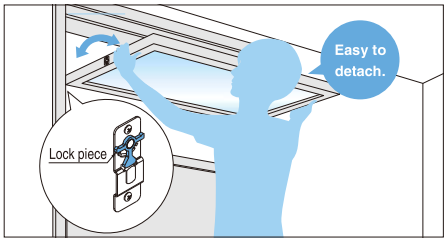
### Parts Included
- Pan head tapping screw 4×20
- Countersunk head tapping screw 4×20

Feature

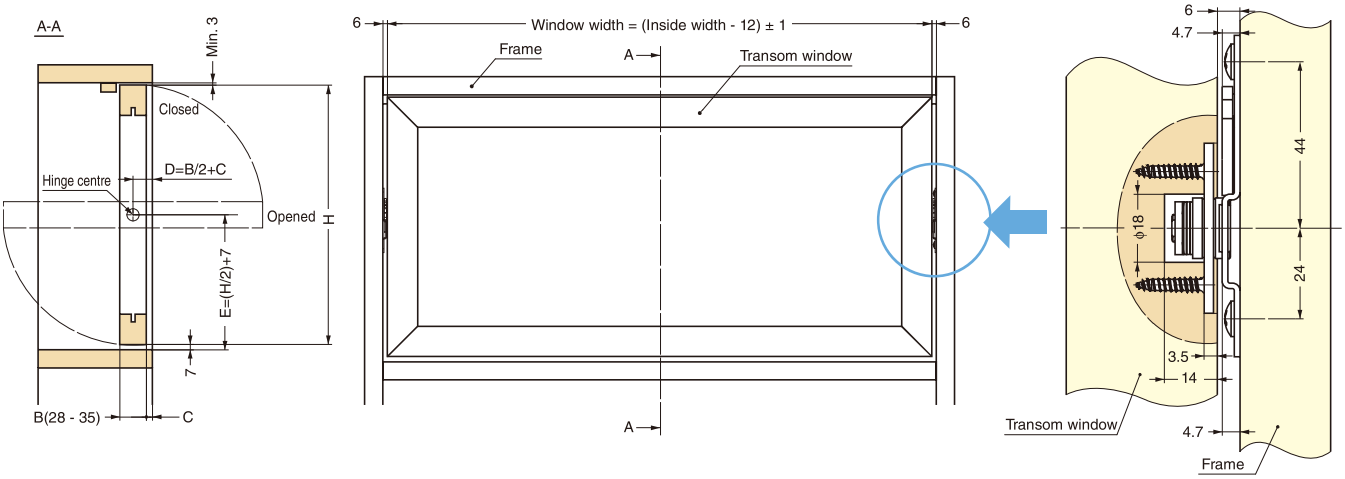
### Remarks
- Vertical use only.

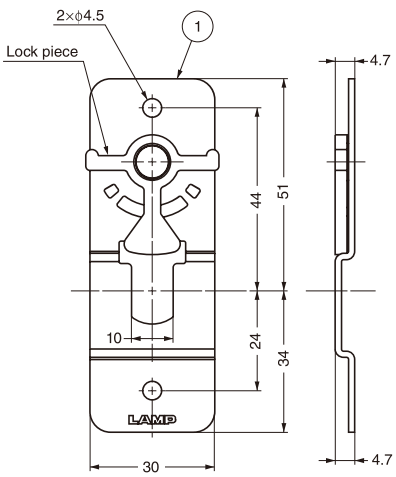


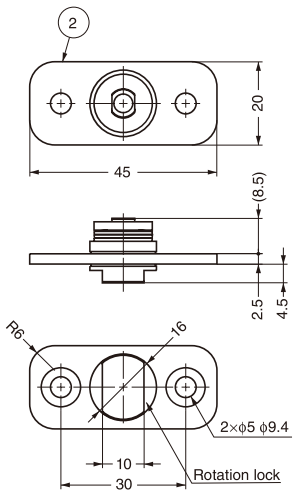



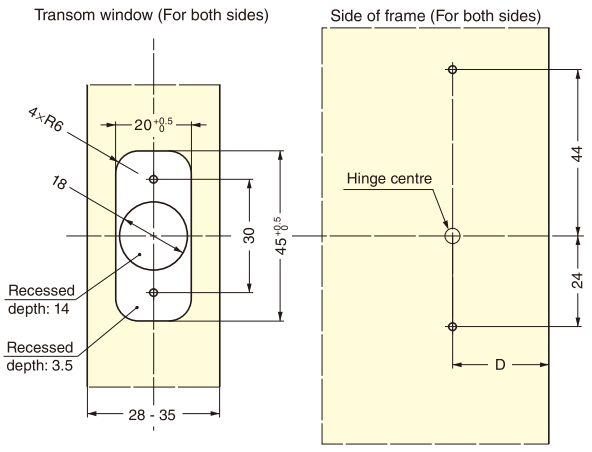

## Installation




## Cut Out Dimensions




| No. | Part Name | Material |
|---|---|---|
| ① | Strike | Stainless Steel, POM |
| ② | Hinge | Stainless Steel |

| Item Code | Item Name | Torque Moment (Per pair) | Weight | Box | Carton |
|---|---|---|---|---|---|
| 170-033-319 | HG-RNM30-SET | 3.0±20% N·m (30.6±20% kgf·cm) | 112 g | 15 sets | 120 sets |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP PIVOT TORQUE HINGE HG-PTH30 NEW

Latest Info



Free stop

Passed Private 30K Cycle Test

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

INSTRUCTION | SUS

## Remarks

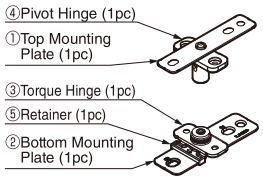
- 90° round trip is counted as one cycle in the test.
- Be sure to read the “Precautions for Use” (P.23).
- When installing, ensure that both hinge shafts are leveled and aligned.
- Force for operation varies depending on use environment, including air temperature and wind.
- Do not use with a door and window enduring strong wind pressure.

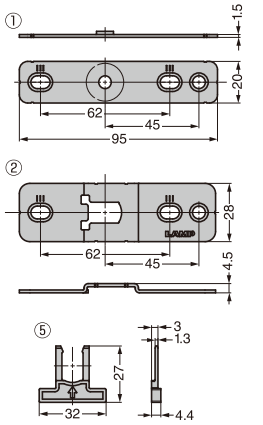
## Parts Included

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

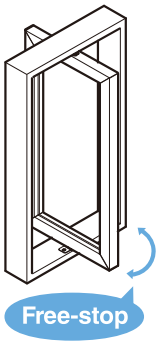
Feature

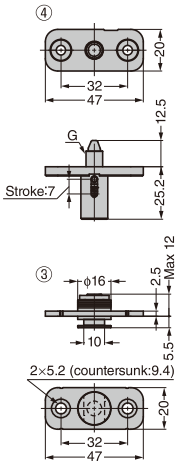
## Component Parts



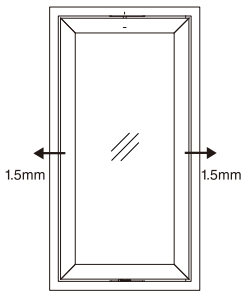




## Holds in any position



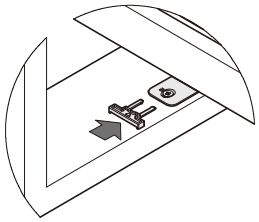




## Adjustable Side Spaces



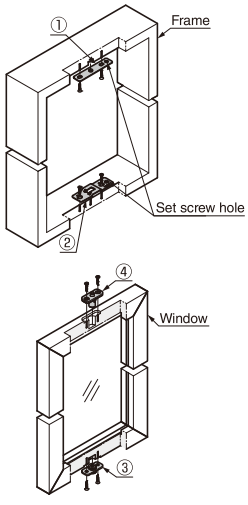

Can be adjusted horizontaly after installation.

## Prevents Doors From Falling Off

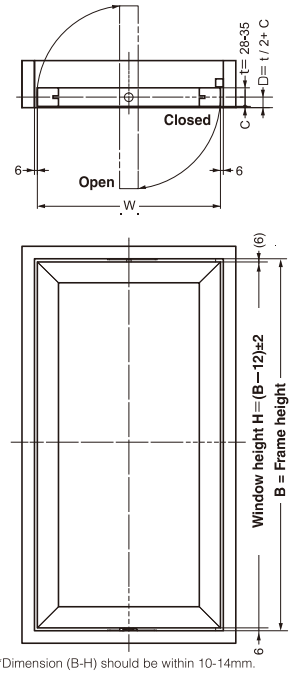


The retainer prevents doors from falling off.
It only needs to be inserted into the bottom plate.

## Processing

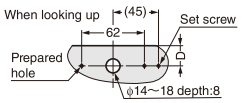



## Installation

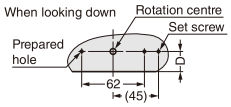



*Dimension (B-H) should be within 10-14mm.

## Upper part of inside of frame

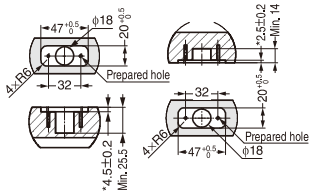



## Lower part of inside of frame



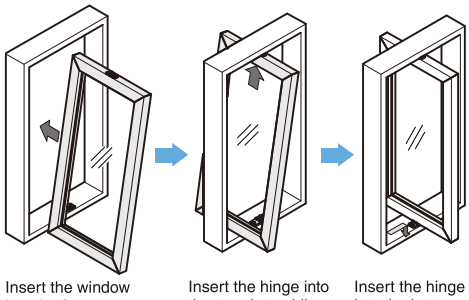

## Upper part of window

## Lower part of window




*Determine the mortice depth so that the component is flush with the surface.

## Easy Installation



Insert the window into the frame.

Insert the hinge into the top plate while holding the window at an incline.

Insert the hinge into the bottom plate.

Sold in sets of two hinges.

| Item Code | Item Name | Material | Door Width | Door Height | Door Thickness | Door Weight kg/set | Torque N·m | Torque kgf·m | Weight (g) | Box (set) | Carton (set) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 170-043-673 | HG-PTH30 | Stainless Steel | 350-500 | 700-1200 | 28-35 | Max. 10 | 3.0±20% | 30.6±20% | 95 | 15 | 120 |

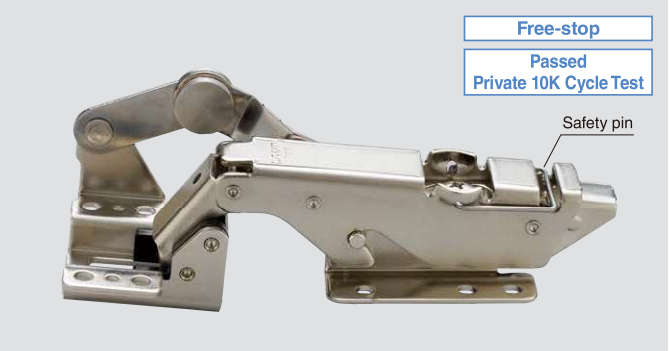


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

# LAMP TORQUE CONCEALED HINGE H95TSH-F For Sheet Metal NEW

Latest Info




- Has free-stop torque mechanism with 95° opening.
- Gives no spring-back and backlash.
  When the angle is near 0°, the torque will be released.
- Easy installation and detachment.
- Hinge can be easily fixed onto the mounting plate by pressing down.
- Less interference with adjacent objects due to wide throw opening.
- The safety pin prevents accidental unlocking of the lock lever.

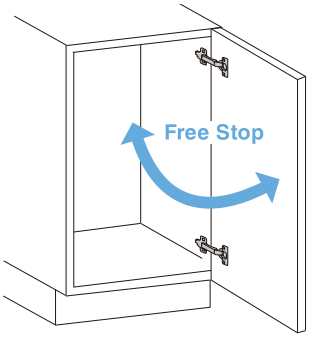
## Application
- Vending machines, ticket machines, contiguous doors, small cabinet door embedded in the walls.

## Sold Separately
- Mounting Plate H95TSZ

## Remarks
- When the angle is near 0°, the torque will be released.

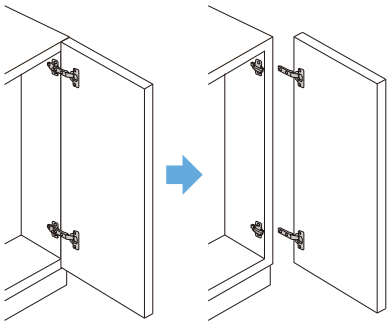
Feature

## Torque Mechanism



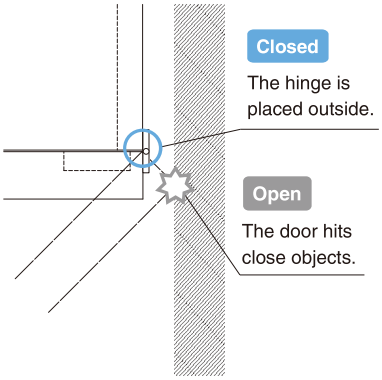

Holds in position even if the door is inclined.

## Easy Installation and Detachment

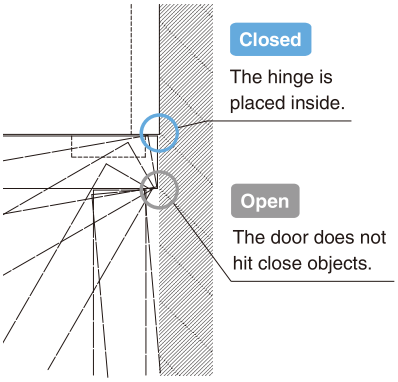


## Door Locus Comparison

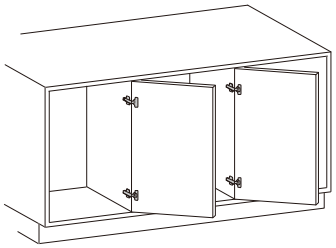
### Butt Hinge




### Concealed Hinge

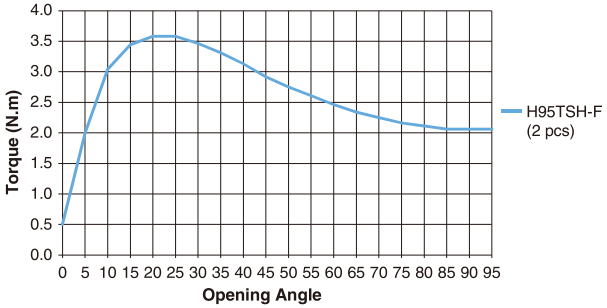



## Alternative Installations



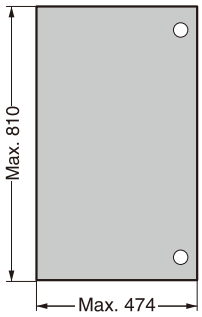
Can be used on doors lined up side by side.

## Torque Graph




Although the torque will be released to prevent "spring-back" at a nearly closed angle, the door will not be firmly kept closed. If detent function is needed, please use with catches.

## Example Door Spec



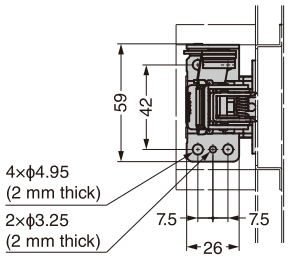

- Height : Max. 810 mm
- Width : Max. 474 mm
- Thickness : Max. 92 mm
- Weight : Max. 20 kg

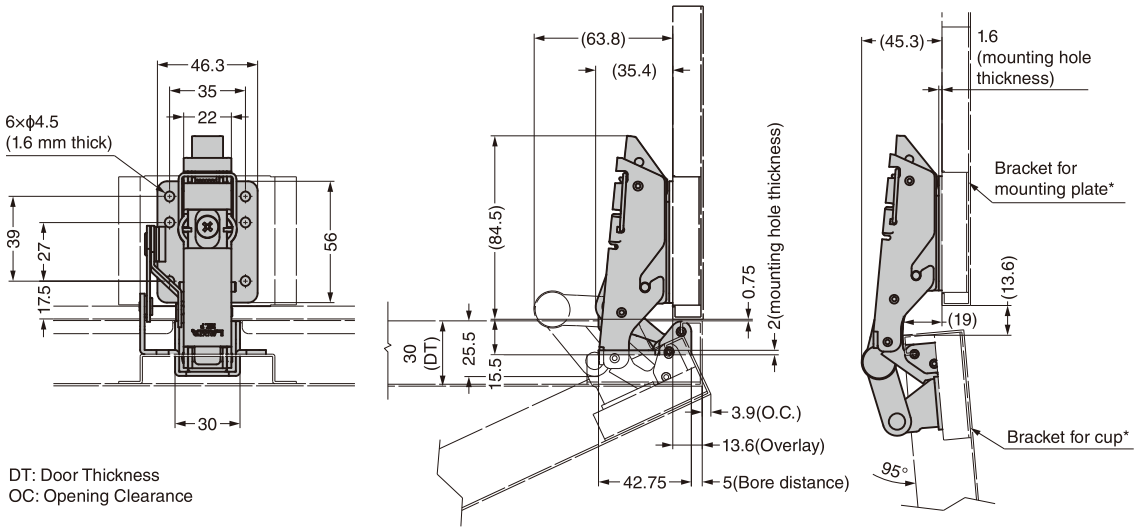
* 2 hinges used



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

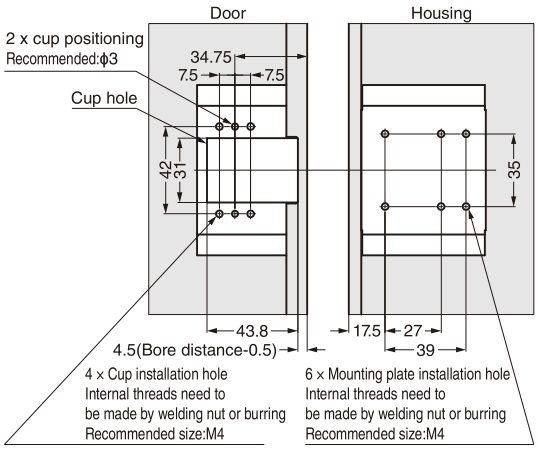



DT: Door Thickness
OC: Opening Clearance

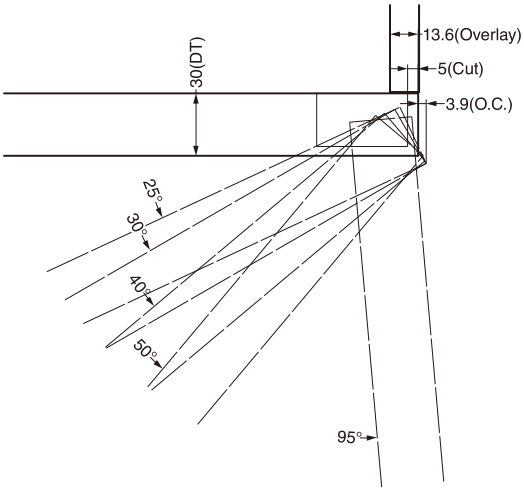
* Please prepare "Bracket for mounting plate" and "Bracket for cup" by yourself.

## Cut Out Dimensions




The drawing shows the installation position in the conditions below:
- Bore distance : 5 mm
- Door thickness : 30 mm
- Overlay : 13.6 mm

## Locus Chart




Reference door weight: 20 kg
(In case of door size W450 x H800, pitch 550, vertical use)

### Hinge Body

| Item Code | Item Name | Main Material | Finish | Weight (g) | Box (pcs) |
|---|---|---|---|---|---|
| 160-046-391 | H95TSH-F | Steel | Nickel | 180 | 60 |

### Mounting Plate (Sold Separately)

| Item Code | Item Name | Main Material | Finish | Weight (g) | Box (pcs) |
|---|---|---|---|---|---|
| 160-073-591 | H95TSZ | Steel | Nickel | 94 | 100 |

This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP CONCEALED TORQUE HINGE HG-TU

Latest Info



Passed Private 20K Cycle Test



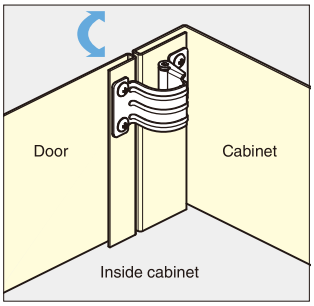
- Hinge has free stop: It holds its position at any desired angle
- Grease free
- Install on the back side of flap doors or doors for a clean appearance.
- Can be used in either horizontal and vertical applications.
- The HG-TUF does not include a torque function. It is used in combination with the HG-TU03/HG-TU07 hinge to reduce the torque applied on lids.

## Remarks

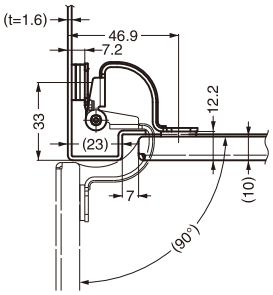
- Recommended for use in pairs.

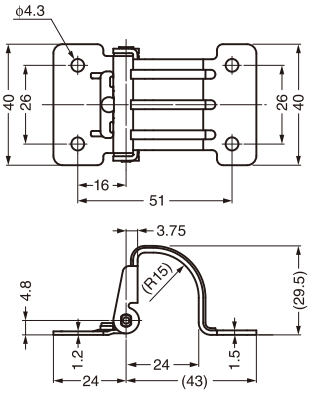
Selection Tool
Torque Hinge

## Installation

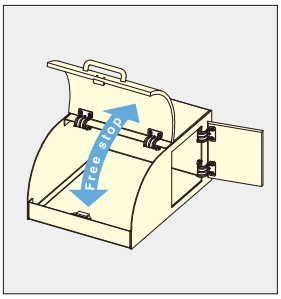



## Dimension




## Application Example




| Item Code | Item Name | Material | Finish | Torque Moment (Per piece) | | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|
| 170-022-304 | HG-TU03 | Stainless Steel (SUS304) | Mirror | 0.35 $^{+40\%}_{-20\%}$ N·m | 3.6 $^{+40\%}_{-20\%}$ kgf·cm | 50 g | 20 pcs | 200 pcs |
| 170-022-305 | HG-TU07 | Stainless Steel (SUS304) | Mirror | 0.7 $^{+40\%}_{-20\%}$ N·m | 7.1 $^{+40\%}_{-20\%}$ kgf·cm | 50 g | 20 pcs | 200 pcs |
| 170-052-628 | HG-TUF | Stainless Steel (SUS304) | Mirror | — | — | 50 g | 20 pcs | 200 pcs |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

## LAMP TORQUE HINGE (DUAL AXIS) HG-T30S15

Latest Info



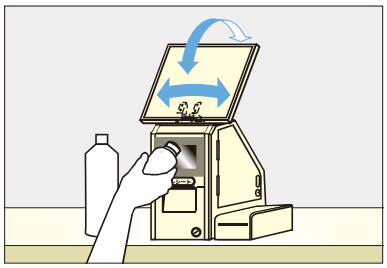

- Dual axis: can both tilt and rotate.
- Free stop: can hold position at any rotation angle or degree of tilt.
- Can fully rotate 360°.
- Provides torque stability in both directions.
- Easy surface installation.

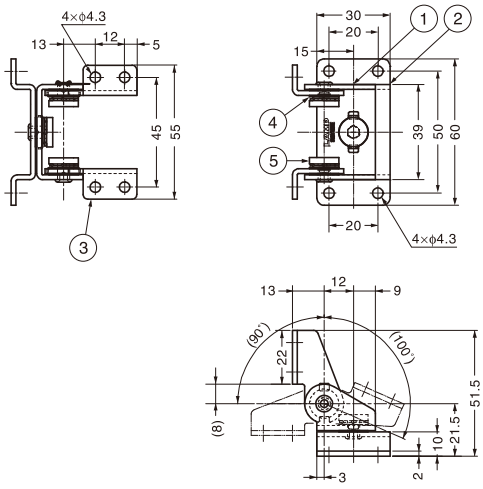
Feature

### Remarks

- Operating temperature : 0˚ - 40˚
- Suitable for monitor screen.

### Application Example






| No. | Part Name | Material | Finish |
|---|---|---|---|
| ① | Base | Stainless Steel (SUS430) | Mirror |
| ② | Base Plate | Stainless Steel (SUS430) | Mirror |
| ③ | Bracket | Stainless Steel (SUS430) | Mirror |
| ④ | Plate | Steel | - |
| ⑤ | Shaft | Stainless Steel (SUS303) | - |

| Item Code | Item Name | Torque Moment (Tilting) | | Torque Moment (Swiveling) | | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|
| 170-020-826 | HG-T30S15 | 3.0±20% N·m | 30.6±20% kgf·cm | 1.5±20% N·m | 15.3±20% kgf·cm | 87 g | 12 pcs | 96 pcs |

## LAMP TORQUE HINGE (DUAL AXIS) HG-T70S30

Latest Info

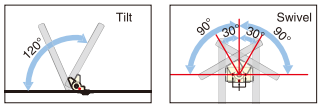



- Dual axis: can both tilt and rotate.
- Free stop: can hold position at any rotation angle or degree of tilt.
- Can fully rotate 360°.
- Provides torque stability in both directions.
- Degree of rotation can be constrained by using screws or pins.

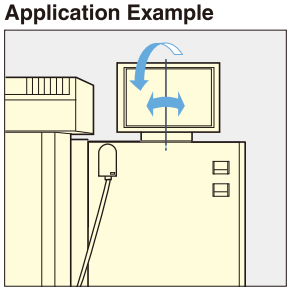
Feature

### Remarks

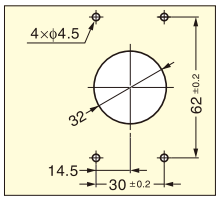
- Operating temperature : 0˚ - 40˚
- Suitable for monitor screen.

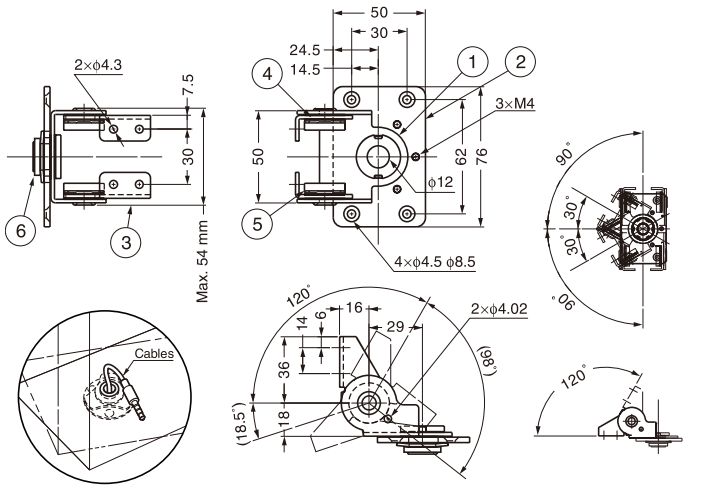



### Application Example



### Cut Out Dimensions



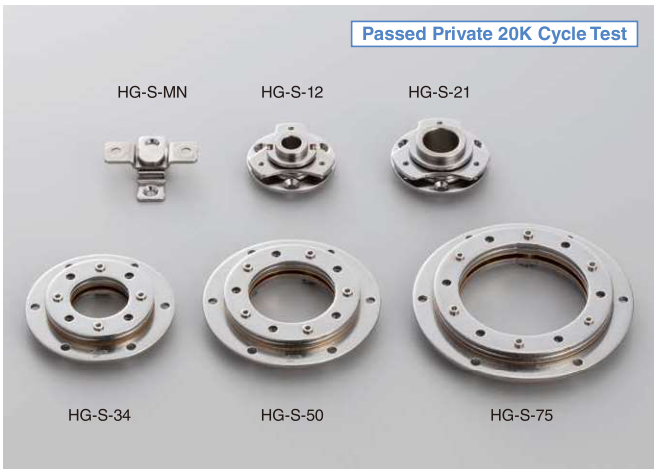

| No. | Part Name | Material | Finish |
|---|---|---|---|
| ① | Base | Stainless Steel (SUS430) | Mirror |
| ② | Base Plate | Stainless Steel (SUS430) | Mirror |
| ③ | Bracket | Stainless Steel (SUS430) | Mirror |
| ④ | Plate | Steel | - |
| ⑤ | Shaft | Stainless Steel (SUS303) | - |
| ⑥ | Washer | Stainless Steel (SUS430) | Mirror |

| Item Code | Item Name | Torque Moment (Tilting) | | Torque Moment (Swiveling) | | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|
| 170-012-419 | HG-T70S30 | 7.0±20% N·m | 71.4±20% kgf·cm | 3.0±20% N·m | 30.6±20% kgf·cm | 233 g | 5 pcs | 40 pcs |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

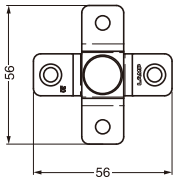
# LAMP SWIVEL TORQUE HINGE HG-S



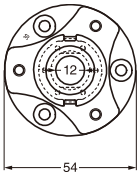

- Rotation angle: 360˚
- Centre hole for easy cable management (except for HG-S-MN).

Feature

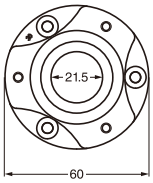
SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES



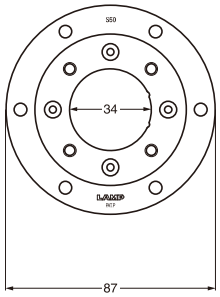
HG-S-MN



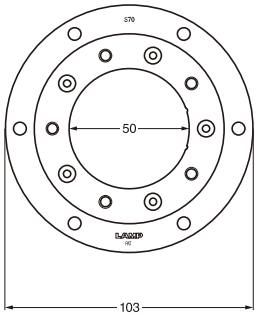
HG-S-12



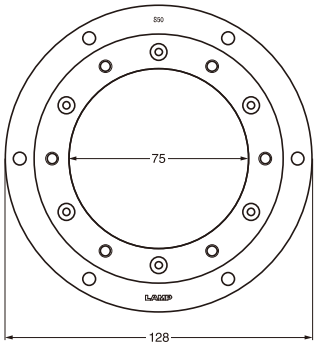
HG-S-21



HG-S-34



HG-S-50



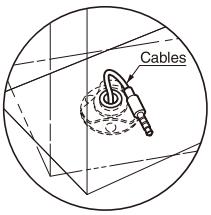
HG-S-75

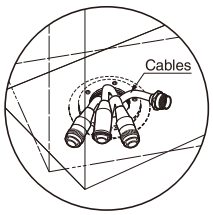
## Application Example

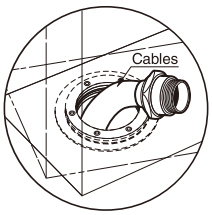
Tablet stand



Wire hole



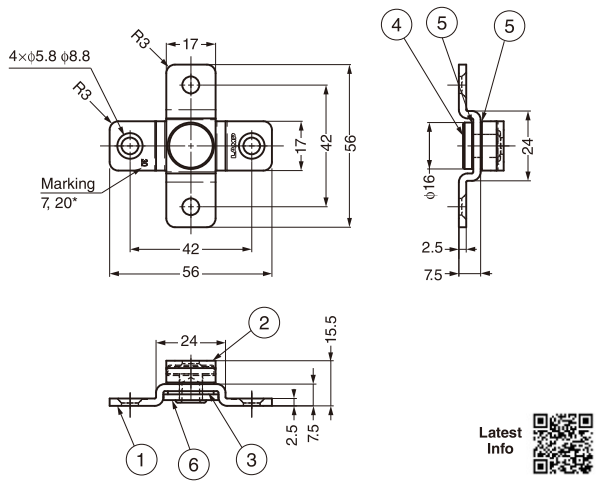

| Item Code | Item Name | Hole Diameter | Size | Torque Moment | Load Capacity | | Weight | Box | Carton | Page |
|---|---|---|---|---|---|---|---|---|---|---|
| 170-029-726 | HG-S7-MN | - | 56 | 0.7±20% N·m ( 7.1±20% kgf·cm) | - | - | 49 g | 25 pcs | 200 pcs | P.153 |
| 170-029-727 | HG-S20-MN | | | 2.0±20% N·m ( 20.4±20% kgf·cm) | - | - | 49 g | 25 pcs | 200 pcs | |
| 170-021-976 | HG-S30-12 | ϕ12 | ϕ 54 | 3.0±20% N·m ( 30.6±20% kgf·cm) | 200 N | 20.4 kgf | 131 g | 10 pcs | 100 pcs | |
| 170-021-975 | HG-S50-12 | | | 5.0±20% N·m ( 51.0±20% kgf·cm) | 200 N | 20.4 kgf | 131 g | 10 pcs | 100 pcs | |
| 170-029-728 | HG-S30-21 | ϕ21.5 | ϕ 60 | 3.0±20% N·m ( 30.6±20% kgf·cm) | 200 N | 20.4 kgf | 173 g | 10 pcs | 80 pcs | |
| 170-029-729 | HG-S50-21 | | | 5.0±20% N·m ( 51.0±20% kgf·cm) | 200 N | 20.4 kgf | 173 g | 10 pcs | 80 pcs | |
| *170-023-959 | HG-S50-34 | ϕ34 | ϕ 87 | 5.0±20% N·m ( 51.0±20% kgf·cm) | 400 N | 40.8 kgf | 274 g | 5 pcs | 40 pcs | P.154 |
| *170-023-960 | HG-S70-34 | | | 7.0±20% N·m ( 71.4±20% kgf·cm) | 400 N | 40.8 kgf | 276 g | 5 pcs | 40 pcs | |
| *170-023-961 | HG-S70-50 | ϕ50 | ϕ103 | 7.0±20% N·m ( 71.4±20% kgf·cm) | 400 N | 40.8 kgf | 370 g | 5 pcs | 40 pcs | |
| *170-023-962 | HG-S100-50 | | | 10.0±20% N·m (102.0±20% kgf·cm) | 400 N | 40.8 kgf | 370 g | 5 pcs | 40 pcs | |
| *170-029-730 | HG-S50-75 | ϕ75 | ϕ128 | 5.0±20% N·m ( 51.0±20% kgf·cm) | - | - | 576 g | 20 pcs | 120 pcs | |
| *170-029-731 | HG-S70-75 | | | 7.0±20% N·m ( 71.4±20% kgf·cm) | - | - | 576 g | 5 pcs | 40 pcs | |

*Horizontal installation only.


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

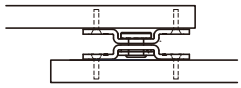
## HG-S-MN




*7 : HG-S7-MN, 20 : HG-S20-MN

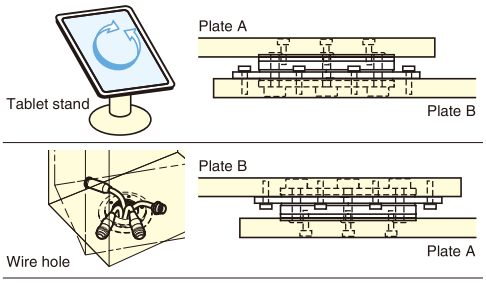
Latest Info

### Installation

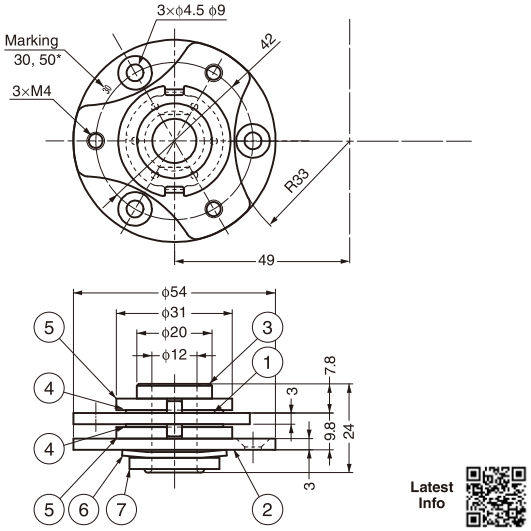


| No. | Part Name | Material | Finish |
|---|---|---|---|
| ① | Bracket B | Stainless Steel (SUS430) | Mirror |
| ② | Bracket A | | |
| ③ | F Plate | Bronze | – |
| ④ | Shaft | Stainless Steel (SUS303) | |
| ⑤ | Spring Washer | Stainless Steel | |
| ⑥ | Washer | Stainless Steel (SUS430) | Mirror |

### Installation



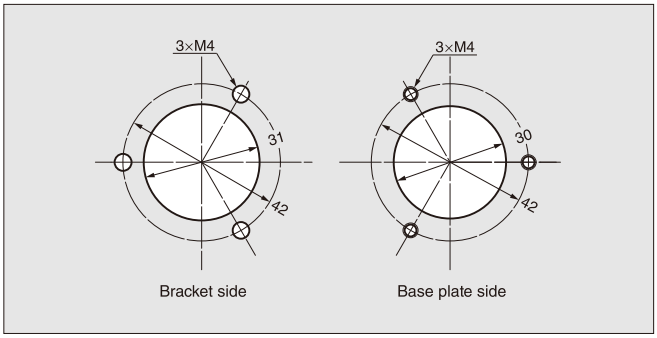

## HG-S-12 (Hole Diameter ϕ12)




*30 : HG-S30-12, 50 : HGS50-12

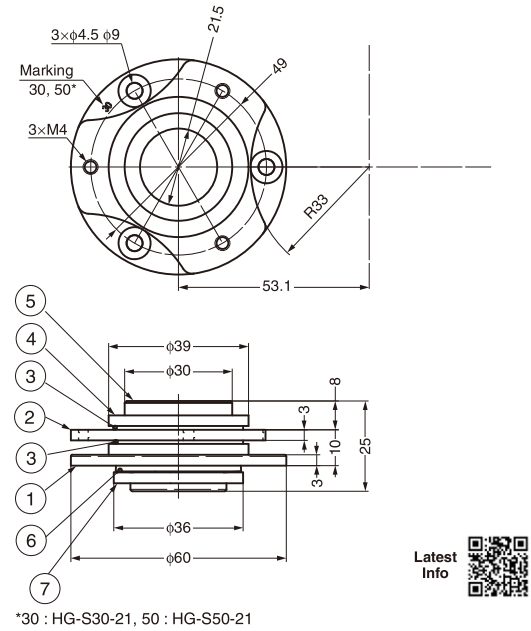
Latest Info

### Cut Out Dimensions




| No. | Part Name | Material | Finish |
|---|---|---|---|
| ① | Bracket | Stainless Steel (SUS430) | Mirror |
| ② | Base Plate | | |
| ③ | Sleeve | Stainless Steel (SUS303) | – |
| ④ | F Plate | Bronze | |
| ⑤ | Washer | Stainless Steel (SUS430) | Mirror |
| ⑥ | Spring Washer | Steel | – |
| ⑦ | Washer | Stainless Steel (SUS430) | |

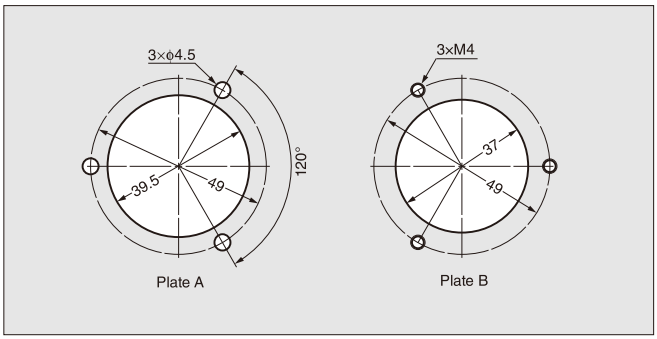
## HG-S-21 (Hole Diameter ϕ21.5)




*30 : HG-S30-21, 50 : HG-S50-21

Latest Info

### Cut Out Dimensions

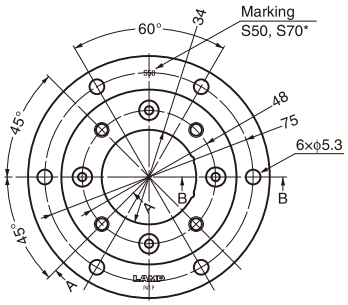



| No. | Part Name | Material | Finish |
|---|---|---|---|
| ① | Plate B | Stainless Steel (SUS430) | Mirror |
| ② | Plate A | | |
| ③ | F Plate | Bronze | Polished |
| ④ | Washer | Stainless Steel (SUS430) | Mirror |
| ⑤ | Sleeve | Stainless Steel (SUS303) | Plain |
| ⑥ | Spring Washer | Stainless Steel | – |
| ⑦ | Washer | Stainless Steel (SUS430) | |

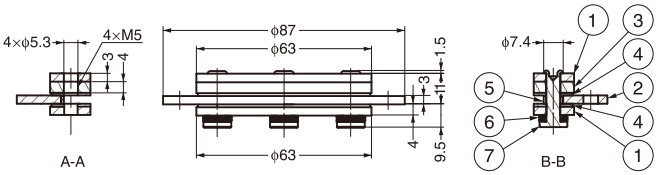
This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

## HG-S-34 (Hole Diameter ϕ34)

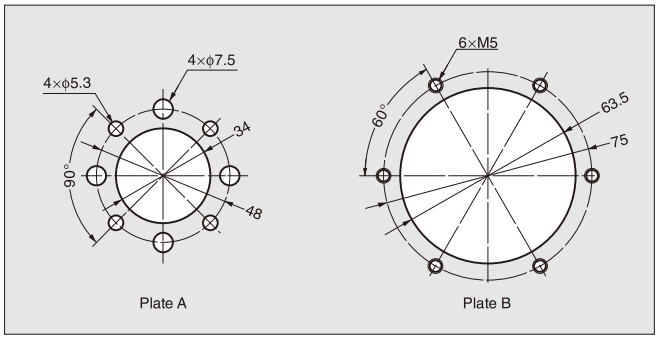



Latest Info



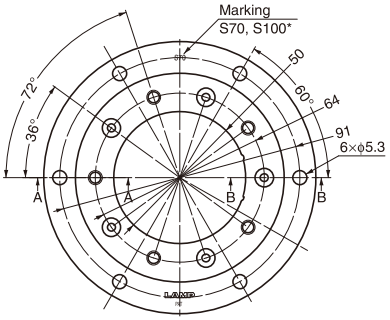

*S50 : HG-S50-34, S70 : HG-S70-34

### Cut Out Dimensions

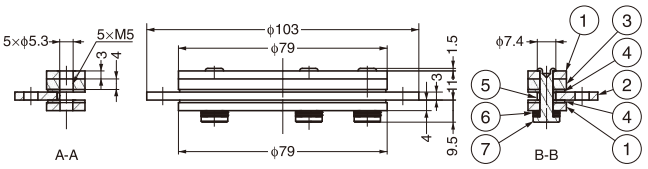



| No. | Part Name | Material | Finish |
|---|---|---|---|
| ① | Plate A | Stainless Steel (SUS430) | Mirror |
| ② | Plate B | | |
| ③ | Plate C | | |
| ④ | F Plate | Bronze | – |
| ⑤ | Bush | Stainless Steel (SUS303) | |
| ⑥ | Spring Washer | Stainless Steel | |
| ⑦ | Shaft | Stainless Steel (SUS303) | |

## HG-S-50 (Hole Diameter ϕ50)

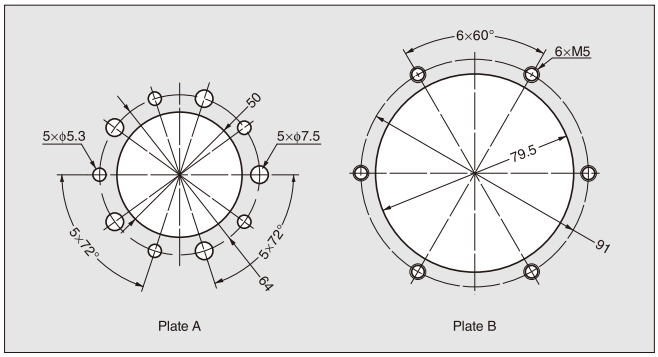



Latest Info



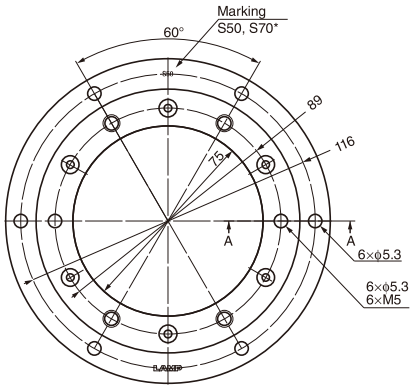

*S70 : HG-S70-50, S100 : HG-S100-50

### Cut Out Dimensions

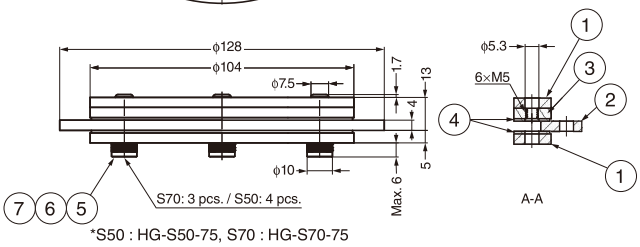



| No. | Part Name | Material | Finish |
|---|---|---|---|
| ① | Plate A | Stainless Steel (SUS430) | Mirror |
| ② | Plate B | | |
| ③ | Plate C | | |
| ④ | F Plate | Bronze | – |
| ⑤ | Bush | Stainless Steel (SUS303) | |
| ⑥ | Spring Washer | Stainless Steel | |
| ⑦ | Shaft | Stainless Steel (SUS303) | |

## HG-S-75 (Hole Diameter ϕ75)

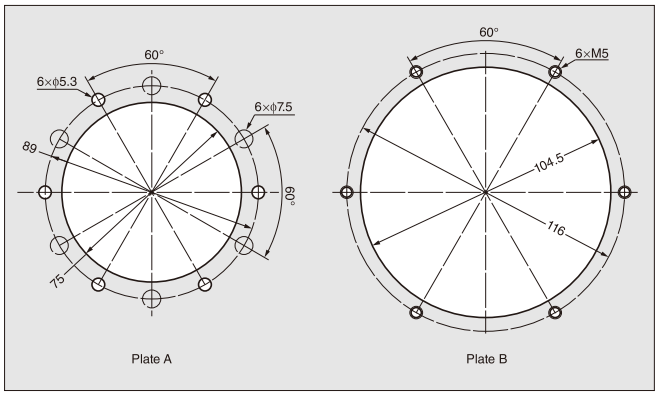



Latest Info




*S50 : HG-S50-75, S70 : HG-S70-75

### Cut Out Dimensions




| No. | Part Name | Material | Finish |
|---|---|---|---|
| ① | Plate A | Stainless Steel (SUS430) | Mirror |
| ② | Plate B | | |
| ③ | Plate C | | |
| ④ | F Plate | Bronze | – |
| ⑤ | Bush | POM | |
| ⑥ | Spring Washer | Stainless Steel | |
| ⑦ | Shaft | Stainless Steel (SUS303) | |

The material of the bush will change to stainless steel (SUS303) when the current stock runs out.


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

# Discover What Sugatsune's Website Has to Offer!

sugatsune global Search

## Our site offers...

- Keyword Search + Product Filters
- Installation Instructions
- New Product Information
- CAD Data (2D, 3D)
- Customer Solution Case Studies
- Product Videos
- Hardware Basics
- Selection Tools

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

# LAMP SPRING-ASSIST TORQUE HINGE HG-TLAJ Torque Adjustment NEW

Latest Info

Lift Assist | Free-stop | Passed Private 50K Cycle Test



Hinge



Cover
(sold separately)

GOOD DESIGN

## 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.

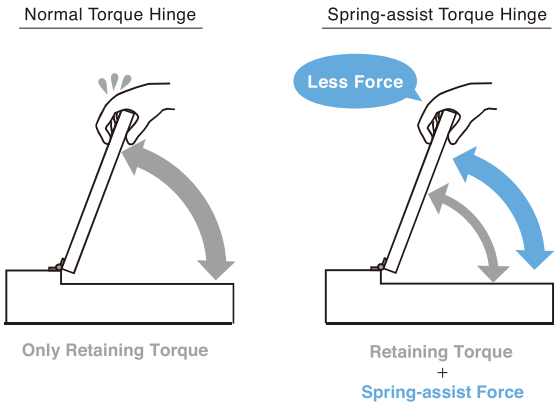
## Specifications
- Operating temperature: -0° to 40°.

## Application
- Medical equipment, analytical instruments

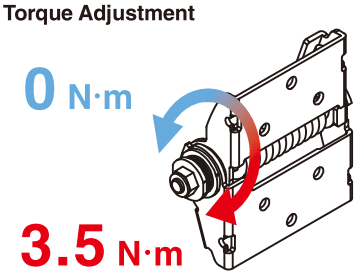
## Remarks
- Do not open/close the hinge before installation. The spring could accidentally pinch fingers.
- When installing, ensure that both hinge shafts are levelled and aligned.
- Do not detach the torque adjustment nut.
- Do not tighten the torque adjustment nut with a force of over 10 N.m. It may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

## Sold Separately
- Cover

## Smoother than ever before




## Retaining Torque Adjustment

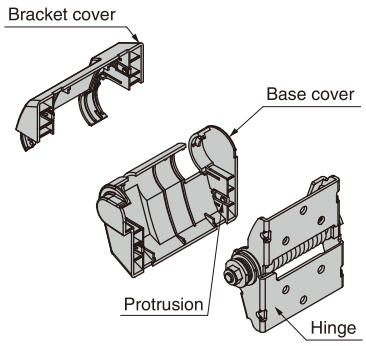


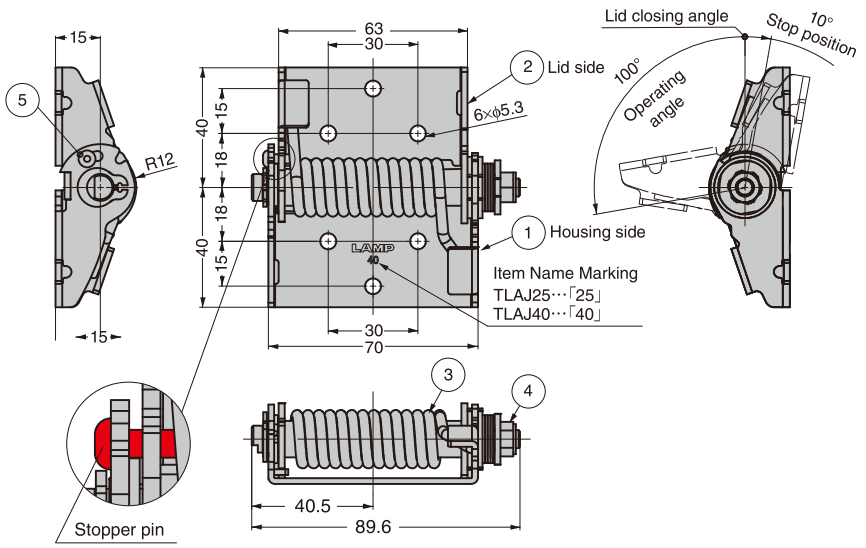

A hex key is needed (size: 10). 0 N.m is the factory preset.

Feature

Selection Tool
Torque Hinge

## 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

| 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 |

*Spring-assist force is not adjustable. Remaining torque is adjustable.

## Cover Sold separately

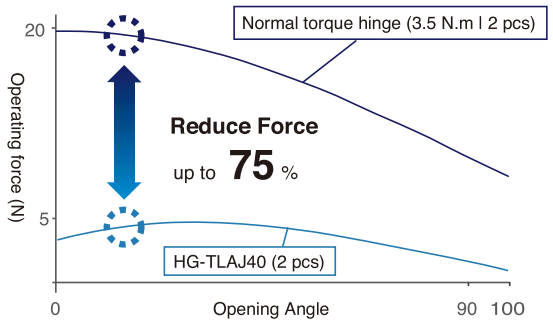
| Item Code | Item Name | Material | Weight (g) | Box (pcs) | Carton (pcs) |
|---|---|---|---|---|---|
| 170-043-831 | HG-TLAJC | PBT | 41 | 10 | 40 |

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



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

## Compare Required Force

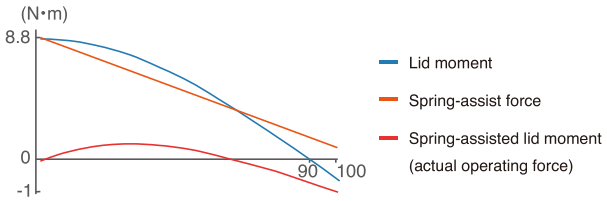



### Conditions

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

## Lift Assist Mechanism

The spring-assist force offsets the lid moment.

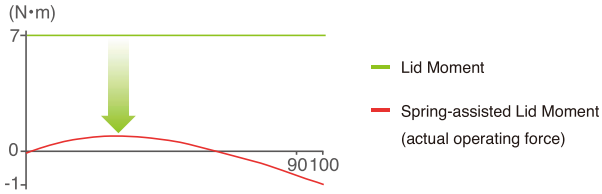



**Force Formula**

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

## Free-stop Mechanism

The retaining torque keeps the lid in position.




**Free-stop Formula**

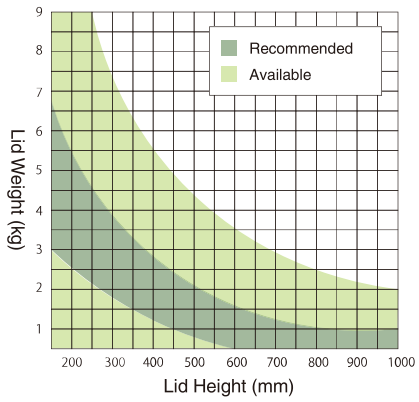
"Retaining Torque" − "Spring-assisted Lid Moment" > 0

**Tips for Smoother Movement**

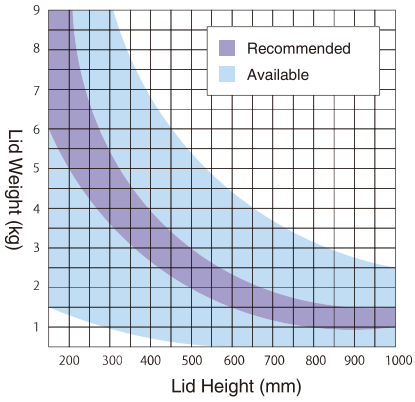
The closer retaining torque is to spring-assisted lid moment, the more lightly a lid moves. (The retaining torque is adjustable.)

## Available Lid Size

HG-TLAJ25 (2 pcs)




HG-TLAJ40 (2 pcs)



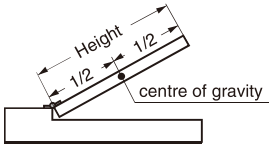

**Available Range**

- Free-stop: 0° to 100°

**Recommended Range**

- Free-stop: 0° to 100°
- Moves very llightly: 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

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

Access here



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

## Achieve Total Coordination with Sleek, Stylish Pivot Hinges and Matching Cylinder Locks.







Silver Gold Black

Meticulously polished flat surfaces and precisely crafted sharp styles combine to create elegant and sophisticated showcases.

Swing door

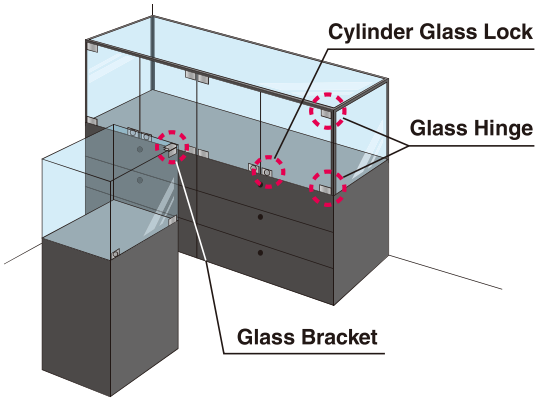
# GS-G Series

## Glass Showcase Fittings

| Model | GS-GH5 ▸ P.160 | GS-GH20 ▸ P.162 | GS-GH50 ▸ P.165 |
|---|---|---|---|
| Colour | Silver / Gold / Black | | |
| Material | Zinc Alloy (ZDC) | | |
| Width | Max. 600 mm | Max. 700 mm | Max. 900 mm |
| Height | Max. 900 mm | Max. 1600 mm | Max. 2500 mm |
| Glass Thickness (Door) | 5, 6 mm | 6, 8 mm | 8, 10, 12, 12.7 mm |
| Load Capacity | Max. 8 kgf/set (2 pcs) | Max. 20 kgf/set (2 pcs) | Max. 50 kgf/set (2 pcs) |


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

## Total Coordination



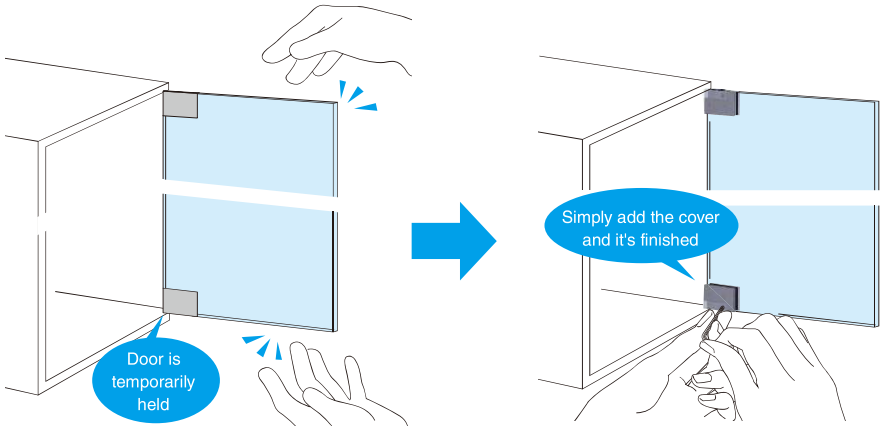



Glass hinges, Glass brackets, and locks can be unified in a flat design, that enhances the appeal of your exhibits.



## Easy Insttallation

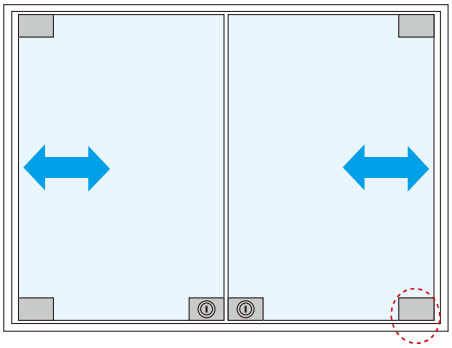
•Temporary holding feature allows the door to be installed easily by one person

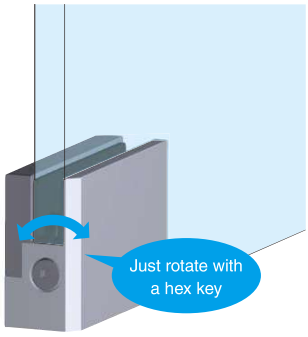



Fit the hinge groove onto the rotating shaft mounted on the top and bottom panels. The temporarily retaining the door in the frame through the temporary holding feature and enabling easy door mounting by one person.

Installation

•Horizontal and height adjustment after mounting the door is easy



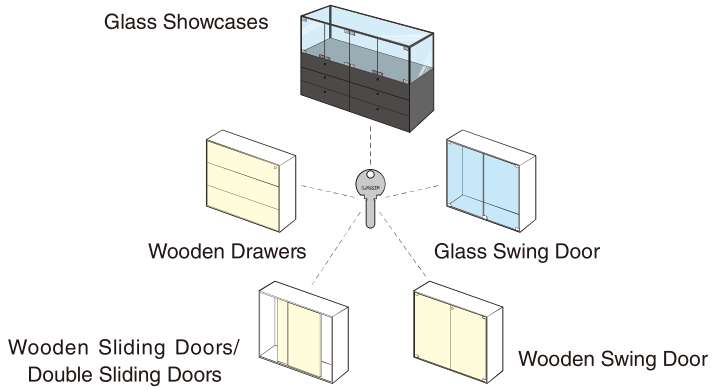



Rotate the adjustment screw on the hinge side to move the door horizontally, enabling easy adjustment with the door mounted. Additionally, height adjustment while mounted is also possible with GS-GH50.

## Total Lock function

### Multiple cabinets can be locked and unlocked with the same key.

Specify the same key number within the Million Lock Series (GS-GL5, GS-GL5W, GS-GL20), the Super Rim Lock Series (GS-GL50), or the 2650 Series (GS-GL3) to lock/unlock drawers and swing doors near the showcase with the same key, as in the figure.

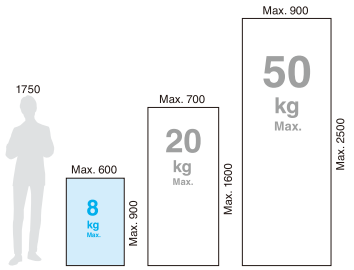





This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP GS-GH5 Series GLASS SHOWCASE HARDWARE Small type






| | |
|---|---|
| Colour | Silver / Gold / Black |
| Material | Zinc Alloy (ZDC) |
| Width | Max. 600 mm |
| Height | Max. 900 mm |
| Glass Thickness (Door) | 5, 6 mm |
| Load Capacity | Max. 8 kgf/set (2 pcs) |

| | Glass Hinge | Glass Bracket | Lock | | |
|---|---|---|---|---|---|
| Required Parts |  |  |  Key Changes: 1 million For single door |  Key Changes: 1 million For double doors |  Key Changes: 120 For single door |
| | GS-GH5-CR/GP/BL | GS-GB5-R/L-CR/GP/BL | GS-GL5-CR/GP/BL-B/D | GS-GL5W-CR/GP/BL-B/D | GS-GL3-KF/KT-CR/GP/BL-B/D |
| | ▶P.160 | ▶P.161 | ▶P.1223 | ▶P.1224 Doorstop Strike Plate GS-GL5HTU included | ▶P.1225 |

| | Surface Mounting Bracket | Doorstop Strike Plate |
|---|---|---|
| Options |  Needed when the hinge insert nut cannot be driven in |  |
| | GS-GH5-MU-BL | GS-GL5HTU-SM/GA/BL |
| | ▶P.161 | ▶P.1226 |

Installation

## LAMP GLASS HINGE (INSET) GS-GH5

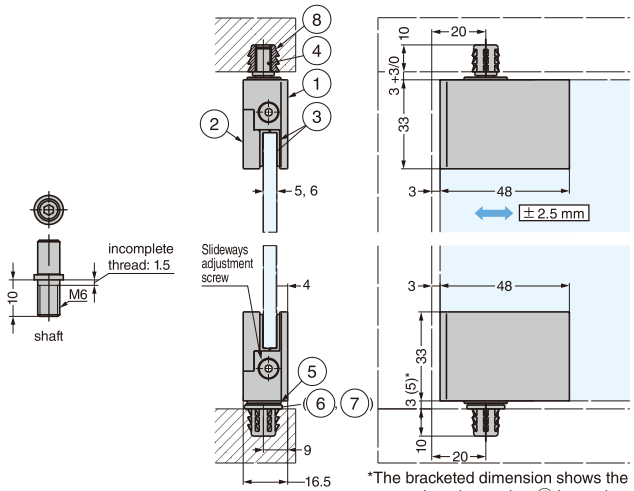
Latest Info




**Parts Included**



- For inset glass doors
- Can be used together with glass bracket GS-GB5 and glass door lock GS-GL5 for a total design of your showcase.
- Temporary holding feature allows the door to be installed easily by one person.
- Sideways adjustment (±2.5 mm) possible after installation of the door.
- The gap below the door is adjustable from 3 mm to 5 mm with washers ( ⑥ , ⑦ ).




*The bracketed dimension shows the case when the washer ⑦ is used.

INSTRUCTION

### Remarks

- Please refer to glass weight as the main reference when installing glass door.
- Please use different gasket supplied with item for 5 mm thickness glass door.
- Film for glass door is recommended for safe usage.
- Please prepare a door stop separately.

### Parts included

- Gaskets (for 5 mm thickness)
- Spanner Hex.2.5

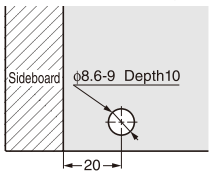
### Optional Part

- Surface mounting bracket GS-GH5-MU-BL

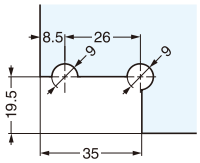
Feature | Selection Tool

Glass Hinge

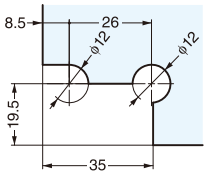
### Installation Drawings




Top and bottom panel




Glass door




Glass door (Tempered glass)

Sold in set (2 pcs).

| Item Code | Item Name | Finish/Colour | Door Width | Door Height | Glass Thickness | Door Weight N/set | Door Weight kgf/set | Box (sets) | Carton (sets) |
|---|---|---|---|---|---|---|---|---|---|
| 170-037-123 | GS-GH5-CR | Chrome | Max. 600 mm | Max. 900 mm | 5, 6 mm | 78 | 8 | 1 | 24 |
| 170-037-124 | GS-GH5-GP | Gold (24K) Plated | | | | | | 1 | 24 |
| 170-042-197 | GS-GH5-BL | Black | | | | | | 1 | 24 |

| No. | Part Name | Material | Finish/Colour | | |
|---|---|---|---|---|---|
| | | | CR | GP | BL |
| ① | Body | Zinc Alloy (ZDC) | Chrome | Gold (24K) Plated | Black |
| ② | Cover Plate | | | | |
| ③ | Gasket | Chloroprene Rubber (CR) | Black | | |
| ④ | Axis | Stainless Steel | Plain | | |
| ⑤ | Plastic Washer | Polyamide (PA) | Black | | |
| ⑥ | Washer (t: 1.5) | Stainless Steel (SUS304) | Plain | | |
| ⑦ | Washer (t: 3.5) | Brass | Nickel | | |
| ⑧ | Insert | Zinc Alloy (ZDC) | – | | |


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP SURFACE MOUNTING BRACKET GS-GH5-MU-BL NEW

Latest Info





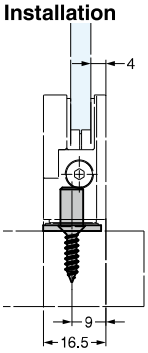
- Specially designed for use with GS-GH5 glass hinge (P.6).
- Can be simply installed with screws without need for recessing and insert nuts.
- Comes with a spacer which can increase gap below doors from 3 to 5 mm.

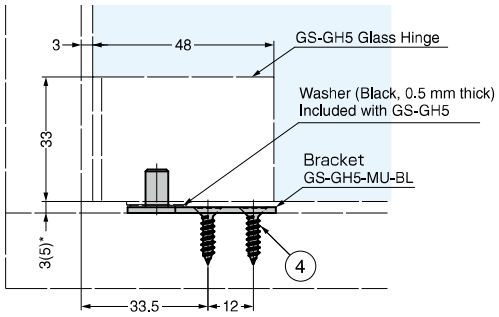
SCREW

## Parts Included

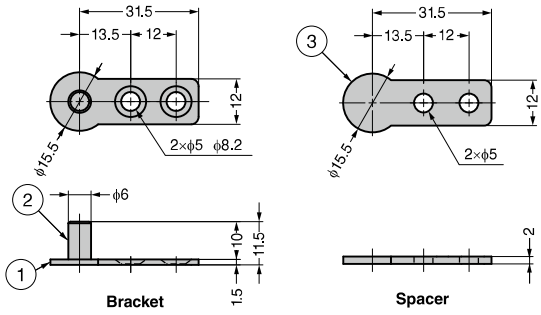
- Spacer
- Cross-recessed head tapping screw 3.5 × 15

## Installation




() Indicates the dimensions when the spacer is attached.




Sold in set: two brackets and one spacer

| Item Code | Item Name | Box (set) | Carton (set) |
|---|---|---|---|
| 170-045-786 | GS-GH5-MU-BL | 40 | 360 |

| No. | Part Name | Material | Finish/Colour |
|---|---|---|---|
| ① | Strike Plate | Stainless Steel (SUS430) | Enamel Black |
| ② | Shaft | Stainless Steel (SUS303) | Plain |
| ③ | Spacer | POM | Black |
| ④ | Included Screw | Stainless Steel | Enamel Black |

# LAMP GLASS BRACKET GS-GB5

Latest Info



GS-GB5-L-CR



GS-GB5-R-GP



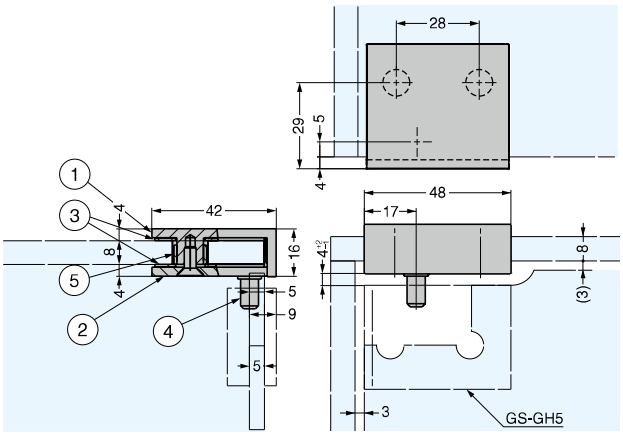
GS-GB5-L-BL

- For use with glass door hinge GS-GH5 for installation on cabinets with a glass top.
- Can be used together with glass door hinge GS-GH5 and lock GS-GL5 for a complete unified design for your showcase.

INSTRUCTION

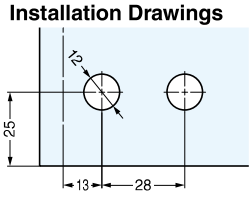
## Remarks

- Film for glass door is recommended for safe usage.
- Please prepare a door stop separately.

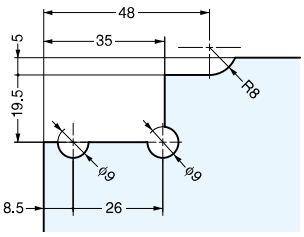



Drawing shows left side installation.

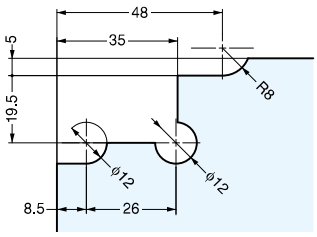
## Installation Drawings




Top panel




Glass door




Glass door (Tempered glass)

| Item Code | Item Name | Type | Finish | Glass Thickness | Box (pcs) | Carton (pcs) |
|---|---|---|---|---|---|---|
| 170-037-125 | GS-GB5-R-CR | Right Side | Chrome | 8 mm | 1 | 24 |
| 170-037-126 | GS-GB5-L-CR | Left Side | | | 1 | 24 |
| 170-037-127 | GS-GB5-R-GP | Right Side | Gold (24K) Plated | | 1 | 24 |
| 170-037-128 | GS-GB5-L-GP | Left Side | | | 1 | 24 |
| 170-042-198 | GS-GB5-R-BL | Right Side | Black | | 1 | 24 |
| 170-042-207 | GS-GB5-L-BL | Left Side | | | 1 | 24 |

| No. | Part Name | Material | Finish/Colour | | |
|---|---|---|---|---|---|
| | | | CR | GP | BL |
| ① | Body | Zinc Alloy (ZDC) | Chrome | Gold (24K) Plated | Black |
| ② | Plate | Stainless Steel (SUS430) | | | |
| ③ | Washer | Chloroprene Rubber (CR) | Black | | |
| ④ | Axis | Stainless Steel | Plain | | |
| ⑤ | Tube | Polyvinyl Chloride (PVC) | Clear | | |

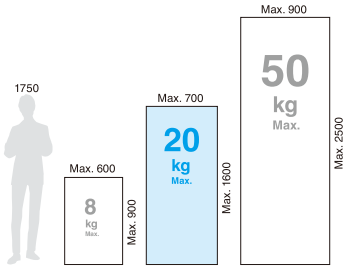


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

# LAMP GS-GH20 Series GLASS SHOWCASE HARDWARE Medium type






| | |
|---|---|
| Colour | Silver / Gold / Black |
| Material | Zinc Alloy (ZDC) |
| Width | Max. 700 mm |
| Height | Max. 1600 mm |
| Glass Thickness (Door) | 6, 8 mm |
| Load Capacity | Max. 20 kgf/set (2 pcs) |

Installation

| | Glass Hinge | Glass Bracket | Lock |
|---|---|---|---|
| Required Parts |  |  |  Key Changes: 1 million For single door |
| | GS-GH20-CR/GP/BL | GS-GB20-R/L-CR/GP/BL | GS-GL20-BL/CR-B/D |
| | ▶P.162 | ▶P.163 | ▶P.1222 |

| | Surface Mounting Bracket |
|---|---|
| Options |  Required when the hinge insert nut cannot be installed. |
| | GS-GH20-MU-SM/GA/BL |
| | ▶P.163 |

## LAMP GLASS HINGE (INSET) GS-GH20

Latest Info




**Parts Included**



- For inset glass doors
- Can be used together with glass bracket GS-GB20 and lock GS-GL20 for a total design of your showcase.
- Temporary holding feature allows the door to be installed easily by one person.
- Sideways adjustment (±2.5 mm) possible after installation of the door.
- The gap below the door is adjustable from 3 mm to 5 mm with the included washer.

INSTRUCTION

### Remarks

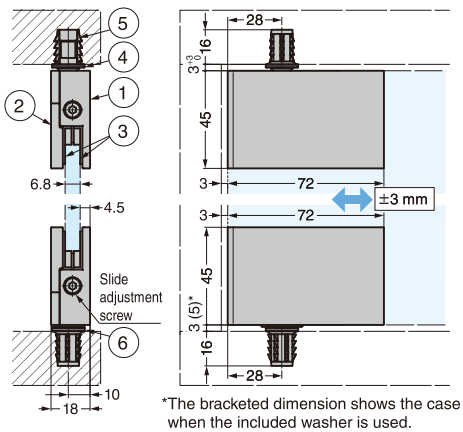
- Glass door weight is preferred to door size.
- Please use different gaskets supplied with item for 6 mm thickness glass door.
- Film on glass door is recommended for safe usage.
- Prepare door stopper separately.

### Parts supplied with set

- Gasket (For 6 mm thickness glass door)
- Spanner Hex.3

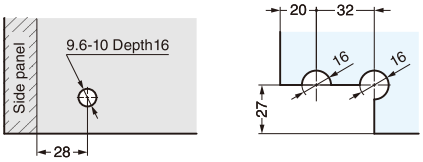
Feature

Selection Tool
Glass Hinge




*The bracketed dimension shows the case when the included washer is used.

### Installation Drawings




Sold in set (2 pcs).

| Item Code | Item Name | Finish | Door Width (mm) | Door Height (mm) | Glass Thickness (mm) | Door Weight N/set | Door Weight kgf/set |
|---|---|---|---|---|---|---|---|
| 170-041-445 | GS-GH20-CR | Chrome | Max. 700 | Max. 1,600 | 6, 8 | 196 | 20 |
| 170-041-446 | GS-GH20-GP | Gold (24K) Plated | | | | | |
| 170-041-447 | GS-GH20-BL | Black | | | | | |

| No. | Part Name | Material | Finish/Colour |
|---|---|---|---|
| ① | Body | Zinc Alloy (ZDC) | Chrome, Gold (24K) Plated, Black |
| ② | Back Plate | | |
| ③ | Gasket | Chloroprene Rubber (CR) | Black |
| ④ | Axis | Stainless Steel | Plain |
| ⑤ | Insert | Zinc Alloy (ZDC) | – |
| ⑥ | Washer (t: 2) | Brass | Nickel |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP SURFACE MOUNTING BRACKET GS-GH20-MU NEW

Latest Info

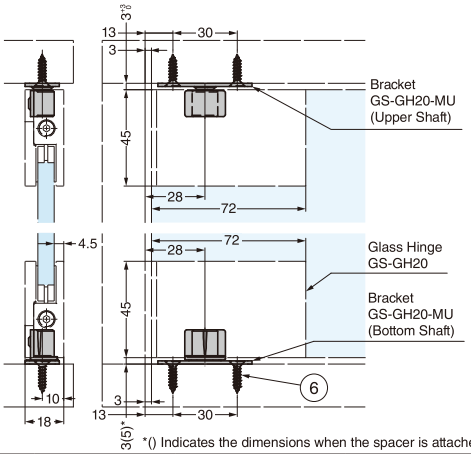


- Specially designed for the GS-GH20 glass hinge (P.162).
- Allows for easier installation with only screws.
- There is no need for recessing or insert nuts.
- There is no need for recessing or insert nuts.
- Comes with a spacer which can increase gap below doors from 3 to 5 mm.

SCREW

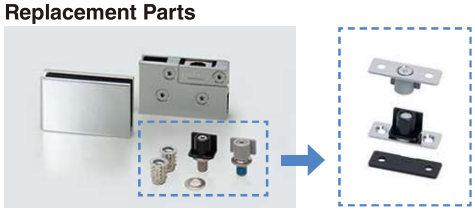
## Parts Included

- Spacer
- Cross-recesssed countersunk head tapping screw 3.5×15

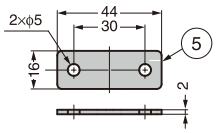



| No. | Part Name | Material | Finish/Colour |
|---|---|---|---|
| ① | Bracket Plate | Stainless Steel(SUS430) | SM : Plain<br>GA : Gold Substitute Plating<br>BL : Enamel Black |
| ② | Shaft | Stainless Steel(SUS340) | Plain |
| ③ | Upper Plastic Bush | POM | |
| ④ | Bottom Plastic Bush | | Black |
| ⑤ | Spacer | | |
| ⑥ | Included Screw | Stainless Steel | SM : Plain<br>GA : Gold Substitute Plating<br>BL : Enamel Black |

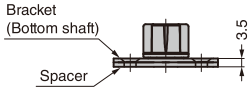
## Replacement Parts



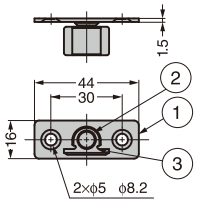
Replace the parts of GS-GH20 hinge for surface mounting.



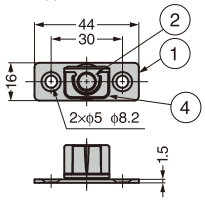

Spacer




Bracket and Spacer




Upper Shaft Unit




Bottom Shaft Unit

Sold in sets of an upper shaft unit, bottom shaft unit, and spacer.

| Item Code | Item Name | Finish | Box (sets) | Carton (sets) |
|---|---|---|---|---|
| 170-045-787 | GS-GH20-MU-SM | Plain | 30 | 270 |
| 170-045-788 | GS-GH20-MU-GA | Gold Substitute Plating | 30 | 270 |
| 170-045-789 | GS-GH20-MU-BL | Enamel Black | 30 | 270 |

# LAMP GLASS BRACKET GS-GB20

Latest Info




- For use with glass hinge GS-GH20 in case of glass top cabinet.
- Can be used together with glass hinge GS-GH20 and lock GS-GL20 for a total design of your showcase.

INSTRUCTION

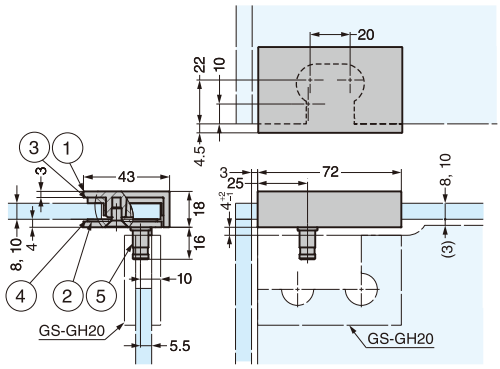
## Remarks

- For use with glass hinge GS-GH20 for installation on cabinets with a glass top.
- Can be used together with glass hinge GS-GH20 and lock GS-GL20 for a complete unified design for your showcase.
- For use in 8 mm thickness glass door, please use with the upper gasket which is included.

Feature

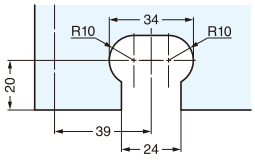
## Parts supplied with set

- Upper Gasket (For 8 mm thickness glass door)

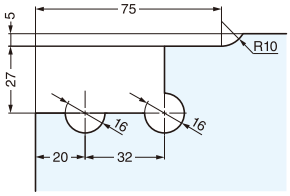



Drawing shows left side installation

## Cut Out Dimensions




Glass top




Glass door

| No. | Part Name | Material | Finish/Colour |
|---|---|---|---|
| ① | Body | Zinc Alloy (ZDC) | Chrome, Gold (24K) Plated, Black |
| ② | Plate | Stainless Steel (SUS430) | |
| ③ | Upper Gasket (For 10 mm thickness glass) | Chloroprene Rubber (CR) | Black |
| ④ | Lower Gasket | | |
| ⑤ | Axis | Stainless Steel | Plain |

| Item Code | Item Name | Type | Finish | Glass Thickness (mm) |
|---|---|---|---|---|
| 170-041-448 | GS-GB20-R-CR | Right Side | Chrome | 8, 10 |
| 170-041-449 | GS-GB20-L-CR | Left Side | | |
| 170-041-450 | GS-GB20-R-GP | Right Side | Gold (24K) Plated | |
| 170-041-451 | GS-GB20-L-GP | Left Side | | |
| 170-041-452 | GS-GB20-R-BL | Right Side | Black | |
| 170-041-453 | GS-GB20-L-BL | Left Side | | |



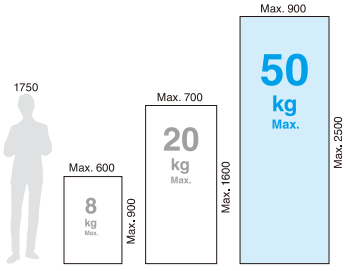
This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP GS-GH50 Series GLASS SHOWCASE HARDWARE Large type






| | Glass Hinge | Lock |
|---|---|---|
| Required Parts |  |  Key Changes: 3 million For single door |
| | GS-GH50-CR/GP/BL | GS-GL50-CR/GP/BL-B/D GS-GL50MK-CR/GP/BL-B |
| | ▶P.165 | ▶P.1220 |




| | Doorstop Magnetic Catch |
|---|---|
| Options |  |
| | HT-MSG62 |
| | ▶P.579 |

| | |
|---|---|
| Colour | Silver / Gold / Black |
| Material | Zinc Alloy (ZDC) |
| Width | Max. 900 mm |
| Height | Max. 2500 mm |
| Glass Thickness (Door) | 8, 10, 12, 12.7 mm |
| Load Capacity | Max. 50 kgf / set (2 pcs) |


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP GLASS DOOR HINGE GS-GH50 For Inset Doors NEW

Latest Info



- Designed for large inset glass showcases.
- Recommended for use with the GS-GL50 lock (P.1220) for design coordination.
- Doors can be temporary held in frames before fixing screws for easy installation.
- The door position can be adjusted by ± 3 mm right and left post installation. (Horizontal adjustment screw)
- The gap below the door can be adjusted from 7 up to 12 mm post installation. (Height adjustment ring)

INSTRUCTION | TEMPERED GLASS | SCREW

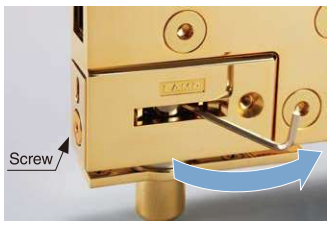
Selection Tool
Glass Hinge

## Remarks

- Be sure to read the “Precautions for Use” (P.23).
- Prioritize the door weight when determining the glass size.
- For 8 mm thick glass, use with a packing A, B, and spacer.
- For 10 mm thick glass, use with a packing A and B.
- For 12/12.7 mm thick glass, use with two packing A.
- Shatter proof films are recommended to be used on glass doors for safety.

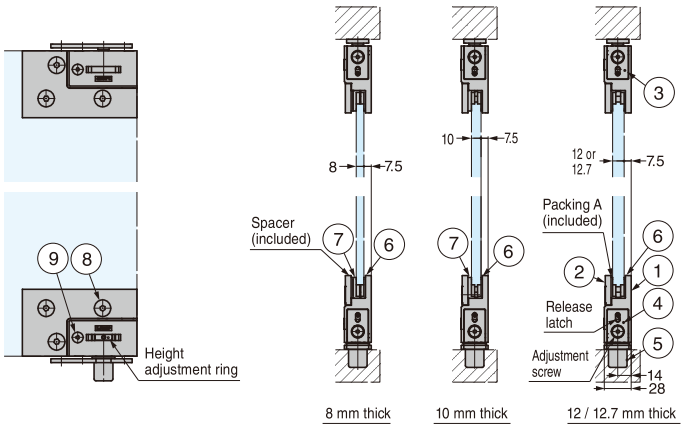
## Parts Included

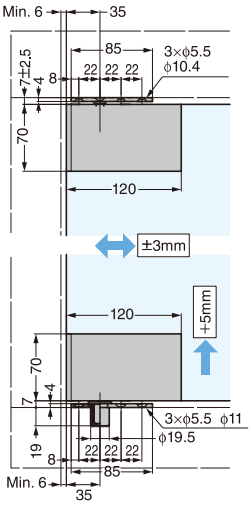
- Cross-recessed countersunk tapping screw 5×30
- Hex key 3 (for door position adjustments)
- Hex key 5 (for hinge assembly)
- Packing A
- Spacer (for 8 mm thick glass)



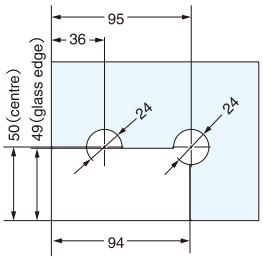

## Door Position Adjustments

Door height can be adjusted by turning the ring with a hex key. It can also be done post installation. Lateral adjustment can be done with the screw.

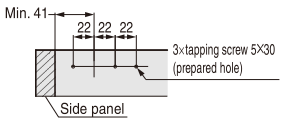


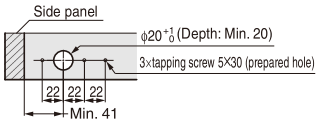

## Cut Out Dimensions



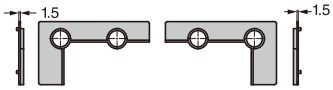

## Mounting Position on Top Board



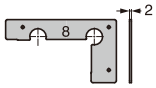

## Processing on Bottom Panel




## Packing A

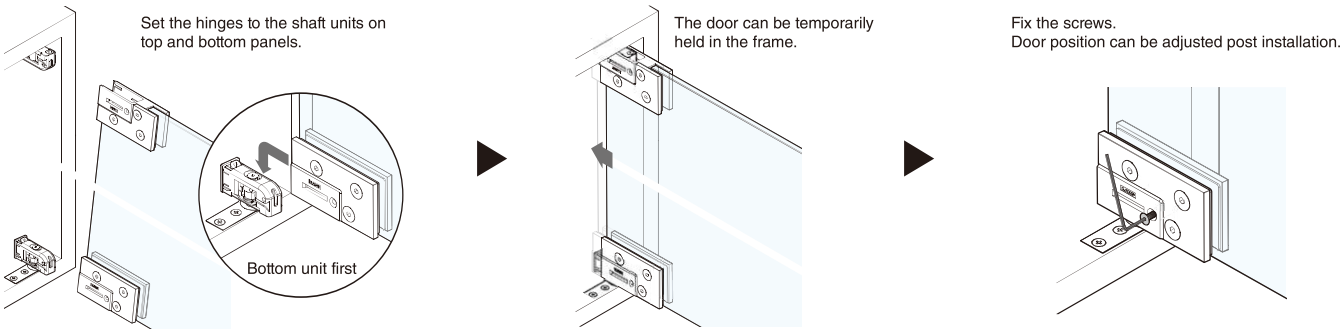



## Spacer (for 8 mm thick glass)




| No. | Part Name | Material | Finish | | |
|---|---|---|---|---|---|
| | | | CR | GP | BL |
| ① | Body (front) | Zinc Alloy (ZDC) | Chrome | Gold Plated (24K) | Enamel Black |
| ② | Body (back) | | | | |
| ③ | Upper Shaft Unit | | | | |
| ④ | Bottom Shaft Unit | | | | |
| ⑤ | Bottom Mounting Plate | | | | |
| ⑥ | Packing A (t: 1.5) | Chloroprene Rubber (CR) | Black | | |
| ⑦ | Packing B (t: 3.5) | | | | |
| ⑧ | Hex socket bolt M8×16 | Steel | Chrome | Gold Plated (24K) | Enamel Black |
| ⑨ | Hex socket bolt M5×10 | | | | |

## Easy Installation




Sold in sets of two hinges.

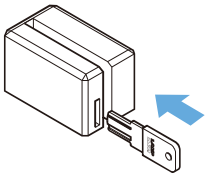
| Item Code | Item Name | Finish/Colour | Available Glass Size | | | Load Capacity/set | | Box (set) | Carton (set) |
|---|---|---|---|---|---|---|---|---|---|
| | | | Width | Height | Thickness | N | kgf | | |
| 170-046-839 | GS-GH50-CR | Chrome | Max. 900 | Max. 2500 | 8, 10, 12, 12.7 | 490 | 50 | 1 | 4 |
| 170-046-840 | GS-GH50-GP | Gold Plated (24K) | | | | | | 1 | 4 |
| 170-046-841 | GS-GH50-BL | Enamel Black | | | | | | 1 | 4 |

This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP GLASS SHOWCASE HARDWARE XL-GC

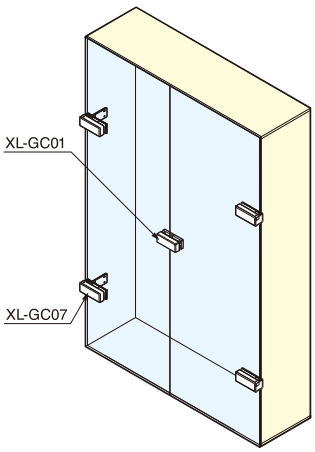


- Hinges, Locks and Sliding door hardware with integrated design.
- Swing and Sliding Doors can be operated with a single key.
- Key hole is located on the side for clean appearance.
- Insert key to unlock.
- Locks when key is pulled out.

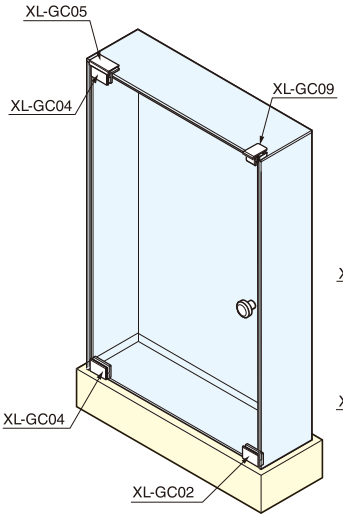


SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

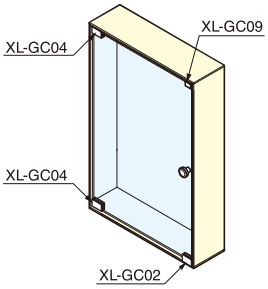
## Double Door



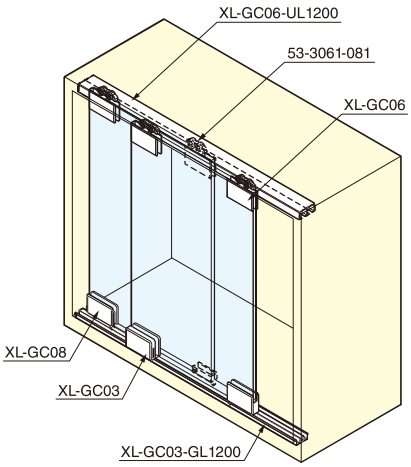

## Swing Door




Can be installed on wooden cabinet.




## Sliding Door




### Locks

| Part Name | Item Name | | Page |
|---|---|---|---|
| For Double Doors | XL-GC01-CR |  | P.1233 |
| For Swing Doors | XL-GC02-CR |  | |
| For Sliding Doors | XL-GC03-CR |  | |

### Hinges

| Part Name | Item Name | | Page |
|---|---|---|---|
| Inset Type | XL-GC04-CR |  | P.168 |
| Overlay Type | XL-GC07-CR |  | P.167 |
| Glass Bracket | XL-GC05-CR |  | P.168 |

### Sliding Door Hardware

| Part Name | Item Name | | Page |
|---|---|---|---|
| Upper Bracket | XL-GC06-CR |  | P.493 |
| Bottom Guide Bracket | XL-GC08-CR |  | |

### Catch

| Part Name | Item Name | | Page |
|---|---|---|---|
| Magnetic Catch | XL-GC09-CR |  | P.347 |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

## LAMP GLASS HINGE (OVERLAY, W/ CATCH) XL-GC07-CR

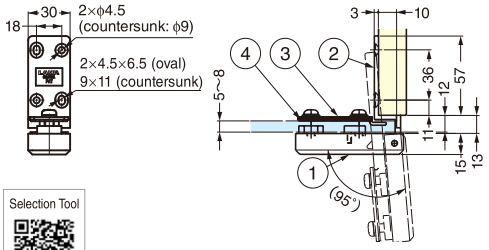
Latest Info



- Hinge with catch for overlay door of glass cabinet.
- Can be used with XL-GC01-CR (P.1233).

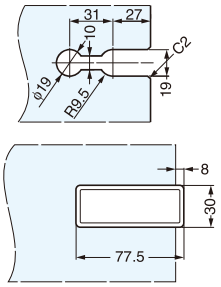
### Remarks

- Can not be used with XL-GC02 because the lock is only for inset doors.




Selection Tool
Glass Hinge

### Cut Out Dimensions




| No. | Part Name | Material | Finish/Colour |
|---|---|---|---|
| ① | Body | Zinc Alloy (ZDC) | Chrome |
| ② | Hinge Plate | Zinc Alloy (ZDC) | Chrome |
| ③ | Back Plate | Steel | Chrome |
| ④ | Spacer | Rubber | Black |

| Item Code | Item Name | Door Width | Door Height | Glass Thickness | Load Capacity | Weight | Carton |
|---|---|---|---|---|---|---|---|
| 170-080-008 | XL-GC07-CR | Max. 500 | Max. 1200 | 5, 6, 8 | 12 kgf/2 pcs | 303 g | 24 pcs |

## LAMP GLASS HINGE XL-GC07D-CR Overlay / Soft Catch

Latest Info



- For overlay glass doors. (10 mm Overlay)
- Softly catches doors and keeps them closed.
- Recommended for use with the lock XL-GC01 for total design coordination. (P.1233)

INSTRUCTION | TEMPERED GLASS | SCREW

Selection Tool
Glass Hinge

### Applications

- Glass showcases

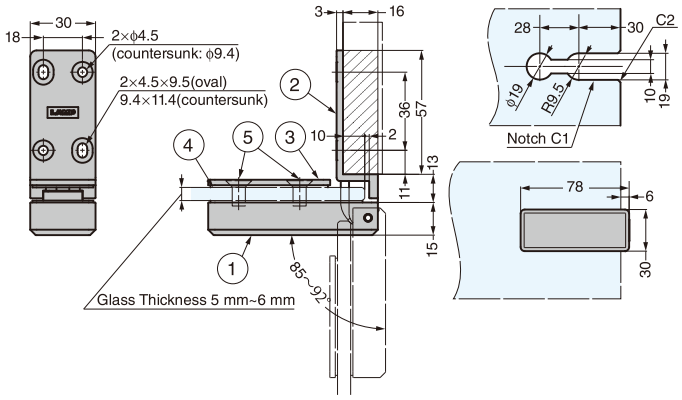
### Parts Included

- Cross recessed countersunk tapping screw

### Remarks

- Handle the glass door with caution, as it may be damaged if forcefully opened or closed.
- Smoothness of door motion vary by glass door size.
- Depending on the glass size, location of use, and environment, consider the use of reinforced glass.
- Maximum opening angle may vary. Please check with the actual product.

### Cut Out Dimensions




| No. | Part Name | Material | Finish/Colour |
|---|---|---|---|
| ① | Body | Zinc Alloy (ZDC) | Chrome |
| ② | Hinge Plate | | |
| ③ | Back Plate | Steel | |
| ④ | Packing | Chloroprene Rubber (CR) | Black |
| ⑤ | Glass Fixing Screw | Stainless Steel | Plain |

| Item Code | Item Name | Door Width | Door Height | Glass Thickness | Load Capacity N/2 pcs | Load Capacity kgf/2 pcs |
|---|---|---|---|---|---|---|
| 170-047-122 | XL-GC07D-CR | Max. 500 | Max. 1000 | 5, 6 | 73.5 | 7.5 |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

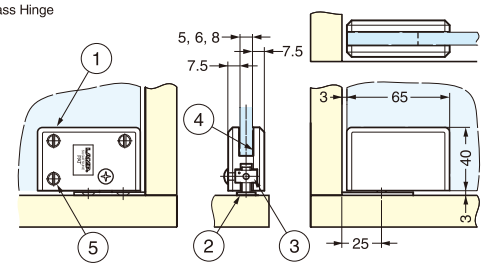
## LAMP. GLASS PIVOT HINGE (INSET) XL-GC04-CR

Latest Info

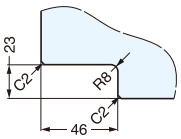



- Inset-type hinge for glass cabinet.
- 1 pair (top / bottom) per set.

Selection Tool
Glass Hinge




**Cut Out Dimensions**




| No. | Part Name | Material | Finish/Colour |
|---|---|---|---|
| ① | Body | Zinc Alloy (ZDC) | Chrome |
| ② | Bottom Plate | Steel | Chrome |
| ③ | Plate | Stainless Steel (SUS304) | Plain |
| ④ | Spacer | Polyvinyl Chloride Resin (PVC) | Clear |
| ⑤ | Screw | Stainless Steel (SUS304) | Plain |

| Item Code | Item Name | Door Width | Door Height | Glass Thickness | Load Capacity | Weight | Carton |
|---|---|---|---|---|---|---|---|
| 170-080-009 | XL-GC04-CR | Max. 500 | Max. 1200 | 5, 6, 8 | 12 kgf/set | 580 g | 24 pcs |

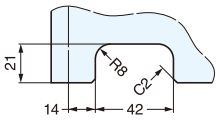
## LAMP. GLASS BRACKET XL-GC05-CR

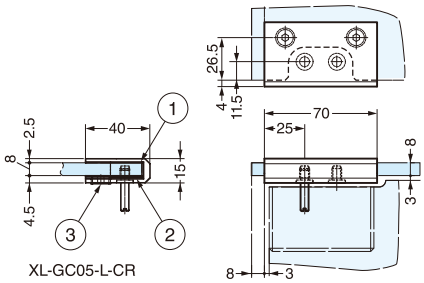
Latest Info



- Top panel hinge bracket for glass cabinet.
- To be used with XL-GC04-CR (above).

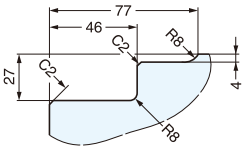
**Cut Out Dimensions (Top Panel)**




XL-GC05-L-CR

**Cut Out Dimensions (Glass Door)**




| No. | Part Name | Material | Finish/Colour |
|---|---|---|---|
| ① | Body | Zinc Alloy (ZDC) | Chrome |
| ② | Spacer | Polyvinyl Chloride Resin (PVC) | Clear |
| ③ | Screw | Stainless Steel (SUS304) | Plain |

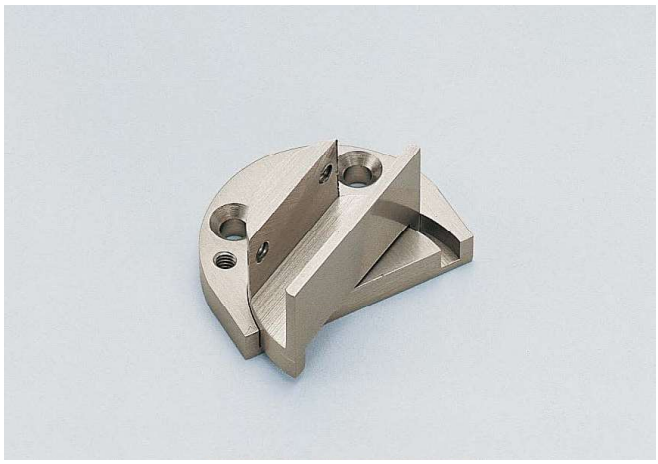
| Item Code | Item Name | Type | Material | Finish | Glass Thickness | Weight | Carton |
|---|---|---|---|---|---|---|---|
| 170-080-011 | XL-GC05-R-CR | Right | Zinc Alloy (ZDC) | Chrome | 8 | 180 g | 24 pcs |
| 170-080-010 | XL-GC05-L-CR | Left | Zinc Alloy (ZDC) | Chrome | 8 | 180 g | 24 pcs |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP INSET GLASS DOOR PIVOT HINGE GP-40

Latest Info

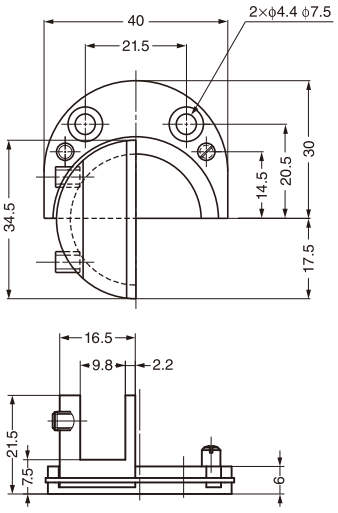


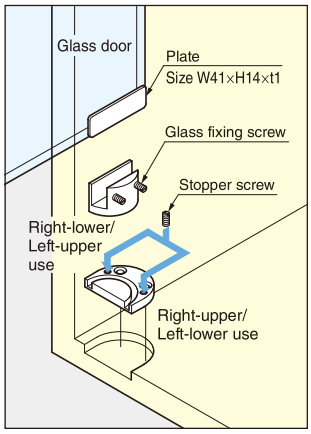
- Pre-drilling on glass/acrylic not required.

## Remarks

- Recommended for use in pairs.
- Screw should be tightened periodically to keep it from becoming loose.

Selection Tool
Glass Hinge




| Item Code | Item Name | Material | Finish | Door Width | Door Height | Glass Thickness | Load Capacity | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|---|
| 170-083-506 | GP-40 | Brass | Satin Nickel | Max. 450 | Max. 700 | 3, 4, 5, 6, 8 | 4 kgf/2 pcs | 76 g | 35 pcs | 350 pcs |

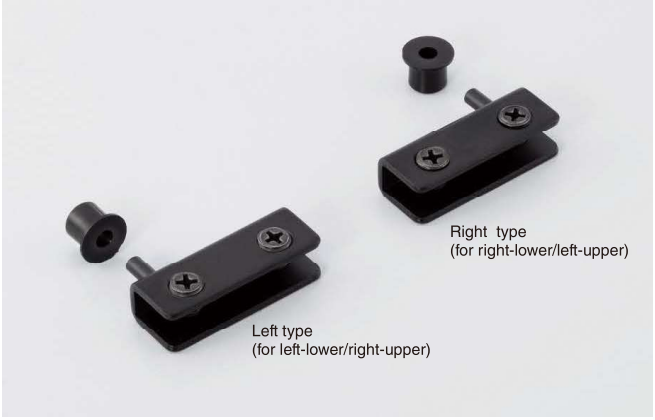
SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

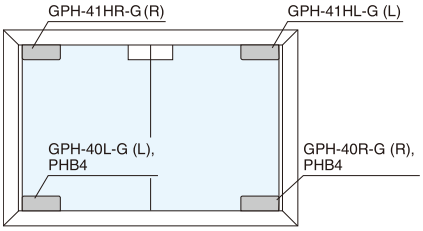
# INSET GLASS DOOR PIVOT HINGE GPH

Latest Info




GPH-41HR/HL-G shown.

## Application Example

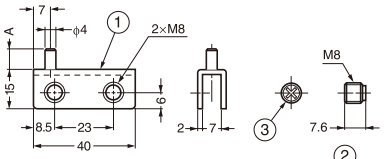



## Remarks

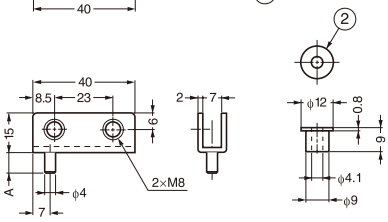
- Please use in pairs. Can not be used separately.
  Left: For left-lower/right-upper
  Right: For right-lower/left-upper
- GPH-40R-G and GPH-40L-G should be used with the socket PHB4 as necessary. In that case, the included supports are not required.
- Screw should be tightened periodically to keep it from becoming loose.

Selection Tool
Glass Hinge

Left




Right




| No. | Part Name | Material | Finish/Colour |
|---|---|---|---|
| ① | Hinge | Steel | Paint/Black |
| ② | Support | Polypropylene (PP) | Black |
| ③ | Screw | Steel | Black |

The material of the screw will changed to resin when the current stock runs out.

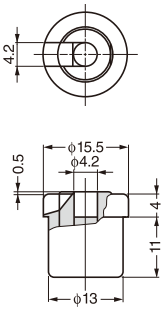
| Item Code | Item Name | Type | A | Door Width | Door Height | Glass Thickness | Load Capacity | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|---|
| 170-080-032 | GPH-40R-G | Right | 4 | Max. 450 | Max. 700 | 4, 5 | 4 kgf/2 pcs | 25 g | 100 pcs | 600 pcs |
| 170-080-033 | GPH-40L-G | Left | 4 | Max. 450 | Max. 700 | 4, 5 | 4 kgf/2 pcs | 25 g | 100 pcs | 600 pcs |
| 170-080-030 | GPH-41HR-G | Right | 9 | Max. 450 | Max. 700 | 4, 5 | 4 kgf/2 pcs | 25.5 g | 100 pcs | 600 pcs |
| 170-080-031 | GPH-41HL-G | Left | 9 | Max. 450 | Max. 700 | 4, 5 | 4 kgf/2 pcs | 25.5 g | 100 pcs | 600 pcs |

# LAMP SOCKET FOR GPH40 PIVOT HINGE PHB4

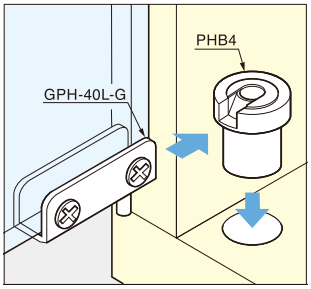
Latest Info



- Bottom socket for GHP-40 glass door hinge.
- Use GPH-41 hinge on upper side.




## Installation




| Item Code | Item Name | Material | Colour | Weight | Carton |
|---|---|---|---|---|---|
| 170-083-509 | PHB4 | Polyamide (PA) | Black | 5 g | 400 pcs |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP. INSET GLASS DOOR HINGE GH34-0

Latest Info




- Hinge for glass/acrylic doors.

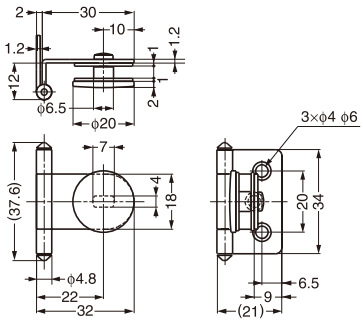
## Recommended Screw

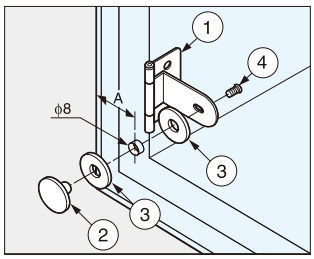
- Countersunk tapping screw 3 / Countersunk wood screw 3.1 / Countersunk screw pan head M3

## Remarks

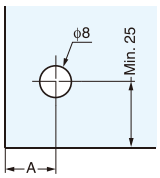
- Recommended for use in pairs.
- Please consider using tempered glass depending on glass size, application, and environment.
- When mounting on sheet metal, make a relief cut for screws/rivets on the mounting surface.

Selection Tool
Glass Hinge




### Cut Out Dimensions




| Glass Thickness | A |
|---|---|
| 4 | 19 |
| 5 | 18 |
| 6 | 17 |

| No. | Part Name | Material | Finish/Colour |
|---|---|---|---|
| ① | Body | Steel | Chrome, Paint/Black, Gold,Clear |
| ② | Plate | Zinc Alloy (ZDC) | Chrome, Paint/Black, Gold,Clear |
| ③ | Washer | Polyvinyl Chloride Resin (PVC) | Clear |
| ④ | Screw* | Steel | Nickel, Paint/Black, Gold,Clear |

*Cross-recessed binding pan head screw M3.5 x 6

| Item Code | Item Name | Finish | Door Width | Door Height | Glass Thickness | Load Capacity | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|
| 170-083-513 | GH34-0CR | Chrome | Max. 450 | Max. 700 | 4, 5, 6 | 4 kgf/2 pcs | 23.5 g | 50 pcs | 500 pcs |
| 170-025-831 | GH34-0BL | Paint/Black | Max. 450 | Max. 700 | 4, 5, 6 | 4 kgf/2 pcs | 23.5 g | 50 pcs | 500 pcs |
| 170-012-158 | GH34-0G | Gold,Clear | Max. 450 | Max. 700 | 4, 5, 6 | 4 kgf/2 pcs | 23.5 g | 200 pcs | – |

# LAMP. HALF OVERLAY GLASS DOOR HINGE GH34-8

Latest Info




- Hinge for glass/acrylic doors.

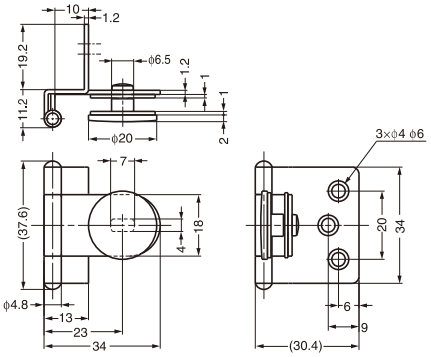
## Recommended Screw

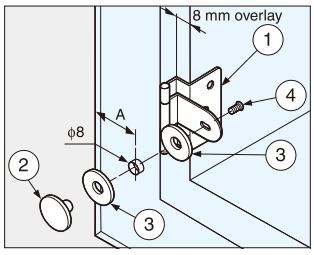
- Countersunk tapping screw 3 / Countersunk wood screw 3.1 / Countersunk screw pan head M3

## Remarks

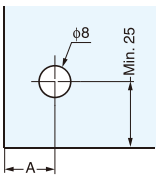
- Recommended for use in pairs.
- Please consider using tempered glass depending on glass size, application, and environment.
- When mounting on sheet metal, make a relief cut for screws/rivets on the mounting surface.

Selection Tool
Glass Hinge




### Cut Out Dimensions




| Glass Thickness | A | Overlay |
|---|---|---|
| 4 | 19 | 8 |
| 5 | 18 | 7 |
| 6 | 17 | 6 |

| No. | Part Name | Material | Finish/Colour |
|---|---|---|---|
| ① | Body | Steel | Chrome, Paint/Black, Gold,Clear |
| ② | Plate | Zinc Alloy | Chrome, Paint/Black, Gold,Clear |
| ③ | Washer | Polyvinyl Chloride Resin (PVC) | Clear |
| ④ | Screw* | Steel | Nickel, Paint/Black, Gold,Clear |

*Cross-recessed binding pan head screw M3.5 x 6

| Item Code | Item Name | Finish | Door Width | Door Height | Glass Thickness | Load Capacity | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|
| 170-083-528 | GH34-8CR | Chrome | Max. 450 | Max. 700 | 4, 5, 6 | 4 kgf/2 pcs | 25 g | 50 pcs | 500 pcs |
| 170-025-832 | GH34-8BL | Paint/Black | Max. 450 | Max. 700 | 4, 5, 6 | 4 kgf/2 pcs | 25 g | 50 pcs | 500 pcs |
| 170-012-159 | GH34-8G | Gold,Clear | Max. 450 | Max. 700 | 4, 5, 6 | 4 kgf/2 pcs | 25 g | 200 pcs | – |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

# LAMP. INSET GLASS DOOR HINGE GH34-0CR-K

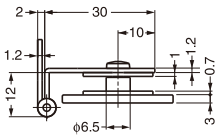
Latest Info



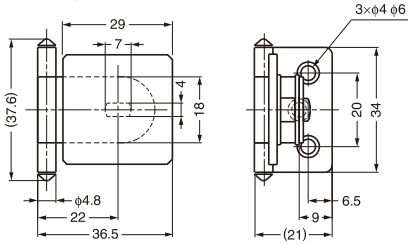
- Hinge for glass/acrylic doors.

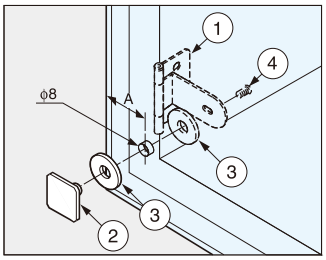
### Recommended Screw
- Countersunk tapping screw 3 / Countersunk wood screw 3.1 / Countersunk screw pan head M3

### Remarks
- Recommended for use in pairs.
- Please consider using tempered glass depending on glass size, application, and environment.
- When mounting on sheet metal, make a relief cut for screws/rivets on the mounting surface.

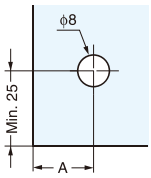



Selection Tool
Glass Hinge




### Cut Out Dimensions




| Glass Thickness | A |
|---|---|
| 4 | 19 |
| 5 | 18 |
| 6 | 17 |

| No. | Part Name | Material | Finish/Colour |
|---|---|---|---|
| ① | Body | Steel | Chrome |
| ② | Plate | Zinc Alloy (ZDC) | Chrome |
| ③ | Washer | Polyvinyl Chloride Resin (PVC) | Clear |
| ④ | Screw* | Steel | Nickel |

*Cross-recessed binding pan head screw M3.5 x 6

| Item Code | Item Name | Door Width | Door Height | Glass Thickness | Load Capacity | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|
| 170-019-481 | GH34-0CR-K | Max. 450 | Max. 700 | 4, 5, 6 | 4 kgf/2 pcs | 34 g | 50 pcs | 300 pcs |

# LAMP. HALF OVERLAY GLASS DOOR HINGE GH34-8CR-K

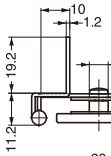
Latest Info



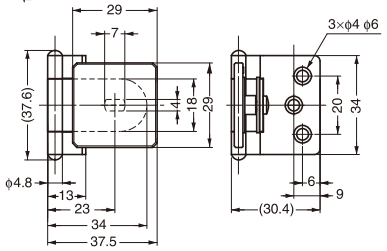
- Hinge for glass/acrylic doors.

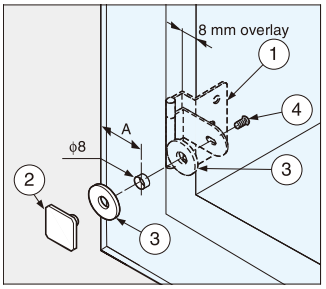
### Recommended Screw
- Countersunk tapping screw 3 / Countersunk wood screw 3.1 / Countersunk screw pan head M3

### Remarks
- Recommended for use in pairs.
- Please consider using tempered glass depending on glass size, application, and environment.
- When mounting on sheet metal, make a relief cut for screws/rivets on the mounting surface.

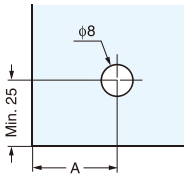



Selection Tool
Glass Hinge




### Cut Out Dimensions




| Glass Thickness | A | Overlay |
|---|---|---|
| 4 | 19 | 8 |
| 5 | 18 | 7 |
| 6 | 17 | 6 |

| No. | Part Name | Material | Finish/Colour |
|---|---|---|---|
| ① | Body | Steel | Chrome |
| ② | Plate | Zinc Alloy (ZDC) | Chrome |
| ③ | Washer | Polyvinyl Chloride Resin (PVC) | Clear |
| ④ | Screw* | Steel | Nickel |

*Cross-recessed binding pan head screw M3.5 x 6

| Item Code | Item Name | Door Width | Door Height | Glass Thickness | Load Capacity | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|
| 170-019-482 | GH34-8CR-K | Max. 450 | Max. 700 | 4, 5, 6 | 4 kgf/2 pcs | 37 g | 50 pcs | 300 pcs |

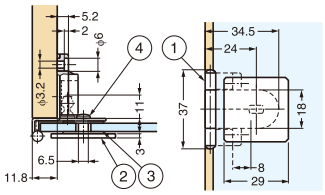


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

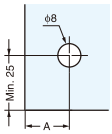
# LAMP. HALF OVERLAY GLASS DOOR HINGE (W/ CATCH) GHC34-8CR-K

Latest Info






## Cut Out Dimensions




| Glass Thickness | A | Overlay |
|---|---|---|
| 4 | 19 | 7 |
| 5 | 18 | 6 |
| 6 | 17 | 5 |

- Hinge for glass/acrylic doors.

### Remarks
- Recommended for use in pairs.

Selection Tool
Glass Hinge

| No. | Part Name | Material | Finish/Colour |
|---|---|---|---|
| ① | Body | Steel | Chrome |
| ② | Plate | Zinc Alloy (ZDC) | Chrome |
| ③ | Washer | Polyvinyl Chloride Resin (PVC) | Clear |
| ④ | Screw | Steel | Nickel |
| ⑤ | Catch | Polyacetal (POM) | Black |

| Item Code | Item Name | Door Width | Door Height | Glass Thickness | Load Capacity | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|
| 170-019-480 | GHC34-8CR-K | Max. 450 | Max. 700 | 4, 5, 6 | 4 kgf/2 pcs | 50 g | 40 pcs | 600 pcs |

# LAMP. HALF OVERLAY GLASS DOOR HINGE (W/ CATCH) GHC34-8

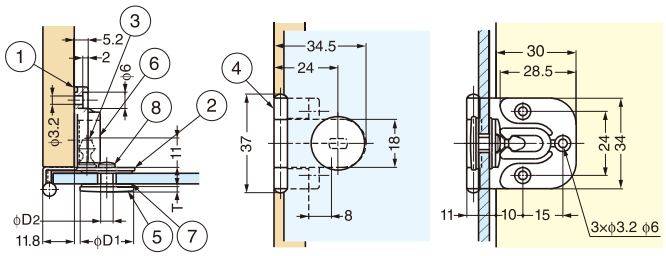
Latest Info



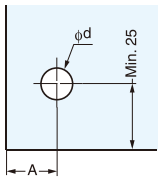

- Hinge for glass/acrylic doors.
- Holds door in closed position without secondary support.

### Remarks
- Recommended for use in pairs.

Selection Tool
Glass Hinge




## Cut Out Dimensions




| Glass Thickness | A | Overlay |
|---|---|---|
| 4 | 19 | 7 |
| 5 | 18 | 6 |
| 6 | 17 | 5 |

| No. | Part Name | Material | | | |
|---|---|---|---|---|---|
| | | GHC34-8G | GHC34-8B | GHC34-8CR | GHC34-8CR-W |
| ① | Body | Steel (SPCC) | Stainless Steel (SUS304) | Steel (SPCC) | |
| ② | Arm | | | | |
| ③ | Striker | Brass | Stainless Steel (SUS303) | Brass | |
| ④ | Shaft | Steel (SWCH) | Stainless Steel (SUS304) | Steel | |
| ⑤ | Plate | Copper Alloy | Aluminium Alloy | Brass | Zinc Alloy |
| ⑥ | Catch | POM | | | |
| ⑦ | Washer | PVC | | | |
| ⑧ | Binding head screw | Brass | Steel | | |

| No. | Part Name | Finish / Colour | | | |
|---|---|---|---|---|---|
| | | GHC34-8G | GHC34-8B | GHC34-8CR | GHC34-8CR-W |
| ① | Body | Gold, Clear | Black Enamel Finish | Chrome | |
| ② | Arm | | | | |
| ③ | Striker | | | | |
| ④ | Shaft | | | | |
| ⑤ | Plate | Polished, Clear | Black Anodized | | |
| ⑥ | Catch | Black | | | Natural |
| ⑦ | Washer | Clear | | | |
| ⑧ | Binding head screw | Brass | Nickel | | |

| Item Code | Item Name | $D_1$ | $D_2$ | d | T | Door Width | Door Height | Glass Thickness | Load Capacity | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 170-083-524 | GHC34-8G | 20 | 6.5 | 8 | 2 | Max. 450 | Max. 700 | 4, 5, 6 | 4 kgf/2 pcs | 36 g | 40 pcs | 600 pcs |
| 170-083-508 | GHC34-8B | 21 | 8 | 10 | 3 | Max. 450 | Max. 700 | 4, 5, 6 | 5 kgf/2 pcs | 32 g | 40 pcs | 600 pcs |
| 170-083-523 | GHC34-8CR | 20 | 6.5 | 8 | 2 | Max. 450 | Max. 700 | 4, 5, 6 | 4 kgf/2 pcs | 36 g | 40 pcs | 600 pcs |
| 170-083-516 | GHC34-8CR-W | 20 | 6.5 | 8 | 2 | Max. 450 | Max. 700 | 4, 5, 6 | 4 kgf/2 pcs | 36 g | 40 pcs | 600 pcs |

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

# LAMP INSET GLASS DOOR HINGE GH34-0SS

Latest Info



- Hinge for glass/acrylic doors.

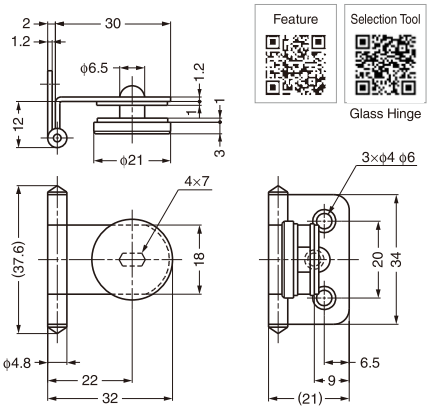
SUS

## Recommended Screw

- Countersunk tapping screw 3 / Countersunk wood screw 3.1 / Countersunk screw pan head M3

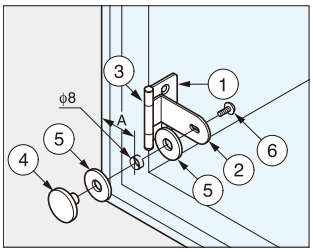
## Remarks

- Recommended for use in pairs.
- Please consider using tempered glass depending on glass size, application, and environment.
- When mounting on sheet metal, make a relief cut for screws/ rivets on the mounting surface.

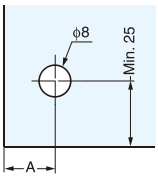



Feature | Selection Tool

Glass Hinge




### Cut Out Dimensions




| Glass Thickness | A |
|---|---|
| 4 | 19 |
| 5 | 18 |
| 6 | 17 |

| No. | Part Name | Material | Finish/Colour |
|---|---|---|---|
| ① | Body | Stainless Steel (SUS304) | Plain |
| ② | Arm | Stainless Steel (SUS304) | Plain |
| ③ | Shaft | Stainless Steel | Plain |
| ④ | Plate | Aluminium Alloy | Anodized |
| ⑤ | Washer | Polyvinyl Chloride Resin (PVC) | Clear |
| ⑥ | Screw* | Stainless Steel | Plain |

*Cross-recessed binding pan head screw M3.5 x 6

| Item Code | Item Name | Door Width | Door Height | Glass Thickness | Load Capacity | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|
| 170-083-529 | GH34-0SS | Max. 450 | Max. 700 | 4, 5, 6 | 5 kgf/2 pcs | 20 g | 50 pcs | 500 pcs |

# LAMP HALF OVERLAY GLASS DOOR HINGE GH34-8SS

Latest Info



- Hinge for glass/acrylic doors.

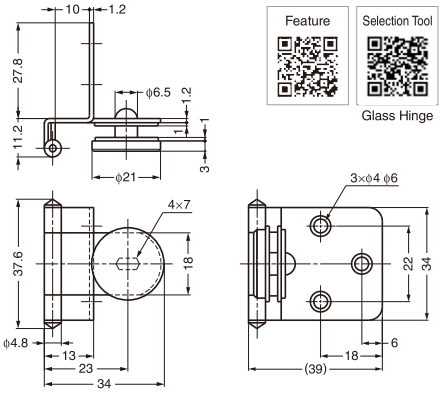
SUS

## Recommended Screw

- Countersunk tapping screw 3 / Countersunk wood screw 3.1 / Countersunk screw pan head M3

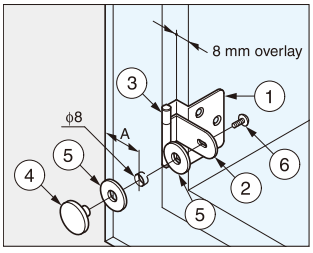
## Remarks

- Recommended for use in pairs.
- Please consider using tempered glass depending on glass size, application, and environment.
- When mounting on sheet metal, make a relief cut for screws/ rivets on the mounting surface.

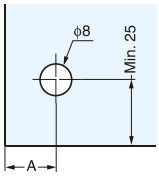



Feature | Selection Tool

Glass Hinge




### Cut Out Dimensions




| Glass Thickness | A | Overlay |
|---|---|---|
| 4 | 19 | 8 |
| 5 | 18 | 7 |
| 6 | 17 | 6 |

| No. | Part Name | Material | Finish/Colour |
|---|---|---|---|
| ① | Body | Stainless Steel (SUS304) | Plain |
| ② | Arm | Stainless Steel (SUS304) | Plain |
| ③ | Shaft | Stainless Steel | Plain |
| ④ | Plate | Aluminium Alloy | Anodized |
| ⑤ | Washer | Polyvinyl Chloride Resin (PVC) | Clear |
| ⑥ | Screw* | Stainless Steel | Plain |

*Cross-recessed binding pan head screw M3.5 x 6

| Item Code | Item Name | Door Width | Door Height | Glass Thickness | Load Capacity | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|
| 170-083-530 | GH34-8SS | Max. 450 | Max. 700 | 4, 5, 6 | 5 kgf/2 pcs | 26 g | 100 pcs | 600 pcs |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP INSET GLASS DOOR HINGE XL-GH03-48-0

Latest Info




- Hinge for medium size glass/acrylic doors.

SUS

Feature

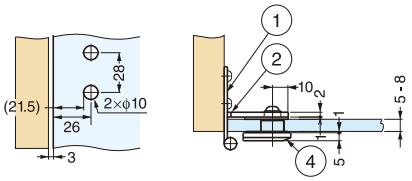
Selection Tool

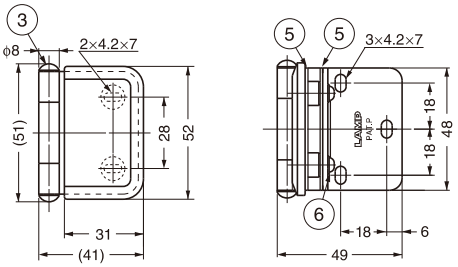
Glass Hinge

## Remarks
- Recommended for use in pairs.

## Parts Included
- Washer (2 pcs.)
- Truss head screw M4×12 (2 pcs.)

## Cut Out Dimensions




| No. | Part Name | Material | Finish/Colour | |
|---|---|---|---|---|
| | | | CR | GC |
| ① | Hinge Plate | Stainless Steel (SUS304) | Mirror | Gold, Clear |
| ② | Arm | Stainless Steel (SUS304) | Mirror | Gold, Clear |
| ③ | Shaft | Stainless Steel (SUS304) | Mirror | Plain, Gold, Clear |
| ④ | Plate | Zinc Alloy (ZDC) | Chrome | Gold, Clear |
| ⑤ | Spacer | Polyethylene | Natural | Natural |
| ⑥ | Screw | Stainless Steel (SUS304) | Plain | Plain, Gold, Clear |

| Item Code | Item Name | Door Width | Door Height | Glass Thickness | Load Capacity | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|
| 170-098-651 | XL-GH03-48-0CR | Max. 650 | Max. 900 | 5, 6, 8 | 12 kgf/2 pcs | 132 g | 10 pcs | 100 pcs |
| 170-098-652 | XL-GH03-48-0GC | Max. 650 | Max. 900 | 5, 6, 8 | 12 kgf/2 pcs | 144 g | 10 pcs | 100 pcs |

# LAMP HALF OVERLAY GLASS DOOR HINGE XL-GH03-48-8

Latest Info




- Hinge for medium size glass/acrylic doors.

SUS

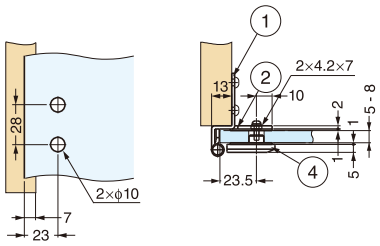
## Remarks
- Recommended for use in pairs.

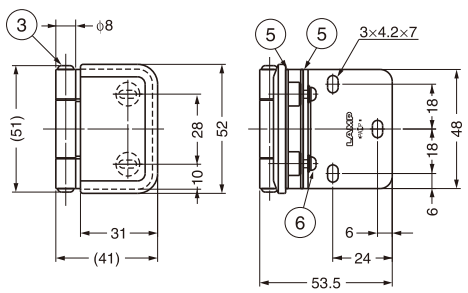
## Parts Included
- Washer (2 pcs.)
- Truss head screw M4×12 (2 pcs.)

## Cut Out Dimensions

Selection Tool

Glass Hinge




| No. | Part Name | Material | Finish/Colour | |
|---|---|---|---|---|
| | | | CR | GC |
| ① | Hinge Plate | Stainless Steel (SUS304) | Mirror | Gold, Clear |
| ② | Arm | Stainless Steel (SUS304) | Mirror | Gold, Clear |
| ③ | Shaft | Stainless Steel (SUS304) | Mirror | Plain, Gold, Clear |
| ④ | Plate | Zinc Alloy (ZDC) | Chrome | Gold, Clear |
| ⑤ | Spacer | Polyethylene | Natural | Natural |
| ⑥ | Screw | Stainless Steel (SUS304) | Plain | Plain, Gold, Clear |

| Item Code | Item Name | Door Width | Door Height | Glass Thickness | Load Capacity | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|
| 170-098-649 | XL-GH03-48-8CR | Max. 650 | Max. 900 | 5, 6, 8 | 12 kgf/2 pcs | 141 g | 10 pcs | 100 pcs |
| 170-098-650 | XL-GH03-48-8GC | Max. 650 | Max. 900 | 5, 6, 8 | 12 kgf/2 pcs | 148 g | 10 pcs | 100 pcs |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

# LAMP. HALF OVERLAY GLASS DOOR HINGE (W/O CATCH) GH-456N

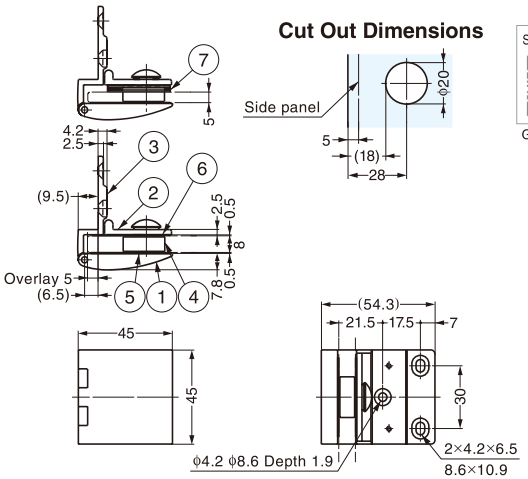
Latest Info





Mirror polished surface

- Suitable for showcases.
- Mounting position adjustable: Vertically ±1 mm
  Horizontally ±1.2 mm
- Spacer included to accommodate different glass thickness.




## Recommended Screws

Size 4 truss head screw

| No. | Part Name | Material | Finish/Colour | | |
|---|---|---|---|---|---|
| | | | SN | CR | GC |
| ① | Front Plate | Brass | Satin Nickel | Chrome | Gold |
| ② | Fixing Plate | Brass | Satin Nickel | Chrome | Gold |
| ③ | Hinge Plate | Brass | Satin Nickel | Chrome | Gold |
| ④ | Glass Adjustment Block | Polyamide (PA) | Black | Black | Black |
| ⑤ | Pad A | Chloroprene Rubber (CR) | Black | Black | Black |
| ⑥ | Pad B | Chloroprene Rubber (CR) | Black | Black | Black |
| ⑦ | Spacer | Polypropylene (PP) | Black | Black | Black |

## Qty of Spacers

| Door Thickness (mm) | 5 | 6 | 8 |
|---|---|---|---|
| Qty of Spacers | 3 | 2 | No Spacer |

| Item Code | Item Name | Finish | Door Width | Door Height | Glass Thickness | Load Capacity | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|
| 170-090-702 | GH-456N-SN | Satin Nickel | Max. 600 | Max. 1200 | 5, 6, 8 | 15 kgf/2 pcs | 206 g | 10 pcs | 80 pcs |
| 170-090-703 | GH-456N-CR | Chrome | Max. 600 | Max. 1200 | 5, 6, 8 | 15 kgf/2 pcs | 206 g | 10 pcs | 80 pcs |
| 170-090-704 | GH-456N-GC | Gold | Max. 600 | Max. 1200 | 5, 6, 8 | 15 kgf/2 pcs | 206 g | 10 pcs | 80 pcs |

# LAMP. HALF OVERLAY GLASS DOOR HINGE (W/ CATCH) GH-456C

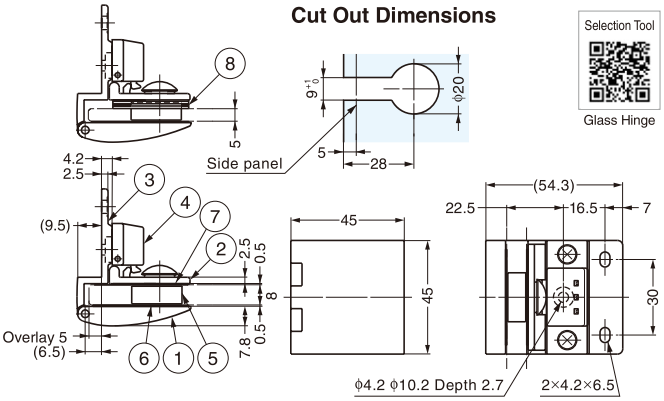
Latest Info





Mirror polished surface

- Suitable for showcases.
- Mounting position adjustable: Vertically ±1 mm
  Horizontally ±1.2 mm
- Spacer included to accommodate different glass thickness.




## Recommended Screws

Size 4 countersunk head screw

| No. | Part Name | Material | Finish/Colour | | |
|---|---|---|---|---|---|
| | | | SN | CR | GC |
| ① | Front Plate | Brass | Satin Nickel | Chrome | Gold |
| ② | Fixing Plate | Brass | Satin Nickel | Chrome | Gold |
| ③ | Hinge Plate | Brass | Satin Nickel | Chrome | Gold |
| ④ | Catch | PBT, Polyacetal (POM) | Black | Black | Black |
| ⑤ | Glass Adjustment Block | Polyamide (PA) | Black | Black | Black |
| ⑥ | Pad A | Polyvinyl Chloride Resin (PVC) | Black | Black | Black |
| ⑦ | Pad B | Polyvinyl Chloride Resin (PVC) | Black | Black | Black |
| ⑧ | Spacer | Polypropylene (PP) | Black | Black | Black |

## Qty of Spacers

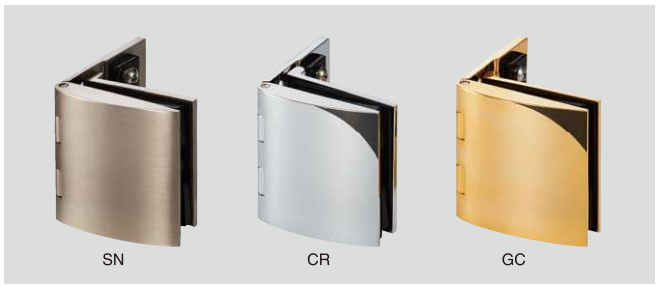
| Door Thickness (mm) | 5 | 6 | 8 |
|---|---|---|---|
| Qty of Spacers | 3 | 2 | No Spacer |

| Item Code | Item Name | Finish | Door Width | Door Height | Glass Thickness | Load Capacity | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|
| 170-020-968 | GH-456C-SN | Satin Nickel | Max. 600 | Max. 1200 | 5, 6, 8 | 15 kgf/2 pcs | 216 g | 10 pcs | 80 pcs |
| 170-020-969 | GH-456C-CR | Chrome | Max. 600 | Max. 1200 | 5, 6, 8 | 15 kgf/2 pcs | 216 g | 10 pcs | 80 pcs |
| 170-020-970 | GH-456C-GC | Gold | Max. 600 | Max. 1200 | 5, 6, 8 | 15 kgf/2 pcs | 216 g | 10 pcs | 80 pcs |


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP INSET GLASS DOOR HINGE GH-450

Latest Info



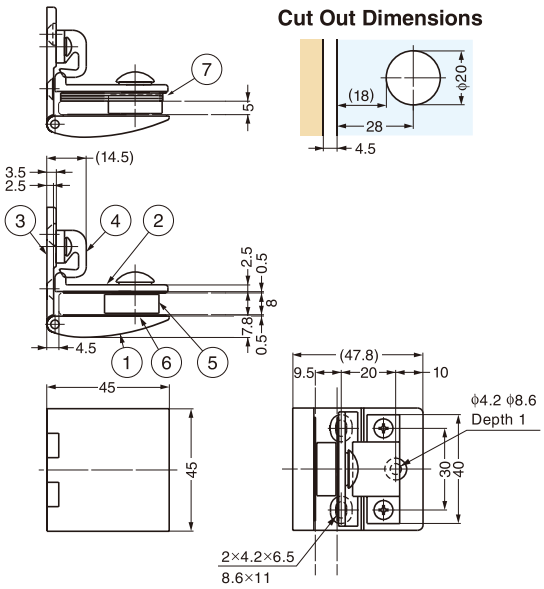

- Suitable for showcases.
- Mounting position adjustable: Vertically ±1 mm
  Horizontally ±1.2 mm
- Spacer included to accommodate different glass thickness.



Mirror polished surface

Selection Tool
Glass Hinge

## Cut Out Dimensions




## Recommended Screws

- Size 4 countersunk head screw

| No. | Part Name | Material | Finish/Colour | | |
|---|---|---|---|---|---|
| | | | SN | CR | GC |
| ① | Front Plate | Brass | Satin Nickel | Chrome | Gold |
| ② | Fixing Plate | Brass | Satin Nickel | Chrome | Gold |
| ③ | Hinge Plate | Brass | Satin Nickel | Chrome | Gold |
| ④ | Catch | Polyamide (PA) | Black | Black | Black |
| ⑤ | Glass Adjustment Block | Polyamide (PA) | Black | Black | Black |
| ⑥ | Pad | Chloroprene Rubber (CR) | Black | Black | Black |
| ⑦ | Spacer | Polypropylene (PP) | Black | Black | Black |

| Item Code | Item Name | Finish | Door Width | Door Height | Glass Thickness | Load Capacity | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|
| 170-090-699 | GH-450-SN | Satin Nickel | Max. 600 | Max. 1200 | 5, 6, 8 | 15 kgf/2 pcs | 207 g | 10 pcs | 40 pcs |
| 170-090-700 | GH-450-CR | Chrome | Max. 600 | Max. 1200 | 5, 6, 8 | 15 kgf/2 pcs | 207 g | 10 pcs | 40 pcs |
| 170-090-701 | GH-450-GC | Gold | Max. 600 | Max. 1200 | 5, 6, 8 | 15 kgf/2 pcs | 207 g | 10 pcs | 40 pcs |

### Qty of Spacers

| Door Thickness (mm) | 5 | 6 | 8 |
|---|---|---|---|
| Qty of Spacers | 3 | 2 | No Spacer |

# LAMP INSET GLASS DOOR HINGE (GLASS FRAME TYPE) GH-450G

Latest Info



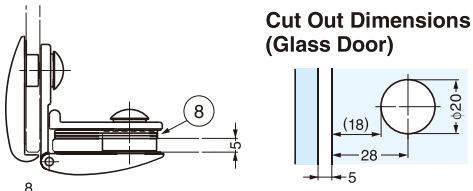

- Suitable for showcases.
- Mounting position adjustable: Horizontally ±1.2 mm
- Spacer included to accommodate different glass thickness.



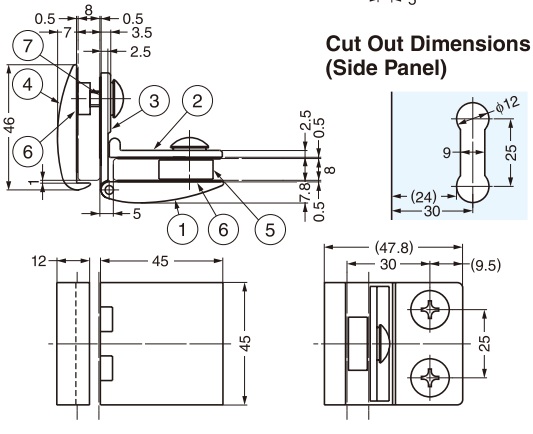
Mirror polished surface

Selection Tool
Glass Hinge

## Cut Out Dimensions (Glass Door)




## Cut Out Dimensions (Side Panel)




| No. | Part Name | Material | Finish/Colour | | |
|---|---|---|---|---|---|
| | | | SN | CR | GC |
| ① | Front Plate | Brass | Satin Nickel | Chrome | Gold |
| ② | Fixing Plate | Brass | Satin Nickel | Chrome | Gold |
| ③ | Hinge Plate | Brass | Satin Nickel | Chrome | Gold |
| ④ | Side Plate | Brass | Satin Nickel | Chrome | Gold |
| ⑤ | Glass Adjustment Block | Polyamide (PA) | Black | Black | Black |
| ⑥ | Pad A | Chloroprene Rubber (CR) | Black | Black | Black |
| ⑦ | Pad B | Chloroprene Rubber (CR) | Black | Black | Black |
| ⑧ | Spacer | Polypropylene (PP) | Black | Black | Black |

| Item Code | Item Name | Finish | Door Width | Door Height | Glass Thickness | Load Capacity | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|
| 170-090-705 | GH-450G-SN | Satin Nickel | Max. 600 | Max. 1200 | 5, 6, 8 | 15 kgf/2 pcs | 314 g | 10 pcs | 80 pcs |
| 170-090-706 | GH-450G-CR | Chrome | Max. 600 | Max. 1200 | 5, 6, 8 | 15 kgf/2 pcs | 314 g | 10 pcs | 80 pcs |
| 170-090-707 | GH-450G-GC | Gold | Max. 600 | Max. 1200 | 5, 6, 8 | 15 kgf/2 pcs | 314 g | 10 pcs | 80 pcs |

### Qty of Spacers

| Door Thickness (mm) | 5 | 6 | 8 |
|---|---|---|---|
| Qty of Spacers | 3 | 2 | No Spacer |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

# LAMP GLASS DOOR HINGE XL-GH01-250

Latest Info



- Pre-drilling on glass/acrylic not required.

SUS SCREW

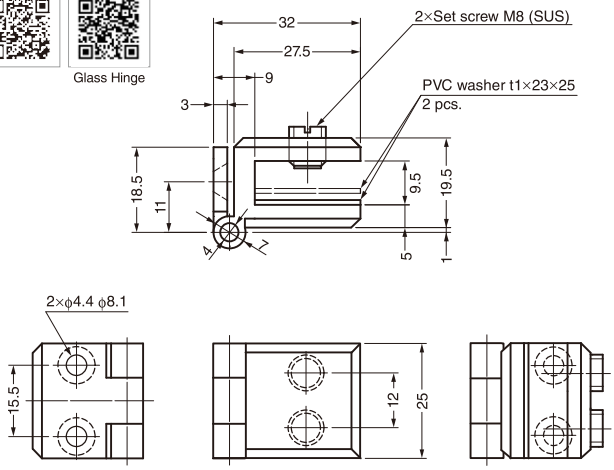
## Remarks

- Use 2 washers for 4 mm door thickness.
- Screw should be tightened periodically to keep it from becoming loose.

## Parts Included

- Countersunk head wood screw 3.5×20

Feature Selection Tool Glass Hinge




| Item Code | Item Name | Material | Finish | Door Width | Door Height | Glass Thickness | Load Capacity | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|---|
| 170-080-500 | XL-GH01-250 | Stainless Steel (SCS13) | Mirror | Max. 400 | Max. 600 | 4, 5, 6, 8 | 4.8 kgf/2 pcs | 60 g | 10 pcs | 100 pcs |

*SCS13 is equivalent of SUS304.

# LAMP GLASS DOOR HINGE XL-GH01-600

Latest Info



- Pre-drilling on glass/acrylic not required.

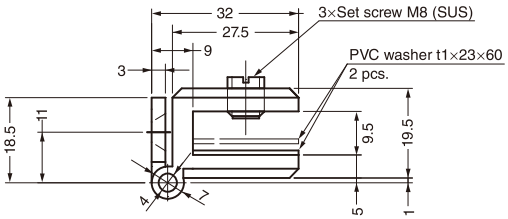
SUS SCREW

## Remarks

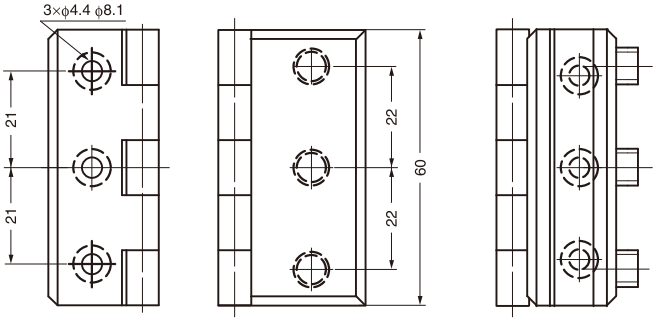
- Use 2 washers for 4 mm door thickness.
- Screw should be tightened periodically to keep it from becoming loose.

## Parts Included

- Countersunk head wood screw 3.5×20




Selection Tool Glass Hinge




| Item Code | Item Name | Material | Finish | Door Width | Door Height | Glass Thickness | Load Capacity | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|---|
| 170-080-501 | XL-GH01-600 | Stainless Steel (SCS13) | Mirror | Max. 450 | Max. 1300 | 4, 5, 6, 8 | 11 kgf/2 pcs | 188 g | 10 pcs | 50 pcs |

*SCS13 is equivalent of SUS304.


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP 3-WAY ADJUSTABLE CONCEALED HINGE HES3D-90/HES3D-G90BKT For Glass Door PAT

Latest Info

HES Hinge + Esprit

Passed Private 50K Cycle Test



KIDS DESIGN AWARD 2021






- The HES Series is compact.
- With shallow recessed depth, recessing into doors and jambs is easy.
- Using the optional machining jig, recessed machining using a router for wooden doors and jambs is easy.
- With 3-way adjustment function (vertical, horizontal, depth).
- The hinge can be split between the door and jamb.

INSTRUCTION | TEMPERED GLASS | SCREW

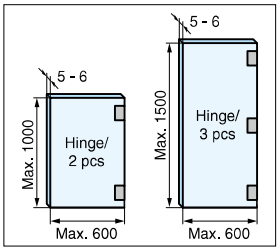
### HES3D-90 Included Parts
- Countersunk head screw 4×20 (4 pcs./hinge)
- Hex key 2

### HES3D-G90BKT Included Parts
- Hexagon socket countersunk head screws M5 x 12, cross-recessed countersunk head screws M4 x 12
- Hex key 3

### Optional Parts
- Machining Jig HES3D-90-TMP

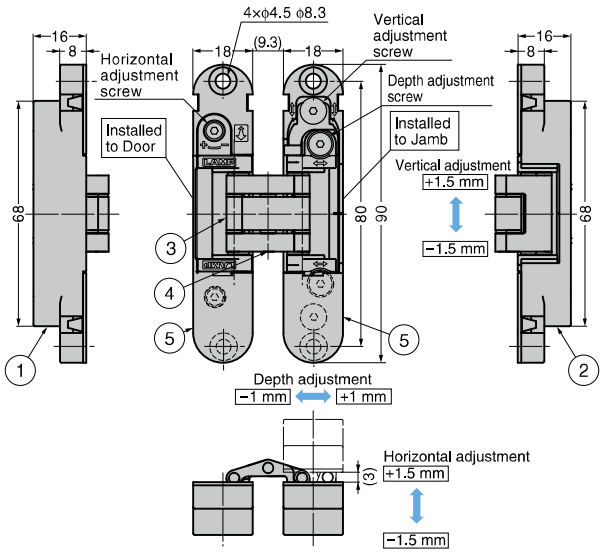
### Caution
- Be sure to read the "Precautions for Use" (P.23).
- Cannot be used in conjunction with dampers or stays.

### Door Dimensions and Number of Hinges



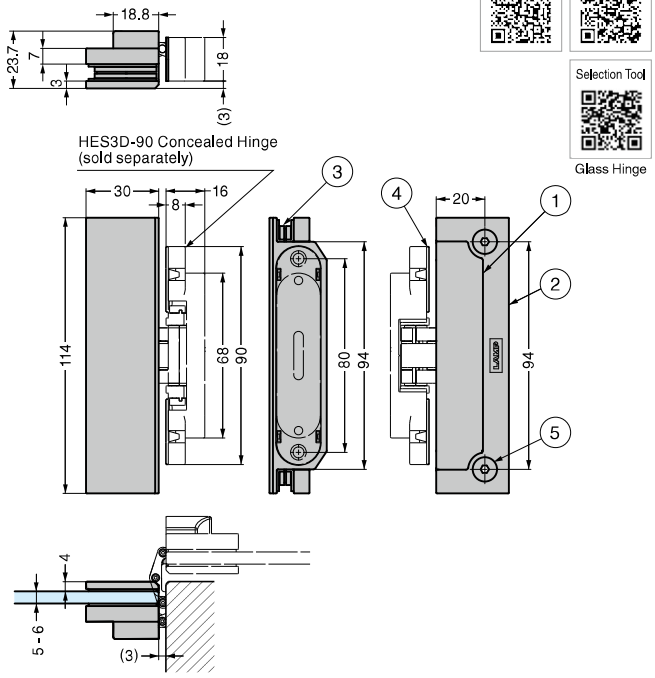

### HES3D-90

Figure shows top screw cover removed.




### HES3D-90BKT (GLASS DOOR BRACKET)

Installation | Installation | Selection Tool | Glass Hinge




| No. | Part Name | Material | Finish | | |
|---|---|---|---|---|---|
| | | | DC | DN | BL |
| ① | Body | Zinc Alloy (ZDC) | Satin Chrome | Satin Nickel | Black Enamel |
| ② | Base Frame | Zinc Alloy (ZDC) | Satin Chrome | Satin Nickel | Black Enamel |
| ③ | Arm | Zinc Alloy (ZDC) | Satin Chrome | Satin Nickel | Black Enamel |
| ④ | Shaft | Stainless Steel | – | – | – |
| ⑤ | Cover | ABS | Silver | Champagne Gold | Black |

| 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 | | | Black Enamel Finish |

### HES3D-90

| Item Code | Item Name | Colour | Door Width | Door Height | Door Thickness | Load Capacity | | Opening Angle | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 170-029-221 | HES3D-90DC | Silver | Max. 600 | Max. 1500 | Min. 23 | 12 kgf/2 pcs | 16 kgf/3 pcs | 180° | 198 g | 2 pcs | 48 pcs |
| 170-029-222 | HES3D-90DN | Champagne Gold | Max. 600 | Max. 1500 | Min. 23 | 12 kgf/2 pcs | 16 kgf/3 pcs | 180° | 198 g | 2 pcs | 48 pcs |
| 170-033-588 | HES3D-90BL | Black | Max. 600 | Max. 1500 | Min. 23 | 12 kgf/2 pcs | 16 kgf/3 pcs | 180° | 198 g | 2 pcs | 48 pcs |

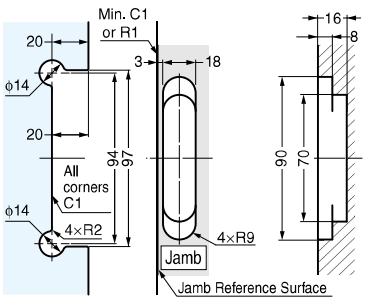
### HES3D-G90BKT (GLASS DOOR BRACKET)

| 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 |

### Installation Template (Sold Separately)

| Item Code | Item Name | Set Content | Material | Colour |
|---|---|---|---|---|
| 170-029-034 | HES3D-90-TMP | 1 pc (for both doors and jambs) | Methacrylic Resin (PMMA) | Clear |

### Cut Out Dimensions




Glass Door Bracket

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.



Update: 03.10.2025

# LAMP 3-WAY ADJUSTABLE CONCEALED HINGE HES3D-120/HES3D-G120BKT For Glass Door PAT

Latest Info



HES Hinge + Esprit

Passed Private 300K Cycle Test



KIDS DESIGN AWARD 2021






- With shallow recessed depth (21 mm), recessing into doors and jambs is easy.
- Using the optional machining jig, recessed machining using a router for wooden doors and jambs is easy.
- With 3-way adjustment function (vertical, horizontal, depth).
- The hinge can be split between the door and jamb and the door can be temporarily fastened to the jamb, making door hanging easy.

INSTRUCTION | TEMPERED GLASS | SCREW

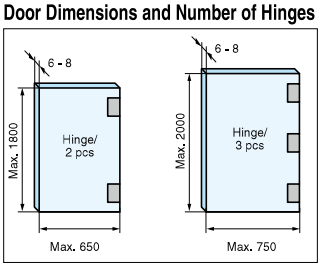
### HES3D-120 Included Parts
- Countersunk head tapping screw 5×20
- Hex key 3

### HES3D-G120BKT Included Parts
- Hexagon socket countersunk head screws M5 x 12, cross-recessed countersunk head screws M4 x 12
- Hex key 3

### Optional Parts
- Machining Jig HES3D-120-TMP

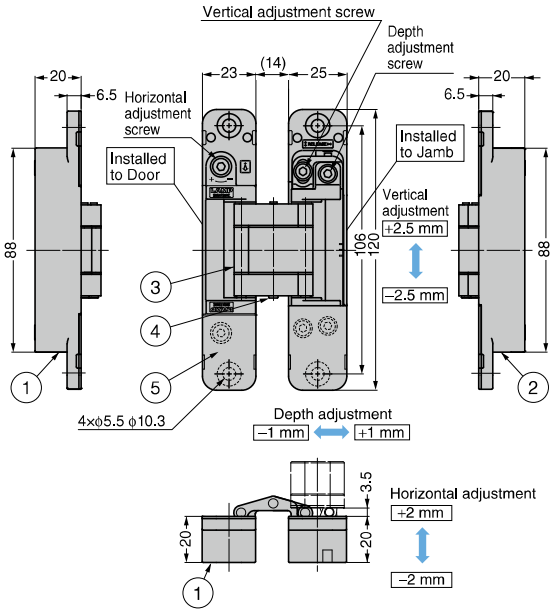
### Caution
- Be sure to read the "Precautions for Use" (P.23).

### Door Dimensions and Number of Hinges

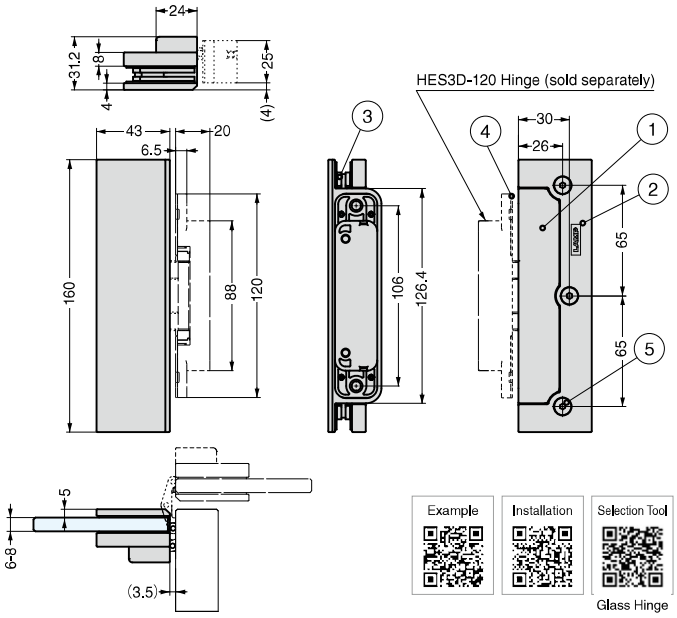



## HES3D-120

Figure shows top screw cover removed.




## HES3D-G120BKT (GLASS DOOR BRACKET)




Example | Installation | Selection Tool

Glass Hinge

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

| 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 | Chrome | 24K Gold Plating | – |
| ⑤ | Hexagon Socket Countersunk Head Screw M5 x 14 | Steel | | | Black Paint |

*Screw cover is not included for BL (black). Use the screw cover included with the concealed hinge.

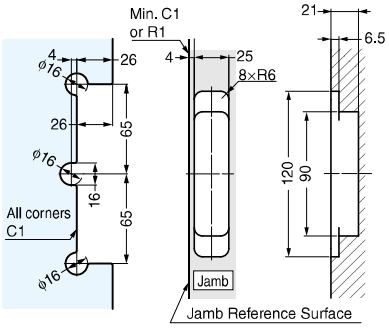
## HES3D-120

| Item Code | Item Name | Colour | Door Width | Door Height | Door Thickness | Load Capacity | | Opening Angle | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|---|---|
| – | HES3D-120DC | Silver | Max. 900 | Max. 2400 | Min. 29 | 30 kgf/2 pcs | 40 kgf/3 pcs | 180° | 401 g | 2 pcs | 24 pcs |
| – | HES3D-120DN | Champagne Gold | Max. 900 | Max. 2400 | Min. 29 | 30 kgf/2 pcs | 40 kgf/3 pcs | 180° | 401 g | 2 pcs | 24 pcs |
| – | HES3D-120BL | Black | Max. 900 | Max. 2400 | Min. 29 | 30 kgf/2 pcs | 40 kgf/3 pcs | 180° | 401 g | 2 pcs | 24 pcs |

## HES3D-G120BKT (GLASS DOOR BRACKET)

| 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 |

### Cut Out Dimensions




### Installation Template (Sold Separately)

| Item Code | Item Name | Set Content | Material | Colour |
|---|---|---|---|---|
| 170-024-569 | HES3D-120-TMP | 1 pc (for both doors and jambs) | Methacrylic Resin (PMMA) | Clear |

### Suspension Jig (Sold Separately)

This product is sold in units of 1 set (3 pcs). When ordering, "1" is for one set.

| Item Code | Item Name | Material | Colour | Weight (g) |
|---|---|---|---|---|
| 170-044-186 | HES3D-120-JIG | POM | Red | 4 |

Glass Door Bracket



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP DROP HINGE (FOR GLASS DOOR) SDH-G

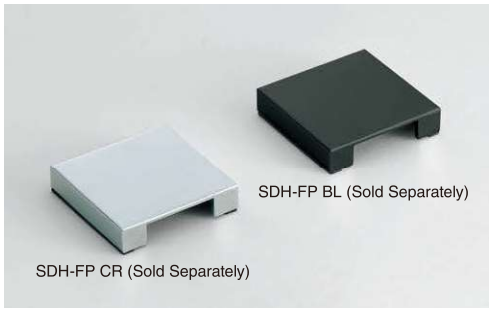
Latest Info


SDH-G

- Opening angle 90˚.
- 3-way adjustment:
  Door gap : 2-3 mm / Horizontal : ±1 mm / Overlay : 14-16 mm
- Can be used with soft-down stay SDS-100 (P.271) or NSDX-10 (P.272).

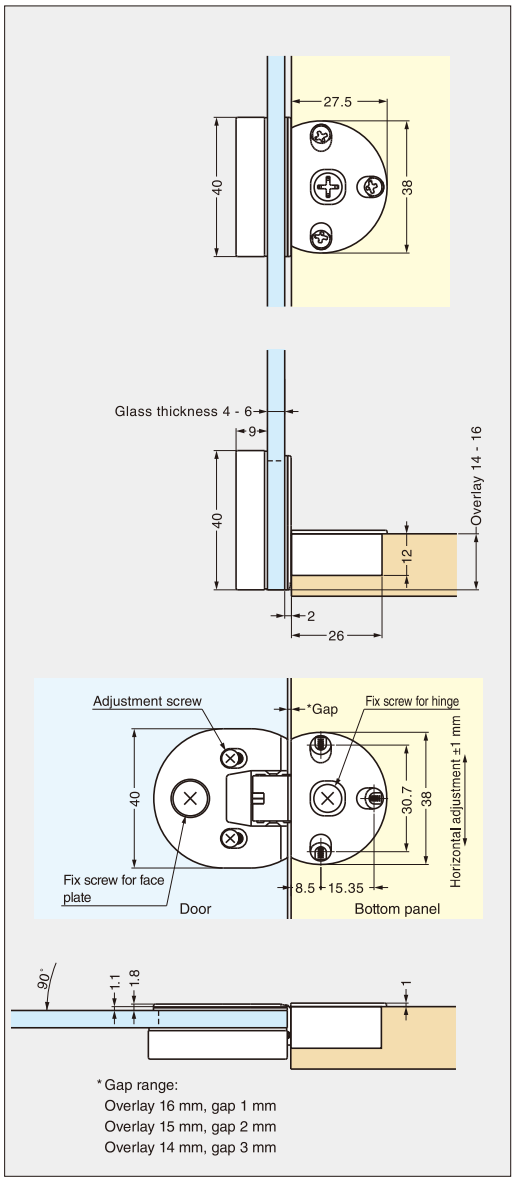
**Sold Separately**
- Face plate SDH-FP

| Item Code | Item Name | Material | Finish | Overlay | Glass Thickness | Opening Angle | Weight | Box |
|---|---|---|---|---|---|---|---|---|
| 170-016-331 | SDH-G | Zinc Alloy (ZDC) | Nickel | 14 - 16 | 4 - 6 | 90˚ | 91 g | 50 pcs |

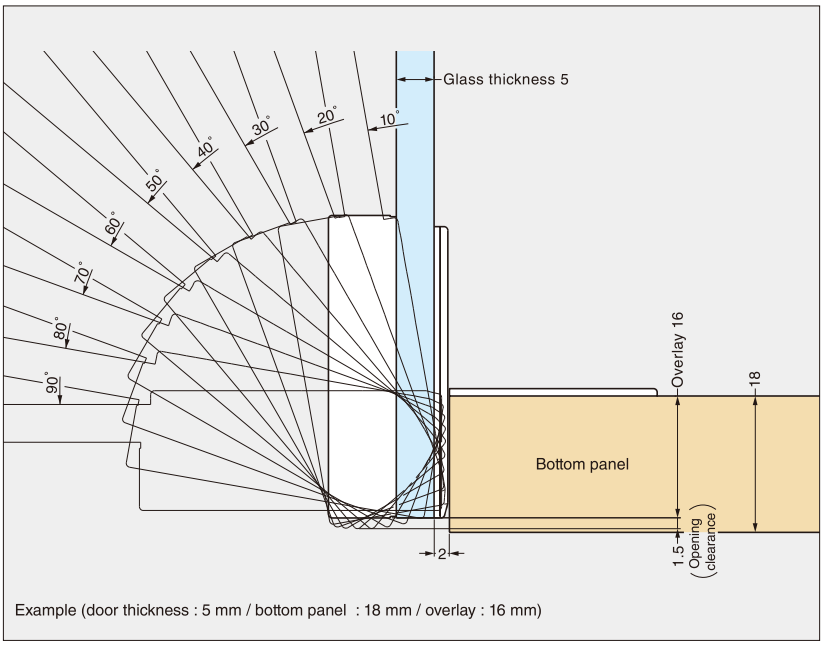



**Face Plate (Sold Separately)**

| Item Code | Item Name | Material | Finish/Colour | Weight | Box |
|---|---|---|---|---|---|
| 170-016-332 | SDH-FP CR | Zinc Alloy (ZDC) | Chrome | 43 g | 50 pcs |
| 170-016-333 | SDH-FP BL | Zinc Alloy (ZDC) | Black | 43 g | 50 pcs |

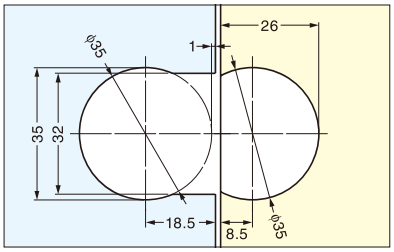



*Gap range:
Overlay 16 mm, gap 1 mm
Overlay 15 mm, gap 2 mm
Overlay 14 mm, gap 3 mm




Example (door thickness : 5 mm / bottom panel : 18 mm / overlay : 16 mm)

## Cut Out Dimensions



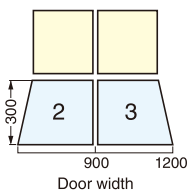

## Application Example




Combination with SDS-100-TV lid support (P.269).

## Qty of Hinges

In case glass thickness is from 4 to 6 mm.

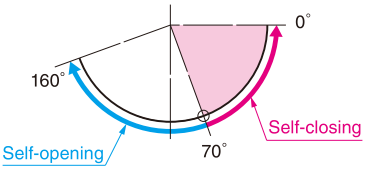
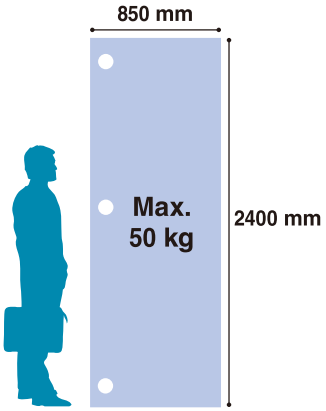
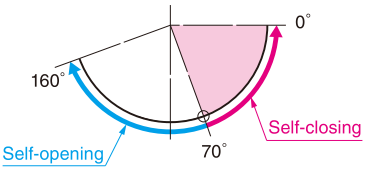
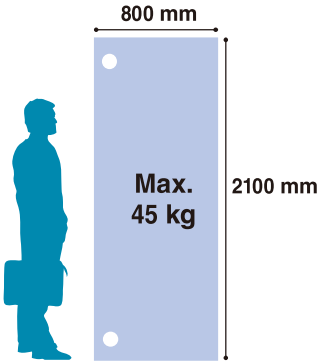
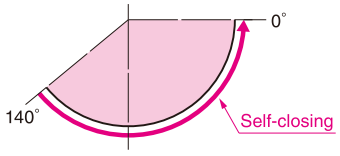


Door width



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP GLASS DOOR GRAVITY HINGE GH-G

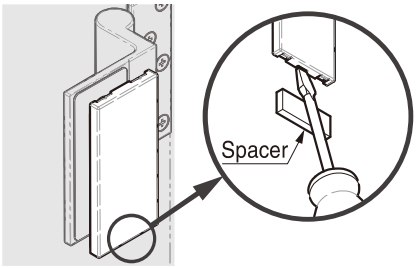
| | Model | Feature | Door Motion | Door Specs |
|---|---|---|---|---|
| GH-G02  | SH | - **Strong** self-close<br>- Self-open |  |  |
| GH-G07  | SH | - **Strong** self-close<br>- Self-open |  |  |
| | SHK | - **Strong** self-close<br>- Self-open<br>- Fixed Shaft | | |
| | AC* | - **Strong** self-close |  | **Glass Thickness:**<br>**8 mm - 12 mm** |

* GH-G07AC does not come in black.

## Beautiful Design

- Comes with a cover to hide screws.




The cover can be snapped in and removed easily with a flathead screwdriver for maintenance.



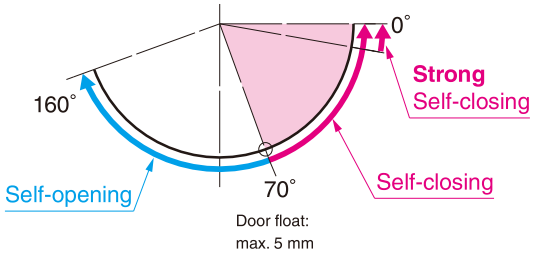

This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

## Types of Motion

### 70° Switching Type

- Combination of self-closing and self-opening, switching at 70°.
- When the door nears the closed position, the self-closing force strengthens. This prevents the door from unintentionally opening due to air pressure.

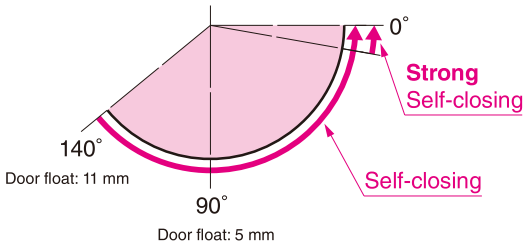
**GH-G02SH (P.184)**
**GH-G07SH (P.184)**
**GH-G07SHK (P.185) (Fixed Shaft)**




### Self-Closing Only Type

- Self closes at all angles.
- When the door nears the closed position, the self-closing force strengthens. This prevents the door from unintentionally opening due to air pressure.

**GH-G07AC (P.185)**






This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

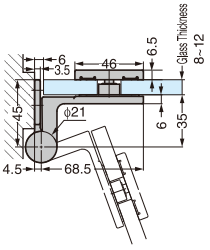
## LAMP. STAINLESS STEEL GLASS DOOR GRAVITY HINGE GH-G02SH Strong Self Closing / Self Opening NEW

Latest Info


GH-G02SH-SM-L


GH-G02SH-BL-L


Backside




Selection Tool
Glass Hinge

- Automatically closes from 70° using door weight and gravity.
- The self-closing force increases when the door nears the closed position to help ensure secure door closure. This reduces the possibility of unintended opening due to air pressure or other outside factors.
- Can be used in areas exposed to water such as shower booths.
- Automatically opens between 70°to 160°. The door can be held open by using a door stopper in this area.

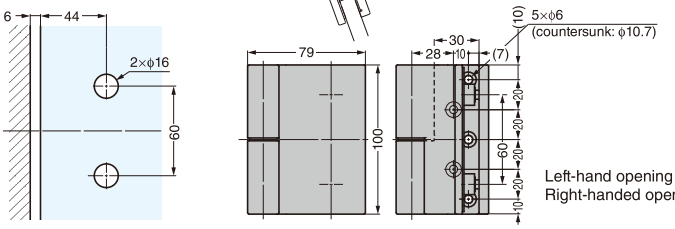
INSTRUCTION | SUS | TEMPERED GLASS | SCREW

### Parts Included
- Cross-recessed flat head screws M5×14 (Stainless steel, finish similar to hinges)

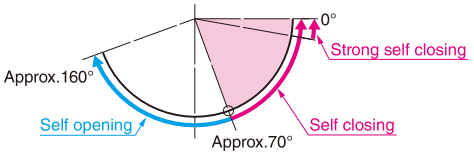
### Sold Separately
- Glass Edge Protector (P.1358)

### Remarks
- Prioritize the door weight when determining the glass size.
- The hinge does not hold the door in a fully closed or fully open position. To hold the door closed, use a magnetic catch (P.579 - 580). The door can be held open by using a door stopper.

### Cut Out Dimensions




Left-hand opening shown.
Right-handed opening is symmetrical.




Door float
Max. 5 mm

| Item Code | Item Name | Type | Material | Finish/ Colour | Door Specs | | | | Glass Thickness | Load Capacity | | | | Opening Angle |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Width/2 pcs | Height/2 pcs | Width/3 pcs | Height/3 pcs | | N/2 pcs | kgf/2 pcs | kgf/3 pcs | kgf/3 pcs | |
| 170-048-645 | GH-G02SH-SM-R | Right | Stainless Steel (SCS13) | Mirror | Max. 800 | Max. 2100 | Max. 850 | Max. 2400 | 8-12 | 441 | 45 | 490 | 50 | 160° |
| 170-048-644 | GH-G02SH-SM-L | Left | | | | | | | | | | | | |
| 170-048-649 | GH-G02SH-BL-R | Right | | Baked finish/Black | | | | | | | | | | |
| 170-048-648 | GH-G02SH-BL-L | Left | | | | | | | | | | | | |

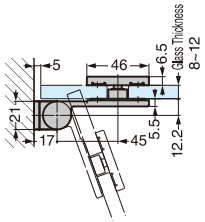
## LAMP. STAINLESS STEEL GLASS DOOR GRAVITY HINGE GH-G07SH Strong Self Closing / Self Opening NEW

Latest Info


GH-G07SH-SM-L


GH-G07SH-BL-L


Backside




Selection Tool
Glass Hinge

- Automatically closes from 70° using door weight and gravity.
- The self-closing force increases when the door nears the closed position to help ensure secure door closure. This reduces the possibility of unintended opening due to air pressure or other outside factors.
- Can be used in areas exposed to water such as shower booths.
- Automatically opens between 70°to 160°. The door can be held open by using a door stopper in this area.

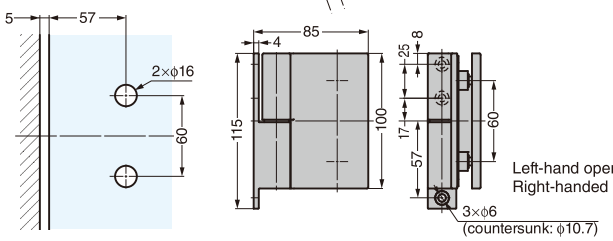
INSTRUCTION | SUS | TEMPERED GLASS | SCREW

### Parts Included
- Cross-recessed flat head screws M5×14 (Stainless steel, finish similar to hinges)

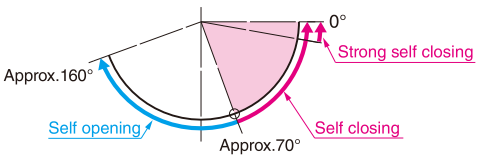
### Sold Separately
- Glass Edge Protector (P.1358)

### Remarks
- Prioritize the door weight when determining the glass size.
- The hinge does not hold the door in a fully closed or fully open position. To hold the door closed, use a magnetic catch (P.579 - 580). The door can be held open by using a door stopper.

### Cut Out Dimensions




Left-hand opening shown.
Right-handed opening is symmetrical.




Door float
Max. 5 mm

| Item Code | Item Name | Type | Material | Finish/ Colour | Door Specs | | | | Glass Thickness | Load Capacity | | | | Opening Angle |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Width/2 pcs | Height/2 pcs | Width/3 pcs | Height/3 pcs | | N/2 pcs | kgf/2 pcs | kgf/3 pcs | kgf/3 pcs | |
| 170-048-647 | GH-G07SH-SM-R | Right | Stainless Steel (SCS13) | Mirror | Max. 800 | Max. 2100 | Max. 850 | Max. 2400 | 8-12 | 441 | 45 | 490 | 50 | 160° |
| 170-048-646 | GH-G07SH-SM-L | Left | | | | | | | | | | | | |
| 170-048-651 | GH-G07SH-BL-R | Right | | Baked finish/Black | | | | | | | | | | |
| 170-048-650 | GH-G07SH-BL-L | Left | | | | | | | | | | | | |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP STAINLESS STEEL GLASS DOOR GRAVITY HINGE GH-G07SHK Strong Self Closing / Self Opening / Fixed Shaft NEW

Latest Info


GH-G07SHK-SM-L


GH-G07SHK-BL-L


Back side

- The fixed shaft on the lower half of the hinge allows for easy door removal.
- Automatically closes from 70° using door weight and gravity.
- The self-closing force increases when the door nears the closed position to help ensure secure door closure. This reduces the possibility of unintended opening due to air pressure or other outside factors.
- Can be used in areas exposed to water such as shower booths.
- Self opens at 70~160°. Doors can be kept open when used together with door stoppers in the self-opening range.

INSTRUCTION | SUS | TEMPERED GLASS | SCREW

## Parts Included

- Cross-recessed flat head screws M5×14 (Stainless steel, finish similar to hinges)
- Shaft fixing screw

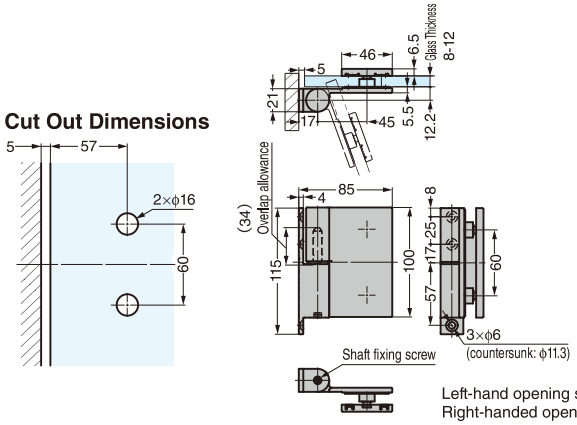
## Sold Separately

- Glass Edge Protector (P.1358)

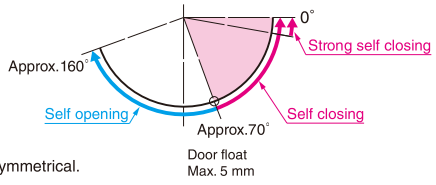
## Remarks

- Prioritize the door weight when determining the glass size.
- The hinge does not hold the door in a fully closed or fully open position. To hold the door closed, use a magnetic catch (P.579 - 580). Install a door stopper to hold the door when it is opened (70° to 160°).
- Take care not to tighten the fixing screws excessively.

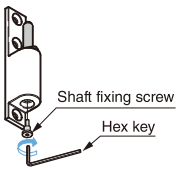
## Cut Out Dimensions




Left-hand opening shown.
Right-handed opening is symmetrical.




## How to Fix the Shaft




| Item Code | Item Name | Type | Material | Finish | Door Specs | | | | Glass Thickness | Load Capacity | | | | Opening Angle |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Width/2 pcs | Height/2 pcs | Width/3 pcs | Height/3 pcs | | N/2 pcs | kgf/2 pcs | N/3 pcs | kgf/3 pcs | |
| 170-053-206 | GH-G07SHK-SM-R | Right | Stainless Steel (SCS13) | Mirror | Max. 800 | Max. 2100 | Max. 850 | Max. 2400 | 8-12 | 441 | 45 | 490 | 50 | 160° |
| 170-053-205 | GH-G07SHK-SM-L | Left | | | | | | | | | | | | |
| 170-053-208 | GH-G07SHK-BL-R | Right | | Baked Enamel/Black | | | | | | | | | | |
| 170-053-207 | GH-G07SHK-BL-L | Left | | | | | | | | | | | | |

# LAMP STAINLESS STEEL GLASS DOOR GRAVITY HINGE GH-G07AC Strong Self Closing NEW

Latest Info


GH-G07AC-SM-L


Backside

- Automatically closes from 140° using door weight and gravity.
- The self-closing force increases when the door nears the closed position to help ensure secure door closure. This reduces the possibility of unintended opening due to air pressure or other outside factors.
- Can be used in areas exposed to water such as shower booths.

INSTRUCTION | SUS | TEMPERED GLASS | SCREW

## Parts Included

- Cross-recessed flat head screws M5×14 (Stainless steel, finish similar to hinges)

## Sold Separately

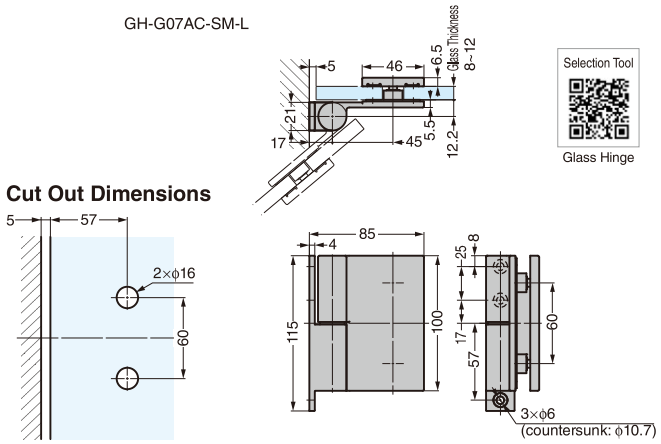
- Glass Edge Protector (P.1358)

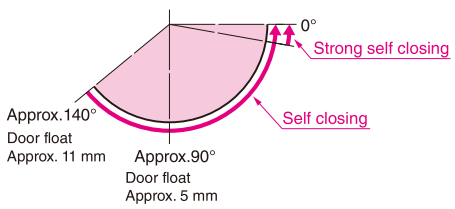
## Remarks

- Prioritize the door weight when determining the glass size.
- The hinge does not hold the door in a fully closed or fully open position. To hold the door closed, use a magnetic catch (P.579 - 580). Please use a door stopper to prevent a door from opening over 140°.

Selection Tool
Glass Hinge

## Cut Out Dimensions




Left-hand opening shown.
Right-handed opening is symmetrical.

| Item Code | Item Name | Type | Material | Finish | Door Specs | | | | Glass Thickness | Load Capacity | | | | Opening Angle |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Width/2 pcs | Height/2 pcs | Width/3 pcs | Height/3 pcs | | N/2 pcs | kgf/2 pcs | N/3 pcs | kgf/3 pcs | |
| 170-048-641 | GH-G07AC-SM-R | Right | Stainless Steel (SCS13) | Mirror | Max. 800 | Max. 2100 | Max. 850 | Max. 2400 | 8-12 | 441 | 45 | 490 | 50 | 140° |
| 170-048-640 | GH-G07AC-SM-L | Left | | | | | | | | | | | | |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# Zwei L Series

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES




## Zwei L® High precision polish, artfully sculpted shine



STAINLESS STEEL HANDLE ZL-2001 (P.1029)



STAINLESS STEEL TOWEL BAR ZL-3201 (P.854)



STAINLESS STEEL TOWEL BAR ZL-3205 (P.855)



STAINLESS STEEL LEVER BOLT ZL-2402 (P.411)



STAINLESS STEEL HOOK ZL-2103 (P.784)



STAINLESS STEEL KNOB ZL-1906 (P.1111)



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# Zwei L GLASS DOOR HINGE ZL-1703

Latest Info

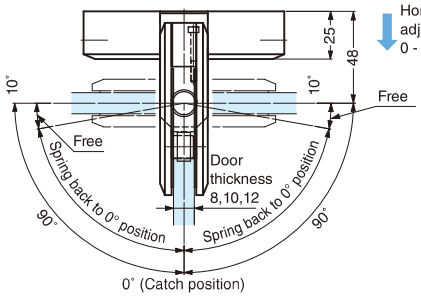



- Made of highly corrosion resistant SUS316
- Ultrapremium Zwei L finish. Zwei L finish: Using top class polishing technology, these products combine the elegance of Satin with the deep glow of a Mirror.
- Recommended for use in shower booths.
- Used as a pair.

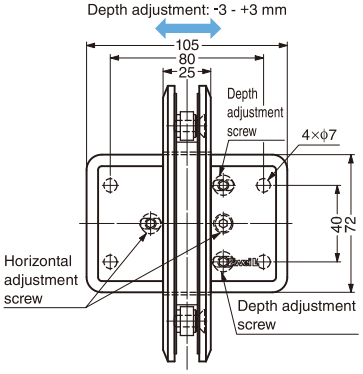
SUS316 | SCREW

Concept | Selection Tool

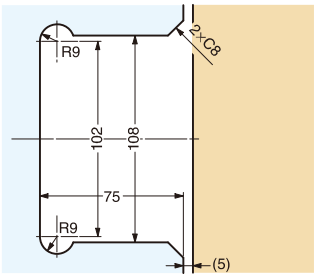
Glass Hinge

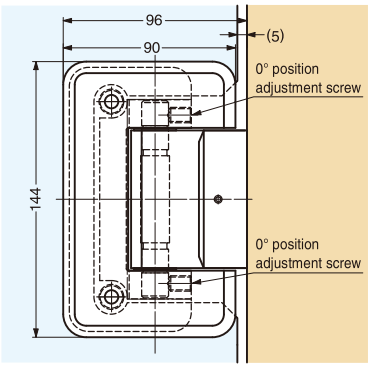



Depth adjustment: -3 - +3 mm




## Cut Out Dimensions




## Parts Included

- Spacer × 6 pcs
  (Use 6 pcs for 8 mm/4 pcs for 10 mm/2 pcs for 12 mm.)
- Round head wood screw 6.2×56 (SUS) 4 pcs
- Plug MG-10×50P 4 pcs
- Allen key 4 1 pc
- Allen key 2.5 1 pc

| Item Code | Item Name | Material | Finish | Door Width | Door Height | Glass Thickness | Load Capacity | Weight | Box |
|---|---|---|---|---|---|---|---|---|---|
| 170-080-081 | ZL-1703 | Stainless Steel (SUS316) | Zwei L Finish | Max. 1000 | Max. 2500 | 8, 10, 12 | 65 kgf/2 pcs | 2,656 g | 1 pc |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# Zwei L. GLASS DOOR HINGE ZL-1702

Latest Info



- Made of highly corrosion resistant SUS316
- Ultrapremium Zwei L finish. Zwei L finish: Using top class polishing technology, these products combine the elegance of Satin with the deep glow of a Mirror.
- Used as a pair.

SUS316 | SCREW

## Parts Included

- Countersunk head screw 4.8×32
- Screw M5×16
- Allen key

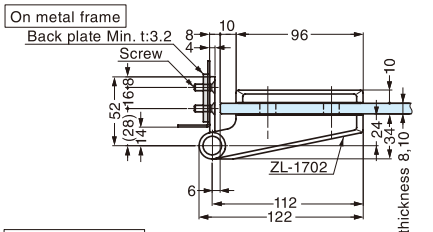
Concept | Selection Tool

Glass Hinge

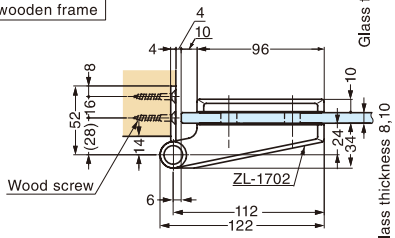
SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

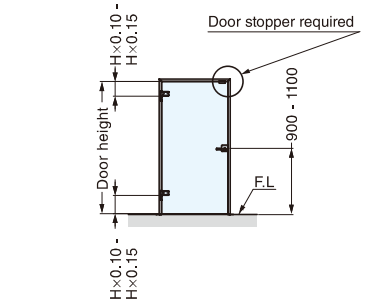
## Installation

On metal frame

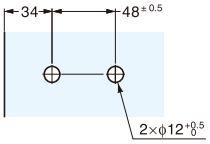


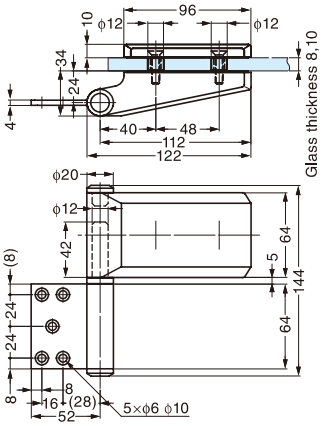

On wooden frame




## Cut Out Dimensions






Case latch ZL-1601
(P.562)

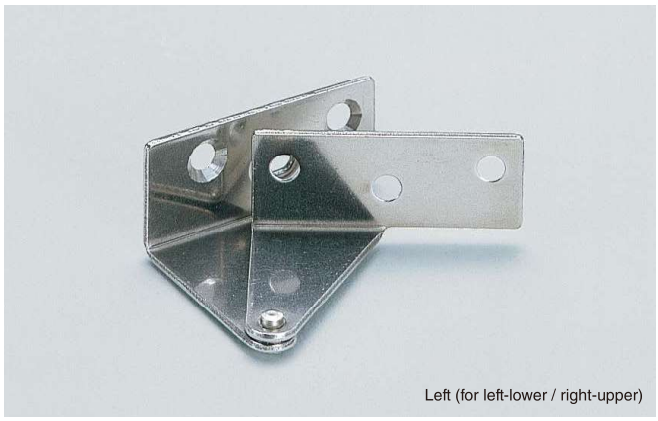
| Item Code | Item Name | Material | Finish | Door Width | Door Height | Glass Thickness | Load Capacity | Weight | Box |
|---|---|---|---|---|---|---|---|---|---|
| 170-183-400 | ZL-1702 | Stainless Steel (SUS316) | Zwei L Finish | Max. 900 | Max. 2500 | 8, 10 | 50 kgf/2 pcs | 806 g | 2 pcs |



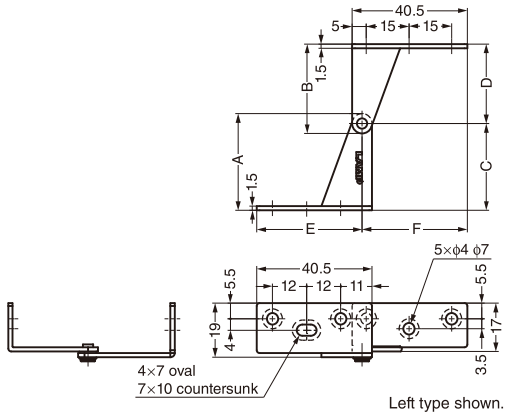
This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# OVERLAY DOOR PIVOT HINGE WP1, WP3

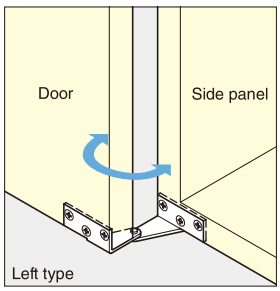
Latest Info


Left (for left-lower / right-upper)

SUS

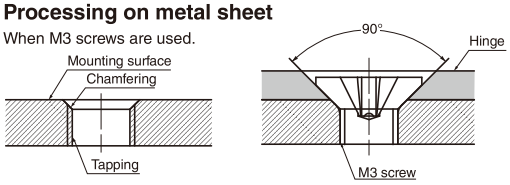


Left type shown.




## Processing on metal sheet

When M3 screws are used.




Please be sure to chamfer the mounting surface for screws and rivets.
In this way, screw head will not project when the body is fixed.

| Item Code | Item Name | Type | Material | Finish | A | B | C | D | E | F | Door Width | Door Height | Door Thickness | Door Weight | Weight | Box |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 170-090-257 | WP1R | Right (for right-lower / left-upper) | Stainless Steel (SUS430) | Barrel Polished | 34 | 31.5 | 30.5 | 28 | 37 | 37 | Max. 300 | Max. 700 | Max. 24 | Max. 2.7 kg /pair | 23 g | 100 pcs |
| 170-090-258 | WP1L | Left (for left-lower / right-upper) | Stainless Steel (SUS430) | Barrel Polished | 34 | 31.5 | 30.5 | 28 | 37 | 37 | Max. 300 | Max. 700 | Max. 24 | | 23 g | 100 pcs |
| 170-090-259 | WP3R | Right (for right-lower / left-upper) | Stainless Steel (SUS430) | Barrel Polished | 28 | 26 | 24.5 | 22 | 36.5 | 36.5 | Max. 300 | Max. 700 | Max. 18 | Max. 2.7 kg /pair | 21 g | 100 pcs |
| 170-090-260 | WP3L | Left (for left-lower / right-upper) | Stainless Steel (SUS430) | Barrel Polished | 28 | 26 | 24.5 | 22 | 36.5 | 36.5 | Max. 300 | Max. 700 | Max. 18 | | 21 g | 100 pcs |

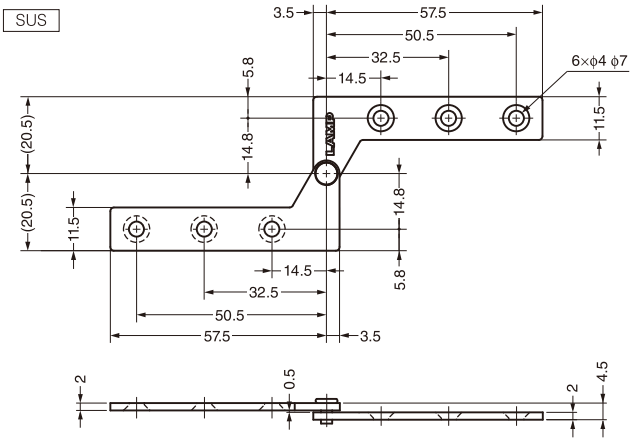
# INSET DOOR PIVOT HINGE PP-60

Latest Info

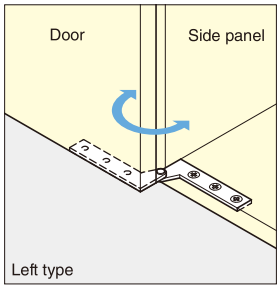

Left (for left-lower / right-upper)



SUS

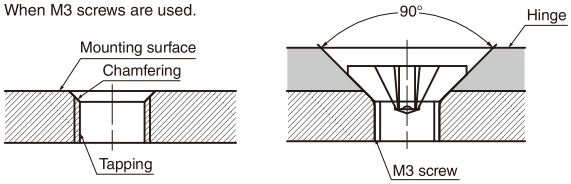


Right type shown.




## Processing on metal sheet

When M3 screws are used.




Please be sure to chamfer the mounting surface for screws and rivets.
In this way, screw head will not project when the body is fixed.

| Item Code | Item Name | Type | Material | Finish | Door Width | Door Height | Door Weight | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|---|
| 170-090-261 | PP-60R | Right (for right-lower / left-upper) | Stainless Steel (SUS430) | Barrel Polished | Max. 450 | Max. 700 | Max. 4 kg /pair | 22 g | 100 pcs | 1000 pcs |
| 170-090-262 | PP-60L | Left (for left-lower / right-upper) | Stainless Steel (SUS430) | Barrel Polished | Max. 450 | Max. 700 | | 22 g | 100 pcs | 1000 pcs |



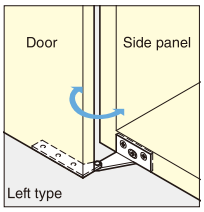
This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

# OVERLAY DOOR PIVOT HINGE PL-60

Latest Info

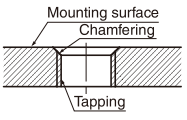

Left (for left-lower / right-upper)

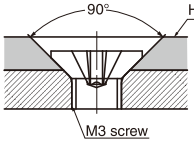



SUS

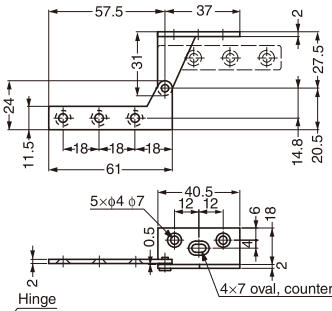
## Processing on metal sheet

When M3 screws are used.




Please be sure to chamfer the mounting surface for screws and rivets.
In this way, screw head will not project when the body is fixed.




Left type shown.

| Item Code | Item Name | Type | Material | Finish | Door Width | Door Height | Door Thickness | Door Weight | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 170-090-263 | PL-60R | Right (for right-lower / left-upper) | Stainless Steel (SUS430) | Plain | Max. 450 | Max. 700 | 22 | Max. 4 kg /pair | 27 g | 100 pcs | 1000 pcs |
| 170-090-264 | PL-60L | Left (for left-lower / right-upper) | Stainless Steel (SUS430) | Plain | Max. 450 | Max. 700 | 22 | | 27 g | 100 pcs | 1000 pcs |

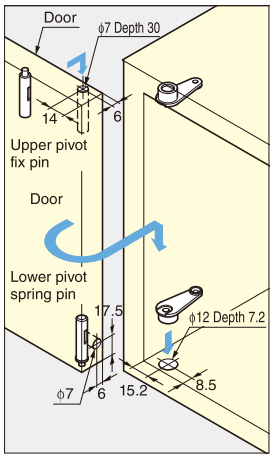
# LAMP. INSET DOOR PIVOT HINGE PV-30

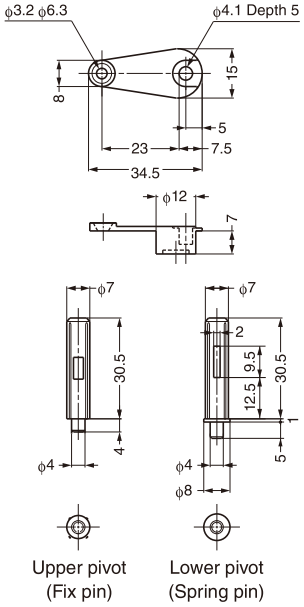
Latest Info



- Easy installation for lower pivot spring pin.

**Remarks**
- Sold in pairs.




Upper pivot (Fix pin)

Lower pivot (Spring pin)

| Item Code | Item Name | Material | Finish/Colour | Door Width | Door Height | Door Thickness | Door Weight | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|---|
| 170-090-060 | PV-30 | Polyamide (PA), Steel (Pin) | White/Nickel | Max. 450 | Max. 700 | Max. 21 | Max. 2.6 kg/set | 9 g | 100 sets | 1000 sets |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP INSET DOOR PIVOT HINGE PAW

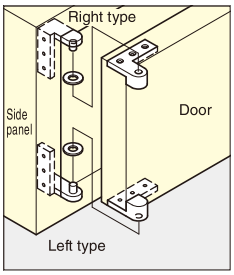
Latest Info

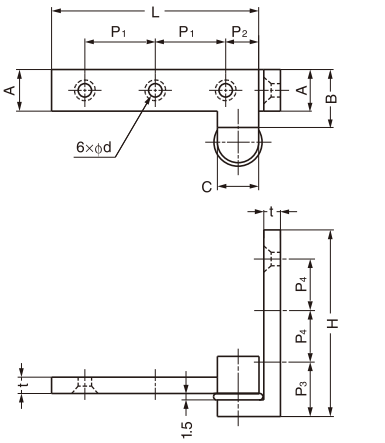



SCREW

## Remarks
- Sold in pairs.

## Parts Included
- Countersunk head wood screw 3.1×20 (SUS) (PAW-50, 60)
- Countersunk head wood screw 3.8×25 (SUS) (PAW-80, 95)




Right type shown.

| Item Code | Item Name | Material | Finish | L | t | H | A | B | C | P1 | P2 | P3 | P4 | d | Door | | | | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | Width | Height | Thickness | Weight | | | |
| 170-090-978 | PAW-50 | Brass | Satin Nickel | 50 | 4 | 45 | 10 | 14 | 10 | 17 | 8 | 13 | 12.5 | 3.2 | Max. 450 | Max. 700 | 14 | Max. 2.6 kg/pair | 98 g | 10 pairs | 200 pairs |
| 170-090-975 | PAW-60 | | | 60 | 4.5 | 50 | 12 | 16 | 12 | 21 | 9 | 12.5 | 15.5 | 3.2 | Max. 450 | Max. 700 | 16 | Max. 2.6 kg/pair | 133 g | 10 pairs | 200 pairs |
| 170-090-979 | PAW-80 | | | 80 | 6 | 70 | 16 | 20 | 15 | 30 | 10 | 15 | 23 | 4.2 | Max. 450 | Max. 700 | 20 | Max. 4 kg/pair | 356 g | 8 pairs | 32 pairs |
| 170-090-980 | PAW-95 | | | 95 | 6.5 | 80 | 19 | 28 | 16 | 35 | 12.5 | 18 | 25.5 | 4.2 | Max. 450 | Max. 700 | 28 | Max. 4 kg/pair | 509 g | 6 pairs | 24 pairs |

# LAMP INSET DOOR PIVOT HINGE PH

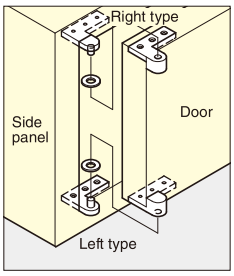
Latest Info

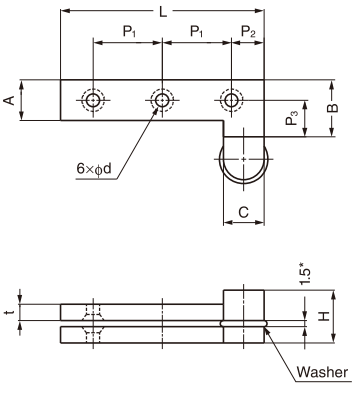



SCREW

## Remarks
- Sold in pairs.

## Parts Included
- Countersunk head wood screw 3.1×20 (SUS) (PH-50, 60)
- Countersunk head wood screw 3.8×25 (SUS) (PH-80, 90)




Right type shown.
* Only PH-50 comes with 0.8 mm thick washer.

| Item Code | Item Name | Material | Finish | L | t | H | A | B | C | P1 | P2 | P3 | d | Door | | | | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | Width | Height | Thickness | Weight | | | |
| 170-090-984 | PH-50 | Brass | Satin Nickel | 50 | 4 | 13.3 | 10 | 14 | 10 | 17 | 8 | 9 | 3.2 | Max. 450 | Max. 700 | Min. 14 mm | Max. 2.6 kg/pair | 40 g | 10 pairs | 200 pairs |
| 170-090-976 | PH-60 | | | 60 | 4.5 | 15 | 12 | 16 | 12 | 21 | 9 | 9 | 3.2 | Max. 450 | Max. 700 | Min. 16 mm | Max. 2.6 kg/pair | 60 g | 10 pairs | 200 pairs |
| 170-090-985 | PH-80 | | | 80 | 6 | 21 | 16 | 20 | 15 | 30 | 10 | 12 | 4.2 | Max. 450 | Max. 700 | Min. 20 mm | Max. 4 kg/pair | 170 g | 8 pairs | 32 pairs |
| 170-090-986 | PH-95 | | | 95 | 6.5 | 23 | 19 | 28 | 16 | 35 | 12.5 | 18.5 | 4.2 | Max. 450 | Max. 700 | Min. 28 mm | Max. 4 kg/pair | 250 g | 6 pairs | 24 pairs |

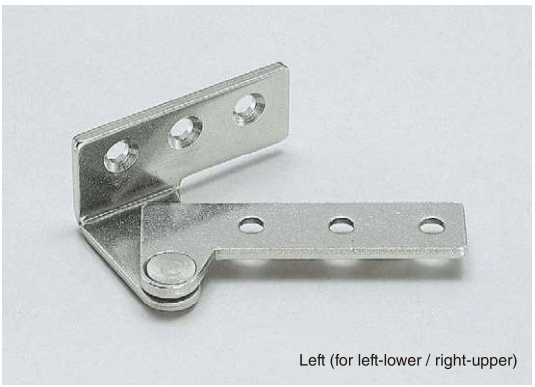


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

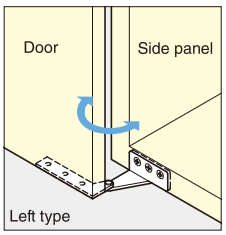
SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

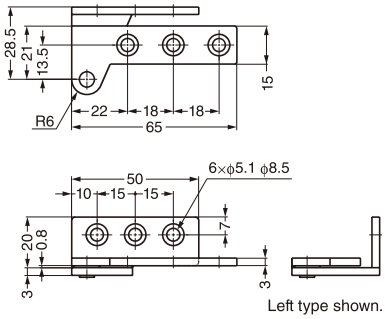
## LAMP. OVERLAY DOOR PIVOT HINGE PL-65

Latest Info


Left (for left-lower / right-upper)

SUS



Left type shown.

| Item Code | Item Name | Type | Material | Finish | Door Width | Door Height | Door Thickness | Door Weight | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 170-099-190 | PL-65R | Right (for right-lower / left-upper) | Stainless Steel (SUS430) | Plain | Max. 450 | Max. 700 | 22 | Max. 4 kg /pair | 55 g | 40 pcs | 400 pcs |
| 170-099-191 | PL-65L | Left (for left-lower / right-upper) | Stainless Steel (SUS430) | Plain | Max. 450 | Max. 700 | 22 | | 55 g | 40 pcs | 400 pcs |

## LAMP. OVERLAY DOOR PIVOT HINGE PAS

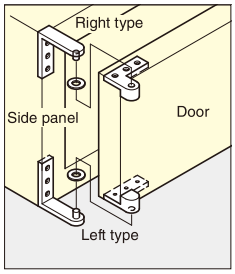
Latest Info

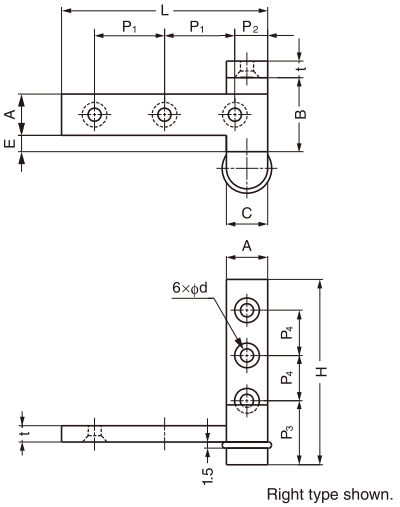

Left (for left-lower / right-upper)

SCREW

### Remarks
- Sold in pairs.

### Parts Included
- Countersunk head wood screw 3.1×20 (SUS) (PAS-50, 60)
- Countersunk head wood screw 3.8×25 (SUS) (PAS-80, 90)



Right type shown.

| Item Code | Item Name | Material | Finish | L | t | H | A | B | C | E | $P_1$ | $P_2$ | $P_3$ | $P_4$ | d | Door Width | Door Height | Door Thickness | Door Weight | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 170-090-981 | PAS-50 | Brass | Satin Nickel | 50 | 4 | 45 | 10 | 22 | 10 | 4 | 17 | 8 | 15.5 | 11 | 3.2 | Max. 450 | Max. 700 | 21 | Max. 2.6 kg/pair | 104 g | 10 pairs | 200 pairs |
| 170-090-977 | PAS-60 | | | 60 | 4.5 | 50 | 12 | 22 | 12 | 4 | 21 | 9 | 16 | 13.5 | 3.2 | Max. 450 | Max. 700 | 21 | Max. 2.6 kg/pair | 141 g | 10 pairs | 200 pairs |
| 170-090-982 | PAS-80 | | | 80 | 6 | 70 | 16 | 26.5 | 15 | 4 | 30 | 10 | 24 | 19 | 4.2 | Max. 450 | Max. 700 | 25 | Max. 4 kg/pair | 348 g | 8 pairs | 32 pairs |
| 170-090-983 | PAS-95 | | | 95 | 6.5 | 80 | 19 | 31.5 | 16 | 9 | 35 | 12.5 | 26 | 22 | 4.2 | Max. 450 | Max. 700 | 30 | Max. 4 kg/pair | 497 g | 6 pairs | 24 pairs |


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

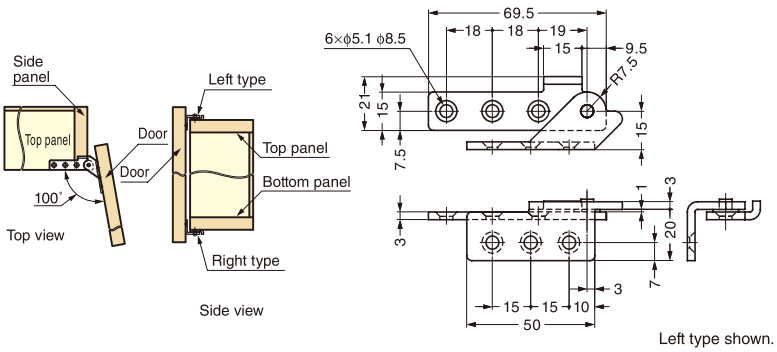
## LAMP OVERLAY DOOR PIVOT HINGE PL-100

Latest Info



Right (for right-lower / left-upper)

SUS

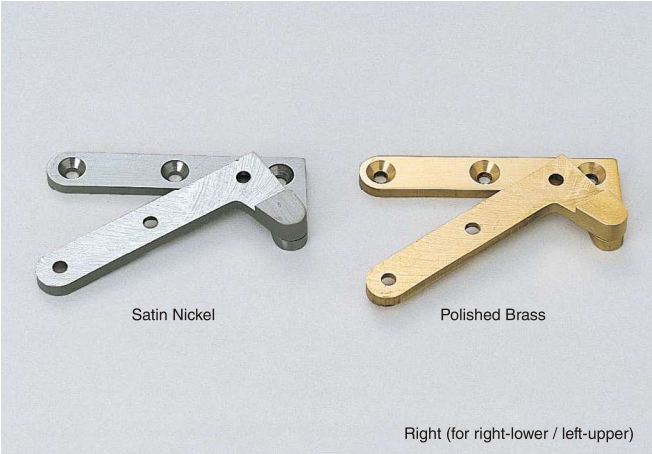



Left type shown.

| Item Code | Item Name | Type | Material | Finish | Door Width | Door Height | Door Weight | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|---|
| 170-099-379 | PL-100R | Right (for right-lower / left-upper) | Stainless Steel (SUS304) | Polished | Max. 600 | Max. 750 | Max. 6 kg /pair | 55 g | 70 pcs | 420 pcs |
| 170-099-380 | PL-100L | Left (for left-lower / right-upper) | Stainless Steel (SUS304) | Polished | Max. 600 | Max. 750 | | 55 g | 70 pcs | 420 pcs |

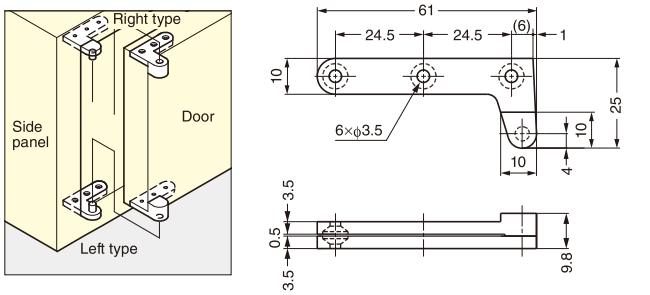
## INSET DOOR PIVOT HINGE TTS-902

Latest Info




Right (for right-lower / left-upper)

**Remarks**
- Sold by piece.




Right type shown.

| Item Code | Item Name | Type | Material | Finish | Weight | Box |
|---|---|---|---|---|---|---|
| 170-090-126 | TTS-902WBL | Left (for left-lower / right-upper) | Brass | Satin Nickel | 41 g | 20 pairs |
| 170-090-125 | TTS-902WBR | Right (for right-lower / left-upper) | | | 41 g | 20 pairs |
| 170-090-128 | TTS-902ML | Left (for left-lower / right-upper) | | Polished | 43 g | 20 pairs |
| 170-090-127 | TTS-902MR | Right (for right-lower / left-upper) | | | 43 g | 20 pairs |

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# INSET DOOR PIVOT HINGE (ADJUSTABLE) PH084N

Latest Info





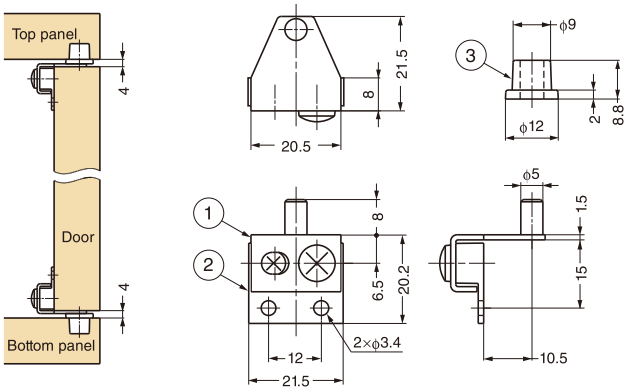
- Function to adjust horizontally and vertically.

## Remarks

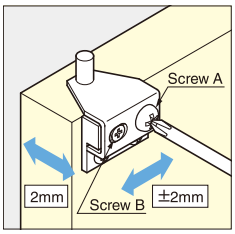
- 2 pcs required for 1 door.

## Adjustment Range

- Depth : 2 mm / Horizontal : 2 mm




## How to Adjust




After loosening screw A, adjust by screwing B in the direction of the arrows.
Tighten screw A at final position.

| No. | Part Name | Material | Finish/Colour |
|---|---|---|---|
| ① | Body | Steel | Nickel |
| ② | Hinge Plate | Zinc Alloy (ZDC) | Plain |
| ③ | Support | Polyamide (PA) | Black |

| Item Code | Item Name | Door Width | Door Height | Door Thickness | Door Weight | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|
| 170-090-621 | PH084N | Max. 300 | Max. 700 | 15 - 19 | Max. 2 kg/2 pcs | 16 g | 500 pcs | 1000 pcs |

* When the current stock runs out, cross-recessed pan head screws will be included. Also, the box quantity will be 700 pcs and the carton quantity will be unavailable.



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP 2-WAY ADJUSTABLE PIVOT HINGE PH-01

Latest Info



- Hinge position adjustable without removing door.
- Sold in pairs (for top and bottom).

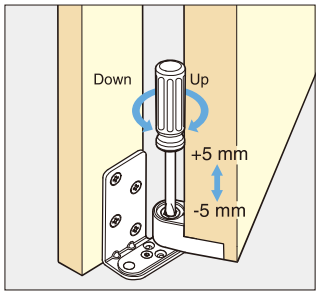
SCREW

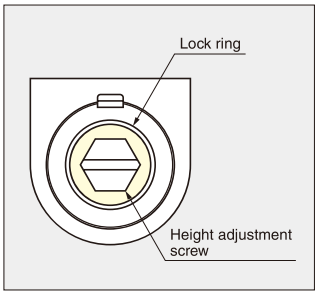
**Parts Included**
- Countersunk head tapping screw 4×30

Feature

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

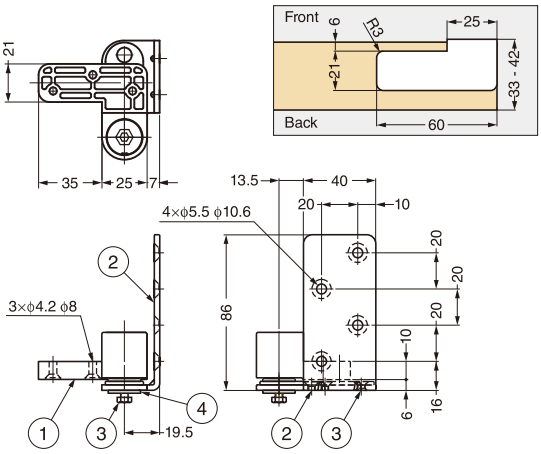
## Vertical Adjustment



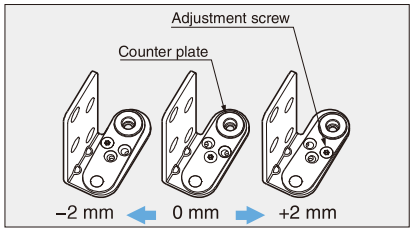




1. Remove the cover cap.
2. Loosen hex lock ring.
3. Adjust by turning slotted screw.
4. Tighten hex lock ring.
5. Put the cover cap.

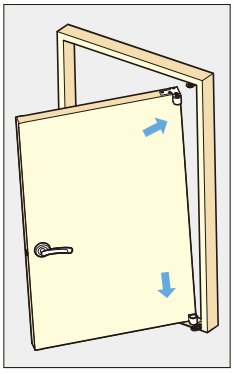
## Cut Out Dimensions




## Lateral Adjustment

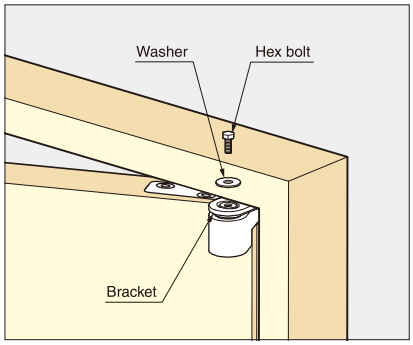



## Door Installation



1. Insert bottom hinge to the bracket.
2. Install door while pushing the shaft of upper hinge.
3. Secure to check the door is fixed with the frame.

## Locking Mechanism




Hex bolt holds the door and prevents the door falling off unexpectedly.

| No. | Part Name | Material | Finish/Colour |
|---|---|---|---|
| ① | Body | Zinc Alloy (ZDC) | Matte Silver |
| ② | Bracket | Stainless Steel (SUS304) | Polished |
| ③ | Hex Bolt | Stainless Steel (SUS304) | – |
| ④ | Washer | Stainless Steel (SUS304) | – |
| ⑤ | Cover | ABS | White |

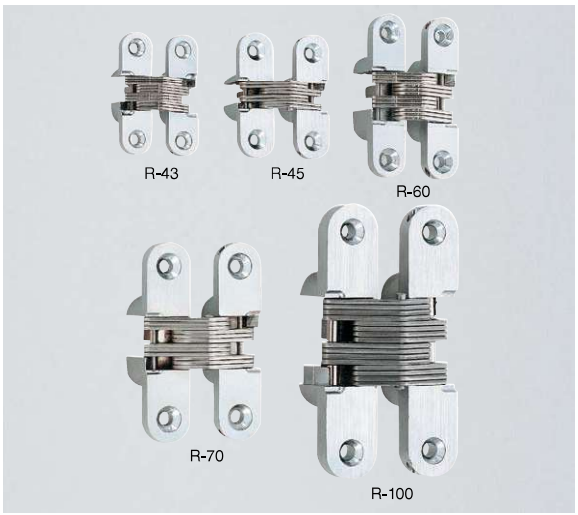
| Item Code | Item Name | Door Width | Door Height | Door Thickness | Door Weight | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|
| 170-090-622 | PH-01 | Max. 850 | Max. 2300 | 33 - 42 | Max. 35 kg/pair | 593 g | 1 pair | 20 pairs |

This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP CONCEALED HINGE R

Latest Info





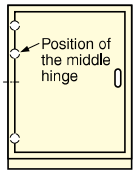

- Stainless steel (SUS304) arm has sufficient strength and superior corrosion resistance.
- R-100 adopts a roller as guide pin, making smooth movement even under high load.

SCREW

## Parts Included

- Countersunk head wood screw (SUS)
- Countersunk head tapping screw (SUS) (R-70 only)

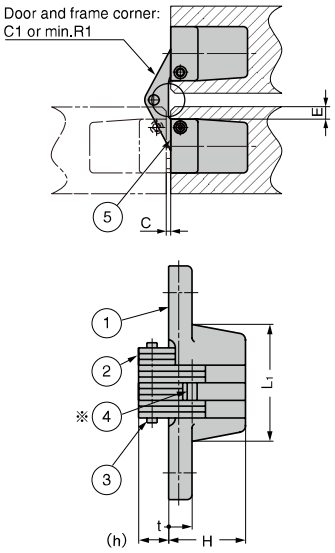
Feature




Example of 3 hinge installation.

| Item No. | Qty of Hinges |
|---|---|
| R- 43 | 3 pcs |
| R- 45 | 3 pcs |
| R- 60 | 3 pcs |
| R- 70 | 2 pcs |
| R-100 | 2 pcs |

[In case of door width, 700 mm and door weight, 15 kg]




| No. | Part Name | Material | | | | | Finish |
|---|---|---|---|---|---|---|---|
| | | R-43 | R-45 | R-60 | R-70 | R-100 | |
| ① | Body | Zinc Alloy | | | | | Satin Chrome |
| ② | Arm | Stainless Steel (SUS304) | | | | | Plain |
| ③ | Shaft | Stainless Steel | | | Stainless Steel (SUS303) | Stainless Steel | |
| ④ | Shaft | Stainless Steel (SUS304) | | | | Steel | |
| ⑤ | Shaft | | | | | | |
| * | Roller | - | | | | | Nickel |

| Item Code | Item Name | L | $L_1$ | B | $B_1$ | $P_1$ | $P_2$ | H | h | t | d | D | C | E | Screw | Number of Arm | Door Width | Door Height | Load Capacity kgf/2 pcs | Opening Angle | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 170-090-079 | R-43 | 43 | 22 | 29 | 11 | 32 | 18 | 13 | 5 | 5 | 3.5 | 6.2 | 0.8 | 2.3 | 3.1×16 | 12 | Max. 450 | Max. 700 | 4 | 180° | 42 g | 30 pcs | 300 pcs |
| 170-090-084 | R-45 | 45 | 19 | 35.7 | 13 | 32 | 22.7 | 18.5 | 6 | 5 | 3.5 | 7 | 0.8 | 3 | 3.1×20 | 8 | | | | 180° | 61 g | 20 pcs | 200 pcs |
| 170-090-081 | R-60 | 60 | 33 | 35.2 | 13 | 47 | 22.2 | 18.5 | 6.5 | 6.5 | 4.3 | 8.3 | 1 | 3 | 3.5×20 | 12 | | | | 180° | 104 g | 10 pcs | 100 pcs |
| 170-095-200 | *R-70 | 70 | 35 | 42.6 | 16.1 | 53 | 26.6 | 23 | 7.3 | 7 | 4.6 | 9.1 | 1.2 | 3.5 | 4 ×25 | 12 | | | 7 | 180° | 164 g | 10 pcs | 100 pcs |
| 170-095-201 | R-100 | 100 | 52 | 53.2 | 20 | 80 | 33.2 | 27.5 | 9.5 | 9.5 | 5.3 | 10 | 1.8 | 4.8 | 4.5×32 | 16 | | | | 180° | 351 g | 10 pcs | 60 pcs |

*For R-70, the shaft material will be changed to SUS303 once existing inventory runs out.



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# CONCEALED HINGE INO-66N

Latest Info



- Front plate is made of stainless steel 304.

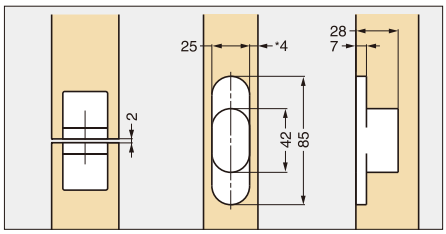
## Remarks

- For using 3 pcs per one door, distance between top hinge and centre hinge must be 200 mm.
- Distance between door edge and hinge (marked * on below drawings) must be less than 4 mm.

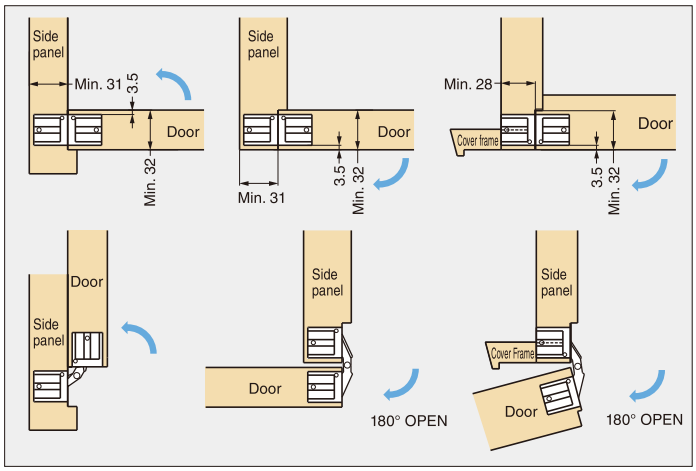
## Recommended Screw

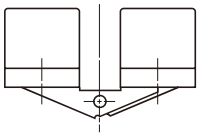
- Countersunk head wood screw 5.8

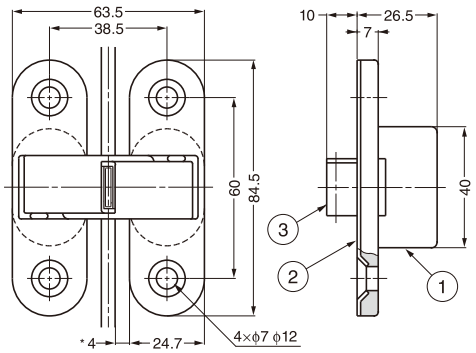
## Cut Out Dimensions




## Installation






| No. | Part Name | Material | Finish |
|---|---|---|---|
| ① | Body | Polyamide (PA) | – |
| ② | Front Plate | Stainless Steel (SUS304) | Satin |
| ③ | Arm | Stainless Steel (SUS304) | – |

| Item Code | Item Name | Door Width | Door Height | Door Weight | | Opening Angle | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|
| 170-095-018 | INO-66N | Max. 800 | Max. 2100 | Max. 30 kg/2 pcs | Max. 50 kg/3 pcs | 180° | 100 g | 24 pcs | 144 pcs |



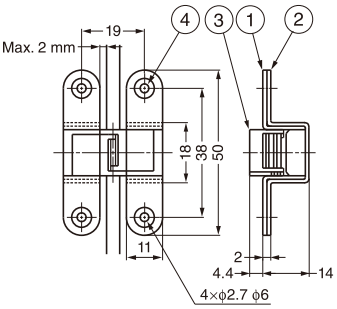
This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

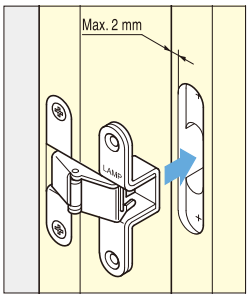
# LAMP CONCEALED HINGE RK-50

Latest Info






## Installation




- For light door.

SCREW | SUS

### Remarks
- Recommended for use in pairs.

### Parts Included
- Countersunk head wood screw 2.4×13 (SUS)

| No. | Part Name | Material | Finish |
|---|---|---|---|
| ① | Body | Stainless Steel (SUS304) | Satin |
| ② | Cover | Stainless Steel (SUS304) | Plain |
| ③ | Arm | Stainless Steel (SUS304) | Satin |
| ④ | Eyelet | Stainless Steel (SUS304) | Plain |
| - | Other Axis Parts | Stainless Steel (SUS304) | Plain |

| Item Code | Item Name | Door Width | Door Height | Door Thickness | Door Weight | Opening Angle | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|
| 170-090-086 | RK-50 | Max. 450 | Max. 700 | Min. 15 | Max. 2.6 kg/2 pcs | 180° | 28 g | 24 pcs | 240 pcs |

# LAMP CONCEALED HINGE RE-45 Resin NEW

Latest Info

**Under Development**



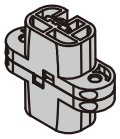
- Concealed hinge with 180° opening range.

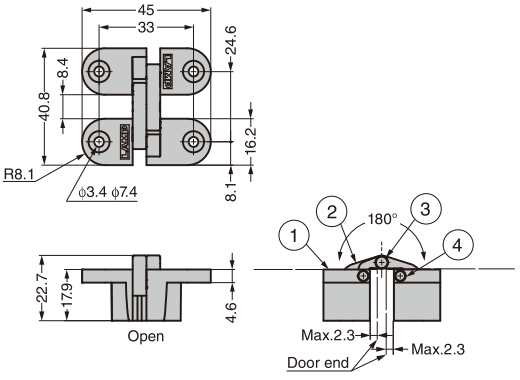
### Applications
- Medical instruments, analytical instruments, steel cabinets, etc.

### Remarks
- Over-tightenning the mounting screws may cause damage.

### Recommended Screws
- M3 flat head screws

Closed






| No. | Part Name | Material | Finish |
|---|---|---|---|
| ① | Body | Polyamide (PA) | — |
| ② | Arm | Zinc Alloy (ZDC) | Nickel Chrome Plating |
| ③ ④ | Shaft | Stainless Steel (SUS304) | — |

| Item Code | Item Name | Colour | Load Capacity N/2 pcs | Load Capacity kgf/2 pcs | Opening Angle | Weight (g) |
|---|---|---|---|---|---|---|
| 170-054-693 | RE-45-BL | Black | — | — | 180° | 17.1 |
| 170-054-694 | RE-45-WT | White | | | | |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP DROP HINGE (ADJUSTABLE TYPE) SDH-001

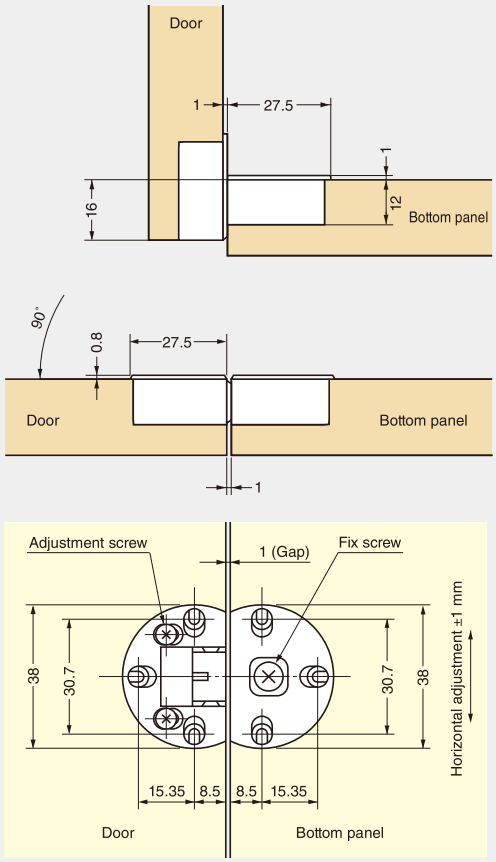
Latest Info

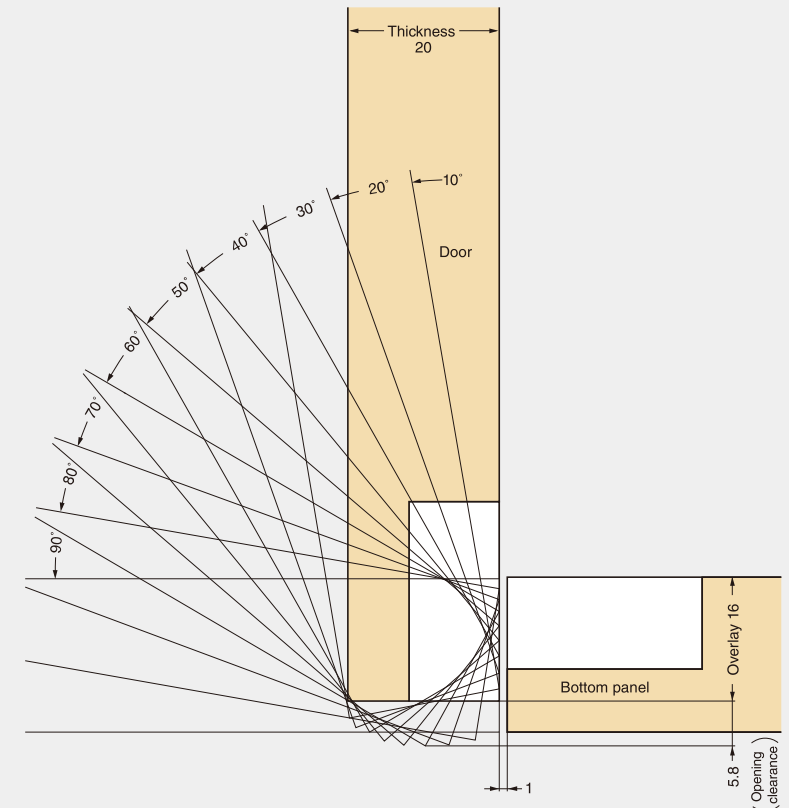



- Opening angle 90˚.
- 3-way adjustment:
  Door gap : +1 mm / Horizontal : ±1 mm / Overlay : 14-16 mm
- Flush when opened, ideal for writing desk application.
- Can be used with soft-down stay SDS-100 (P.271) or NSDX-10 (P.272).
- Glass door type SDH-G (P.181) is also available.

### Recommended Screws
- Pan head tapping screw 3×13

### Sold Separately
- Pan head tapping screw 3×13 coated in black for SDH-001BL (300 pcs/1 pack)



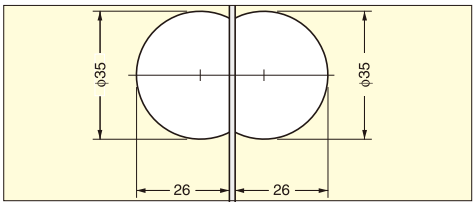

Example (door thickness : 20 mm / bottom panel : 20 mm / overlay : 16 mm)

### Application Example



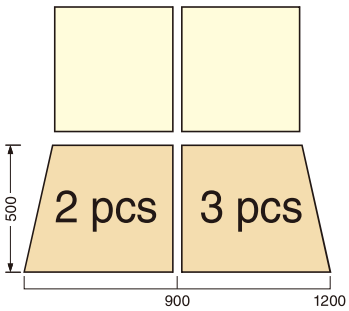
Combination of HDS-10 lid support (P.273).

### Cut Out Dimensions




### Number of Hinges

In case of door thickness up to 20 mm.




| Item Code | Item Name | Material | Finish | Overlay | Door Thickness | Opening Angle | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|
| 170-090-471 | SDH-001 | Zinc Alloy (ZDC) | Nickel | 14 - 16 | 16 - 20 | 90˚ | 85 g | 50 pcs | 200 pcs |
| 170-010-648 | SDH-001BL | Zinc Alloy (ZDC) | Black | 14 - 16 | 16 - 20 | 90˚ | 85 g | 50 pcs | 200 pcs |

### Pan Head Tapping Screw 3×13 in Black (For SDH-001BL)

| Item Code | Item Name | 1 pack |
|---|---|---|
| 170-011-885 | SDH-001-S-BL | 300 pcs |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP DROP HINGE (ADJUSTABLE TYPE) SDH-P

Latest Info

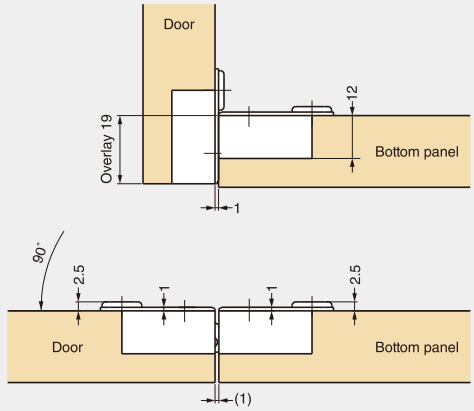


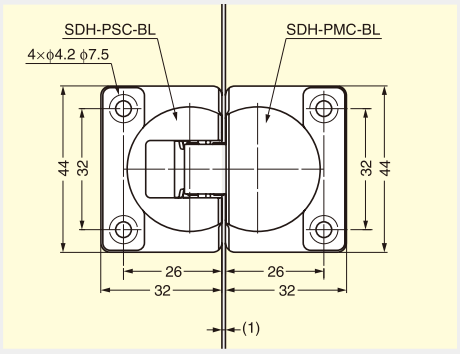
- 3-way adjustment.
  Overlay: 16-19 mm / Horizontal: ±1 mm / Door gap: 1-3 mm
- Can be used with soft-down stay SDS-100, SDS-100TV, NSDX-10(R/L)K, NSDX-10(R/L)K-TV, CSD-10-TV.

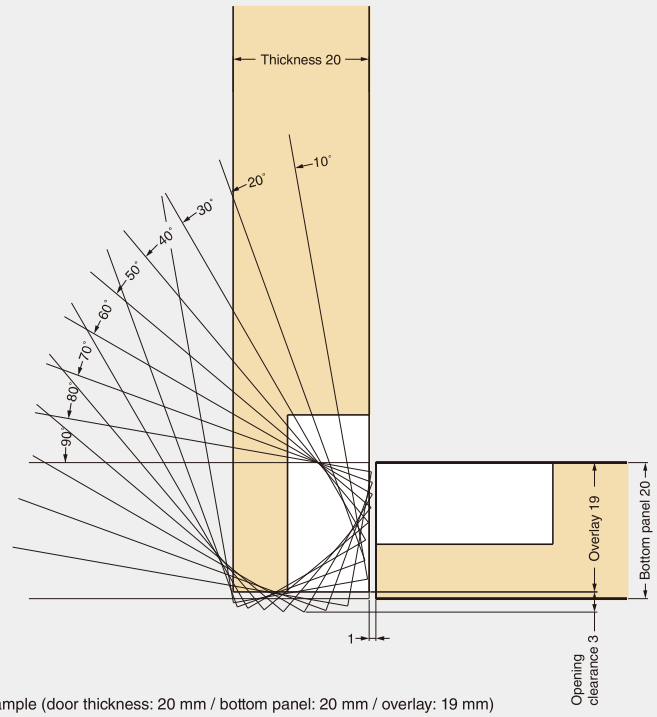
## Recommended Screws
- Pan head tapping screw 3.5

## Sold Separately
- Cover cap SDH-PSC-BL and SDH-PMC-BL

Feature

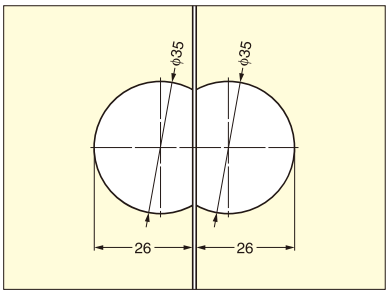


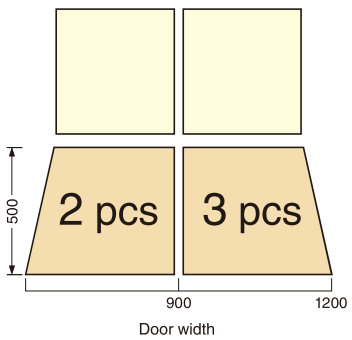

Example (door thickness: 20 mm / bottom panel: 20 mm / overlay: 19 mm)

## Cut Out Dimensions




## Number of Hinges

In case of door thickness up to 20 mm. Material: particle board.




## Drop Hinge + Covers

| Item Code | Item Name |
|---|---|
| 170-035-444 | SDH-P-BL-SET |
| 170-037-357 | SDH-P-WT-SET |
| 170-037-358 | SDH-P-NI-SET |

## Cover Set (Covers for Socket and Mounting Plate)

| Item Code | Item Name | Material | Colour |
|---|---|---|---|
| 170-034-769 | SDH-PC-BL | ABS | Black |
| 170-034-828 | SDH-PC-WT | ABS | White |
| 170-034-829 | SDH-PC-NI | ABS | Nickel |

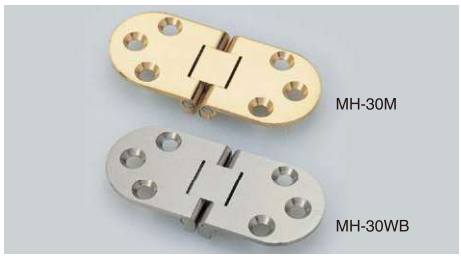
## Drop Hinge

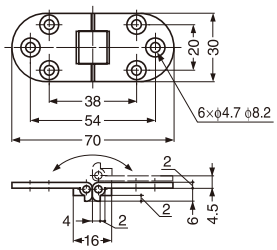
| Item Code | Item Name | Material | Finish | Overlay | Door Thickness | Opening Angle | Box | Carton |
|---|---|---|---|---|---|---|---|---|
| 170-034-200 | SDH-P | Steel | Nickel | 16 - 19 | 16 - 20 | 90° | 50 pcs | 200 pcs |


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

## LAMP TABLETOP HINGE MH-30

Latest Info

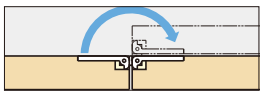



- Double pivot hinge allows 180˚ opening.

Feature



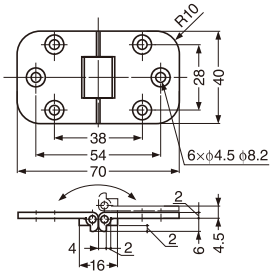


| Item Code | Item Name | Material | Finish | Door Width | Door Height | Door Thickness | Door Weight | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|---|
| 170-090-052 | MH-30M | Brass | Polished | Max. 450 | Max. 700 | Max. 21 | Max. 4 kg/2 pcs | 45 g | 24 pcs | 360 pcs |
| 170-090-051 | MH-30WB | Brass | Satin Nickel | Max. 450 | Max. 700 | Max. 21 | Max. 4 kg/2 pcs | 45 g | 24 pcs | 360 pcs |
| 170-090-050 | MH-30CR | Brass | Chrome | Max. 450 | Max. 700 | Max. 21 | Max. 4 kg/2 pcs | 45 g | 24 pcs | 360 pcs |

## LAMP TABLETOP HINGE MH-40

Latest Info

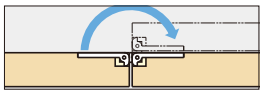



- Double pivot hinge allows 180˚ opening.

Feature

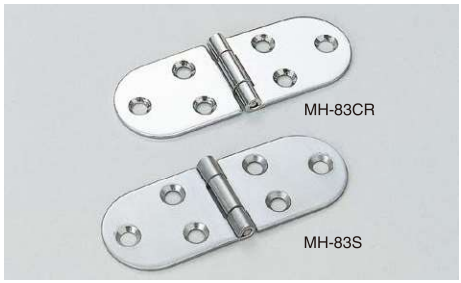


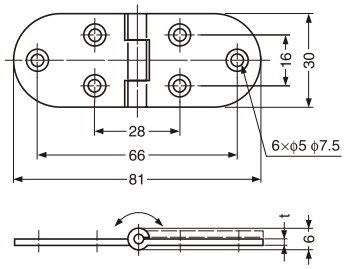


| Item Code | Item Name | Material | Finish | Door Width | Door Height | Door Thickness | Door Weight | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|---|
| 170-090-057 | MH-40M | Brass | Polished | Max. 450 | Max. 700 | Max. 21 | Max. 4 kg/2 pcs | 64 g | 16 pcs | 240 pcs |
| 170-090-056 | MH-40WB | Brass | Satin Nickel | Max. 450 | Max. 700 | Max. 21 | Max. 4 kg/2 pcs | 64 g | 16 pcs | 240 pcs |
| 170-090-055 | MH-40CR | Brass | Chrome | Max. 450 | Max. 700 | Max. 21 | Max. 4 kg/2 pcs | 64 g | 16 pcs | 240 pcs |

## LAMP TABLETOP HINGE MH-83

Latest Info



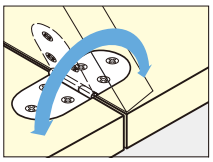




SUS

**Remarks**

- Only for use on the wooden board.

Feature

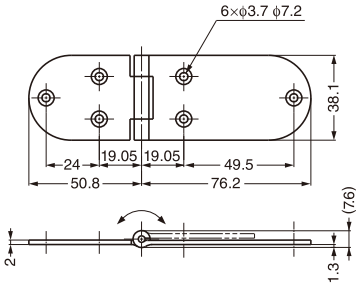


| Item Code | Item Name | Material | Finish | t | Door Width | Door Height | Door Thickness | Door Weight | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 170-090-046 | MH-83CR | Steel | Chrome | 1.6 | Max. 450 | Max. 700 | Max. 21 | Max. 4 kg/2 pcs | 31 g | 100 pcs | 1000 pcs |
| 170-090-045 | MH-83S | Stainless Steel (SUS304) | Satin | 1.5 | Max. 450 | Max. 700 | Max. 21 | Max. 4 kg/2 pcs | 28 g | 100 pcs | 1000 pcs |

## LAMP TABLETOP HINGE MA-5

Latest Info



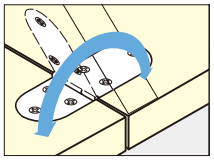



SUS

**Recommended Screw**

- Countersunk head wood screw 3.5

Feature



| Item Code | Item Name | Material | Finish | Door Width | Door Height | Door Thickness | Door Weight | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|---|
| 170-918-023 | MA-5 | Stainless Steel (SUS304) | Mirror | Max. 450 | Max. 700 | Max. 21 | Max. 4 kg/2 pcs | 77 g | 35 pcs | 350 pcs |

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

# LAMP MINI DETENT HINGE HG-MPS2

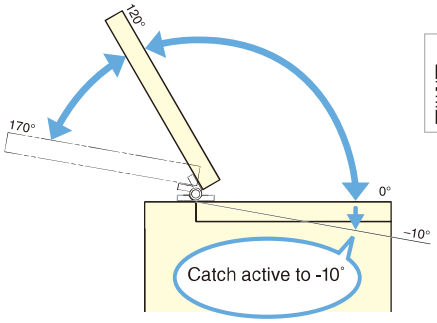
Latest Info



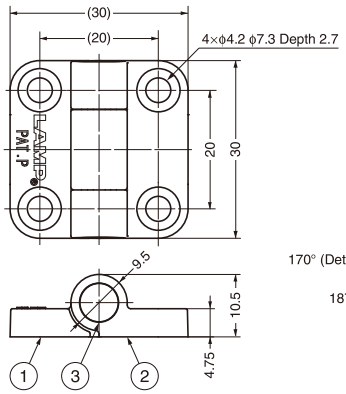

- Plastic hinge holds doors at 3 different positions without secondary support (-10˚, 120˚and 170˚).
- Can be used horizontally or vertically.
- Additional stopper is recommended at 0˚and 170˚.

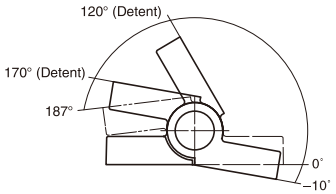
## Recommended Screw

- Pan wood screw M4




Feature




| No. | Part Name | Material | Finish/Colour |
|---|---|---|---|
| ① | Bracket A | PBT | Black (BL), White (WT) |
| ② | Bracket B | PBT | Black (BL), White (WT) |
| ③ | Cap | ABS | Black (BL), White (WT) |

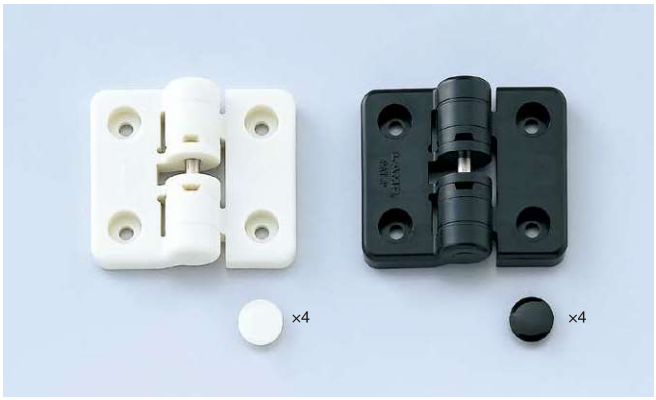
## Applicable Door Size (per 2 pcs)

| Width | Height | Weight |
|---|---|---|
| Max. 370 | Max. 460 | Max. 1.0 kg |

| Item Code | Item Name | Colour | Catch Release Torque | | | | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|
| | | | -10˚, 170˚ | | 120˚ | | | | |
| 170-023-908 | HG-MPS2-BL | Black | 26.0 cN·m | 2.65 kgf·cm | 14.5 cN·m | 1.48 kgf·cm | 8 g | 50 pcs | 500 pcs |
| 170-023-909 | HG-MPS2-WT | White | 26.0 cN·m | 2.65 kgf·cm | 14.5 cN·m | 1.48 kgf·cm | 8 g | 50 pcs | 500 pcs |

# LAMP DETENT HINGE HG-YJ50

Latest Info

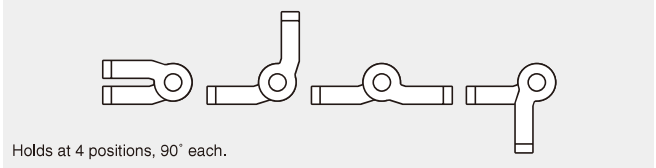


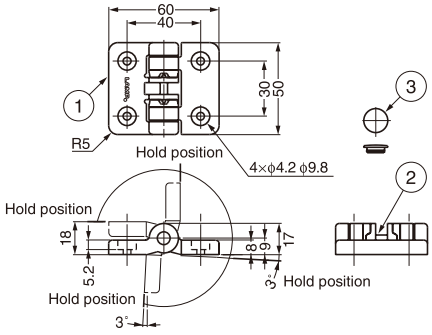

- Plastic hinge holds doors at 4 different positions (90˚ increment) without secondary support.
- Caps for the screw holes are included.

## Parts Included

- Caps (Ivory : KD-772-3I, Black : KD-772-3B)

Feature




| No. | Part Name | Material | Finish/Colour |
|---|---|---|---|
| ① | Body | Polyacetal (POM) | Ivory (IV), Black (BL) |
| ② | Shaft | Stainless Steel (SUS303) | – |
| ③ | Cover | Polypropylene (PP) | Ivory (IV), Black (BL) |

| Item Code | Item Name | Colour | Door Width | Door Height | Door Weight | Torque Moment (Per piece) | | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|---|
| 170-090-000 | HG-YJ50IV | Ivory | Max. 400 | Max. 500 | Max. 1.2 kg | Approx. 49 cN·m | Approx. 5 kgf·cm | 35 g | 20 pcs | 200 pcs |
| 170-090-002 | HG-YJ50BL | Black | Max. 400 | Max. 500 | Max. 1.2 kg | Approx. 49 cN·m | Approx. 5 kgf·cm | 35 g | 20 pcs | 200 pcs |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP ANGLE-ADJUSTABLE DETENT HINGE HG-CHJ70 NEW

Latest Info



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.

INSTRUCTION

## 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

**Without Covers**

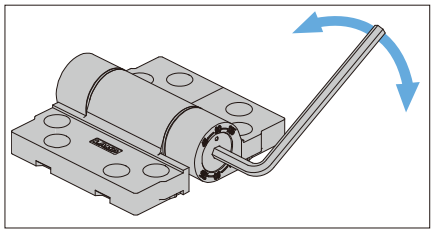


**Application Example**




Detent angle: 45°

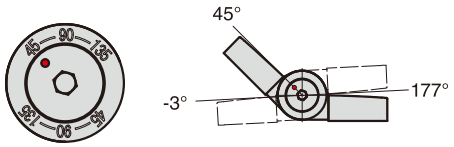
**Switching 45° ↔90° ↔135°**



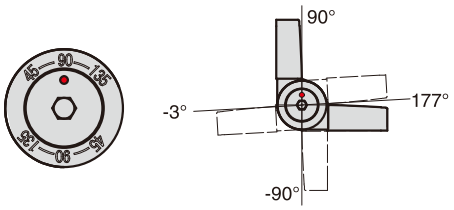
Can be adjusted by a hex key.

**Available Detent Angles**

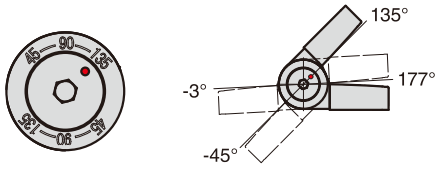
●45°

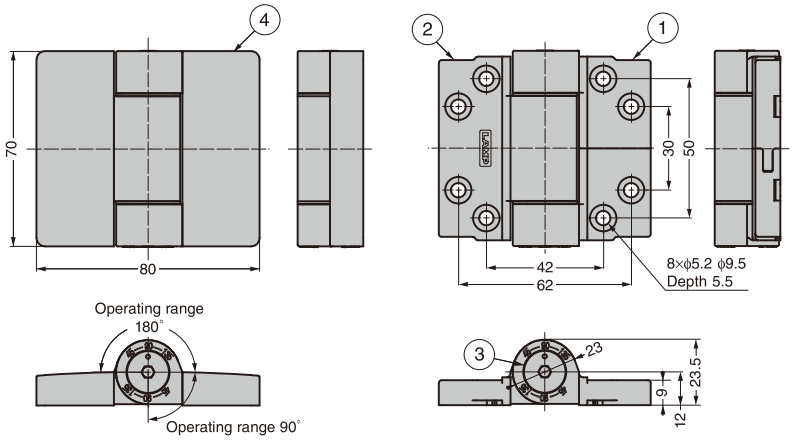



●90° (factory setting)



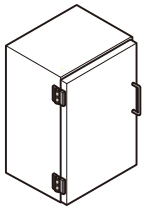

●135°



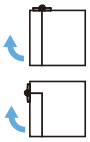

**[Available Door Specs]** When using two hinges

●Lateral opening



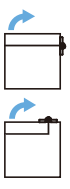
-Weight: Max. 8kg
-Width: Max. 500mm
-Height: Max. 1,000mm

●Upward opening



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

●Top opening



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

Feature

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

| 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 |



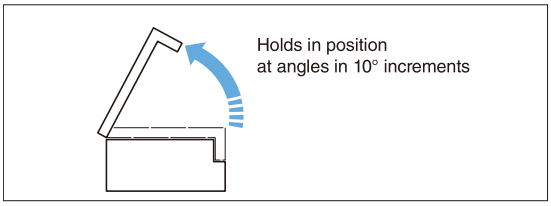
This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP. MULTI ANGLE LOCKING HINGE HG-MA95A NEW

Latest Info






- 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

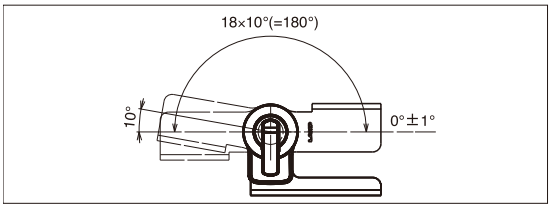
- Be sure to read the “Precautions for Use”(P.23).

## Recommended screws

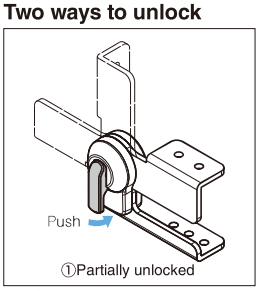
- M5 screw

Feature

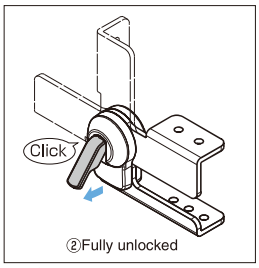
## Locus chart




## Two ways to unlock

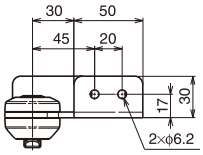



The flap is temporarily unlocked while the lever is pushed.

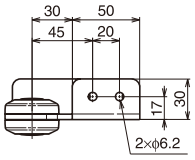


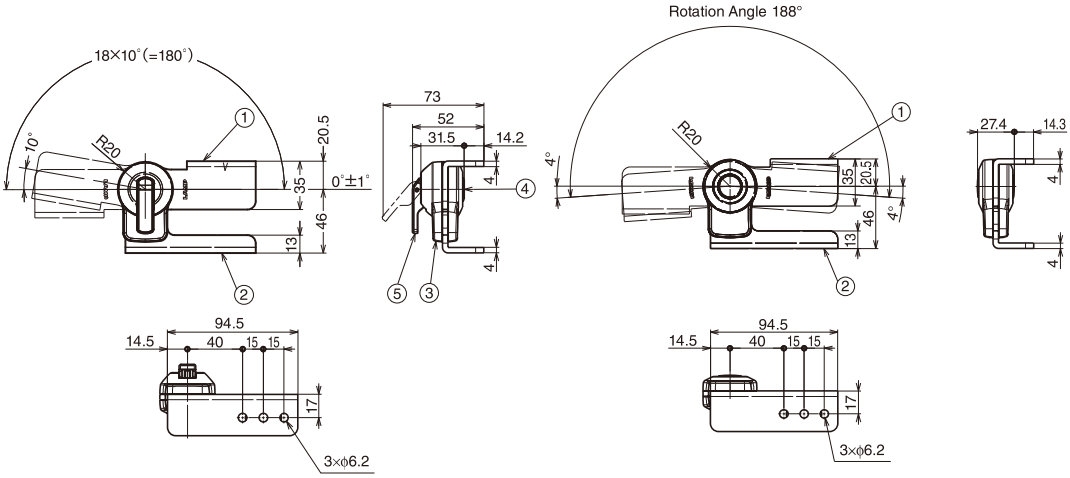

The flap stays unlocked when the lever is lifted.

[HG-MA95A-L]




[HG-MA95AF-L]




Left-handed shown. Right-handed is symmetrical.

| No. | Part Name | Material | Finish/Colour |
|---|---|---|---|
| ① | Bracket | Steel | Nickel |
| ② | Base | | |
| ③ | Plastic Cover | PC | Black |
| ④ | Pin | ABS | |
| ⑤ | Lever | PA | Light Gray |

| Item Code | Item Name | Position | Type | Max Torque N.m / pc | Max Torque kgf.cm/pc | Weight (g) | Box (pc) | Carton (pc) |
|---|---|---|---|---|---|---|---|---|
| 170-043-818 | HG-MA95A-R | Right-handed | With lever | 45 | 459 | 351 | 5 | 20 |
| 170-043-819 | HG-MA95A-L | Left-handed | | | | 351 | 5 | 20 |
| 170-043-822 | HG-MA95AF-R | Right-handed | Without lever | – | – | 351 | 5 | 20 |
| 170-043-823 | HG-MA95AF-L | Left-handed | | | | 351 | 5 | 20 |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP MULTI ANGLE LOCKING HINGE HG-MA95B NEW

Latest Info

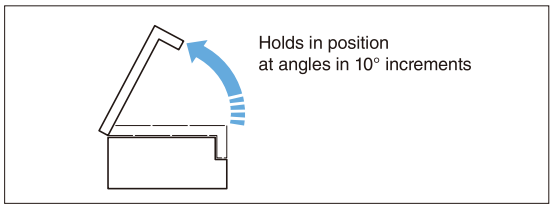



- Easily adjusts the flap angle by toggling the lever.
- Lock allows the hinge to be held in position from 0° to 180° in 10° increments.
- The flap is temporarily unlocked while the lever is pushed.
- The flap stays unlocked when the lever is lifted.
- Both hinge types can be used together.

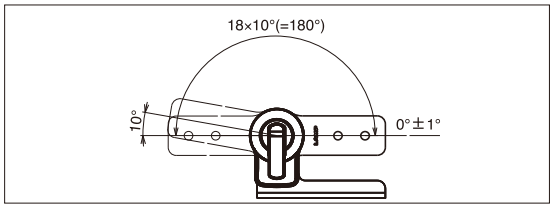
## Applications
- Medical equipment, analytical instruments, semiconductor equipment.

## Remarks
- Be sure to read the “Precautions for Use”(P.23).

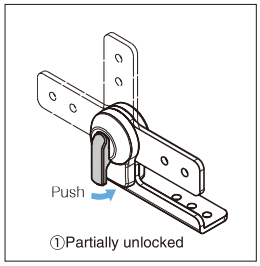
## Recommended screws
- M5 screw



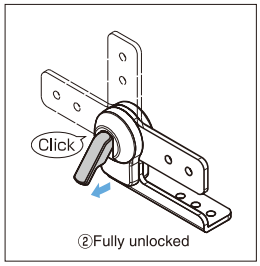

## Locus chart




## Two ways to unlock

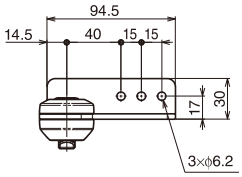



The flap is temporarily unlocked while the lever is pushed.

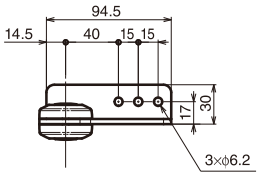


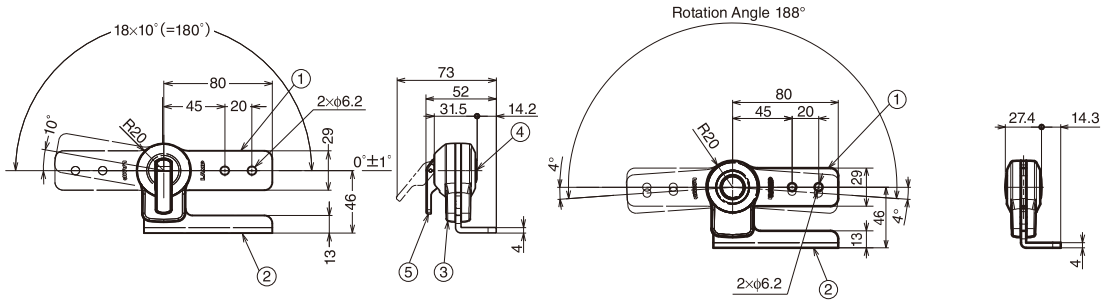

The flap stays unlocked when the lever is lifted.

**[HG-MA95B-L]**




**[HG-MA95BF-L]**




Left-handed shown. Right-handed is symmetrical.

| No. | Part Name | Material | Finish/Colour |
|---|---|---|---|
| ① | Bracket | Steel | Nickel |
| ② | Base | | |
| ③ | Plastic Cover | PC | Black |
| ④ | Pin | ABS | |
| ⑤ | Lever | PA | Light Gray |

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



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP FOLDING HINGE HG-RCT1S-90 90° Locking NEW

Latest Info

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES



- 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. (P.207)

## Application

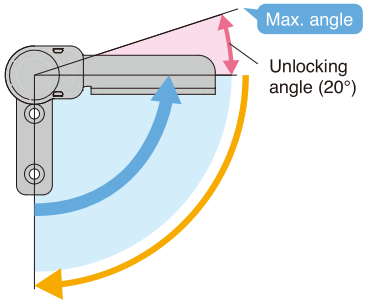
- Foldable tables and shelves.

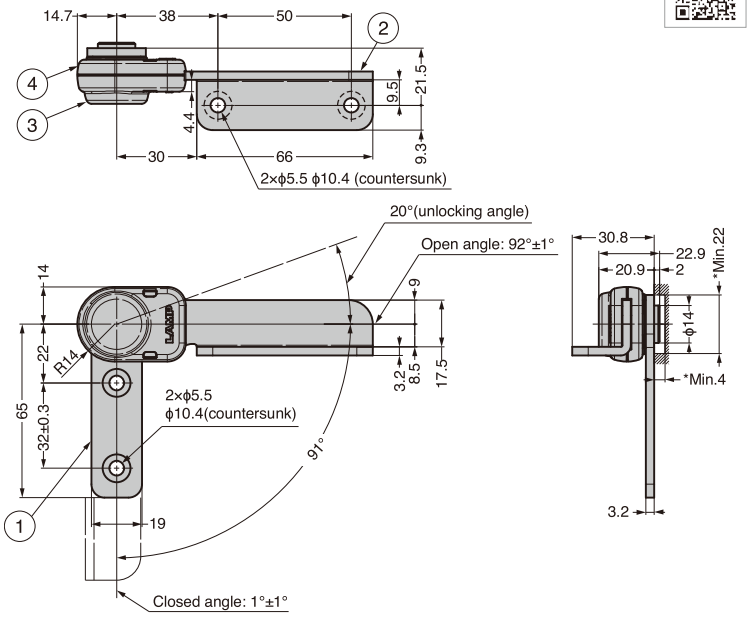
## Remarks

- 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.

Feature

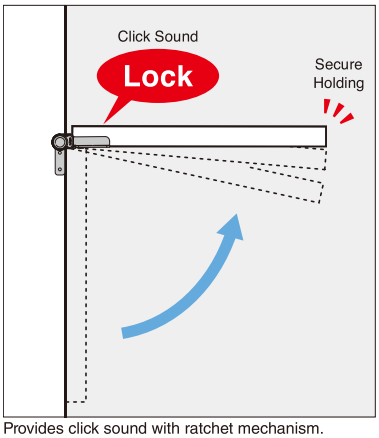
## Operating Angle



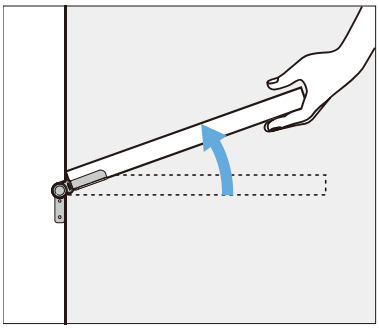

- Right-handed type is shown. Right and left handed types are symmetrical.
- Make space indicated by * marks when installing.

## Lock at 90°




Provides click sound with ratchet mechanism.

## Unlock



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

| 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)

| 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 |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP RATCHET HINGE WITH FRICTION HG-RCT12-C

Latest Info



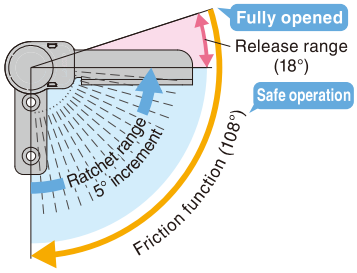
- Ratchet mechanism holds at angles in 5° increment from closed to opened position.
- Lift up to the fully open position to release the ratchet mechanism.
- The friction (resistance) function works even when released for safe operation.

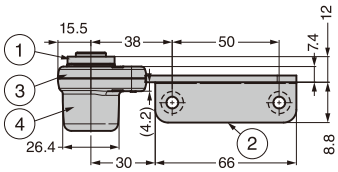
## Applications

- For angle adjustment of folding table, touch panel, keyboard, etc.

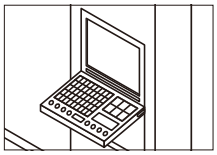
## Remarks

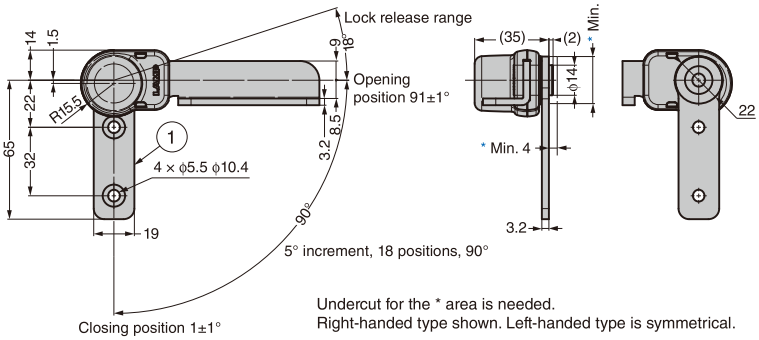
- Ratchet mechanism holds at angles in 5° increments from closed to the 90° position.
- Lift up to the fully open position to release the ratchet mechanism.
- The friction (resistance) function works even when the ratchet mechanism is released, for safe operation.



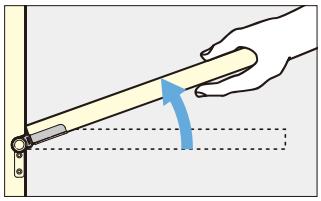

## Application Example






Undercut for the * area is needed.
Right-handed type shown. Left-handed type is symmetrical.

## Lock Release



| No. | Part Name | Material | Finish |
|---|---|---|---|
| ① | Bracket | Steel (SPCC) | Nickel |
| ② | Arm (Right-handed) | | |
| ③ | Cover (Right-handed) | PC | Light Gray |
| ④ | Cover (Right-handed) | | |

| Item Code | Item Name | Allowable Moment N·m/pair | Allowable Moment kgf·cm/pair | Weight (g) | Box (pairs) | Carton (pairs) |
|---|---|---|---|---|---|---|
| 170-036-333 | HG-RCT12-C | 40 | 408 | 350 | 8 | 32 |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP DETENT HINGE HG-YC105

Latest Info



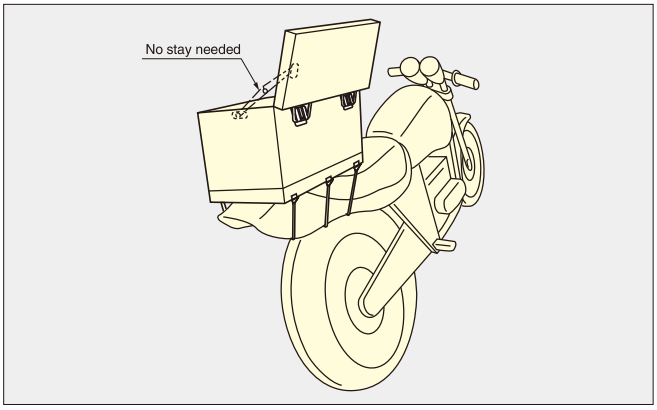
- Snaps in at 115˚ open position.
- Holds door open without secondary support.

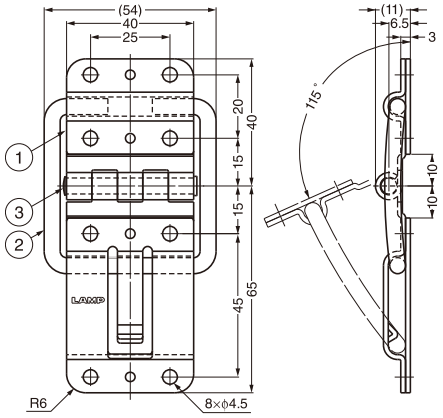
SUS



Feature

## Application Example




| No. | Part Name | Material | Finish |
|---|---|---|---|
| ① | Body | Stainless Steel (SUS304) | Mirror |
| ② | Stopper | Stainless Steel (SUS304) | – |
| ③ | Shaft | Stainless Steel (SUS304) | – |

| Item Code | Item Name | Retaining Force (Per piece) | | Weight | Box | Carton |
|---|---|---|---|---|---|---|
| 170-099-093 | HG-YC105 | Approx. 1.18 N·m | Approx. 12 kgf·cm | 122 g | 10 pcs | 100 pcs |

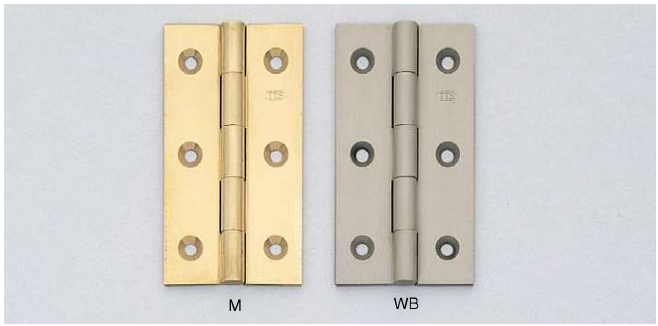
SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

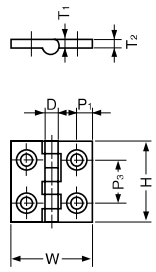


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

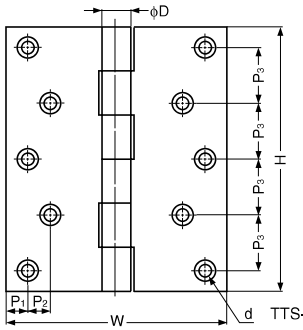
# BUTT HINGE TTS-100 SERIES

Latest Info




TTS-101 - 106

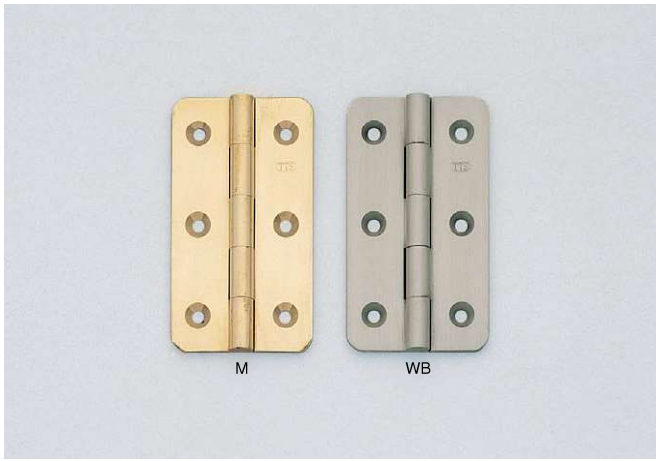


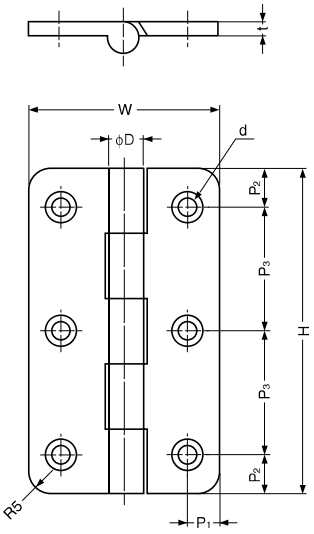

TTS-107 - 109

| Item Code | Item Name | Finish | Material | H | W | $T_1$ | $T_2$ | D | $P_1$ | $P_2$ | $P_3$ | d | Load Capacity | Weight | Box |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 170-090-144 | TTS-101M | Polished | Brass | 25 | 27 | 2 | 1.8 | 4.5 | 5 | – | 14 | 4×ϕ3 | 3.5 kgf/2 pcs | 11 g | 100 pcs |
| 170-090-130 | TTS-101WB | Satin Nickel | | 25 | 27 | 2 | 1.8 | 4.5 | 5 | – | 14 | 4×ϕ3 | 3.5 kgf/2 pcs | 11 g | 100 pcs |
| 170-090-145 | TTS-102M | Polished | | 32 | 27 | 2 | 1.8 | 4.5 | 5 | – | 19 | 4×ϕ3 | 4 kgf/2 pcs | 15 g | 100 pcs |
| 170-090-131 | TTS-102WB | Satin Nickel | | 32 | 27 | 2 | 1.8 | 4.5 | 5 | – | 19 | 4×ϕ3 | 4 kgf/2 pcs | 15 g | 100 pcs |
| 170-090-146 | TTS-103M | Polished | | 38 | 27 | 2 | 1.8 | 4.5 | 5 | – | 13 | 6×ϕ3 | 5 kgf/2 pcs | 20 g | 100 pcs |
| 170-090-132 | TTS-103WB | Satin Nickel | | 38 | 27 | 2 | 1.8 | 4.5 | 5 | – | 13 | 6×ϕ3 | 5 kgf/2 pcs | 20 g | 100 pcs |
| 170-090-147 | TTS-104M | Polished | | 50 | 32 | 2.2 | 2.1 | 5.2 | 6 | – | 18 | 6×ϕ3.5 | 8 kgf/2 pcs | 30 g | 100 pcs |
| 170-090-133 | TTS-104WB | Satin Nickel | | 50 | 32 | 2.2 | 2.1 | 5.2 | 6 | – | 18 | 6×ϕ3.5 | 8 kgf/2 pcs | 30 g | 100 pcs |
| 170-090-148 | TTS-105M | Polished | | 65 | 38 | 2.4 | 2.3 | 6.1 | 7 | – | 25 | 6×ϕ3.6 | 14 kgf/2 pcs | 54 g | 50 pcs |
| 170-090-134 | TTS-105WB | Satin Nickel | | 65 | 38 | 2.4 | 2.3 | 6.1 | 7 | – | 25 | 6×ϕ3.6 | 14 kgf/2 pcs | 54 g | 50 pcs |
| 170-090-149 | TTS-106M | Polished | | 75 | 42 | 2.6 | 2.5 | 7.1 | 8 | – | 27 | 6×ϕ3.8 | 19 kgf/2 pcs | 77 g | 50 pcs |
| 170-090-135 | TTS-106WB | Satin Nickel | | 75 | 42 | 2.6 | 2.5 | 7.1 | 8 | – | 27 | 6×ϕ3.8 | 19 kgf/2 pcs | 77 g | 50 pcs |
| 170-090-150 | TTS-107M | Polished | | 90 | 56 | 3.2 | 2.8 | 8 | 7 | 5 | 24.6 | 8×ϕ4.1 | 25 kgf/2 pcs | 146 g | 10 pcs |
| 170-090-136 | TTS-107WB | Satin Nickel | | 90 | 56 | 3.2 | 2.8 | 8 | 7 | 5 | 24.6 | 8×ϕ4.1 | 25 kgf/2 pcs | 146 g | 10 pcs |
| 170-090-151 | TTS-108M | Polished | | 100 | 68 | 3.5 | 3 | 8.5 | 9 | 6 | 26 | 8×ϕ4.5 | 29 kgf/2 pcs | 206 g | 10 pcs |
| 170-090-137 | TTS-108WB | Satin Nickel | | 100 | 68 | 3.5 | 3 | 8.5 | 9 | 6 | 26 | 8×ϕ4.5 | 29 kgf/2 pcs | 206 g | 10 pcs |
| 170-090-152 | TTS-109M | Polished | | 125 | 82 | 4.2 | 3.7 | 10 | 10 | 10 | 26.8 | 10×ϕ5.1 | 38 kgf/2 pcs | 370 g | 10 pcs |
| 170-090-138 | TTS-109WB | Satin Nickel | | 125 | 82 | 4.2 | 3.7 | 10 | 10 | 10 | 26.8 | 10×ϕ5.1 | 38 kgf/2 pcs | 370 g | 10 pcs |

# BUTT HINGE TTS-800 SERIES

Latest Info




| Item Code | Item Name | Finish | Material | H | W | t | D | $P_1$ | $P_2$ | $P_3$ | d | Load Capacity | Weight | Box |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 170-090-174 | TTS-801M | Polished | Brass | 38 | 27 | 1.8 | 4.5 | 5 | 6 | 13 | 6×ϕ3 | 4.5 kgf/2 pcs | 17 g | 100 pcs |
| 170-090-170 | TTS-801WB | Satin Nickel | | 38 | 27 | 1.8 | 4.5 | 5 | 6 | 13 | 6×ϕ3 | 4.5 kgf/2 pcs | 17 g | 100 pcs |
| 170-090-175 | TTS-802M | Polished | | 50 | 32 | 2.1 | 5.2 | 6 | 7 | 18 | 6×ϕ3.5 | 7 kgf/2 pcs | 31 g | 100 pcs |
| 170-090-171 | TTS-802WB | Satin Nickel | | 50 | 32 | 2.1 | 5.2 | 6 | 7 | 18 | 6×ϕ3.5 | 7 kgf/2 pcs | 31 g | 100 pcs |
| 170-090-176 | TTS-803M | Polished | | 65 | 38 | 2.3 | 6.1 | 7 | 7.5 | 25 | 6×ϕ3.6 | 10 kgf/2 pcs | 54 g | 50 pcs |
| 170-090-172 | TTS-803WB | Satin Nickel | | 65 | 38 | 2.3 | 6.1 | 7 | 7.5 | 25 | 6×ϕ3.6 | 10 kgf/2 pcs | 54 g | 50 pcs |
| 170-090-177 | TTS-804M | Polished | | 75 | 42 | 2.5 | 7.1 | 8 | 10.5 | 27 | 6×ϕ3.8 | 15 kgf/2 pcs | 77 g | 50 pcs |
| 170-090-173 | TTS-804WB | Satin Nickel | | 75 | 42 | 2.5 | 7.1 | 8 | 10.5 | 27 | 6×ϕ3.8 | 15 kgf/2 pcs | 77 g | 50 pcs |



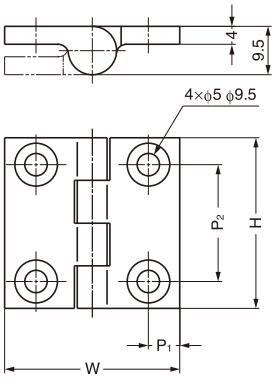
This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

# BUTT HINGE 28300, 28400

Latest Info




- Ideal for exterior application.

SUS316

**Remarks**
- Recommended for use in pairs.

| Item Code | Item Name | Material | Finish | H | W | $P_1$ | $P_2$ | Door Width | Door Height | Door Thickness | Load Capacity | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 170-096-004 | 28300 | Stainless Steel (SCS14) | Mirror | 38 | 39 | 7 | 26 | Max. 450 | Max. 700 | Max. 21 | 17 kgf/2 pcs | 55 g | 20 pcs | 100 pcs |
| 170-096-005 | 28400 | Stainless Steel (SCS14) | Mirror | 50 | 50 | 7.5 | 34 | Max. 450 | Max. 700 | Max. 21 | 23 kgf/2 pcs | 90 g | 20 pcs | 100 pcs |

*SCS14 is equivalent of SUS316.

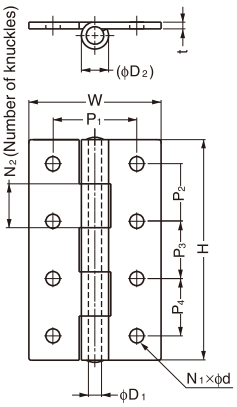
# LAMP. BUTT HINGE LSB

Latest Info



- No-hole type is also available at surcharge.

SUS




| Item Code | Item Name | Material | Finish | H | W | $P_1$ | $P_2$ | $P_3$ | $P_4$ | t | d | $D_1$ | $D_2$ | $N_1$ | $N_2$ | Load Capacity | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 170-090-724 | LSB-40 | Stainless Steel (SUS304) | Mirror | 40 | 35 | 22 | 26 | – | – | 1.5 | 3.2 | 3 | 6.3 | 4 | 3 | 7 kgf/2 pcs | 25 g | 100 pcs | 400 pcs |
| 170-090-725 | LSB-50 | | | 50 | 35 | 22 | 34 | – | – | 1.5 | 4.3 | 3 | 6.3 | 4 | 3 | 9 kgf/2 pcs | 30 g | 100 pcs | 400 pcs |
| 170-090-716 | LSB-65 | | | 65 | 50 | 30 | 23 | 23 | – | 2 | 4.3 | 4.5 | 8.8 | 6 | 5 | 16 kgf/2 pcs | 71 g | 50 pcs | 200 pcs |
| 170-090-717 | LSB-75 | | | 75 | 50 | 30 | 27 | 27 | – | 2 | 5.3 | 4.5 | 8.8 | 6 | 5 | 19 kgf/2 pcs | 82 g | 40 pcs | 160 pcs |
| 170-090-728 | LSB-90 | | | 90 | 60 | 38 | 35 | 35 | – | 3 | 6.4 | 6 | 12.3 | 6 | 5 | 34 kgf/2 pcs | 180 g | 10 pcs | 80 pcs |
| 170-090-729 | LSB-100 | | | 100 | 60 | 38 | 26 | 26 | 26 | 3 | 6.4 | 6 | 12.3 | 8 | 5 | 37 kgf/2 pcs | 202 g | 10 pcs | 60 pcs |

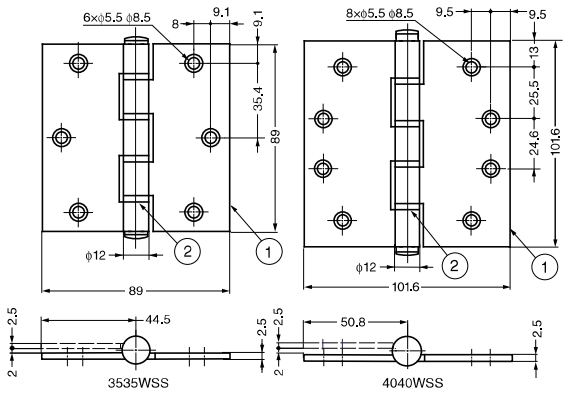


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

## LAMP BUTT HINGE (W/ WASHER) 3535WSS, 4040WSS

Latest Info




- Washer prevents metal-to-metal contact.

SUS | SCREW

### Parts Included
- Countersunk head tapping screw 4×25 (SUS)

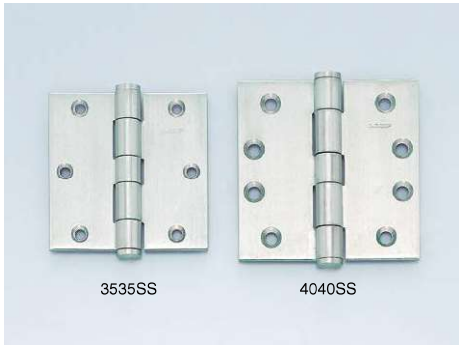
### Remarks
- The shaft is not removable.

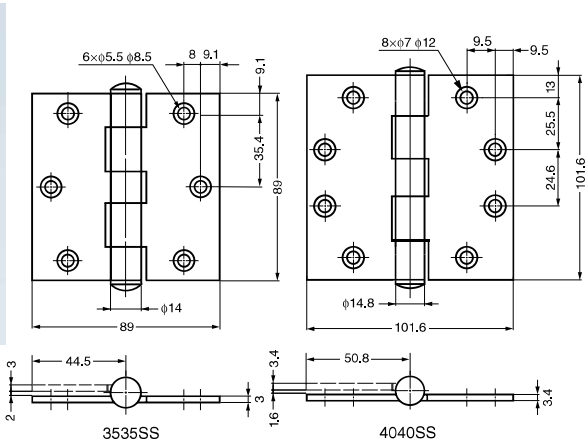
| No. | Part Name | Material | Finish/Colour |
|---|---|---|---|
| ① | Body | Stainless Steel (SUS304) | Satin |
| ② | Washer | Polyamide (PA) | White |

| Item Code | Item Name | Load Capacity | Weight | Box |
|---|---|---|---|---|
| 170-029-834 | 3535WSS | 25 kgf/2 pcs | 195 g | 2 pcs |
| 170-029-835 | 4040WSS | 30 kgf/2 pcs | 250 g | 2 pcs |

## LAMP BUTT HINGE 3535SS, 4040SS

Latest Info




SUS | SCREW

### Parts Included
- 3535SS : Countersunk wood head screw 4.5×25
- 4040SS : Countersunk wood head screw 5.5×32

### Remarks
- The shaft is not removable.

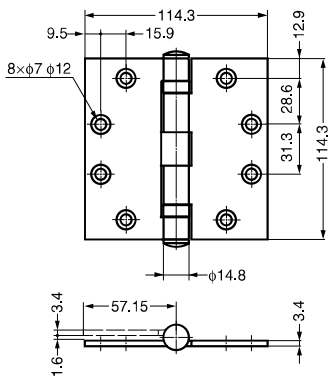
| Item Code | Item Name | Material | Finish | Load Capacity | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|
| 170-920-181 | 3535SS | Stainless Steel (SUS304) | Satin | 34 kgf/2 pcs | 270 g | 2 pcs | 100 pcs |
| 170-920-182 | 4040SS | Stainless Steel (SUS304) | Satin | 44 kgf/2 pcs | 400 g | 2 pcs | 100 pcs |

*The carton quantity for 3535SS will be changed to 50 units once the current stock is depleted.☆Limited inventory, contact sales associate for details.

## LAMP BUTT HINGE (W/ BALL BEARING) 4545BSS

Latest Info






- Ball bearing provides smooth movement.

SUS | SCREW

### Parts Included
- Countersunk head tapping screw 5.5×32

### Remarks
- The shaft is not removable.

| Item Code | Item Name | Material | Finish | Load Capacity | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|
| 170-920-184 | 4545BSS | Stainless Steel (SUS304) | Satin | 49 kgf/2 pcs | 420 g | 2 pcs | 50 pcs |

☆Limited inventory, contact sales associate for details.

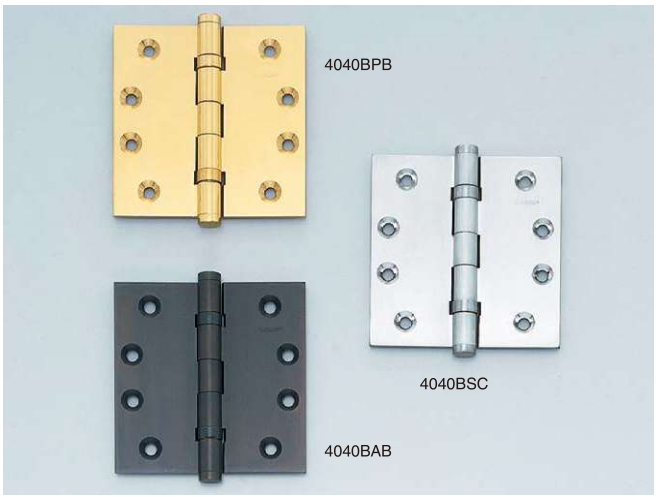


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

# LAMP. BUTT HINGE (W/ BALL BEARING) 4040B

Latest Info



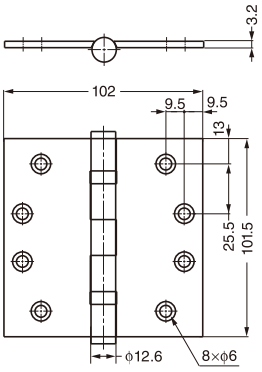

- Ball bearing provides smooth movement.
- The material of axis is stainless steel (SUS304).
- 3 types of finish available.
- The shaft can be removed by taking off the top and bottom head caps.

SCREW

**Parts Included**
- Countersunk head wood screw 5.5×32

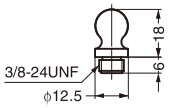
**Sold Separately**
- Head Cap MG-M

Feature




**Head Cap MG-M**



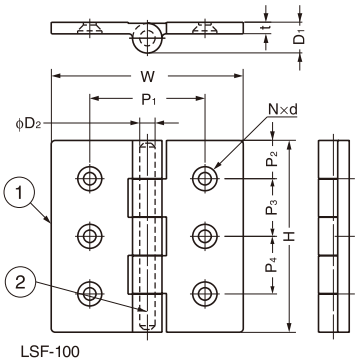



| Item Code | Item Name | Finish | Material | Door Width | Door Height | Load Capacity | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|
| 170-918-790 | 4040BPB | Polished Brass | Brass | Max. 900 | Max. 2000 | 50 kgf/2 pcs | 330 g | 2 pcs | 40 pcs |
| 170-918-791 | 4040BSC | Satin Chrome | Brass | Max. 900 | Max. 2000 | 50 kgf/2 pcs | 330 g | 2 pcs | 40 pcs |
| 170-918-792 | 4040BAB | Antique Bronze | Brass | Max. 900 | Max. 2000 | 50 kgf/2 pcs | 330 g | 2 pcs | 40 pcs |

# LAMP. BUTT HINGE LSF

Latest Info





LSF-100

- Ideal for exterior application.

SUS316

| No. | Part Name | Material | Finish |
|---|---|---|---|
| ① | Body | Stainless Steel (SCS14) | Mirror |
| ② | Shaft | Stainless Steel (SUS316) | – |

*SCS14 is equivalent of SUS316.

| Item Code | Item Name | H | W | $P_1$ | $P_2$ | $P_3$ | $P_4$ | t | $D_1$ | $D_2$ | Knuckles | N | d | Load Capacity | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 170-090-720 | LSF-50 | 50 | 50 | 35 | 15 | 20 | – | 5 | 14 | 6 | 3 | 4 | Counterbore for M4 | 28 kgf/2 pcs | 125 g | 20 pcs | 100 pcs |
| 170-090-721 | LSF-65 | 65 | 65 | 40 | 15 | 35 | – | 5 | 14 | 6 | 3 | 4 | Counterbore for M5 | 36 kgf/2 pcs | 180 g | 20 pcs | 80 pcs |
| 170-090-722 | LSF-75 | 75 | 75 | 50 | 17.5 | 40 | – | 6 | 16 | 8 | 3 | 4 | Counterbore for M6 | 51 kgf/2 pcs | 297 g | 10 pcs | 50 pcs |
| 170-090-723 | LSF-100 | 100 | 100 | 60 | 20 | 30 | 30 | 6 | 16 | 8 | 5 | 6 | Counterbore for M6 | 68 kgf/2 pcs | 483 g | 10 pcs | 30 pcs |


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# BALL BEARING HINGE DFHG Stainless Steel NEW

Latest Info



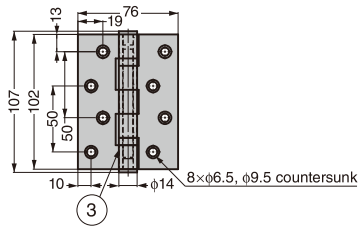
- The built-in ball bearings allow for smooth movement.

SUS | SCREW

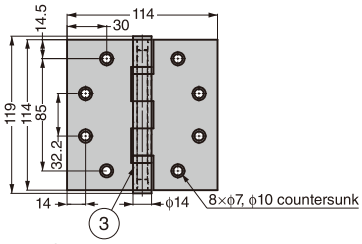
## Applications
- Outside/inside doors, industrial doors

## Parts Included
- Cross-recessed countersunk screws 4.9×32 (stainless steel)

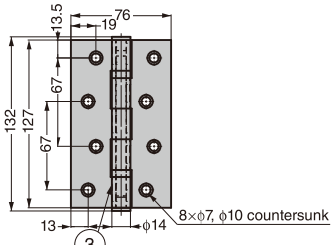
## Remarks
- When mounting on sheet metal, spot facing of the enclosure is required.
- The shaft is not removable.




DFHG-4030BSS




DFHG-4545BSS




DFHG-5030BSS

| No. | Part Name | Material | Finish |
|---|---|---|---|
| ① | Body A | Stainless Steel (SS304)* | Satin |
| ② | Shaft | Stainless Steel (SUS304) | – |
| ③ | Ball Bearing | | |

*ASTM standard AISI 304: SUS304 equivalent

| Item Code | Item Name | Load Capacity N/2 (pcs) | Load Capacity kgf/2 (pcs) | Weight g | Box (pcs) | Carton (pcs) |
|---|---|---|---|---|---|---|
| 170-048-112 | DFHG-4030BSS | 392 | 40 | 260 | 2 | 30 |
| 170-048-114 | DFHG-4545BSS | 441 | 45 | 320 | 2 | 30 |
| 170-048-113 | DFHG-5030BSS | 490 | 50 | 380 | 2 | 30 |

# LAMP STAINLESS STEEL HEAVY-DUTY BUTT HINGE HG-LSC210 NEW

Latest Info

Passed Private 200K Cycle Test



HG-LSC210 HG-LSC210N

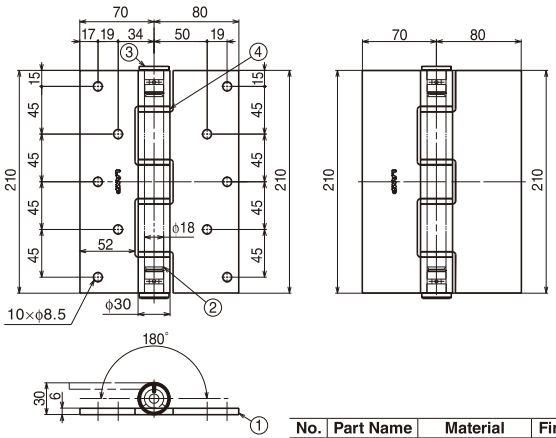
- 6mm thick stainless steel makes the hinge very strong.
- Made with special rings (oil-impregnated bearings) for smooth movement.

SUS

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

## Remarks
- The shaft is not removable.

[HG-LSC210] [HG-LSC210N]




| 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

| 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 |

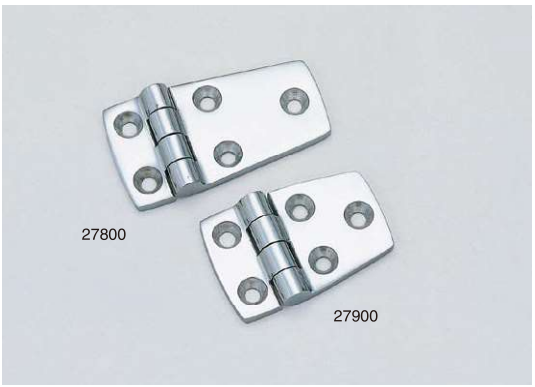


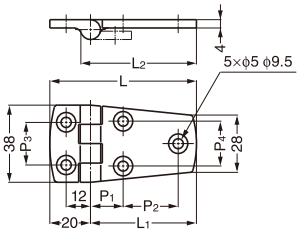
This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

# BUTT HINGE 27900, 27800

Latest Info




- Ideal for exterior application.

SUS316

**Remarks**
- Recommended for use in pairs.

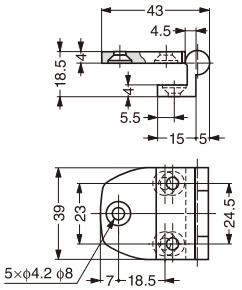
| Item Code | Item Name | Material | Finish | L | L1 | L2 | P1 | P2 | P3 | P4 | Door Width | Door Height | Door Thickness | Load Capacity | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 170-096-008 | 27900 | Stainless Steel (SCS14) | Mirror | 58 | 38 | 42 | 13.5 | 16.5 | 21 | 20 | Max. 450 | Max. 700 | Max. 21 | 17 kgf/2 pcs | 70 g | 20 pcs | 100 pcs |
| 170-096-007 | 27800 | Stainless Steel (SCS14) | Mirror | 72 | 52 | 57 | 16 | 27 | 22 | 21 | Max. 450 | Max. 700 | Max. 21 | 17 kgf/2 pcs | 85 g | 20 pcs | 100 pcs |

*SCS14 is equivalent of SUS316.

# BUTT HINGE 28100

Latest Info






- Ideal for exterior application.

SUS316

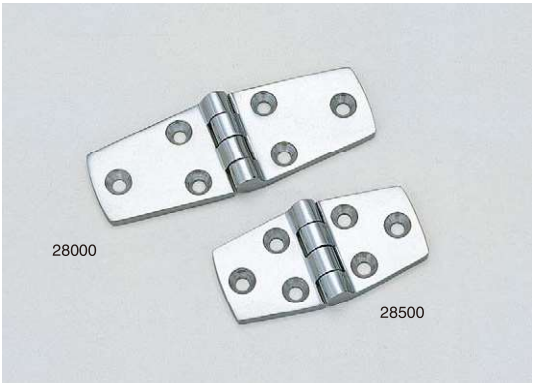
**Remarks**
- Recommended for use in pairs.

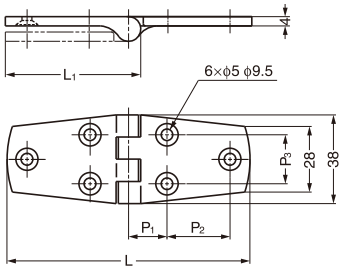
| Item Code | Item Name | Material | Finish | Door Width | Door Height | Door Thickness | Load Capacity | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|---|
| 170-096-006 | 28100 | Stainless Steel (SCS14) | Mirror | Max. 450 | Max. 700 | Max. 21 | 17 kgf/2 pcs | 83 g | 20 pcs | 100 pcs |

*SCS14 is equivalent of SUS316.

# BUTT HINGE 28500, 28000

Latest Info




- Ideal for exterior application.

SUS316

**Remarks**
- Recommended for use in pairs.

| Item Code | Item Name | Material | Finish | L | L1 | P1 | P2 | P3 | Door Width | Door Height | Door Thickness | Load Capacity | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 170-096-002 | 28500 | Stainless Steel (SCS14) | Mirror | 74 | 42 | 13 | 17 | 20 | Max. 450 | Max. 700 | Max. 21 | 17 kgf/2 pcs | 86 g | 20 pcs | 100 pcs |
| 170-096-003 | 28000 | Stainless Steel (SCS14) | Mirror | 104 | 57 | 16.5 | 27 | 21 | Max. 450 | Max. 700 | Max. 21 | 17 kgf/2 pcs | 115 g | 20 pcs | 100 pcs |

*SCS14 is equivalent of SUS316.


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP DOUBLE ACTION HINGE HG-BH

Latest Info



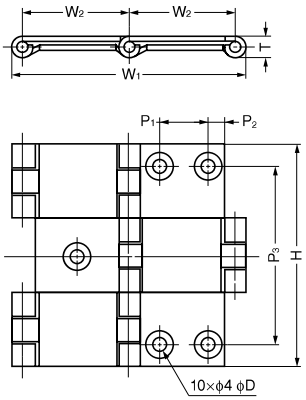
- Opens 180˚ in both left and right direction.

SUS

**Remarks**

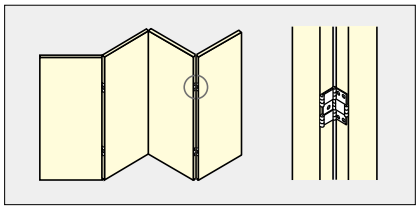
- Recommended for use in pairs.

Feature




| Material | Finish |
|---|---|
| Stainless Steel (SUS304) | Satin Finish |

## Application Example



| Item Code | Item Name | H | $W_2$ | $W_1$ | T | $P_3$ | $P_2$ | $P_1$ | D | Panel Thickness | Door Width | Door Height | Load Capacity | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 170-090-065 | HG-BH60 | 60 | 29 | 64 | 5.5 | 47 | 4.8 | 13.5 | 6.5 | Max. 23 | Max. 450 | Max. 700 | 2.6 kgf/2 pcs | 65g | 20 pcs | 260 pcs |
| 170-090-066 | HG-BH70 | 70 | 35 | 78 | 7.5 | 57 | 6.8 | 13.5 | 7 | Max. 27 | Max. 450 | Max. 700 | 2.6 kgf/2 pcs | 130g | 10 pcs | 180 pcs |
| 170-090-067 | HG-BH80 | 80 | 43.2 | 94 | 7.5 | 66 | 6.5 | 22 | 7 | Max. 35 | Max. 450 | Max. 700 | 2.6 kgf/2 pcs | 175g | 10 pcs | 120 pcs |

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.



Update: 12.06.2024

# Zwei L LIFT-OFF HINGE ZL-1701

Latest Info






- Made of highly corrosion resistant SUS316
- Ultrapremium Zwei L finish. Zwei L finish: Using top class polishing technology, these products combine the elegance of Satin with the deep glow of a Mirror.
- Oil-free ring provides smooth movement.

SUS316 | SCREW

## Remarks

- Insert spacer between door and frame.

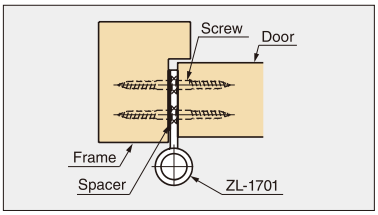
## Parts Included

ZL-1701-10
- Countersunk head wood screw 4.1×38 (SUS)
- Countersunk head screw M5×16, ϕ8 (SUS) (For Metal Doors)

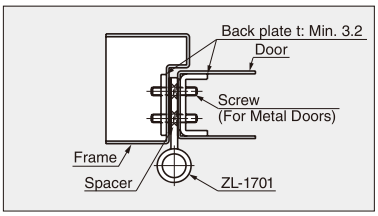
ZL-1701-12
- Countersunk head wood screw 4.8×38 (SUS)
- Countersunk head screw M5×16, ϕ9 (SUS) (For Metal Doors)

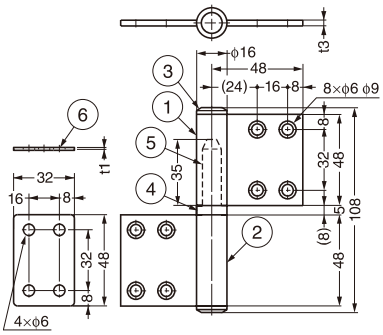
Concept

## Installation for Wooden Door

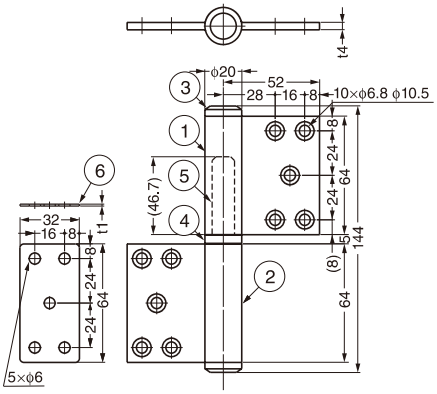



## Installation for Metal Door




ZL-1701-10




ZL-1701-12

| No. | Part Name | Material | Finish |
|---|---|---|---|
| ① | Door Side Hinge Plate | Stainless Steel (SUS316) | Zwei L Finish |
| ② | Frame Side Hinge Plate | Stainless Steel (SUS316) | Zwei L Finish |
| ③ | Head Cap | Stainless Steel (SUS316) | Zwei L Finish |
| ④ | Washer | Stainless Steel (SUS316) | Satin |
| ⑤ | Shaft | Stainless Steel (SUS316) | Plain |
| ⑥ | Spacer | Stainless Steel (SUS316) | Plain |

| Item Code | Item Name | Load Capacity | | Weight | Box |
|---|---|---|---|---|---|
| 170-091-691 | ZL-1701-10 | 314 N/2 pcs | 32 kgf/2 pcs | 305 g | 8 pcs |
| 170-091-690 | ZL-1701-12 | 559 N/2 pcs | 57 kgf/2 pcs | 560 g | 6 pcs |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP HEAVY-DUTY STAINLESS STEEL BUTT HINGE HG-LSH

Latest Info



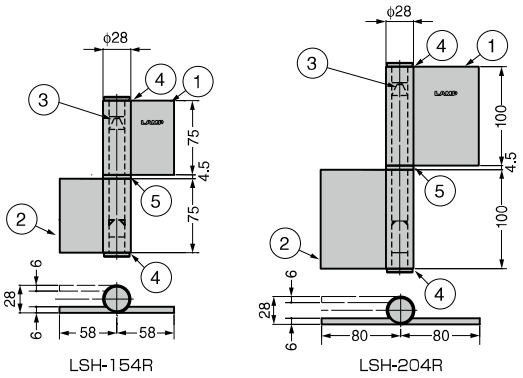
HG-LSH-204R

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

SUS

## Application

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



LSH-154R LSH-204R

| 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 | | |

*The opening/closing test count indicates the following status.
3 hinges placed vertically, door size W900 x H2000
HG-LSH-154: Door weight 250 kg
HG-LSH-204: Door weight 280 kg

| Item Code | Item Name | Type | Load Capacity N/2 pcs | Load Capacity kgf/2 pcs | Weight (g) | Box (pcs) | Carton (pcs) |
|---|---|---|---|---|---|---|---|
| 170-034-219 | HG-LSH-154L | Left Side | 1961 | 200 | 1020 | 6 | 12 |
| 170-034-220 | HG-LSH-154R | Right Side | | | | 6 | 12 |
| 170-034-221 | HG-LSH-204L | Left Side | 2177 | 222 | 1540 | – | 6 |
| 170-034-222 | HG-LSH-204R | Right Side | | | | – | 6 |

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

Latest Info



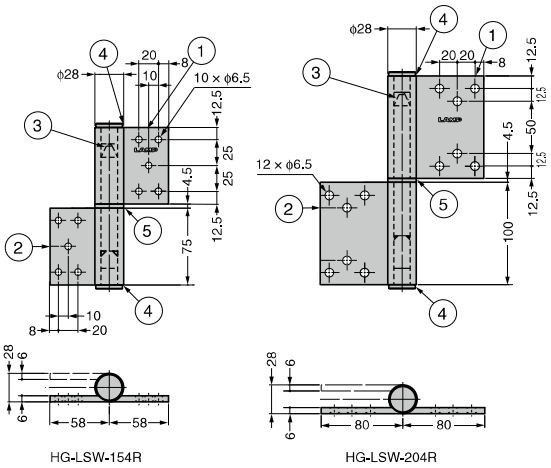
HG-LSW-154R

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

SUS

## Application

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



HG-LSW-154R HG-LSW-204R

| 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 |

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

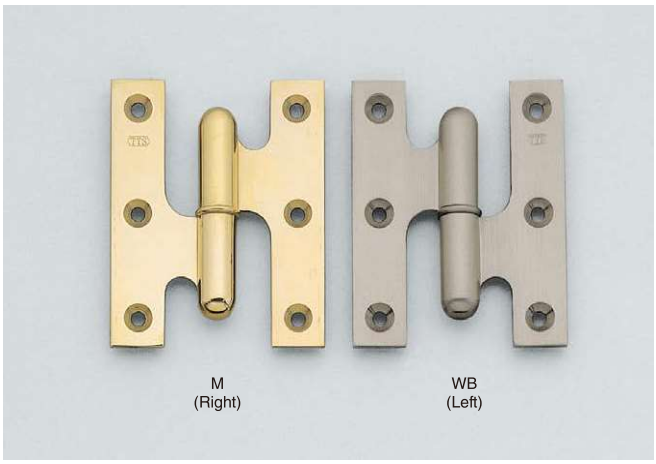


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LIFT-OFF HINGE TTS-200 SERIES

Latest Info

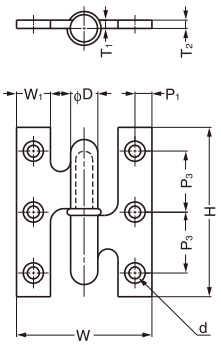




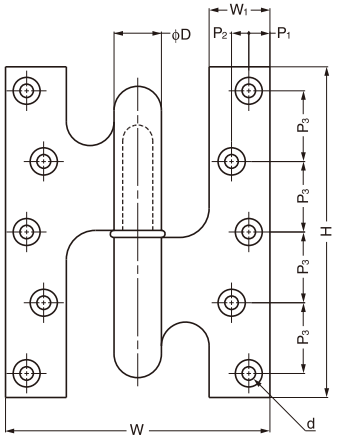

SCREW

**Parts Included**

- Countersunk head wood screw (* marks only. Not provided for TTS-201 - TTS-203)




TTS-201 L/R - 203 L/R




| Item Code | Item Name | Type | Material | Finish | Screw | H | W | W1 | T1 | T2 | D | P1 | P2 | P3 | d | Load Capacity | Weight | Box |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 170-090-230 | TTS-201MR | Right | Brass | Polished | – | 50 | 40 | 10 | 2.5 | 2.5 | 8 | 5 | – | 18 | 6×φ3.5 | 6.5 kgf/2 pcs | 37 g | 20 pcs |
| 170-090-231 | TTS-201ML | Left | | Polished | – | 50 | 40 | 10 | 2.5 | 2.5 | 8 | 5 | – | 18 | 6×φ3.5 | 6.5 kgf/2 pcs | 37 g | 20 pcs |
| 170-090-220 | TTS-201WBR | Right | | Satin Nickel | – | 50 | 40 | 10 | 2.5 | 2.5 | 8 | 5 | – | 18 | 6×φ3.5 | 6.5 kgf/2 pcs | 37 g | 20 pcs |
| 170-090-221 | TTS-201WBL | Left | | Satin Nickel | – | 50 | 40 | 10 | 2.5 | 2.5 | 8 | 5 | – | 18 | 6×φ3.5 | 6.5 kgf/2 pcs | 37 g | 20 pcs |
| 170-090-232 | TTS-202MR | Right | | Polished | – | 65 | 50 | 13 | 2.8 | 2.8 | 10 | 6.5 | – | 25 | 6×φ3.8 | 11 kgf/2 pcs | 73 g | 20 pcs |
| 170-090-233 | TTS-202ML | Left | | Polished | – | 65 | 50 | 13 | 2.8 | 2.8 | 10 | 6.5 | – | 25 | 6×φ3.8 | 11 kgf/2 pcs | 73 g | 20 pcs |
| 170-090-222 | TTS-202WBR | Right | | Satin Nickel | – | 65 | 50 | 13 | 2.8 | 2.8 | 10 | 6.5 | – | 25 | 6×φ3.8 | 11 kgf/2 pcs | 73 g | 20 pcs |
| 170-090-223 | TTS-202WBL | Left | | Satin Nickel | – | 65 | 50 | 13 | 2.8 | 2.8 | 10 | 6.5 | – | 25 | 6×φ3.8 | 11 kgf/2 pcs | 73 g | 20 pcs |
| 170-090-234 | TTS-203MR | Right | | Polished | – | 75 | 60 | 15 | 3 | 3 | 11 | 7.5 | – | 29.5 | 6×φ4.1 | 12 kgf/2 pcs | 106 g | 10 pcs |
| 170-090-235 | TTS-203ML | Left | | Polished | – | 75 | 60 | 15 | 3 | 3 | 11 | 7.5 | – | 29.5 | 6×φ4.1 | 12 kgf/2 pcs | 106 g | 10 pcs |
| 170-090-224 | TTS-203WBR | Right | | Satin Nickel | – | 75 | 60 | 15 | 3 | 3 | 11 | 7.5 | – | 29.5 | 6×φ4.1 | 12 kgf/2 pcs | 106 g | 10 pcs |
| 170-090-225 | TTS-203WBL | Left | | Satin Nickel | – | 75 | 60 | 15 | 3 | 3 | 11 | 7.5 | – | 29.5 | 6×φ4.1 | 12 kgf/2 pcs | 106 g | 10 pcs |
| 170-090-236 | *TTS-204MR | Right | | Polished | 4.1×25 | 100 | 75 | 19 | 4.5 | 4 | 15 | 7 | 4 | 28.3 | 8×φ4.5 | 21 kgf/2 pcs | 260 g | 6 pcs |
| 170-090-237 | *TTS-204ML | Left | | Polished | 4.1×25 | 100 | 75 | 19 | 4.5 | 4 | 15 | 7 | 4 | 28.3 | 8×φ4.5 | 21 kgf/2 pcs | 260 g | 6 pcs |
| 170-090-226 | *TTS-204WBR | Right | | Satin Nickel | 4.1×25 | 100 | 75 | 19 | 4.5 | 4 | 15 | 7 | 4 | 28.3 | 8×φ4.5 | 21 kgf/2 pcs | 260 g | 6 pcs |
| 170-090-227 | *TTS-204WBL | Left | | Satin Nickel | 4.1×25 | 100 | 75 | 19 | 4.5 | 4 | 15 | 7 | 4 | 28.3 | 8×φ4.5 | 21 kgf/2 pcs | 260 g | 6 pcs |
| 170-090-238 | *TTS-205MR | Right | | Polished | 4.5×30 | 125 | 100 | 23.5 | 5 | 4.5 | 18 | 8 | 7 | 26.75 | 10×φ5.1 | 35 kgf/2 pcs | 480 g | 6 pcs |
| 170-090-239 | *TTS-205ML | Left | | Polished | 4.5×30 | 125 | 100 | 23.5 | 5 | 4.5 | 18 | 8 | 7 | 26.75 | 10×φ5.1 | 35 kgf/2 pcs | 480 g | 6 pcs |
| 170-090-228 | *TTS-205WBR | Right | | Satin Nickel | 4.5×30 | 125 | 100 | 23.5 | 5 | 4.5 | 18 | 8 | 7 | 26.75 | 10×φ5.1 | 35 kgf/2 pcs | 480 g | 6 pcs |
| 170-090-229 | *TTS-205WBL | Left | | Satin Nickel | 4.5×30 | 125 | 100 | 23.5 | 5 | 4.5 | 18 | 8 | 7 | 26.75 | 10×φ5.1 | 35 kgf/2 pcs | 480 g | 6 pcs |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# STAINLESS STEEL PIANO HINGE LSN-C NEW

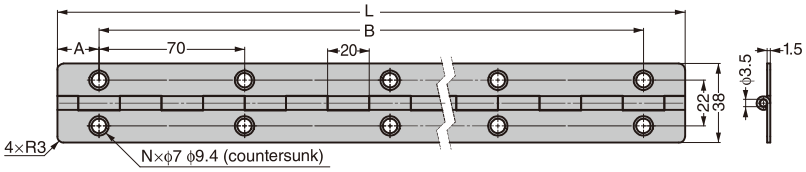
Latest Info



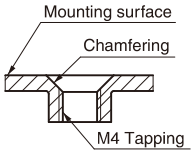
SUS

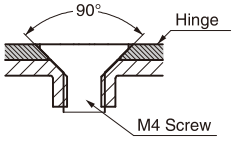
## Remarks

- 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




| 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 |

## Suggested Options 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.

SCREW INSTRUCTION

Feature

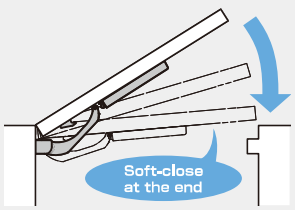
### Recommended Hinge

- Stainless Steel Piano Hinge LSN-C



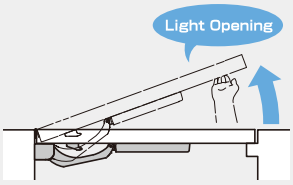
Firmly fixes flaps with M4 screws

### Soft-close



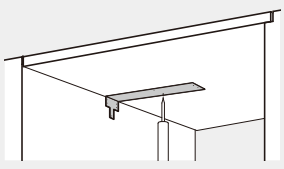

Prevents from slamming shut

### Lift-assist



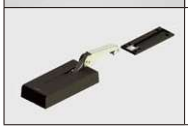

Helps you open flaps lightly

### Easy Installation



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

### Lift-assist Dampers

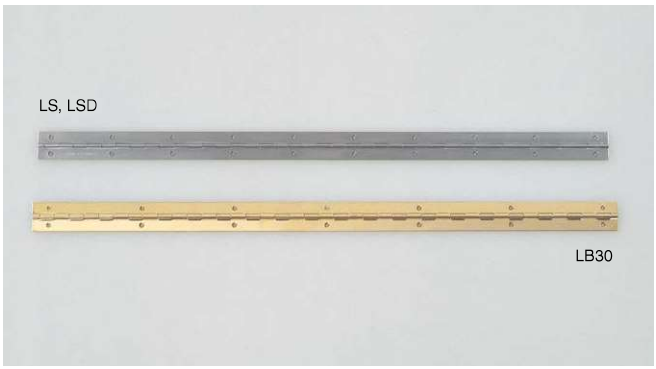
| | Model | Required Quantity | Angle Stopper | Max. Moment of Flap |
|---|---|---|---|---|
|  | LAD (P.254) | 1 pc / 2 pcs | Without | 8.0–16.0 N·m (81.6–163.2 kgf·cm) |
|  | LAD-ST (P.256) | 1 pc | With (Stop at 95°) | 8.0–16.0 N·m (81.6–163.2 kgf·cm) |
|  | LADH (P.258) | 1 pc | With (Stop at 95°) | 25.0–50.0 N·m (254.9–509.9 kgf·cm) |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# PIANO HINGE LS, LSD, LB30, LB45

LS, LSD LB30, LB45

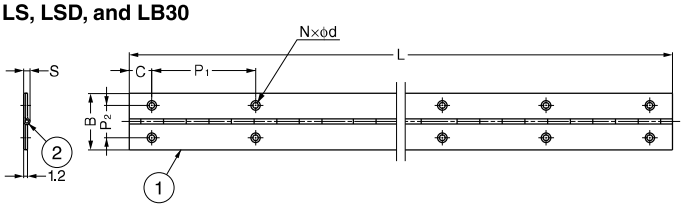



- Double folded construction provides extra rigidity.
- Can be cut to any length.
- In case of cutting the hinge, attention should be paid to prevent the pin from coming out.

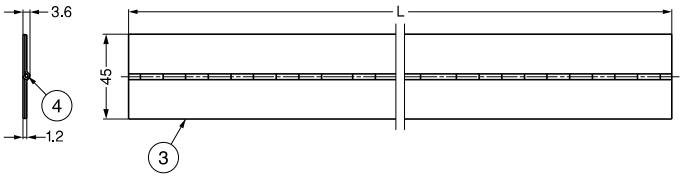
SUS

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

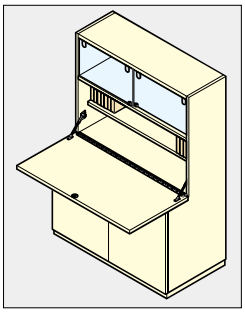
## LS, LSD, and LB30




## LB45




## Application Example



| No. | Part Name | Material | Finish |
|---|---|---|---|
| ① | Leaf | LS: Stainless Steel (SUS430)<br>LSD: Stainless Steel (SUS304) | Satin |
| ② | Axis | LS: Stainless Steel (SUS430)<br>LS240: Steel<br>LSD: Stainless Steel (SUS304) | Plain |
| ③ | Leaf | Brass | Polished |
| ④ | Axis | | Plain |

※LS24 will be changed to stainless steel (SUS430) once existing inventory runs out.

## LS, LSD, and LB30

| Item Code | Item Name | L | B | C | $P_1$ | $P_2$ | Qty of Holes N | d | S | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 170-090-240 | LS-240 | 240 | 24.5 | 10.5 | 43.5 | 14.5 | 12 | 3 | 3.5 | 65 g | 20 pcs | 200 pcs |
| 170-090-246 | LSD-240 | 240 | 30 | 10.5 | 43.5 | 17 | 12 | 3 | 3.5 | 65 g | 20 pcs | 200 pcs |
| 170-090-241 | LS-300 | 300 | 24.5 | 10.5 | 46.3 | 14.5 | 14 | 3 | 3.5 | 80 g | 20 pcs | 200 pcs |
| 170-090-247 | LSD-300 | 300 | 30 | 10.5 | 46.3 | 17 | 14 | 3 | 3.5 | 80 g | 20 pcs | 200 pcs |
| 170-090-242 | LS-360 | 360 | 30 | 15 | 47 | 17 | 16 | 3 | 3.5 | 95 g | 20 pcs | 200 pcs |
| 170-090-248 | LSD-360 | 360 | 30 | 15 | 47 | 17 | 16 | 3 | 3.5 | 95 g | 20 pcs | 200 pcs |
| 170-090-243 | LS-450 | 450 | 30 | 14.5 | 60 | 17 | 16 | 3 | 3.5 | 120 g | 20 pcs | 100 pcs |
| 170-090-249 | LSD-450 | 450 | 30 | 14.5 | 60 | 17 | 16 | 3 | 3.5 | 120 g | 20 pcs | 100 pcs |
| 170-090-244 | LS-600 | 600 | 30 | 14 | 63.3 | 17 | 20 | 3 | 3.5 | 190 g | 20 pcs | 100 pcs |
| 170-090-250 | LSD-600 | 600 | 30 | 14 | 63.3 | 17 | 20 | 3 | 3.5 | 190 g | 20 pcs | 100 pcs |
| 170-090-245 | LS-900 | 900 | 30 | 14 | 62.3 | 17 | 30 | 3 | 3.5 | 280 g | 20 pcs | 100 pcs |
| 170-090-251 | LSD-900 | 900 | 30 | 14 | 62.3 | 17 | 30 | 3 | 3.5 | 280 g | 20 pcs | 100 pcs |
| 170-090-252 | LB30-900 | 900 | 30 | 15 | 79 | 18 | 24 | 3.3 | 3.6 | 290 g | 10 pcs | 100 pcs |
| 170-090-253 | LB30-1200 | 1200 | 30 | 15 | 83.6 | 18 | 30 | 3.3 | 3.6 | 385 g | 10 pcs | 100 pcs |
| 170-090-254 | LB30-1800 | 1800 | 30 | 15 | 80.5 | 18 | 46 | 3.3 | 3.6 | 600 g | 10 pcs | 100 pcs |

## LB45

| Item Code | Item Name | L | Weight | Box | Carton |
|---|---|---|---|---|---|
| 170-090-255 | LB45-1200 | 1200 | 570 g | 10 pcs | 30 pcs |
| 170-090-256 | LB45-1800 | 1800 | 840 g | 10 pcs | 30 pcs |


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

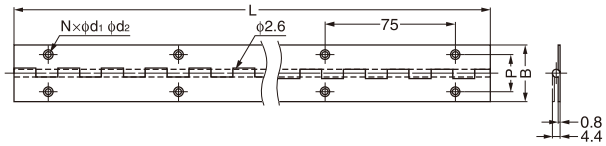
# PIANO HINGE LHN

Latest Info

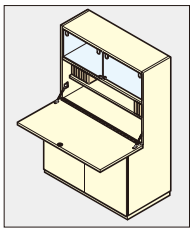


- Can be cut to any length.
- In case of cutting the hinge, attention should be paid to prevent the pin from coming out.

SUS




## Application Example



| Item Code | Item Name | Material | Finish | L | B | P | Qty of Holes N | $d_1$ | $d_2$ | Load Capacity | | Weight | Box |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 170-097-846 | LHN-32-1200 | Stainless Steel (SUS304) | Polished | 1200 | 32 | 20 | 32 | 4 | 5.2 | 549 N/pc | 56 kgf/pc | 400 g | 30 pcs |
| 170-097-847 | LHN-32-1500 | | | 1500 | 32 | 20 | 40 | 4 | 5.2 | 588 N/pc | 60 kgf/pc | 425 g | 30 pcs |
| 170-097-848 | LHN-32-1872 | | | 1872 | 32 | 20 | 50 | 4 | 5.2 | 745 N/pc | 76 kgf/pc | 530 g | 30 pcs |
| 170-097-849 | LHN-32-2100 | | | 2100 | 32 | 20 | 56 | 4 | 5.2 | 834 N/pc | 85 kgf/pc | 595 g | 30 pcs |
| 170-097-850 | LHN-38-1200 | | | 1200 | 38 | 22.5 | 32 | 4.2 | 6 | 549 N/pc | 56 kgf/pc | 400 g | 30 pcs |
| 170-097-843 | LHN-38-1500 | | | 1500 | 38 | 22.5 | 40 | 4.2 | 6 | 588 N/pc | 60 kgf/pc | 480 g | 30 pcs |
| 170-097-844 | LHN-38-1872 | | | 1872 | 38 | 22.5 | 50 | 4.2 | 6 | 745 N/pc | 76 kgf/pc | 600 g | 30 pcs |
| 170-097-845 | LHN-38-2100 | | | 2100 | 38 | 22.5 | 56 | 4.2 | 6 | 834 N/pc | 85 kgf/pc | 670 g | 30 pcs |

# LAMP TORQUE PIANO HINGE HG-TLS30-50-300 NEW

Latest Info

Free stop
Greaseless
Passed Private 30K Cycle Test



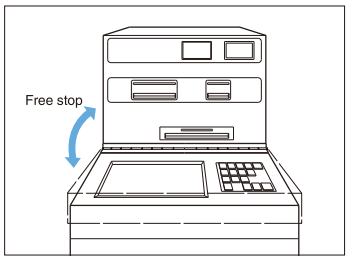
- Long type torque hinge.
- Possible to install in vertical and horizontal.

### Remarks

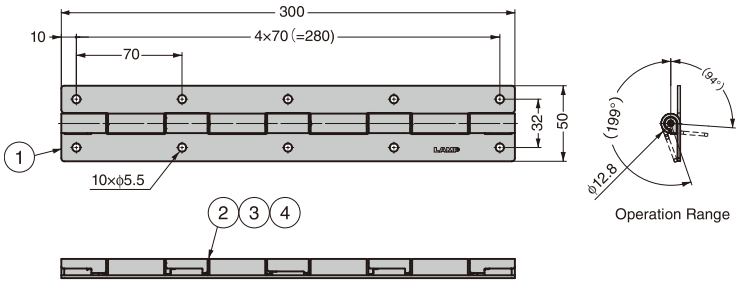
- Be sure to read the “Precautions for Use” (P.23).
- When using multiple hinges, ensure that both hinge shafts are levelled and aligned.
- Can not be used by cutting the length.

Selection Tool
Torque Hinge

## Application Example




For opening/closing of cash machine maintenance door.




| No. | Part Name | Material |
|---|---|---|
| ① | Hinge | Stainless Steel (SUS304) |
| ② | Shaft | |
| ③ | Plug | POM |
| ④ | Holder | PA |

| Item Code | Item Name | Torque N·m/pc | Torque kgf·cm/pc | Weight (g) | Box (pcs) | Carton (pcs) |
|---|---|---|---|---|---|---|
| 170-037-315 | HG-TLS30-50-300 | $3^{\pm 30\%}$ | $31^{\pm 30\%}$ | 388 | 5 | 20 |

This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

# LAMP TABLETOP PIANO HINGE HG-MH

Latest Info

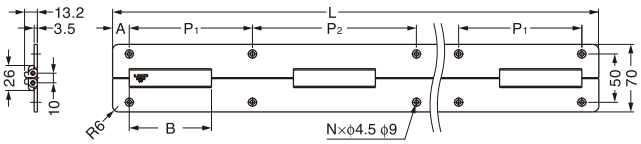


- Opening angle 180˚ thanks to the double joint mechanism.
- Can be cut easily.
- In case of cutting the hinge, attention should be paid to prevent the pin from coming out.
- The included screws have the same finish as the hinge.

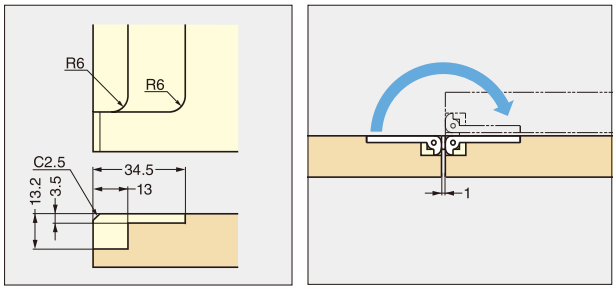
SCREW

### Parts Included

- Cross-recessed countersunk tapping screw 4x16 (stainless steel)




### Cut Out Dimensions




| Item Code | Item Name | Material | Finish | L | A | P1 | P2 | B | Qty of Holes N | Weight | Box |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 170-012-587 | HG-MH400S | Aluminium Alloy | Anodized/Stainless Finish | 400 | 15 | 111 | 148 | 74 | 8 | 452 g | 15 pcs |
| 170-012-588 | HG-MH400BR | | Anodized/Brown | 400 | 15 | 111 | 148 | 74 | 8 | 452 g | 15 pcs |
| 170-012-589 | HG-MH400BL | | Anodized/Black | 400 | 15 | 111 | 148 | 74 | 8 | 452 g | 15 pcs |
| 170-012-590 | HG-MH800S | | Anodized/Stainless Finish | 800 | 17.5 | 127.5 | 170 | 85 | 12 | 908 g | 10 pcs |
| 170-012-591 | HG-MH800BR | | Anodized/Brown | 800 | 17.5 | 127.5 | 170 | 85 | 12 | 908 g | 10 pcs |
| 170-012-592 | HG-MH800BL | | Anodized/Black | 800 | 17.5 | 127.5 | 170 | 85 | 12 | 908 g | 10 pcs |
| 170-012-593 | HG-MH1100S | | Anodized/Stainless Finish | 1100 | 16.5 | 145.5 | 194 | 97 | 14 | 1,236 g | 8 pcs |
| 170-012-594 | HG-MH1100BR | | Anodized/Brown | 1100 | 16.5 | 145.5 | 194 | 97 | 14 | 1,236 g | 8 pcs |
| 170-012-595 | HG-MH1100BL | | Anodized/Black | 1100 | 16.5 | 145.5 | 194 | 97 | 14 | 1,236 g | 8 pcs |

# LAMP HIGH DURABILITY SPRING HINGE HG-SHL

Latest Info



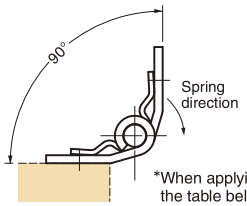

- Made entirely out of stainless steel, high corrosion resistance
- Designed to exert constant closing force on flap doors and doors

### Remarks

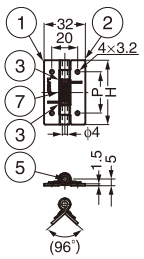
- Torque given in the table below is the value when the hinge opens 90°. (Refer to * in the drawing below)
- The open/close tests were conducted on top-opening lids.

Feature

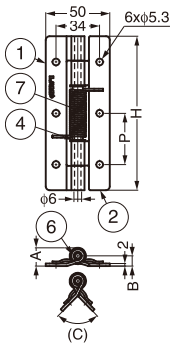
| No. | Part Name | Material | Finish |
|---|---|---|---|
| ① | Body 1 | Stainless Steel (SUS304) | Mirror |
| ② | Body 2 | Stainless Steel (SUS304) | Mirror |
| ③ | Collar | Stainless Steel (SUS303) | - |
| ④ | Collar | Stainless Steel (SUS303) | - |
| ⑤ | Shaft 1 | Stainless Steel (SUS303) | - |
| ⑥ | Shaft 2 | Stainless Steel (SUS304) | - |
| ⑦ | Spring | Stainless Steel (SUS304) | - |



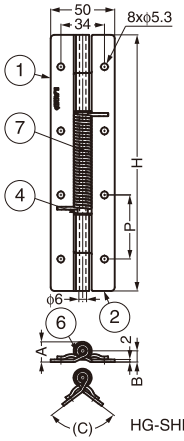

*When applying the torque given in the table below




HG-SHL32
HG-SHL50
HG-SHL60




HG-SHL90
HG-SHL120
HG-SHL150




HG-SHL200

| Item Code | Item Name | H | P | A | B | C | Torque Moment | | Load Capacity N/2 pcs | Load Capacity kgf/2 pcs | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 170-024-384 | HG-SHL32 | 32 | 18 | - | - | - | 4.7 cN·m | 0.48 kgf·cm | 39 | 4 | 20 g | 50 pcs | 500 pcs |
| 170-024-385 | HG-SHL50 | 50 | 32 | - | - | - | 8.9 cN·m | 0.91 kgf·cm | 59 | 6 | 30 g | 50 pcs | 500 pcs |
| 170-024-386 | HG-SHL60 | 60 | 40 | - | - | - | 14.0 cN·m | 1.43 kgf·cm | 59 | 6 | 38 g | 50 pcs | 500 pcs |
| 170-045-741 | HG-SHL90 | 90 | 30 | 14 | 7.85 | 92 | 21.4 cN·m | 2.18 kgf·cm | 78 | 8 | 103 g | 50 pcs | 500 pcs |
| 170-045-742 | HG-SHL120 | 120 | 40 | 14.35 | 8 | 89 | 43.0 cN·m | 4.38 kgf·cm | 186 | 19 | 137 g | 50 pcs | 500 pcs |
| 170-045-743 | HG-SHL150 | 150 | 50 | 14.95 | 8.2 | 103 | 70.0 cN·m | 7.14 kgf·cm | 225 | 23 | 180 g | 50 pcs | 500 pcs |
| 170-045-744 | HG-SHL200 | 200 | 50 | 15.75 | 8.7 | 106 | 95.0 cN·m | 9.68 kgf·cm | 284 | 29 | 248 g | 50 pcs | 500 pcs |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP HIGH DURABILITY SPRING HINGE HG-SHL-RS Reverse Action / Stainless Steel NEW

Latest Info

High durability
Passed Private 1000K Cycle Test



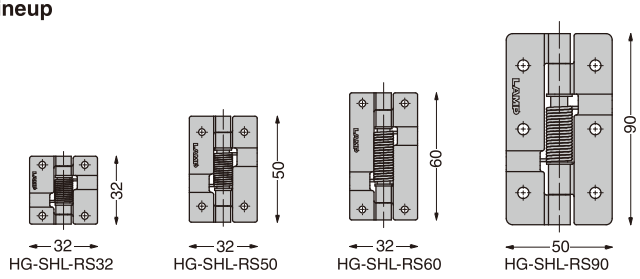
- The spring action works in the opposite direction to the HG-SHL (P.222).
- All parts are made of stainless steel for excellent corrosion resistance.
- The collar in the shaft section reduces spring friction and provides excellent durability.
- Food-grade grease is used on the shaft. (NSF H1 registered)

SUS

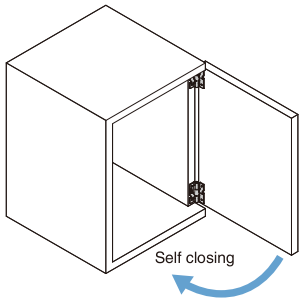
## Remarks

- The torque in the table below is the value when the hinge is opened to 90°.
- The open/close cycle test was conducted on top-opening lids.

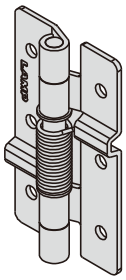
## Lineup

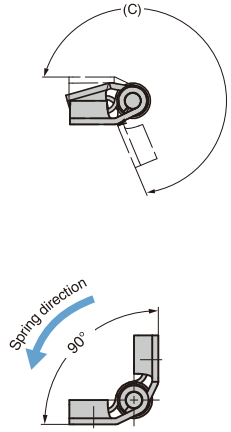



## Use Example

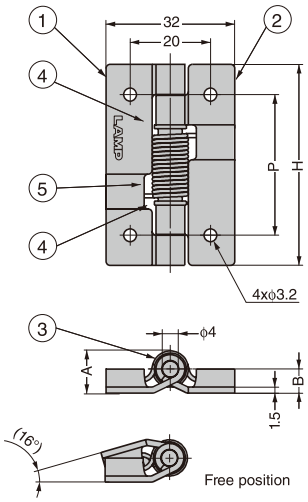



## When Opened

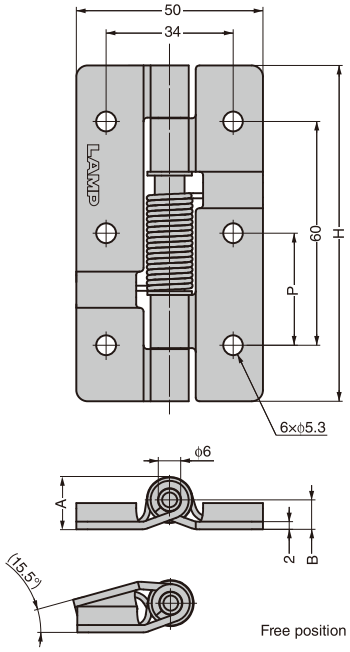





*The table's torque values are calculated with the hinge at a 90° angle.




HG-SHL-RS32
HG-SHL-RS50
HG-SHL-RS60




HG-SHL-RS90

| No. | Part Name | Material | Finish |
|---|---|---|---|
| ① | Body 1 | Stainless Steel (SUS304) | Barrel Polished |
| ② | Body 2 | | |
| ③ | Collar | Stainless Steel (SUS303) | Plain |
| ④ | Shaft | | |
| ⑤ | Spring | Stainless Steel (SUS304) | - |

| Item Code | Item Name | H | P | A | B | C | Torque N.m | Torque kgf.cm | Load Capacity N/2 pcs | Load Capacity kgf/2 pcs | Weight (g) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 170-054-527 | HG-SHL-RS32 | 32 | 24 | 9.3 | 5 | 257° | 0.047 | 0.48 | 39 | 4 | 17.8 |
| 170-054-528 | HG-SHL-RS50 | 50 | 35 | 10.5 | 6 | 247° | 0.089 | 0.91 | 59 | 6 | 28.8 |
| 170-054-529 | HG-SHL-RS60 | 60 | 50 | 10.7 | | | 0.14 | 1.43 | | | 34.9 |
| 170-054-530 | HG-SHL-RS90 | 90 | 30 | 14 | 7.85 | 259° | 0.3 | 3.06 | 78 | 8 | 106.3 |

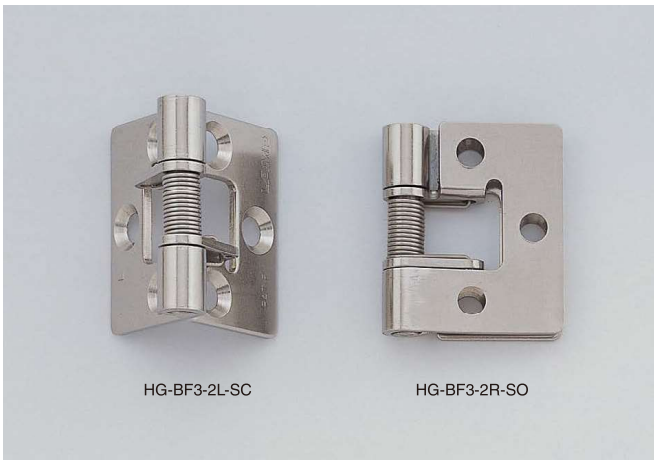


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

# LAMP. BUTT HINGE (W/ SPRING) HG-BF3-2

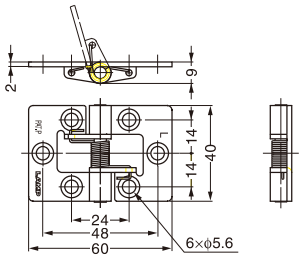
Latest Info

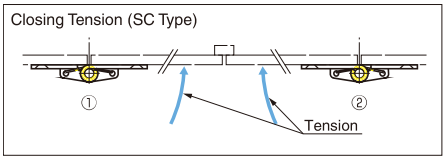


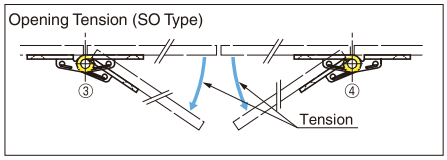

- Spring hinge to hold door.
- Available with either opening or closing spring tension.

SUS

Feature




*①, ③ "L"
②, ④ "R"

| Item Code | Item Name | No. | Type | Material | Finish | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|
| 170-091-562 | HG-BF3-2L-SC | ① | Closing Tension/Left | Stainless Steel (SUS304) | Polished | 41 g | 20 pcs | 120 pcs |
| 170-091-564 | HG-BF3-2R-SC | ② | Closing Tension/Right | | | 41 g | 20 pcs | 120 pcs |
| 170-091-561 | HG-BF3-2L-SO | ③ | Opening Tension/Left | | | 41 g | 20 pcs | 120 pcs |
| 170-091-563 | HG-BF3-2R-SO | ④ | Opening Tension/Right | | | 41 g | 20 pcs | 120 pcs |

# ALUMINIUM SPRING LIFT-OFF HINGE PM120

Latest Info



PM120-BK-5253-09R

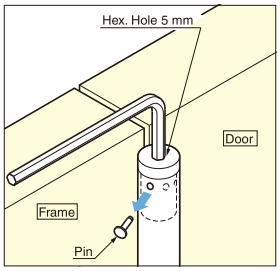
Passed Private 250K Cycle Test

Special Colours (made to order)

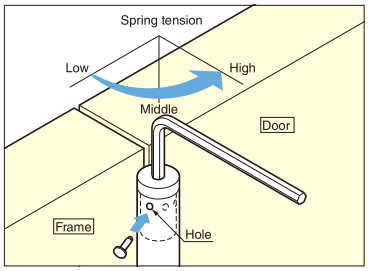


- Spring powered to automatically close.
- Spring strength is adjustable.
- Easy to remove door from frame post-installation.

## How to Adjust Spring Tension

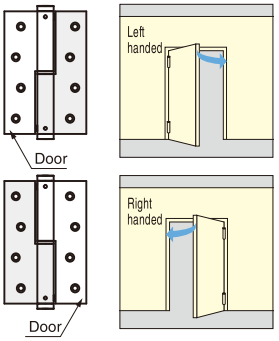



Loosen shaft with Hex key and remove the pin.

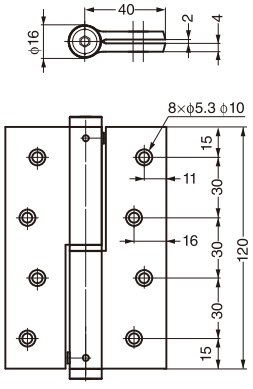



Adjust the spring tension in three separate turns. Replace the pin into the hole.

## Installation




Use right-handed hinge if door is hung on the right (viewing from the side of pulling the door).




PM120-BK-5243-09L

Left-handed type.
*After the door is closed, leaves are not parallel to each other.

| Item Code | Item Name | Type | Material | Finish | Load Capacity (Door Width Max. 1000 mm) | | Weight | Box |
|---|---|---|---|---|---|---|---|---|
| 170-048-791 | PM120-BK-5243-09L | Left-handed | Aluminium Alloy | Black | 200 N (20 kgf)/2 pcs | 300 N (30 kgf)/3 pcs | 172 g | 2 pcs |
| 170-048-792 | PM120-BK-5253-09R | Right-handed | Aluminium Alloy | Black | 200 N (20 kgf)/2 pcs | 300 N (30 kgf)/3 pcs | 172 g | 2 pcs |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# SPRING HINGE SA

Latest Info

Passed Private 500K Cycle Test



SA120-5314-01 SA180-5814-05 SA180-BK-5813-09

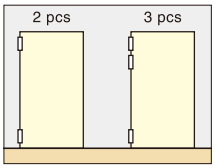
Special Colours (made to order)



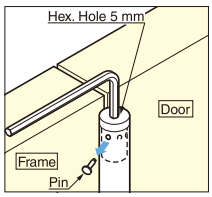
- Spring powered to automatically close.
- Spring strength is adjustable.
- All parts made from stainless steel (SUS304) for high corrosion resistance.

SUS

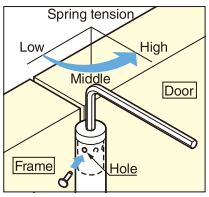
## Installation



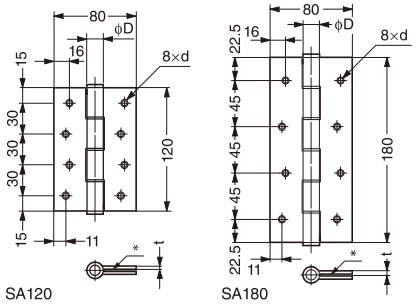

## How to Adjust Spring Tension




Loosen shaft with Hex key and remove the pin.




Adjust the spring tension in three separate turns. Replace the pin into the hole.




*After the door is closed, leaves are not parallel to each other.

| Item Code | Item Name | Material | Finish | With Spring | D | t | d | Load Capacity (Door width Max. 1000 mm) | | Weight | Box |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 170-090-810 | SA120-5314-01 | Aluminium Alloy | Anodized | Yes | 16 | 4 | ϕ5.3 THRU ϕ10 CSK | 196 N (20 kgf)/2 pcs | 294 N (30 kgf)/3 pcs | 175 g | 2 pcs |
| 170-090-811 | SA180-5814-01 | Aluminium Alloy | Anodized | | 16 | 4 | ϕ5.3 THRU ϕ10 CSK | 392 N (40 kgf)/2 pcs | 588 N (60 kgf)/3 pcs | 260 g | 2 pcs |
| 170-090-812 | SA120-5314-05 | Stainless Steel (SUS304) | Plain | | 17 | 2.5 | ϕ5.5 THRU ϕ 9 CSK | 196 N (20 kgf)/2 pcs | 294 N (30 kgf)/3 pcs | 303 g | 2 pcs |
| 170-090-813 | SA180-5814-05 | Stainless Steel (SUS304) | Plain | | 18 | 3 | ϕ5.5 THRU ϕ 9 CSK | 392 N (40 kgf)/2 pcs | 588 N (60 kgf)/3 pcs | 526 g | 2 pcs |
| 170-048-795 | SA120-BK-5313-09 | Aluminium Alloy | Black | | 16 | 4 | ϕ5.3 THRU ϕ10 CSK | 196 N (20 kgf)/2 pcs | 294 N (30 kgf)/3 pcs | 175 g | 2 pcs |
| 170-048-796 | SA180-BK-5813-09 | Aluminium Alloy | Black | | 16 | 4 | ϕ5.3 THRU ϕ10 CSK | 392 N (40 kgf)/2 pcs | 588 N (60 kgf)/3 pcs | 260 g | 2 pcs |
| 170-048-793 | SA120-SM-5394-01 | Aluminium Alloy | Anodized | No | 16 | 4 | ϕ5.3 THRU ϕ10 CSK | 196 N (20 kgf)/2 pcs | 294 N (30 kgf)/3 pcs | 175 g | 2 pcs |
| 170-048-794 | SA180-SM-5894-01 | Aluminium Alloy | Anodized | | 16 | 4 | ϕ5.3 THRU ϕ10 CSK | 392 N (40 kgf)/2 pcs | 588 N (60 kgf)/3 pcs | 260 g | 2 pcs |
| 170-048-797 | SA120-SM-5394-05 | Stainless Steel (SUS304) | Plain | | 17 | 2.5 | ϕ5.5 THRU ϕ 9 CSK | 196 N (20 kgf)/2 pcs | 294 N (30 kgf)/3 pcs | 303 g | 2 pcs |
| 170-048-798 | SA180-SM-5894-05 | Stainless Steel (SUS304) | Plain | | 18 | 3 | ϕ5.5 THRU ϕ 9 CSK | 392 N (40 kgf)/2 pcs | 588 N (60 kgf)/3 pcs | 526 g | 2 pcs |

# SPRING HINGE ST150-6314-05

Latest Info

Passed Private 500K Cycle Test

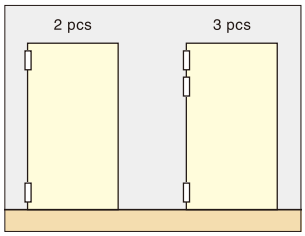


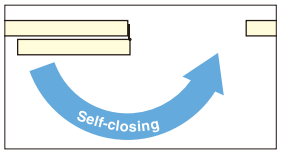


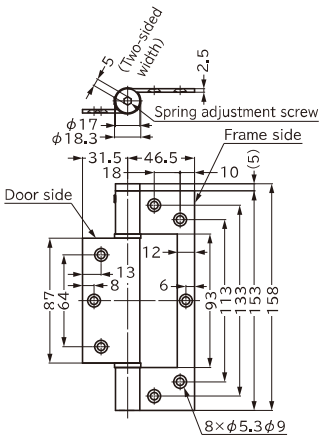
- Spring powered to automatically close.
- Spring strength is adjustable.
- All parts made from stainless steel (SUS304) for high corrosion resistance.
- Easy surface installation does not require mortise.

SUS

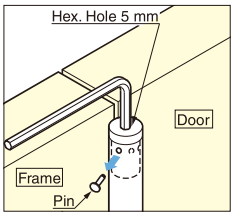
## Installation



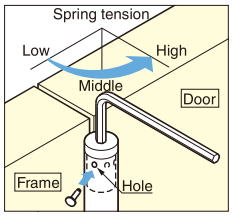




## How to Adjust Spring Tension




Loosen shaft with Hex key and remove the pin.




Adjust spring tension with three steps. Put the pin to the hole and fix.

| Item Code | Item Name | Material | Finish | Load Capacity (Door width Max. 1000 mm) | | Weight | Box |
|---|---|---|---|---|---|---|---|
| 170-022-486 | ST150-6314-05 | Stainless Steel (SUS304) | Plain | 392 N (40 kgf)/2 pcs | 588 N (60 kgf)/3 pcs | 736 g | 2 pcs |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# DOUBLE ACTION HINGE DA

Latest Info



Passed Private 500K Cycle Test



DA120-5404-01 DA180-5914-05

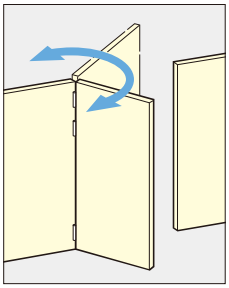
- Hinge allows door to be opened forwards or backwards.
- Spring powered to automatically close.
- Spring strength is adjustable.
- Angle of opening movement in either direction is 180°.
- All parts made from stainless steel (SUS304) for high corrosion resistance.
- Anodized type is also available in black, white, gold, bronze colours. (Made to order / MOQ: 2 pcs)

SUS

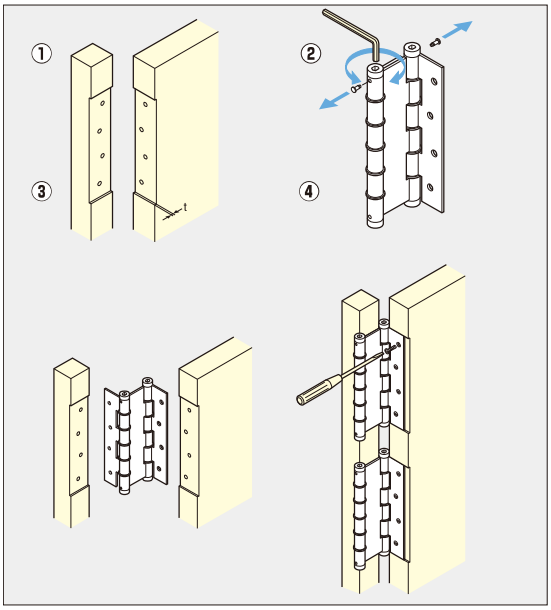
## Special Colours (made to order)

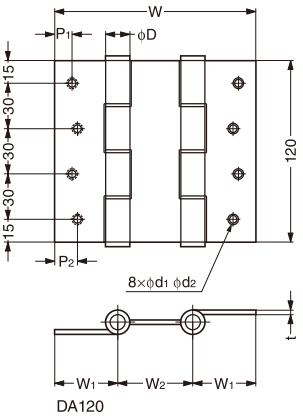




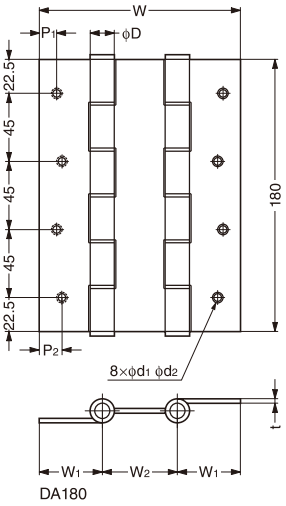


## Installation

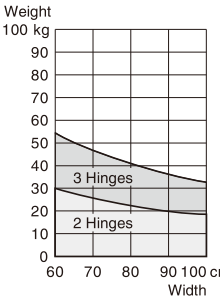


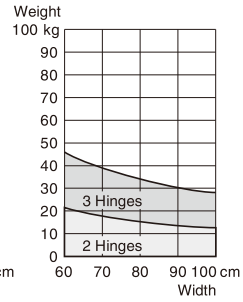

DA120



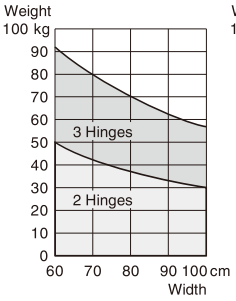

DA180



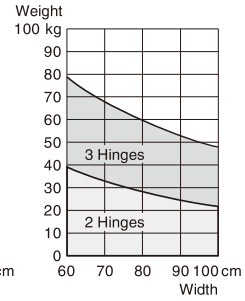

DA120-5404



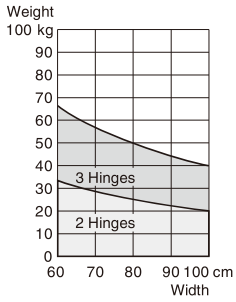

DA120-5414



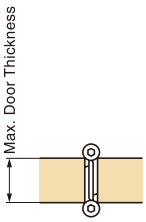

DA180-5904



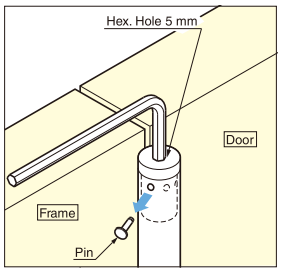

DA180-5914



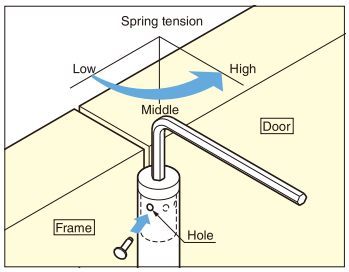

DA180-5934




## How to Adjust Spring Tension




Loosen shaft with Hex key and remove the pin.




Adjust spring tension with three steps. Put the pin to the hole and fix.

| Item Code | Item Name | Material | Finish | W | $W_1$ | $W_2$ | $P_1$ | $P_2$ | D | t | $d_1$ | $d_2$ | Max. Door Thickness | Weight | Box |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 170-090-803 | DA120-5404-01 | Aluminium Alloy | Anodized | 101 | 29.5 | 42 | 6.5 | 11.5 | 16 | 4 | 5.3 | 10 | 30 | 275 g | 2 pcs |
| 170-090-804 | DA120-5414-01 | Aluminium Alloy | Anodized | 133 | 40 | 53 | 11 | 16 | 16 | 4 | 5.3 | 10 | 40 | 320 g | 2 pcs |
| 170-090-805 | DA120-5414-05 | Stainless Steel (SUS304) | Plain | 133 | 40 | 53 | 11 | 16 | 17 | 2.5 | 5.5 | 9 | 36 | 555 g | 2 pcs |
| 170-090-806 | DA180-5904-01 | Aluminium Alloy | Anodized | 101 | 29.5 | 42 | 6.5 | 11.5 | 16 | 4 | 5.3 | 10 | 30 | 407 g | 2 pcs |
| 170-090-807 | DA180-5914-01 | Aluminium Alloy | Anodized | 133 | 40 | 53 | 11 | 16 | 16 | 4 | 5.3 | 10 | 40 | 466 g | 2 pcs |
| 170-090-808 | DA180-5914-05 | Stainless Steel (SUS304) | Plain | 133 | 40 | 53 | 11 | 16 | 18 | 3 | 5.5 | 9 | 38 | 947 g | 2 pcs |
| 170-090-809 | DA180-5934-01 | Aluminium Alloy | Anodized | 157 | 48.5 | 60 | 19.5 | 24.5 | 16 | 4 | 5.3 | 10 | 50 | 510 g | 2 pcs |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# ALUMINIUM SPRING HINGE DAW

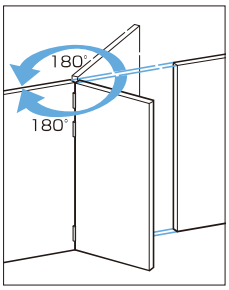
Latest Info



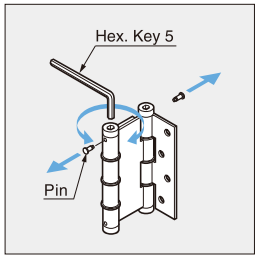
- Hinge allows door to be opened forwards or backwards.
- Spring powered to automatically close.
- Spring strength is adjustable.
- Angle of opening movement in either direction is 180°.
- Please use in combination with door stoppers.

## Remarks

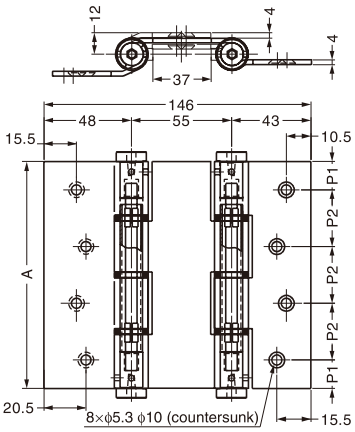
- Please use with door stopper.

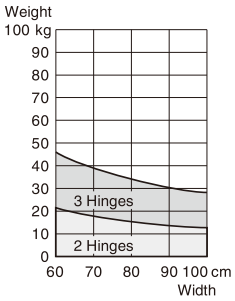



## How to Adjust Spring Tension

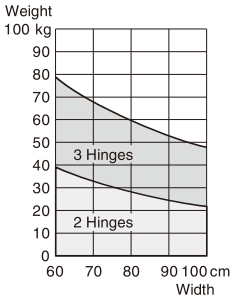



1. Remove the pin.
2. Adjust spring with a hex key.
3. Put back the pin to the hole.




DAW120




DAW180

| Item Code | Item Name | Material | Finish | A | P1 | P2 | Door Thickness | Weight | Box |
|---|---|---|---|---|---|---|---|---|---|
| 170-017-703 | DAW120 | Aluminium Alloy | Anodized | 120 | 15 | 30 | Max. 35 | 342 g | 2 pcs |
| 170-017-702 | DAW180 | Aluminium Alloy | Anodized | 180 | 22.5 | 45 | Max. 35 | 506 g | 2 pcs |

*The dimension "8×ϕ5 ϕ8" will change to "8×ϕ5.3 ϕ10" when the current stock runs out.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

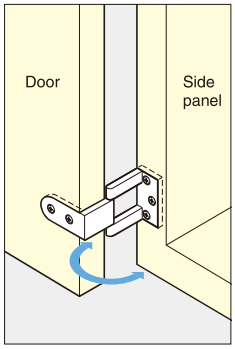
## LAMP. OVERLAY DOOR ANGLE HINGE AHS

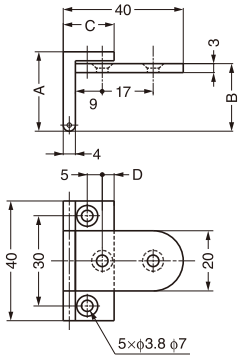
Latest Info




### Remarks
- Recommended for use in pairs.

Feature

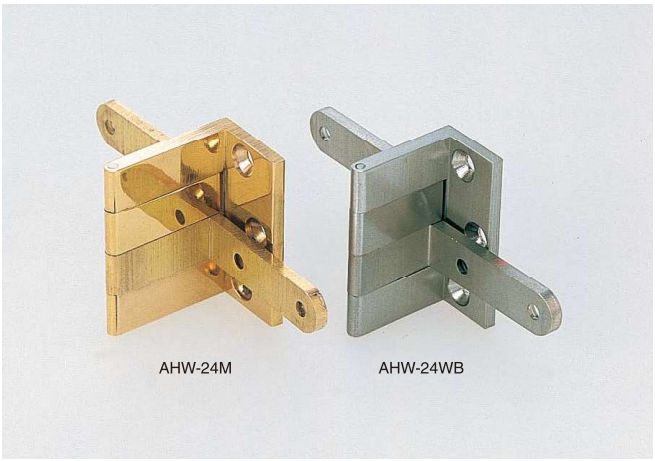



| Item Code | Item Name | Material | Finish | A | B | C | D | Door | | | | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Width | Height | Thickness | Weight | | | |
| 170-090-010 | AHS-20M | Brass | Polished | 26.5 | 22.5 | 17 | 4 | Max. 450 | Max. 700 | 20 | Max. 2.6 kg/2 pcs | 61 g | 20 pcs | 360 pcs |
| 170-090-011 | AHS-20WB | Brass | Satin Nickel | 26.5 | 22.5 | 17 | 4 | Max. 450 | Max. 700 | 20 | Max. 2.6 kg/2 pcs | 61 g | 20 pcs | 360 pcs |
| 170-090-015 | AHS-24M | Brass | Polished | 30.5 | 27 | 20 | 5.5 | Max. 450 | Max. 700 | 24 | Max. 2.6 kg/2 pcs | 71 g | 20 pcs | 360 pcs |
| 170-090-016 | AHS-24WB | Brass | Satin Nickel | 30.5 | 27 | 20 | 5.5 | Max. 450 | Max. 700 | 24 | Max. 2.6 kg/2 pcs | 71 g | 20 pcs | 360 pcs |

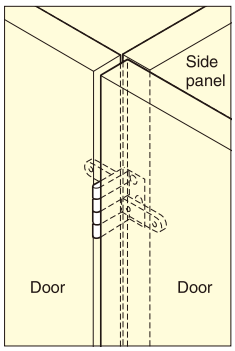
## LAMP. OVERLAY DOOR ANGLE HINGE AHW

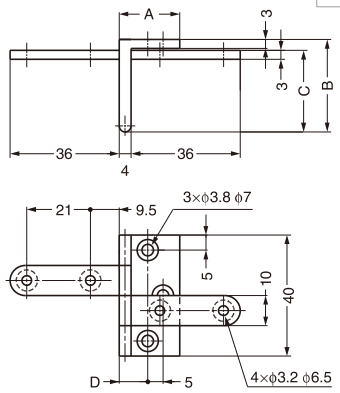
Latest Info




### Remarks
- Recommended for use in pairs.

Feature




| Item Code | Item Name | Material | Finish | A | B | C | D | Door | | | | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Width | Height | Thickness | Weight | | | |
| 170-090-020 | AHW-20M | Brass | Polished | 17 | 26.5 | 22.5 | 8 | Max. 450 | Max. 700 | 20 | Max. 2.6 kg/2 pcs | 63 g | 25 pcs | 200 pcs |
| 170-090-021 | AHW-20WB | Brass | Satin Nickel | 17 | 26.5 | 22.5 | 8 | Max. 450 | Max. 700 | 20 | Max. 2.6 kg/2 pcs | 63 g | 25 pcs | 200 pcs |
| 170-090-025 | AHW-24M | Brass | Polished | 20 | 30.5 | 27 | 9.5 | Max. 450 | Max. 700 | 24 | Max. 2.6 kg/2 pcs | 72 g | 20 pcs | 80 pcs |
| 170-090-026 | AHW-24WB | Brass | Satin Nickel | 20 | 30.5 | 27 | 9.5 | Max. 450 | Max. 700 | 24 | Max. 2.6 kg/2 pcs | 72 g | 20 pcs | 80 pcs |

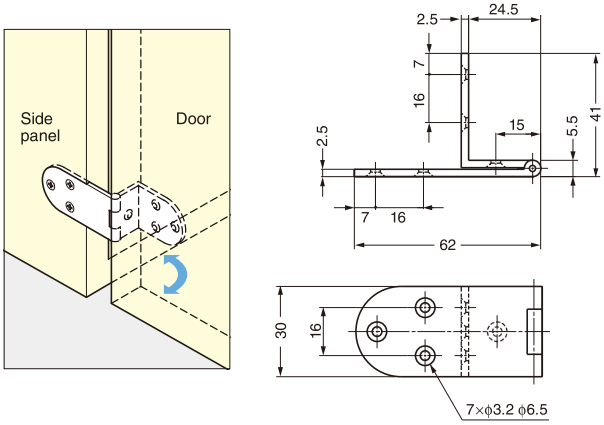

This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

## LAMP OVERLAY DOOR ANGLE HINGE AHA-24

Latest Info




**Remarks**
- Recommended for use in pairs.



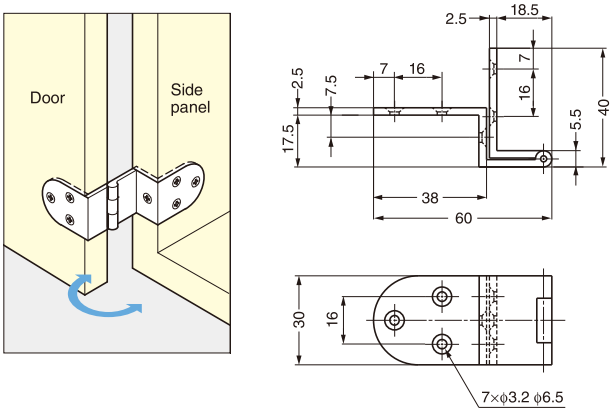

| Item Code | Item Name | Material | Finish | Door | | | | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Width | Height | Thickness | Weight | | | |
| 170-090-030 | AHA-24SG | Brass | Satin Gold | Max. 450 | Max. 700 | 24 | Max. 2.6 kg/2 pcs | 70 g | 50 pcs | 200 pcs |
| 170-090-031 | AHA-24WB | Brass | Satin Nickel | Max. 450 | Max. 700 | 24 | Max. 2.6 kg/2 pcs | 70 g | 50 pcs | 200 pcs |

## LAMP OVERLAY DOOR ANGLE HINGE AHB-18

Latest Info




**Remarks**
- Recommended for use in pairs.




| Item Code | Item Name | Material | Finish | Door | | | | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Width | Height | Thickness | Weight | | | |
| 170-090-035 | AHB-18SG | Brass | Satin Gold | Max. 450 | Max. 700 | 18 | Max. 2.6 kg/2 pcs | 76 g | 50 pcs | 200 pcs |
| 170-090-036 | AHB-18WB | Brass | Satin Nickel | Max. 450 | Max. 700 | 18 | Max. 2.6 kg/2 pcs | 76 g | 50 pcs | 200 pcs |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# LAMP GRAVITY HINGE ET-100A Inside Opening

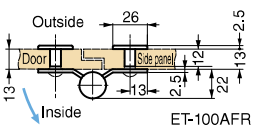
Latest Info

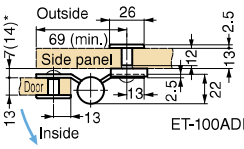




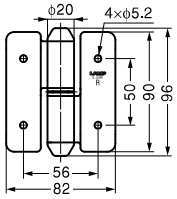


- For inward opening doors. Can be installed with door flush or with an offset.
- The automatic closing radius of the door can be adjusted by angles of 18° (Must be adjusted during installation)
- Door rises up to 6mm at a radius of 90°.
- Optional spacer allows adjustment of the gap between the side panel and the door from 7 mm to 14 mm. When used with the ET-70DS latch lock with indicator, along with spacers ET-3 and ET-7, it prevents finger entrapment.

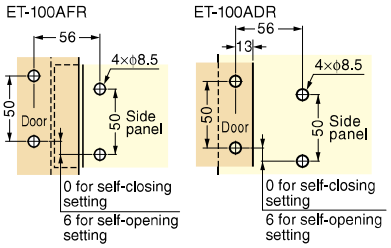



*Dimensions in brackets () are with optional 11.5 mm thick spacer.




### Cut Out Dimensions (At closed position)




SUS

### Remarks
- 3 pcs in 1 set required for 1 door.

### Parts Included
- Spacer (7 mm / for ET-100AD)

### Option
- Spacer, ET-100-S13 to double the gap between door and side panel.

### Recommended Screw
- Hexagon top bolt

| Type | Spacer | Door Thickness | | Side Panel Thickness | | |
|---|---|---|---|---|---|---|
| | | 13 | 16 | 13 | 16 | 20 |
| ET-100AF | – | M5×10 | M5×12 | M5×10 | M5×12 | M5×16 |
| ET-100AD | 7 mm (included) | M5×10 | M5×12 | M5×14 | M5×16 | M5×20 |
| | 11.5 mm (sold separately) | M5×10 | M5×12 | M5×20 | M5×25 | M5×25 |

### Spacer for ET-100AD (11.5 mm / Sold Separately)

| Item Code | Item Name | Weight | Box |
|---|---|---|---|
| 170-020-997 | ET-100-S13 | 16 g | 900 pcs |

### Body

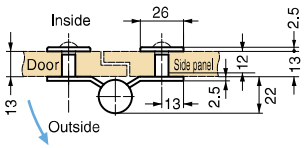
| Item Code | Item Name | Shape | Type | Material | Finish | Door Width | Door Height | Load Capacity N / 3(pcs) | Load Capacity kgf / 3pcs | Weight | Box |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 170-099-066 | ET-100AFR | Flat | Right | Stainless Steel (SUS304) | Satin | Max.680 | MAX.2000 | 294 | 30 | 955 g | 10 sets |
| 170-099-067 | ET-100AFL | Flat | Left | | | | | | | | 10 sets |
| 170-099-905 | ET-100ADR | Stepped | Right | | | | | | | 980 g | 10 sets |
| 170-099-048 | ET-100ADL | Stepped | Left | | | | | | | | 10 sets |

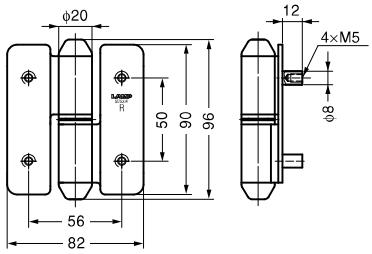
# LAMP GRAVITY HINGE ET-100BF Outside Opening

Latest Info

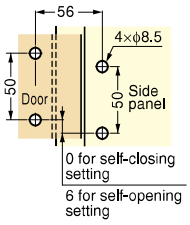



- For outward opening doors. Can be installed with door flush or with an offset.
- The automatic closing radius of the door can be adjusted by angles of 18° (Must be adjusted during installation)
- Door rises up to 6 mm at a radius of 90°.




### Cut Out Dimensions
(At closed position)




SUS

### Remarks
- 3 pcs in 1 set required for 1 door.

### Recommended Screw
- Hexagon top bolt

| Door Thickness | | Side Panel Thickness | | |
|---|---|---|---|---|
| 13 | 16 | 13 | 16 | 20 |
| M5×10 | M5×12 | M5×10 | M5×12 | M5×16 |

| Item Code | Item Name | Type | Material | Finish | Weight | Box |
|---|---|---|---|---|---|---|
| 170-099-906 | ET-100BFR | Right | Stainless Steel (SUS304) | Satin | 956 g | 10 sets |
| 170-099-049 | ET-100BFL | Left | Stainless Steel (SUS304) | Satin | 956 g | 10 sets |


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

# LAMP GRAVITY HINGE ET-100CD

Latest Info







- For outward opening doors. Can be installed with door flush or with an offset.
- The automatic closing radius of the door can be adjusted by angles of 18° (Must be adjusted during installation)
- Door rises up to 6 mm at a radius of 90°.

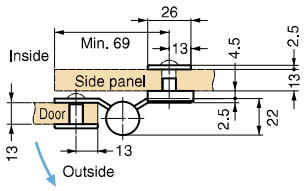
SUS

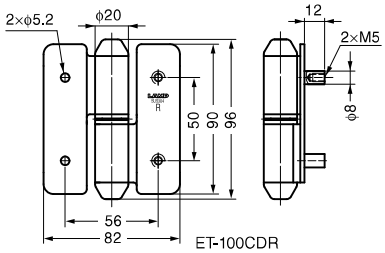
**Remarks**
- 3 pcs in 1 set required for 1 door.

**Parts Included**
- Spacer

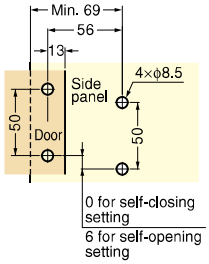
**Recommended Screw**
- Hexagon top bolt

| Door Thickness | | Side Panel Thickness | | |
|---|---|---|---|---|
| 13 | 16 | 13 | 16 | 20 |
| M5×10 | M5×12 | M5×14 | M5×16 | M5×20 |



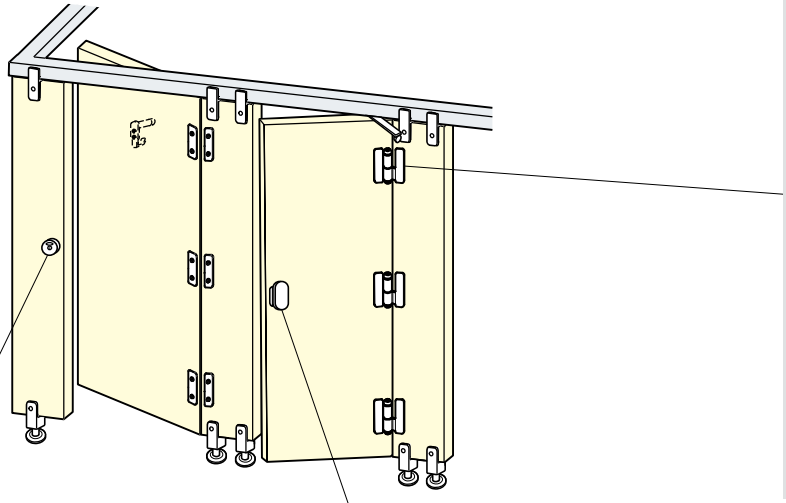




**Cut Out Dimensions**
(At closed position)




| Item Code | Item Name | Type | Material | Finish | Door Width | Door Height | Load Capacity N / 3(pcs) | Load Capacity kgf / 3(pcs) | Weight | Box |
|---|---|---|---|---|---|---|---|---|---|---|
| 170-099-907 | ET-100CDR | Right | Stainless Steel (SUS304) | Satin | Max. 680 | Max.2200 | 294 | 30 | 980 g | 10 sets |
| 170-099-050 | ET-100CDL | Left | | | | | | | | 10 sets |

## APPLICATION



**Hinge**


ET-100A (P.230)


ET-100BF (P.230)


ET-100CD (P.231)

**Latch**


ET-70 (P.423)


ET-125T (P.424)

**Knob**


DW-50N (P.1113)



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.



Update: 11.11.2024

# LAMP DAMPER CATCH DC

Latest Info

SELECTION GUIDE
HES CONCEALED HINGES
CONCEALED HINGES
DAMPER HINGES
TORQUE HINGES
GLASS HINGES
PIVOT HINGES
TABLETOP HINGES
DETENT HINGES
BUTT HINGES
LIFT-OFF HINGES
PIANO HINGES
SPRING HINGES
ANGLE HINGES
GRAVITY HINGES

Soft close




GOOD DESIGN

- Damper and catch combination for sideways opening doors.
- Prevents doors from slamming.
- Separate models for wood and glass doors.
- Non-handed.

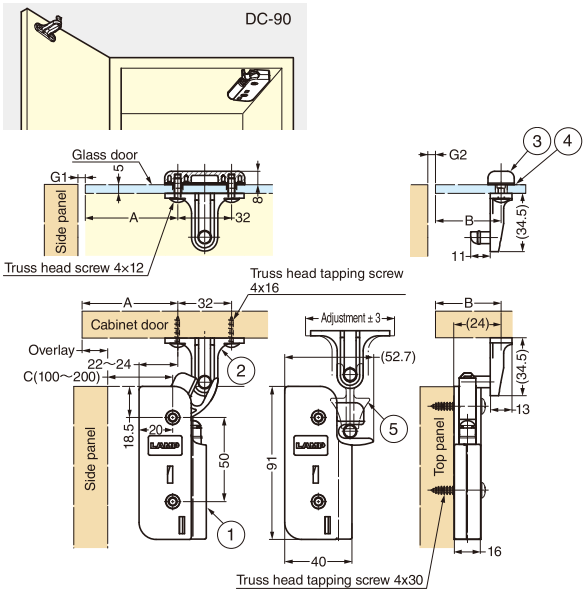
SCREW

Feature

## Parts included

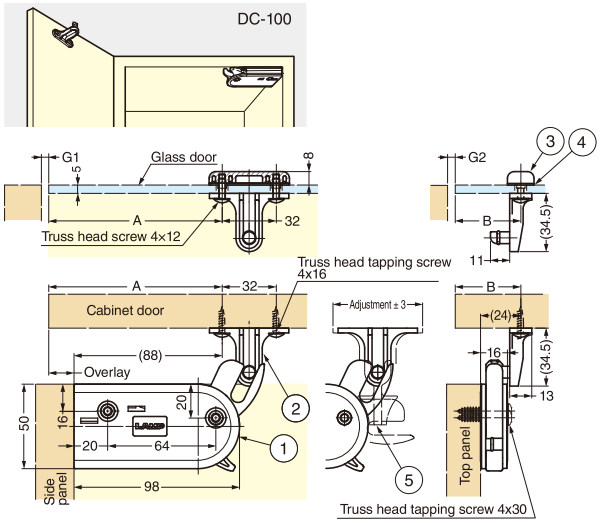
- Truss head tapping screw 4×30
- Truss head tapping screw 4×16
- Truss countersunk head screw 4×12
- Trigger Jig
- Face plate (Only included in DC-90G, DC-100G)

## DC-90




| Installation Position | A | B |
|---|---|---|
| Inset Door | C-G1+3 | 24-G2 |
| Overlay Door | C+Overlay+3 | Overlay+24 |

## DC-100

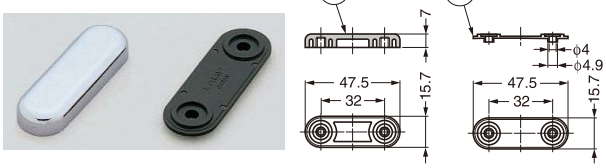


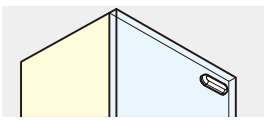

| Installation Position | A | B |
|---|---|---|
| Inset Door | 88-G1 | 24-G2 |
| Overlay Door | Overlay+88 | Overlay+24 |

G1 is the gap between the door edge and the side panel. G2 is the gap between the edge of the door and the top panel.

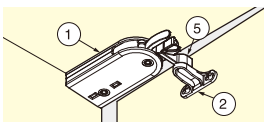
| No. | Parts Name | Material | Finish/Colour |
|---|---|---|---|
| ① | Body | Polyacetal (POM) /PBT | Dark Grey/Light Grey |
| ② | Counter Plate | Polyacetal (POM) | Dark Grey |
| ③ | Face Plate | Zinc Alloy (ZDC) | Chrome |
| ④ | Spacer | ABS | Black |
| ⑤ | Jig | PBT | Light Grey |

## Face plate for glass door

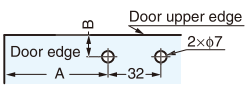


## Installation




## Cut Out Dimensions for Glass Door




| Item Code | Item Name | Type | Door Width | Door Height | Glass Thickness | Door Weight | Weight | Box | Carton |
|---|---|---|---|---|---|---|---|---|---|
| 140-021-698 | DC-90G | Glass Door | Max. 450 | Max. 600 | 5 | 1 ～4 kg | 71 g | 25 pcs | 200 pcs |
| 140-021-700 | DC-100G | | Max. 600 | Max. 800 | 5 | 1.5～7 kg | 91 g | 25 pcs | 200 pcs |
| 140-021-697 | DC-90 | Wood Door | Max. 450 | Max. 600 | – | 1 ～4 kg | 46 g | 25 pcs | 200 pcs |
| 140-021-699 | DC-100 | | Max. 600 | Max. 800 | – | 1.5～7 kg | 66 g | 25 pcs | 200 pcs |



This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

# Technical Information

1364 | TEST METHODS
1366 | SURFACE TREATMENT
1367 | MATERIALS
1368 | DOOR WEIGHT TABLE

September 2024

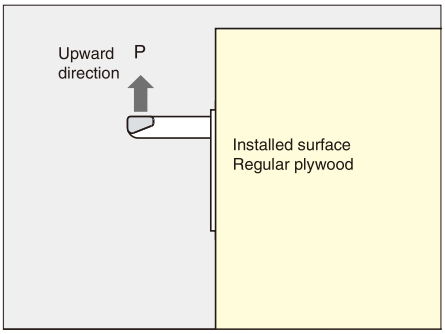
# TEST METHODS

## ■Test Methods

In this catalogue, various values about products with TEST METHOD icon in the product specification columns are determined by the tests as described below. Values are to provide guidance for the safe use of our products.

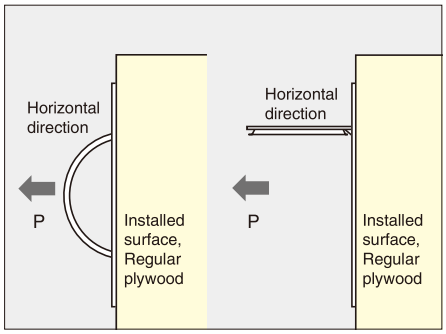
Product without TEST METHOD icon may not be based on these criteria in some cases.

### TEST METHOD 1 HANDLE LOAD CAPACITY TEST



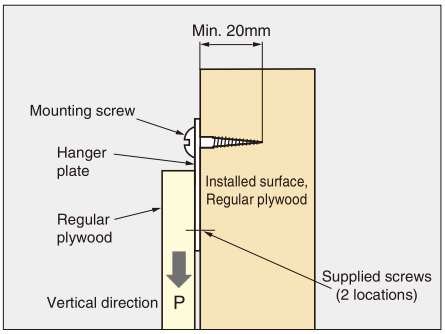

The load capacity is measured when the force (P) is gently applied in the direction of the arrow under the condition indicated by the figure.

### TEST METHOD 2 HANDLE, PULL, HOOK LOAD CAPACITY TEST



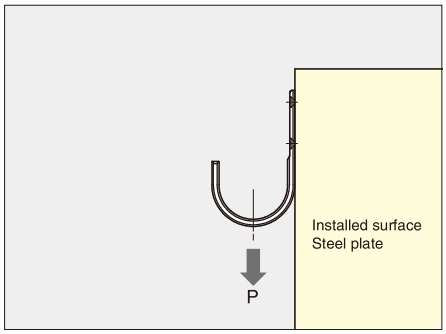

The load capacity is measured when the force (P) is gently applied in the direction of the arrow under the condition indicated by the figure.
Product may fail or distort if the force is applied in a direction other than the frontal direction. Please do not use on application other than in the pull direction.

### TEST METHOD 3 HANGING-LOAD CAPACITY TEST



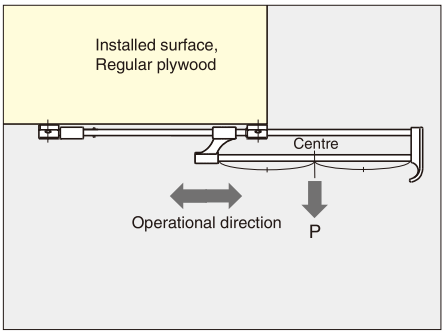

The hanging-load capacity is measured when the force (P) is gently applied in the direction of the arrow under the condition indicated by the figure. This value will vary according to the diameter / length of the screw(s) used and strength of the installed surface.
Hanging load of 10 kgf, in case of using round head wood screw 3.8 x 25.

### TEST METHOD 4 HOOK LOAD CAPACITY TEST



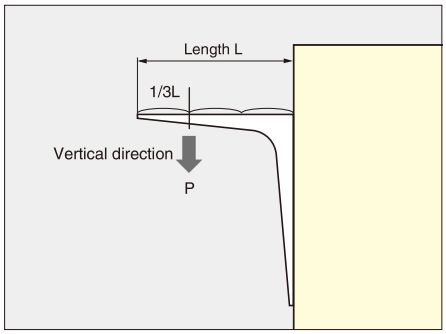

Under the conditions shown in the figure, a force (P) is gently applied to the centre of the hanging part in the vertical direction. The indicated load capacity value is about one-third of the limit load value (safety factor: 3). Therefore, this safety factor changes depending on the usage conditions. If you use it under adverse conditions, please be sure to check the actual product.

### TEST METHOD 5 MAXIMUM HANGING-LOAD TEST



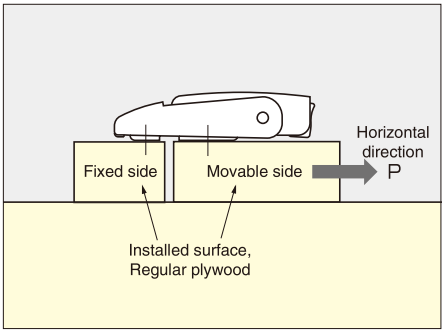

The maximum hanging-load capacity is measured when the force (P) is gently applied in the direction of the arrow and operated under the condition indicated by the figure. If the load is concentrated at the front tip of the hanger, the front tip may sag or the movement may become heavy.

### TEST METHOD 6 BRACKET LOAD CAPACITY TEST



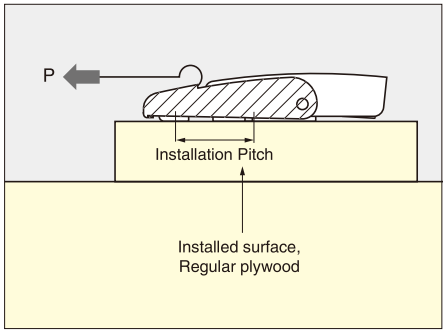

The load capacity is measured when the force (P) is gently applied in the direction of the arrow under the condition indicated by the figure.
(This is based on the force (W) applied at the centre of the shelf board with its length 4/3 times longer than the shelf bracket or angle bracket.)

### TEST METHOD 7 FASTENER LOAD CAPACITY TEST



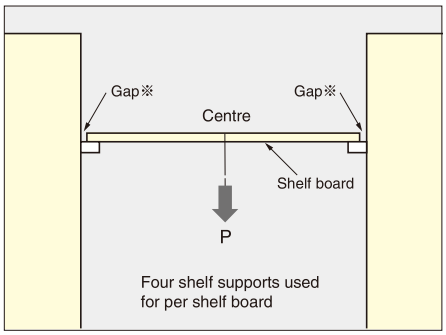

The load capacity is measured when the force (P) is gently applied in the direction of the arrow under the condition indicated by the figure.

### TEST METHOD 8 CLAMPING FORCE TEST UNDER STANDARD INSTALLATION




The capacity of the clamping force under standard installation is measured when the force (P) is gently applied in the direction of the arrow under the condition indicated by the figure, and when the shaded portion begins to slide.

## TEST METHOD 9 DOWEL, SHELF STANDARD LOAD CAPACITY TEST



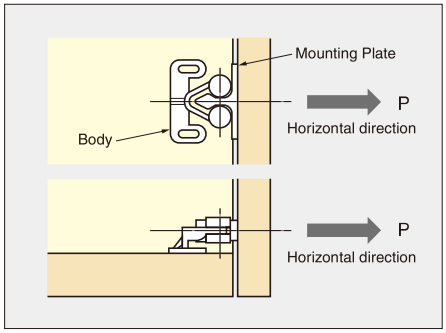

The load capacity is measured when the force (P) is gently applied in the direction of the arrow under the condition indicated by the figure.
Follow the conditions below to prevent the shelf supports or shelf board from falling off.

Condition 1 The gap (※) between the shelf board and the side board shall be 1mm or less.
※ The gap between the shelf board and the shelf standard if shelf support is installed on a shelf standard.

Condition 2 Use shelf board which has sufficient durability.

Condition 3 The mounting hole processing dimension of the shelf dowel shall be less than the recommended mounting hole dimension.
(The processing dimension may vary depending on the material of the side board.

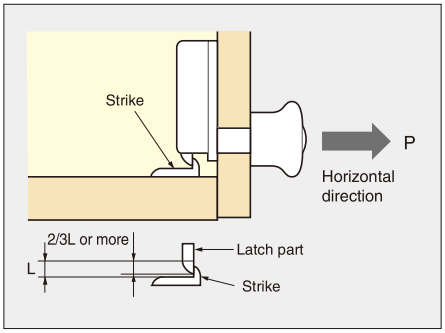
## TEST METHOD 10 CATCH FORCE TEST




The catch force is measured when the force (P) is gently applied in the direction of the arrow under the condition indicated by the figure.

Note: Misalignment of the mounting plate and body parts may cause the catch force to decrease or parts failure.

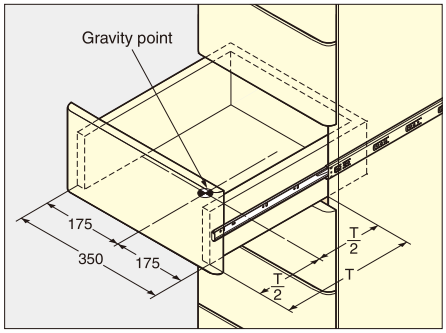
## TEST METHOD 11 RETAINING FORCE TEST




The retaining force is measured when the force (P) is gently applied in the direction of the arrow under the condition indicated by the figure.

Note: Latch and strike must be engaged at least 2/3L or more (see the figure).

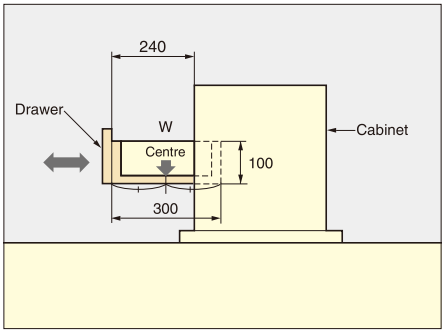
## TEST METHOD 12 DRAWER SLIDE LOAD CAPACITY TEST




Calculation of slide centre of gravity

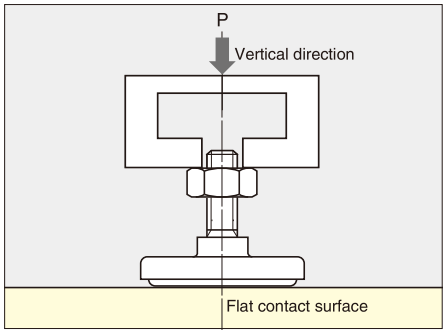
The load capacity is measured based on the condition:
- Continuous open-close: 50,000 cycles
- Speed: 10 cycles per minute
- Load is applied on the gravity point. The figure of load capacity includes drawer itself.
- Drawer width: 350mm

## TEST METHOD 13 DRAWER SLIDE LOAD CAPACITY TEST



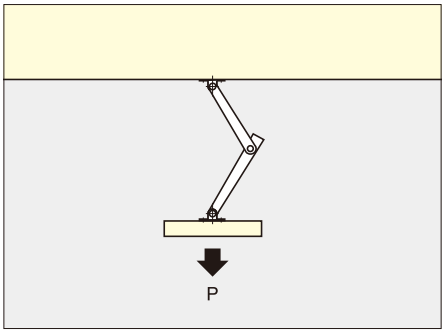

The load capacity is measured when the weight (W) is applied at the centre of the drawer under the condition indicated by the figure and the operation to pull out the drawer by 240mm is repeated. The gap between drawer and cabinet shall be 1 mm or less.

## TEST METHOD 14 LEVELLING GLIDE LOAD CAPACITY TEST



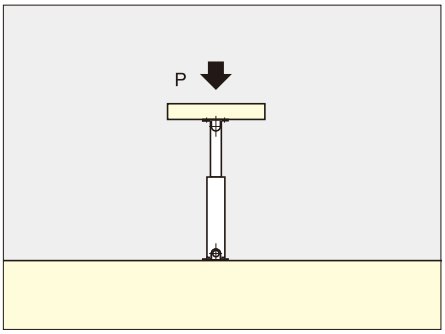

The load capacity is measured when the force (P) is applied in the direction of the arrow under the condition indicated in the figure.
Product may break or distort if the contact surface is not flat.

## TEST METHOD 15 PULL LOAD TEST




The pull load capacity is measured when the force (P) is gently applied in the direction of the arrow under the condition indicated by the figure.

## TEST METHOD 16 COMPRESSION LOAD TEST



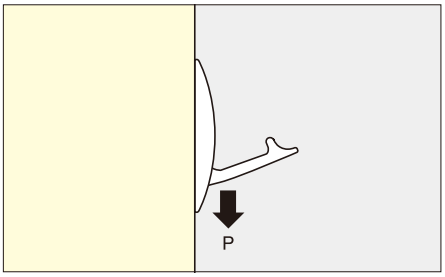

The compression load capacity is measured when the force (P) is gently applied in the direction of the arrow under the condition indicated by the figure.

## TEST METHOD 17 PERMISSIBLE LOAD OF FASTENER

Permissible load kgf = Ultimate Load ÷ 3

The safety factor will vary depending on the conditions of use.
When used under adverse conditions, please test the fastener in intended application.

## TEST METHOD 18 HOOK LOAD CAPACITY TEST

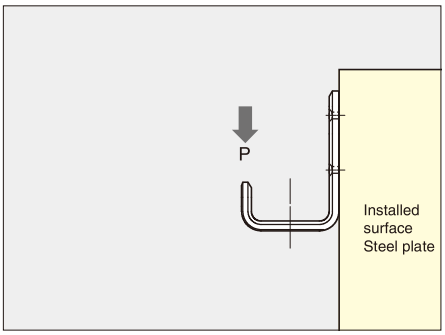



The load capacity is measured when the force (P) is gently applied in the direction of the arrow under the condition indicated by the figure.

Load capacity kgf = Ultimate Load ÷ 3

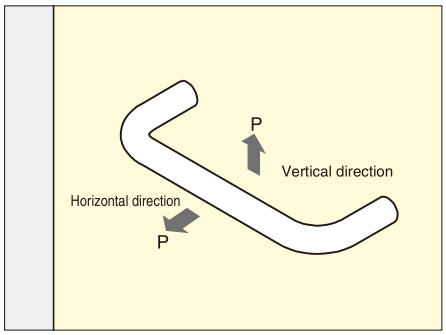
However, the safety factor will vary depending on the conditions of use.
When used under adverse conditions, please test the hook in intended application.

## TEST METHOD 19 HOOK LOAD CAPACITY TEST




Under the conditions shown in the figure, a force (P) is gently applied in the vertical direction. The indicated load capacity value is one-third of the limit load value (safety factor: 3). Therefore, this safety factor changes depending on the usage conditions. If you use it under adverse conditions, please be sure to check the actual product.

## TEST METHOD 20 HANDLE LOAD CAPACITY TEST




Under the conditions shown in the figure, a force (P) is gently applied in the vertical and horizontal directions. The load capacity is a value that indicates the strength of the handle itself. Install it on something with sufficient strength or reinforcement.

# SURFACE TREATMENT

| Finish | Characteristics |
|---|---|
| Zinc Plating | Zinc plating is commonly used on steel to prevent oxidation. Chromate is generally applied over zinc to enhance corrosion resistance. |
| Chromate Conversion Coating | Major coating mainly applied on parts after zinc plated or cadmium plated. Parts are immersed in a solution mainly consisting of chromic acid or heavy chromic acid to create the coating. This is used to improve corrosion resistance and appearance of metals, metal colouration, and is also used as a pre-treatment for painting. Various chromate coatings are developed such as yellow chromate (rainbow colour), clear chromate, black chromate, green chromate, etc. |
| Chrome Plating | Common electroplating for various industrial purposes. Reflective finish can be achieved by polishing. High hardness and good corrosion resistance along with thermal resistance, abrasion resistance and good adhesion characteristics. Generally used as final finish for various decorative parts and products due to its uniquely deep colouration. |
| Nickel Plating | Nickel is commonly used for decorative and anti-corrosion purpose because of its stability against air or humidity compared to iron. However, since the surface of the nickel plating will slightly discolour through exposure to air, chrome is often used after nickel to keep the finish/colour. Nickel plating has moderate hardness / corrosion-resistance and widely used on industrial application. |
| Alumite or Anodising (Anodic Oxidation Film Processing) | Also called the “anodic oxidation film processing”. This process thickens and toughens natural oxide layer on metal, commonly applied to aluminium for corrosion resistance and dyeing. In aluminium anodising, aluminium object serves as the anode (the positive electrode) when electrolysed in the sulfuric acid. This will create a layer of porous oxide film which has high electric insulation and abrasion resistance. The film is normally transparent when it is thin, although it becomes dull as the thickness increases.The pores produced by anodising are closed by a process called sealing, which is done by high-pressurised or boiling-hot deionised water. This process fills the pores and creates a thin layer that is corrosion resistant, suitable for various aluminium parts / products. |

※Hexavalent-Chromium (CR6) Free

Sugatsune is strictly controlling the use of chemicals that would adversely impact the environment. We are designing and developing products with minimum use of materials which has adverse environmental impact. Hexavalent chromium compound is especially known for its adverse effects on the human body. We are actively substituting this Hexavalent-chromium (CR6) with the environment friendly Trivalent-chromium (CR3).

# MATERIALS

In this catalogue, materials are indicated below. (For some items, only the materials of main parts are shown due to space limitations)

## Irons and Steels

| Material | Name |
|---|---|
| Steel | Iron-based screw, washer, etc. |
| Steel (SS) | Rolled steel for general structure |
| Steel (S※※C) | Carbon steel for machine structural use (Enter number for ※) |
| Steel (SECC) | Electrogalvanised steel sheet and steel strip |
| Steel (SF) | Carbon steel forging |
| Steel (SGCC) | Hot-dip galvanised steel sheet and steel strip |
| Steel (SK) | Carbon tool steel |
| Steel (SPCC) | Cold-rolled steel sheet and steel strip |
| Steel (SPHC) | Hot-rolled mild steel sheet and steel strip |
| Steel (SUM) | Sulfur and sulfur-composite free cutting steel |
| Steel (SUP) | Spring steel |
| Steel (SW) | Hard steel wire |
| Steel (SWP) | Piano wire |
| Steel (SWRH) | High carbon steel wire rod |
| Steel (SWRM) | Low carbon steel wire rod |
| Steel (SWCH) | Carbon steel for cold heading |
| Cast Iron (FC) | Grey iron casting |
| Stainless Steel | Stainless steel screw, washer, etc. |
| Stainless Steel (SUS301) | Austenitic stainless steel |
| Stainless Steel (SUS303) | Austenitic stainless steel |
| Stainless Steel (SUS304) | Austenitic stainless steel |
| Stainless Steel (SUS316, SUS316L) | Austenitic stainless steel |
| Stainless Steel (SUS420) | Martensitic stainless steel |
| Stainless Steel (SUS430) | Ferritic stainless steel |
| Stainless Steel (SUS440) | Martensitic stainless steel |
| Stainless Steel (SUS631) | Precipitation hardening stainless steel |
| Stainless Steel (SCS13) | Stainless steel casting |
| Stainless Steel (SCS14) | Stainless steel casting |

## Non-ferrous Metals

| Material | Name |
|---|---|
| Aluminium Alloy | — |
| Aluminium Alloy (ADC) | Aluminium alloy die casting |
| Aluminium Alloy (AC) | Aluminium alloy casting |
| Zinc Alloy | — |
| Zinc Alloy (ZDC) | Zinc alloy die casting |
| Zinc Alloy (BRIC) | A kind of zinc alloy die casting |
| Brass | — |
| Free Cutting Brass | — |
| Phosphor Bronze | — |
| Phosphor Bronze for Spring | — |
| Nickel Silver | — |
| Copper Alloy Casting (CAC) | — |
| Magnesium Alloy (MDC) | Magnesium alloy die casting |
| Titanium Alloy | — |

## Magnets

| Material | Name |
|---|---|
| Ferrite | — |
| Neodymium | — |
| Samarium Cobalt | Samarium-cobalt |
| Alnico | — |

## Plastics

| Material | Name |
|---|---|
| ABS Resin | Acrylonitrile butadiene styrene |
| AES Resin | Acrylonitrile ethylene propylene rubber styrene |
| AS Resin | Acrylonitrile styrene |
| Cellulose Acetate (CA) | — |
| Casein (CS) | — |
| Epoxy Resin (EP) | — |
| Ethylene Vinyl Acetate (EVA) | — |
| EVOH Resin | Ethylene vinyl alcohol |
| FRP | Unsaturated polyester + glass fibre |
| Melamine Resin (MF) | Melamine formaldehyde resin |
| Polyamide (PA) | — |
| Polycarbonate (PC) | — |
| Polyethylene (PE) | — |
| PEEK Resin | Polyether ether ketone |
| High Density Polyethylene (HDPE) | — |
| Chlorinated Polyethylene (CPE) | — |
| PBT Resin | Polybutylene terephthalate |
| PET Resin | Polyethylene terephthalate |
| Phenol resin (PF) | Phenol formaldehyde resin |
| Methacrylic Resin (PMMA) | Polymethyl methacrylate |
| Polyacetal (POM) | — |
| Polypropylene (PP) | — |
| PPO Resin | Polypropylene oxide |
| PPS Resin | Polyphenylene sulfide |
| PPE Resin | Polyphenylene ether |
| Polystyrene (PS) | — |
| High Impact Polystyrene (HIPS) | — |
| Polytetrafluoroethylene (PTFE) | Polytetrafluoroethylene |
| Polyvinyl Chloride (PVC) | Polyvinyl chloride |
| Polyimide (PI) | — |
| Polyamideimide (PAI) | — |
| Polyetherimide (PEI) | — |
| Silicone Resin (SI) | Silicone plastic |
| Urea Resin (UF) | Urea formaldehyde resin |
| Unsaturated polyester Resin (UP) | — |
| ~Elastomer | Elastomer |

## Rubbers

| Material |
|---|
| Natural Rubber (NR) |
| Styrene Butadiene Rubber (SBR) |
| Butadiene Rubber (BR) |
| Isoprene Rubber (IR) |
| Nitrile Rubber (NBR) |
| Chloroprene Rubber (CR) |
| Ethylene Propylene Rubber (EPDM) |
| Isobutylene Isoprene Rubber (IIR) |
| Urethane Rubber (UR) |
| Polyurethane Rubber (PUR) |
| Silicone Rubber (Q) |
| Fluoro Rubber (FKM) |
| Synthetic Rubber |

# DOOR WEIGHT TABLE

Door Weight Calculator

The below density is only for reference and it may differ depending on their material and specification.
For door sizes not listed in the table below, please use the Door Weight Calculator.

Calculation: Door Weight (kg) = Density (Specific Gravity) × Door Height (mm) × Door Width (mm) × Door Thickness (mm) ÷ 1,000,000

## Wooden Door Weight (kg)

| Door Type | MDF (Density 0.8) | | | | | Particle Board (Density 0.6) | | | | | Plywood (Density 0.6) | | | | | Flush (Density 0.5) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Door Thickness mm / Door Size mm | 16 | 19 | 22 | 25 | 35 | 16 | 19 | 22 | 25 | 35 | 16 | 19 | 22 | 25 | 35 | 16 | 19 | 22 | 25 | 35 |
| 300× 400 | 1.5 | 1.8 | 2.1 | 2.4 | 3.4 | 1.2 | 1.4 | 1.6 | 1.8 | 2.5 | 1.2 | 1.4 | 1.6 | 1.8 | 2.5 | 1.0 | 1.1 | 1.3 | 1.5 | 2.1 |
| 300× 500 | 1.9 | 2.3 | 2.6 | 3.0 | 4.2 | 1.4 | 1.7 | 2.0 | 2.3 | 3.2 | 1.4 | 1.7 | 2.0 | 2.3 | 3.2 | 1.2 | 1.4 | 1.7 | 1.9 | 2.6 |
| 300× 600 | 2.3 | 2.7 | 3.2 | 3.6 | 5.0 | 1.7 | 2.1 | 2.4 | 2.7 | 3.8 | 1.7 | 2.1 | 2.4 | 2.7 | 3.8 | 1.4 | 1.7 | 2.0 | 2.3 | 3.2 |
| 300× 700 | 2.7 | 3.2 | 3.7 | 4.2 | 5.9 | 2.0 | 2.4 | 2.8 | 3.2 | 4.4 | 2.0 | 2.4 | 2.8 | 3.2 | 4.4 | 1.7 | 2.0 | 2.3 | 2.6 | 3.7 |
| 300× 800 | 3.1 | 3.6 | 4.2 | 4.8 | 6.7 | 2.3 | 2.7 | 3.2 | 3.6 | 5.0 | 2.3 | 2.7 | 3.2 | 3.6 | 5.0 | 1.9 | 2.3 | 2.6 | 3.0 | 4.2 |
| 300× 900 | 3.5 | 4.1 | 4.8 | 5.4 | 7.6 | 2.6 | 3.1 | 3.6 | 4.1 | 5.7 | 2.6 | 3.1 | 3.6 | 4.1 | 5.7 | 2.2 | 2.6 | 3.0 | 3.4 | 4.7 |
| 300×1000 | 3.8 | 4.6 | 5.3 | 6.0 | 8.4 | 2.9 | 3.4 | 4.0 | 4.5 | 6.3 | 2.9 | 3.4 | 4.0 | 4.5 | 6.3 | 2.4 | 2.9 | 3.3 | 3.8 | 5.3 |
| 400× 500 | 2.6 | 3.0 | 3.5 | 4.0 | 5.6 | 1.9 | 2.3 | 2.6 | 3.0 | 4.2 | 1.9 | 2.3 | 2.6 | 3.0 | 4.2 | 1.6 | 1.9 | 2.2 | 2.5 | 3.5 |
| 400× 600 | 3.1 | 3.6 | 4.2 | 4.8 | 6.7 | 2.3 | 2.7 | 3.2 | 3.6 | 5.0 | 2.3 | 2.7 | 3.2 | 3.6 | 5.0 | 1.9 | 2.3 | 2.6 | 3.0 | 4.2 |
| 400× 700 | 3.6 | 4.3 | 4.9 | 5.6 | 7.8 | 2.7 | 3.2 | 3.7 | 4.2 | 5.9 | 2.7 | 3.2 | 3.7 | 4.2 | 5.9 | 2.2 | 2.7 | 3.1 | 3.5 | 4.9 |
| 400× 800 | 4.1 | 4.9 | 5.6 | 6.4 | 9.0 | 3.1 | 3.6 | 4.2 | 4.8 | 6.7 | 3.1 | 3.6 | 4.2 | 4.8 | 6.7 | 2.6 | 3.0 | 3.5 | 4.0 | 5.6 |
| 400× 900 | 4.6 | 5.5 | 6.3 | 7.2 | 10.1 | 3.5 | 4.1 | 4.8 | 5.4 | 7.6 | 3.5 | 4.1 | 4.8 | 5.4 | 7.6 | 2.9 | 3.4 | 4.0 | 4.5 | 6.3 |
| 400×1000 | 5.1 | 6.1 | 7.0 | 8.0 | 11.2 | 3.8 | 4.6 | 5.3 | 6.0 | 8.4 | 3.8 | 4.6 | 5.3 | 6.0 | 8.4 | 3.2 | 3.8 | 4.4 | 5.0 | 7.0 |
| 400×1100 | 5.6 | 6.7 | 7.7 | 8.8 | 12.3 | 4.2 | 5.0 | 5.8 | 6.6 | 9.2 | 4.2 | 5.0 | 5.8 | 6.6 | 9.2 | 3.5 | 4.2 | 4.8 | 5.5 | 7.7 |
| 400×1200 | 6.1 | 7.3 | 8.4 | 9.6 | 13.4 | 4.6 | 5.5 | 6.3 | 7.2 | 10.1 | 4.6 | 5.5 | 6.3 | 7.2 | 10.1 | 3.8 | 4.6 | 5.3 | 6.0 | 8.4 |
| 500× 600 | 3.8 | 4.6 | 5.3 | 6.0 | 8.4 | 2.9 | 3.4 | 4.0 | 4.5 | 6.3 | 2.9 | 3.4 | 4.0 | 4.5 | 6.3 | 2.4 | 2.9 | 3.3 | 3.8 | 5.3 |
| 500× 700 | 4.5 | 5.3 | 6.2 | 7.0 | 9.8 | 3.4 | 4.0 | 4.6 | 5.3 | 7.4 | 3.4 | 4.0 | 4.6 | 5.3 | 7.4 | 2.8 | 3.3 | 3.9 | 4.4 | 6.1 |
| 500× 800 | 5.1 | 6.1 | 7.0 | 8.0 | 11.2 | 3.8 | 4.6 | 5.3 | 6.0 | 8.4 | 3.8 | 4.6 | 5.3 | 6.0 | 8.4 | 3.2 | 3.8 | 4.4 | 5.0 | 7.0 |
| 500× 900 | 5.8 | 6.8 | 7.9 | 9.0 | 12.6 | 4.3 | 5.1 | 5.9 | 6.8 | 9.5 | 4.3 | 5.1 | 5.9 | 6.8 | 9.5 | 3.6 | 4.3 | 5.0 | 5.6 | 7.9 |
| 500×1000 | 6.4 | 7.6 | 8.8 | 10.0 | 14.0 | 4.8 | 5.7 | 6.6 | 7.5 | 10.5 | 4.8 | 5.7 | 6.6 | 7.5 | 10.5 | 4.0 | 4.8 | 5.5 | 6.3 | 8.8 |
| 500×1100 | 7.0 | 8.4 | 9.7 | 11.0 | 15.4 | 5.3 | 6.3 | 7.3 | 8.3 | 11.6 | 5.3 | 6.3 | 7.3 | 8.3 | 11.6 | 4.4 | 5.2 | 6.1 | 6.9 | 9.6 |
| 500×1200 | 7.7 | 9.1 | 10.6 | 12.0 | 16.8 | 5.8 | 6.8 | 7.9 | 9.0 | 12.6 | 5.8 | 6.8 | 7.9 | 9.0 | 12.6 | 4.8 | 5.7 | 6.6 | 7.5 | 10.5 |
| 500×1300 | 8.3 | 9.9 | 11.4 | 13.0 | 18.2 | 6.2 | 7.4 | 8.6 | 9.8 | 13.7 | 6.2 | 7.4 | 8.6 | 9.8 | 13.7 | 5.2 | 6.2 | 7.2 | 8.1 | 11.4 |
| 500×1400 | 9.0 | 10.6 | 12.3 | 14.0 | 19.6 | 6.7 | 8.0 | 9.2 | 10.5 | 14.7 | 6.7 | 8.0 | 9.2 | 10.5 | 14.7 | 5.6 | 6.7 | 7.7 | 8.8 | 12.3 |
| 500×1500 | 9.6 | 11.4 | 13.2 | 15.0 | 21.0 | 7.2 | 8.6 | 9.9 | 11.3 | 15.8 | 6.0 | 7.1 | 8.3 | 9.4 | 13.1 | 7.2 | 8.6 | 9.9 | 11.3 | 15.8 |
| 500×1600 | 10.2 | 12.2 | 14.1 | 16.0 | 22.4 | 7.7 | 9.1 | 10.6 | 12.0 | 16.8 | 7.7 | 9.1 | 10.6 | 12.0 | 16.8 | 6.4 | 7.6 | 8.8 | 10.0 | 14.0 |
| 500×1700 | 10.9 | 12.9 | 15.0 | 17.0 | 23.8 | 8.2 | 9.7 | 11.2 | 12.8 | 17.9 | 8.2 | 9.7 | 11.2 | 12.8 | 17.9 | 6.8 | 8.1 | 9.4 | 10.6 | 14.9 |
| 500×1800 | 11.5 | 13.7 | 15.8 | 18.0 | 25.2 | 8.6 | 10.3 | 11.9 | 13.5 | 18.9 | 8.6 | 10.3 | 11.9 | 13.5 | 18.9 | 7.2 | 8.6 | 9.9 | 11.3 | 15.8 |

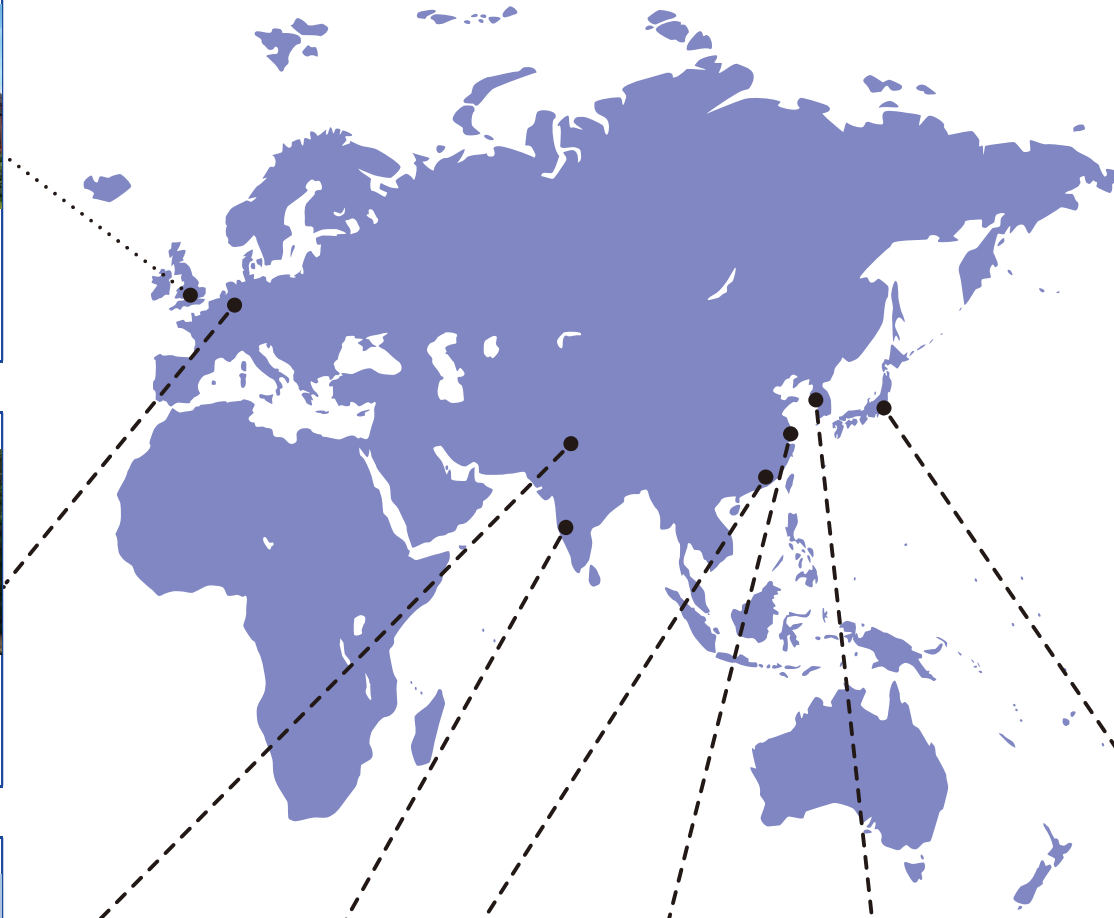
## Glass Door Weight (kg)

| Glass Door Thickness mm | 4 (Density 2.5) | | | | | | | 5 (Density 2.5) | | | | | | | 6 (Density 2.5) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Door Width mm / Door Height mm | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 300 | 400 | 500 | 600 | 700 | 800 | 900 |
| 300 | 0.9 | 1.2 | 1.5 | 1.8 | 2.1 | 2.4 | 2.7 | 1.1 | 1.5 | 1.9 | 2.3 | 2.6 | 3.0 | 3.4 | 1.4 | 1.8 | 2.3 | 2.7 | 3.2 | 3.6 | 4.1 |
| 350 | 1.1 | 1.4 | 1.8 | 2.1 | 2.5 | 2.8 | 3.2 | 1.3 | 1.8 | 2.2 | 2.6 | 3.1 | 3.5 | 3.9 | 1.6 | 2.1 | 2.6 | 3.2 | 3.7 | 4.2 | 4.7 |
| 400 | 1.2 | 1.6 | 2.0 | 2.4 | 2.8 | 3.2 | 3.6 | 1.5 | 2.0 | 2.5 | 3.0 | 3.5 | 4.0 | 4.5 | 1.8 | 2.4 | 3.0 | 3.6 | 4.2 | 4.8 | 5.4 |
| 450 | 1.4 | 1.8 | 2.3 | 2.7 | 3.2 | 3.6 | 4.1 | 1.7 | 2.3 | 2.8 | 3.4 | 3.9 | 4.5 | 5.1 | 2.0 | 2.7 | 3.4 | 4.1 | 4.7 | 5.4 | 6.1 |
| 500 | 1.5 | 2.0 | 2.5 | 3.0 | 3.5 | 4.0 | 4.5 | 1.9 | 2.5 | 3.1 | 3.8 | 4.4 | 5.0 | 5.6 | 2.3 | 3.0 | 3.8 | 4.5 | 5.3 | 6.0 | 6.8 |
| 550 | 1.7 | 2.2 | 2.8 | 3.3 | 3.9 | 4.4 | 5.0 | 2.1 | 2.8 | 3.4 | 4.1 | 4.8 | 5.5 | 6.2 | 2.5 | 3.3 | 4.1 | 5.0 | 5.8 | 6.6 | 7.4 |
| 600 | 1.8 | 2.4 | 3.0 | 3.6 | 4.2 | 4.8 | 5.4 | 2.3 | 3.0 | 3.8 | 4.5 | 5.3 | 6.0 | 6.8 | 2.7 | 3.6 | 4.5 | 5.4 | 6.3 | 7.2 | 8.1 |
| 650 | 2.0 | 2.6 | 3.3 | 3.9 | 4.6 | 5.2 | 5.9 | 2.4 | 3.3 | 4.1 | 4.9 | 5.7 | 6.5 | 7.3 | 2.9 | 3.9 | 4.9 | 5.9 | 6.8 | 7.8 | 8.8 |
| 700 | 2.1 | 2.8 | 3.5 | 4.2 | 4.9 | 5.6 | 6.3 | 2.6 | 3.5 | 4.4 | 5.3 | 6.1 | 7.0 | 7.9 | 3.2 | 4.2 | 5.3 | 6.3 | 7.4 | 8.4 | 9.5 |
| 750 | 2.3 | 3.0 | 3.8 | 4.5 | 5.3 | 6.0 | 6.8 | 2.8 | 3.8 | 4.7 | 5.6 | 6.6 | 7.5 | 8.4 | 3.4 | 4.5 | 5.6 | 6.8 | 7.9 | 9.0 | 10.1 |
| 800 | 2.4 | 3.2 | 4.0 | 4.8 | 5.6 | 6.4 | 7.2 | 3.0 | 4.0 | 5.0 | 6.0 | 7.0 | 8.0 | 9.0 | 3.6 | 4.8 | 6.0 | 7.2 | 8.4 | 9.6 | 10.8 |
| 850 | 2.6 | 3.4 | 4.3 | 5.1 | 6.0 | 6.8 | 7.7 | 3.2 | 4.3 | 5.3 | 6.4 | 7.4 | 8.5 | 9.6 | 3.8 | 5.1 | 6.4 | 7.7 | 8.9 | 10.2 | 11.5 |
| 900 | 2.7 | 3.6 | 4.5 | 5.4 | 6.3 | 7.2 | 8.1 | 3.4 | 4.5 | 5.6 | 6.8 | 7.9 | 9.0 | 10.1 | 4.1 | 5.4 | 6.8 | 8.1 | 9.5 | 10.8 | 12.2 |
| 950 | 2.9 | 3.8 | 4.8 | 5.7 | 6.7 | 7.6 | 8.6 | 3.6 | 4.8 | 5.9 | 7.1 | 8.3 | 9.5 | 10.7 | 4.3 | 5.7 | 7.1 | 8.6 | 10.0 | 11.4 | 12.8 |
| 1000 | 3.0 | 4.0 | 5.0 | 6.0 | 7.0 | 8.0 | 9.0 | 3.8 | 5.0 | 6.3 | 7.5 | 8.8 | 10.0 | 11.3 | 4.5 | 6.0 | 7.5 | 9.0 | 10.5 | 12.0 | 13.5 |
| 1050 | 3.2 | 4.2 | 5.3 | 6.3 | 7.4 | 8.4 | 9.5 | 3.9 | 5.3 | 6.6 | 7.9 | 9.2 | 10.5 | 11.8 | 4.7 | 6.3 | 7.9 | 9.5 | 11.0 | 12.6 | 14.2 |
| 1100 | 3.3 | 4.4 | 5.5 | 6.6 | 7.7 | 8.8 | 9.9 | 4.1 | 5.5 | 6.9 | 8.3 | 9.6 | 11.0 | 12.4 | 5.0 | 6.6 | 8.3 | 9.9 | 11.6 | 13.2 | 14.9 |
| 1150 | 3.5 | 4.6 | 5.8 | 6.9 | 8.1 | 9.2 | 10.4 | 4.3 | 5.8 | 7.2 | 8.6 | 10.1 | 11.5 | 12.9 | 5.2 | 6.9 | 8.6 | 10.4 | 12.1 | 13.8 | 15.5 |

# About Us

September 2024

# Global Network



## Reading, UK



**SUGATSUNE KOGYO(UK)LIMITED**
Office / Showroom
Unit 635 Wharfedale Road Winnersh Triangle
Wokingham RG41 5TP UK
Tel : +44-1189-272-955
Fax : +44-1189-272-871

## Dusseldorf, Germany




**SUGATSUNE EUROPE GmbH**
Office / Showroom
Heerdter Lohweg 87-89
D-40549 Düsseldorf Germany
Tel : +49-211-53812-900
Fax : +49-211-53812-901

## Delhi, India



**SUGATSUNE KOGYO INDIA PRIVATE LIMITED**
Delhi Office / Display Studio
Sugatsune Delhi Display Studio(India)
FIEE Complex,A-36 First Floor,Okhla Phase II ,New Delhi,Delhi 110020,INDIA
Tel : +91-9867299597,
+91-11-45093636
E-mail : sales@sugatsune.in

## Mumbai, India



**SUGATSUNE KOGYO INDIA PRIVATE LIMITED**
Mumbai Office / Showroom
No.G-002 & B-02, Ground Floor,
KANAKIA ATRIUM-2 Next to Courtyard Marriott Hotel, Andheri Kurla Road,
Andheri East, Mumbai-400093,
Maharashtra, INDIA
Tel : +91-9867299597
E-mail : sales@sugatsune.in

## Shanghai, China



**SUGATSUNE SHANGHAI CO.,LTD.**
Shanghai Office / Showroom
Building No.3, No. 100 Hu lan
West Road, Baoshan District, Shanghai
200443, China
Tel : +86-21-3632-1858
Fax : +86-21-3632-1868

## Guangzhou, China



**SUGATSUNE SHANGHAI CO.,LTD.**
Guangzhou Office
15th Floor, KeyThink Center,
No. 278 Xingtai Road.
Panyu District, Guangzhou
511400, China
Tel : +86-20-6639-3554
Fax : +86-20-6230-9772

## Incheon, Korea



**SUGATSUNE KOREA CO., LTD.**
Incheon Office
407 Tower2, 495 Parang-ro, Seo-gu,
Incheon, KOREA 22770
Tel : +82-32-220-0603
Fax : +82-32-220-0605



Los Angeles, USA



**SUGATSUNE AMERICA,INC.**
Main Office
18101 Savarona Way,Carson,
CA 90746 U.S.A.
Tel : +1-310-329-6373
Fax : +1-310-329-0819

Montreal, Canada



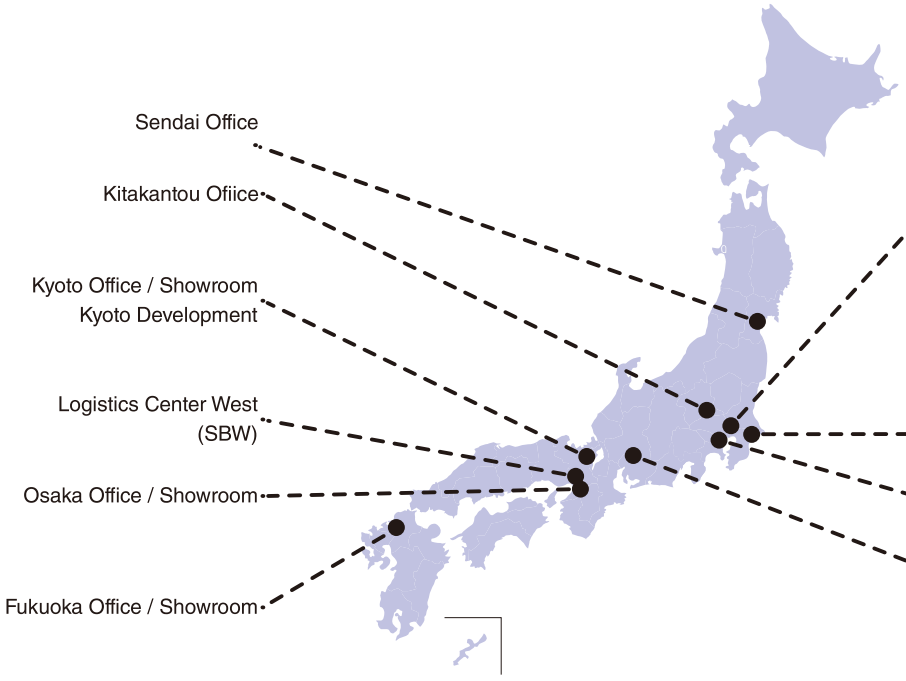
**SUGATSUNE CANADA,INC.**
3775 Boulevard du
Tricentenaire Montreal,
Quebec H1B-5W3 Canada
Tel : +1-514-312-5267
Fax : +1-514-399-0538

Chicago, USA



**SUGATSUNE AMERICA,INC.Midwest Distribution Center**
1790 W Cortland Court, Addison,
IL 60101 U.S.A.
Tel : +1-630-317-7072
Fax : +1-630-519-4107

## Japan



Sendai Office
Kitakantou Ofiice
Kyoto Office / Showroom
Kyoto Development
Logistics Center West
(SBW)
Osaka Office / Showroom
Fukuoka Office / Showroom

Tokyo Head Office / Showroom
Tokyo Development

Export Department
1-8-11 Higashikanda, Chiyoda-ku
Tokyo 101-8633,Japan
Tel : +81-3-3866-2260
Fax : +81-3-3866-4447
E-mail : export@sugatsune.co.jp

Chiba Factory,
Chiba Development
Logistics Center(SBC)
Kanagawa Office
Nagoya Office / Showroom

# Sugatsune's History



The first home shop after the war (1946)

| | |
|---|---|
| 1930 | “Sugatsune Shoten” is founded by Tsunesaburo Sugasawara.Sells European style furniture hardware. |
| 1943 | The company changes its name to “Sugatsune Kogyo Co., Ltd.”, manufacturing metal accessories for communication until the end of the war. |
| 1949 | The company starts manufacture furniture hardware and architectural hardware. |
| 1968 | Capital is increased to 50 million yen. Shin-ohashi Sales Office is moved to the site of Tokyo Factory (Adachi-ku, Tokyo), and Adachi Sales Office is set up. |
| 1969 | Chiba Factory is constructed on the Trading Estate at Matsuo-cho in Chiba. This marked the beginning of mass production. |
| 1975 | Osaka Sales Office (current Osaka Branch) is opened. |
| 1982 | A logistics centre (S.B.C) with a floor area of 4,026m$^2$ is completed at the site of Chiba Factory.<br>Sugatsune America Inc. is established in the United States. |
| 1987 | Sugatsune Kogyo comes up with an original damper technology “Lapcon”. |
| 1992 | Sugatsune Kogyo’s President Sugasawara is presented with a Medal with a Blue Ribbon by the government of Japan.<br>A new logistics centre (S.B.C) with modern facilities is completed. (Floor area of 8,884m$^2$) |
| 1998 | Sugatsune Kogyo’s President Sugasawara receives Gold and Silver Rays, an Order of the Sacred Treasure.<br>A technical centre is built at the site of Chiba Factory.<br>Nagoya Sales Office is opened. The company registers for ISO 9001 certification. |
| 2004 | Sendai and Fukuoka sales offices are opened. An office and showroom are established in Shanghai, China. |
| 2005 | The largest showroom in the industry in Japan is opened at Iwamoto-cho, Chiyoda-ku, Tokyo. A large exhibition is held to commemorate the opening of the new showrooms in Tokyo and Osaka, and a new product presentation is held in Fukuoka and Sendai. Sugatsune UK is established in Great Britain.<br>Shanghai Office is changed to Sugatsune Shanghai. |
| 2006 | A showroom is opened in Nagoya, and an exhibition is held to commemorate the opening of the new showroom.<br>New head office building No.4 and No.5 are completed. |
| 2007 | A new building at logistics centre (S.B.C) is completed. (Floor area of 7,413m$^2$)<br>Nagoya Sales Office is moved from Naka-ku to Kita-ku. |
| 2009 | The product concept “Motion Design Tech” is presented for giving further motion functions to the “opening and closing of doors or lids”. |
| 2011 | Kanagawa Sales Office is opened.<br>Fukuoka Sales Office is moved and a showroom is opened.<br>A showroom and sales office are opened in Chicago by Sugatsune America. |
| 2012 | Kyoto Sales Office is opened. |
| 2013 | Kyoto showroom is opened. |
| 2015 | Sugatsune Kogyo India Private Limited is established in India. A showroom is opened in Mumbai, India.<br>A new logistics centre (SBW) is established in Osaka. |
| 2016 | Sugatsune Europe GmbH is established in Germany.<br>Sugatsune Canada, Inc is established in Canada. |
| 2017 | The Monoflat LIN-X1000 wins a Reddot award. |
| 2018 | Sugatsune UK changes locations. Private exhibitions displaying new products are held in Tokyo, Osaka and Nagoya. In total, exhibitions are held in 13 cities across Japan. Sugatsune EU opens a showroom in Düsseldorf. |
| 2019 | Sales office opens in Northern Kanto. The LDD-V100 door damper wins both the Red Dot design award and also the iF design award. The head office moves to a new location. |
| 2020 | Sugatsune Kogyo celebrated its 90th anniversary. |
| 2022 | Sugatsune Korea is established as a local subsidiary in South Korea. |

# Company Profile

| | |
|---|---|
| **Company Name** | Sugatsune Kogyo Co., Ltd. |
| **President** | Jun Sugasawara |
| **Headquarters** | Tokyo, Japan |
| **Founded** | February 11, 1930 |
| **Established** | November 20, 1943 |
| **Capital** | ¥400,000,000 |
| **Number of Employees** | 497 (January, 2024) |
| **Business Segment** | Furniture fittings, Architectural hardware, Decorative hardware, Various import hardware, Industrial components hardware, IT industrial components, Custom-made items, Lighting part metal, Furniture metal, Fixtures furniture |

**Business Partner Countries & Regions**

Sweden/Netherlands/Belgium/Spain/Portugal/France/Maltese/Monaco/Denmark/Sweden/Finland/Norway/Cyprus/Greece/Brazil/Argentina/Brazil/Argentina/Chile/Britain/Ireland/Germany/Italy/Austria/Oman/Bahrain/Jordan/Iran/Egypt/Qatar/India/Pakistan/SriLanka/Bangladesh/South Africa/Russia/Poland/Romania/Bulgaria/Estonia/Lithuania/Turkey/Israel/Lebanon/SaudiArabia/Kuwait/Australia/NewZealand/Indonesia/Singapore/Malaysia/Thailand/Myanmar/Vietnam/Philippines/Mongolia/China/HongKong/Taiwan/Korea

**Registration**

ISO 9001 : JSAQ384

ISO 14001 : JSAE597

(ISO 9001 : Sugatsune's bases in Japan,
ISO 14001 : Chiba Factory of Chiba Production Division and Logistics Centre of Logistics Division)

General Construction Business Licence No. :
Tokyo Metropolitan Governor Licence (General –25) No.140997

## The Origin of LAMP Brand

The initial trademark for LAMP goods was derived by the company's founder, Tsunezaburo Sugasawara, from the Japanese symbol for "ordinary" (常). By separating this character into its component pieces, he took this to symbolize "the use of fire," which he chose to designate as a metaphor for wisdom and courage. He visualized this concept as a lamp. He thought that Sugatsune goods may, even if only a little, "brighten" society. Sugatsune's reliable quality is still represented by the logo to this day.

HAND_LAMP Mark
Founding time ~ Around 1990

LAMP Mark
Around 1990 ~ Now

# Commitment to Quality and the Environment

All departments from planning, manufacturing to sales have a high awareness of quality, and through unremitting efforts, all the domestic bases in Japan have achieved ISO 9001 certification (registration No.: JSAQ384). We also actively engaged in environmental conservation activities, and achieved ISO 14001 certification (registration No.: JSAE597) at our development bases, namely Chiba Factory of Chiba Production Division and Logistics Centre of Logistics Division.

## Quality Management System ISO 9001 certification (certification/registration) approved

Quality Policy: I consider the fundamentals and pursue the essential and ideal.

Sugatsune America, Sugatsune Europe, and Sugatsune Shanghai are also ISO 9001 certified.

## Environmental Management System ISO 14001 certification (certification/registration) approved

# Connect with Us on Social Media

Watch our product videos, including instructional guides on our YouTube channel.

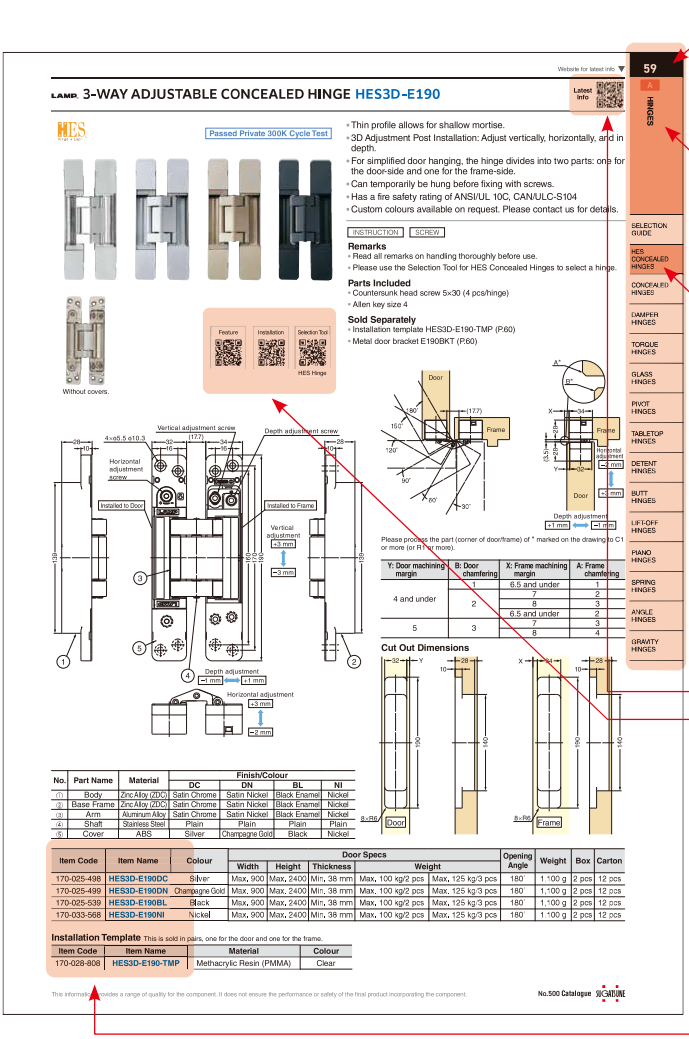
Sugatsune Global

Explore our product applications and stay updated on Instagram and Facebook.

Sugatsune Global

Sugatsune Global

# Description of Main Text

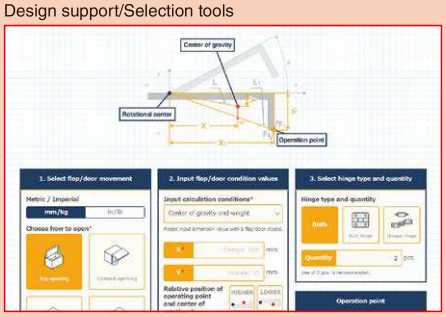



Viewable from the QR code.

Access website, videos and selection tools



Design support/Selection tools



With the selection tool Sasuga-kun, you can select the “Motion Design Tech” products meeting your requirements simply by entering values such as the size and weight of the lid or door. You can use it on our website.

| Item Code | Item Name | Col |
|---|---|---|
| 170-025-498 | HES3D-E190DC | Silv |
| 170-025-499 | HES3D-E190DN | Champag |
| 170-025-539 | HES3D-E190BL | Bla |
| 170-033-568 | HES3D-E190NI | Nic |

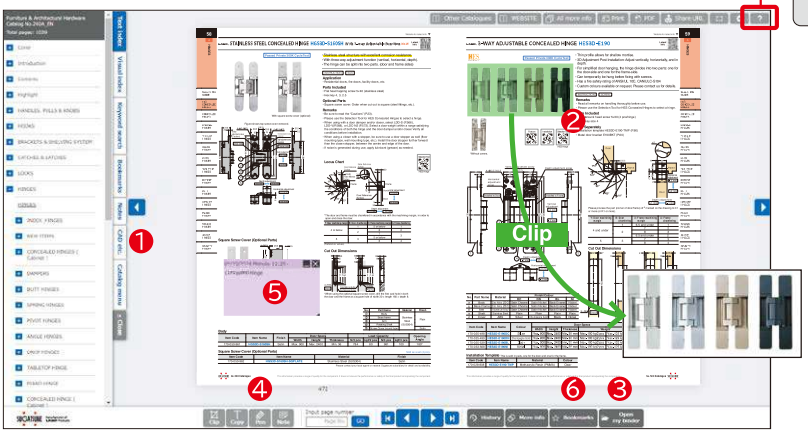
• Please specify the Item Name. and quantity when ordering.

## Online Catalogue Functions

**❶ CAD etc.**
Access product information easily.

**❷ Clip**
Download images within the dragged area.

**❸ MyBinder**
Register favourites to MyBinder to download multiple catalogues together as a single PDF.




*Screens may be changed.

See Help for other functions and operation methods.

**❹ Pen**
Draw arrows, add frames, or take notes on the catalogue as desired.

**❺ Note**
Enter notes. Display only pages with sticky notes affixed.

**❻ Bookmarks**
Register favourite pages for easier reference later.

## How to Use This Catalogue

- All items, unless specified, are made to exact metric dimension.
- Changes in dimensions, finishes, packing, etc., and suspension of production may occur without notice.
- Our liability is limited to the replacement of the merchandise.

## Defective Products

- While great care is taken in the manufacturing of our products, should a defect arise, contact the dealer. The warranty period is one year from the date of our invoice. Should a defect arise during the warranty period, we will replace the product in question with a functioning product within the range of our responsibility.

## Returns/Replacements/Post-Order Changes

- Returns and replacements will be handled upon confirming the actual product after customer consultation with a Sugatsune sales representative. Requests for returns or replacements must be made within 30 days of the date of our invoice.
  Please note that customers will be asked to cover handling charges for returns or replacements made at customer convenience.
- Please note that we may not be able to accommodate changes made after placing orders.

## Precautions for Mounting

- Improper installation may not only cause the product to malfunction but could also result in damage. Handle with care.
  For some products, installation manuals are included or available online. Read the manual thoroughly to ensure correct installation.
- Pay attention to any loosened mounting screws or fastening parts. Screws or fastening parts may loosen due to the mounting conditions or the usage environment. Such loosening may result in decreased functionality or damage to the mounted product, as well as potential injuries. To ensure safe usage, retighten periodically, even if thread-locker is applied to the screws. Generally, retighten one month after initial use, again six months thereafter, and approximately every year subsequently. Note that these guidelines apply to specific conditions and do not guarantee product quality or safety. Their applicability to the product is to be judged by the customer.

## Screws

- The included and recommended screws listed with the product conform to the former JIS standards.

## CAD Data (3D & 2D)

- Register as a member on our website to download CAD data. Additionally, we will verify the registered data, as membership is intended for designers.

## Product Information

- The information listed in this catalogue is current as of September 2024. Product prices, specifications, dimensions, colours, and other details may change without notice due to improvements or material price fluctuations; products may also be discontinued without notice. For the latest information, see our website.
- Due to the hard copy format, some specifications such as details of dimensions and shapes have been omitted.
  For more detailed information, please contact us.
- Many of the listed products include registered or pending designs, patents, and utility models.
- Due to the hard copy format, product colours may differ slightly from the actual products. Please refer to the actual product for accurate colour representation.
- The photographs and computer graphics in the catalogue are visualisations. Depending on the conditions, installation as shown may not be possible. Confirm before purchase.
- Data on specifications and performance, such as loads, weight, force, is listed for use as a guideline to product selection. The values shown are not guaranteed under all conditions.
- Product content listed in this catalogue indicates the quality range as parts. It does not guarantee the functionality, performance, or safety of the final product using these parts.
- Data when using our products with customer products may involve different figures depending on elements such as mounting accuracy, mounting method, temperature, humidity, dust, indoors/outdoors conditions, target product structure, material, size, installation conditions, and individual operation.
- For test content details, request a test report and confirm as needed.
- When using our products near the limits of the listed data, or when confirmation of safety or durability is required in order to prevent accidents, mount the actual product and confirm, or provide the most detailed possible explanation of the usage conditions to consult with us.
- With some exceptions, our products are furniture and architectural fittings for indoor use. Consult with a sales representative concerning use outdoors, near water, or in severe environments.
- Unauthorized reproduction of this catalogue is strictly prohibited.

## Display Content

### Material

For material notation, please see “Materials” on P.1367.

### Finish (surface treatment)

Finish notations are displayed with the following abbreviations due to limitations of space.

| Display | Finish |
|---|---|
| Bright Chromate | Zinc Plated Bright Chromate |
| Coloured Chromate | Zinc Plated Coloured Chromate |

Coloured chromate is characterized by sharply varying hues; this is not a defect.

#### ■Paint

Paint is displayed as follows. (e.g.) Powder Baked Enamel Paint/White

#### ■Colour Display

There may be multiple display methods for a single colour.

(e.g.) White may be indicated as W, WT, or WH.
Black may be indicated as B or BL.
Silver may be indicated as S or SL.

### Dimensional Units

The units for the listed dimensions are millimetres (mm) (unless otherwise stated).

### Dimensional Error

The machining process inevitably results in a degree of product error. Be sure to confirm with the actual product before use.

### Drawings

With some exceptions, drawings employ the third angle projection method. Due to limitations of space, some detailed dimensions, etc. may been omitted.

### Weight

Notations indicate the weight for one product or one set only.

### Load Capacity

The figures displayed for load capacity are examples of data we considered reliable and measured values in tests under conditions specified by us; they are not guaranteed values. As the values may vary depending on the usage method and application, be sure to make a selection upon confirmation of suitability for the application before use.

Units are shown in SI units based on the new measuring method, with MKS units also provided.

### Quantity

Quantity, when notated, is shown as below.

1 box: Quantity in one small box displayed.
1 carton: Quantity in one cardboard box displayed.


SUGATSUNE





September 2024