No.500



Stylishly subtle hardware **highlights displays**





SUGATSUNE

Since 1930

Manufacturer of LAMP® brand products

Furniture & Architectural Hardware



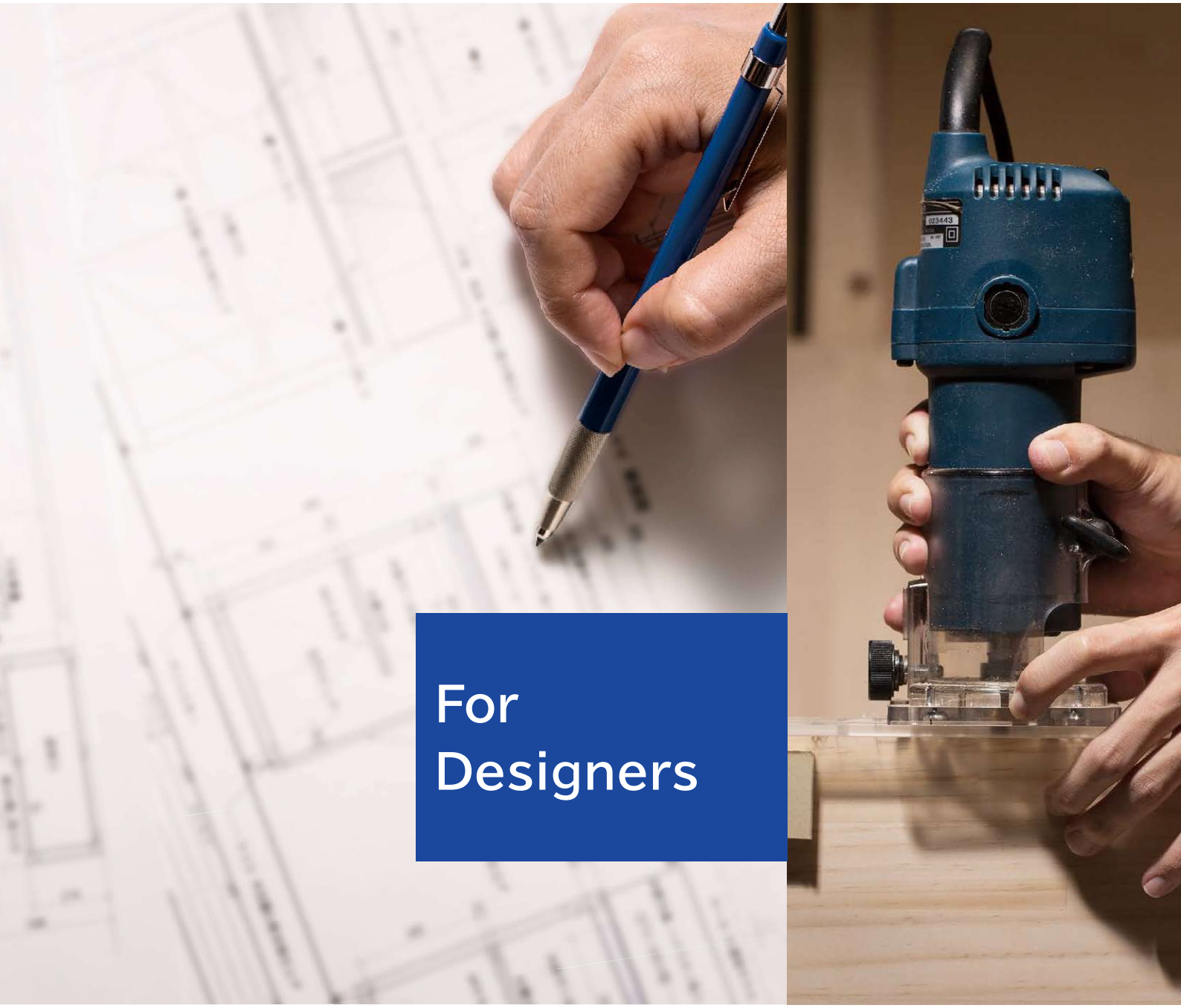
Hinges **integrated** with thin door frames





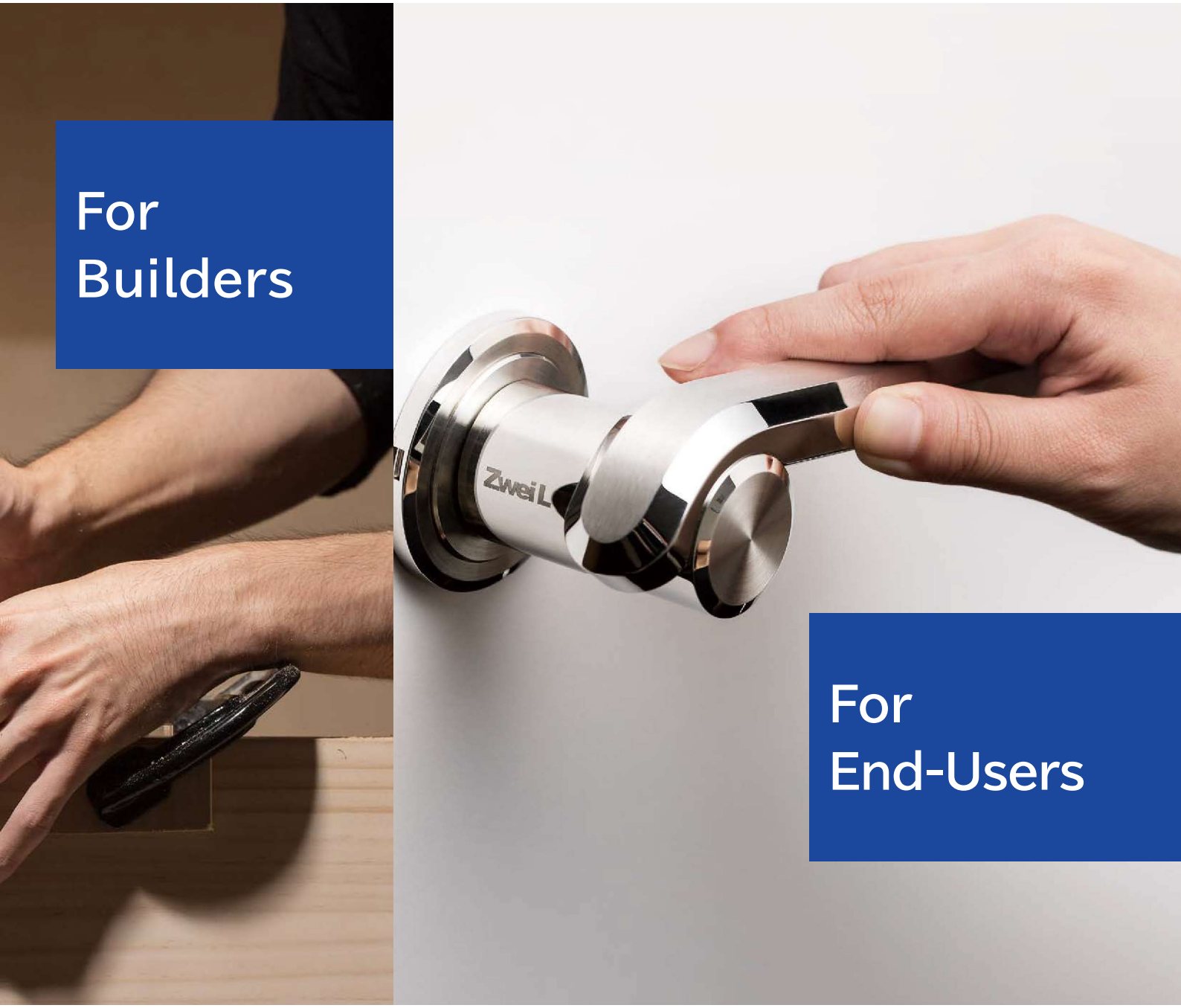
Innovation beyond expectation

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



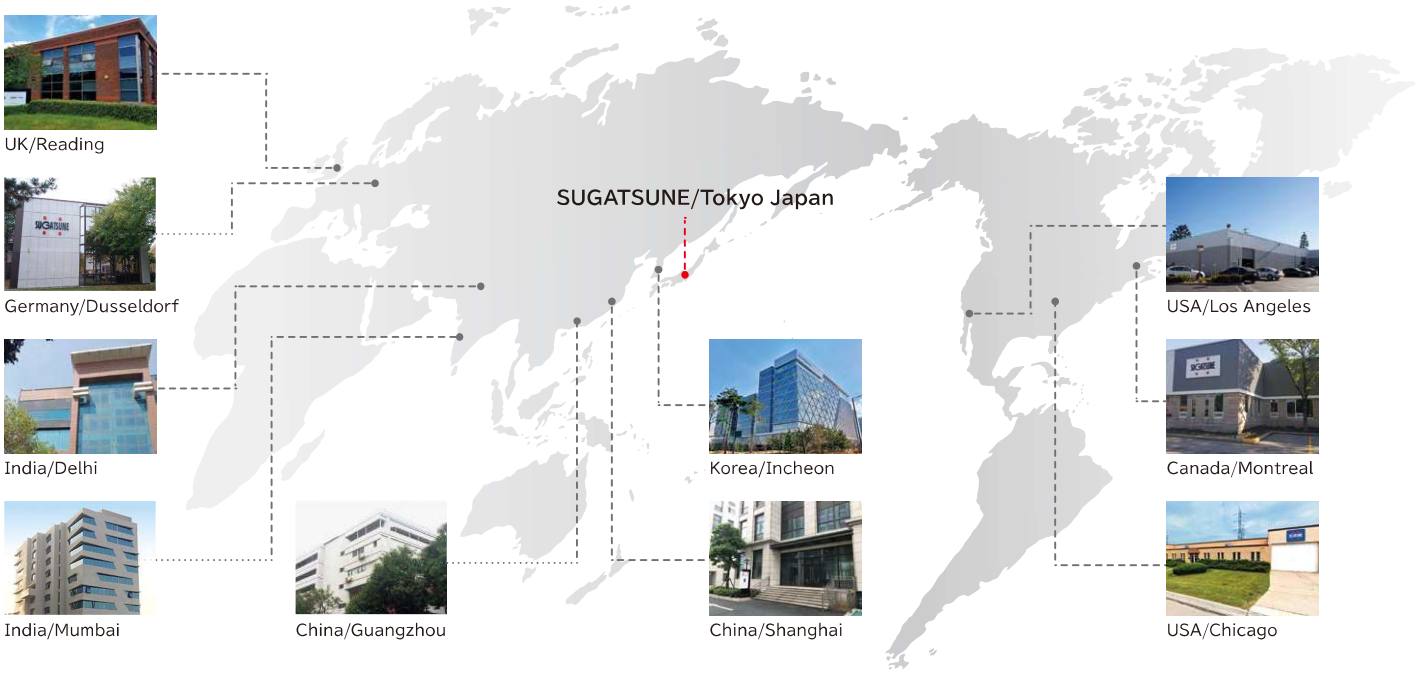
Design is no longer just about shape and colour. To deepen the meaning of "design," practicality and functionality have become integral elements in the Sugatsune manufacturing development process. Without ignoring the traditional design approach, resulting products undoubtedly possess a distinct visually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

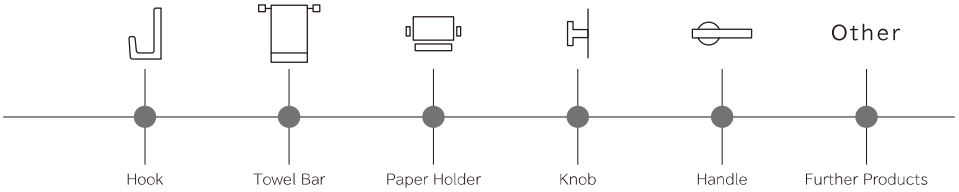








LINE UP





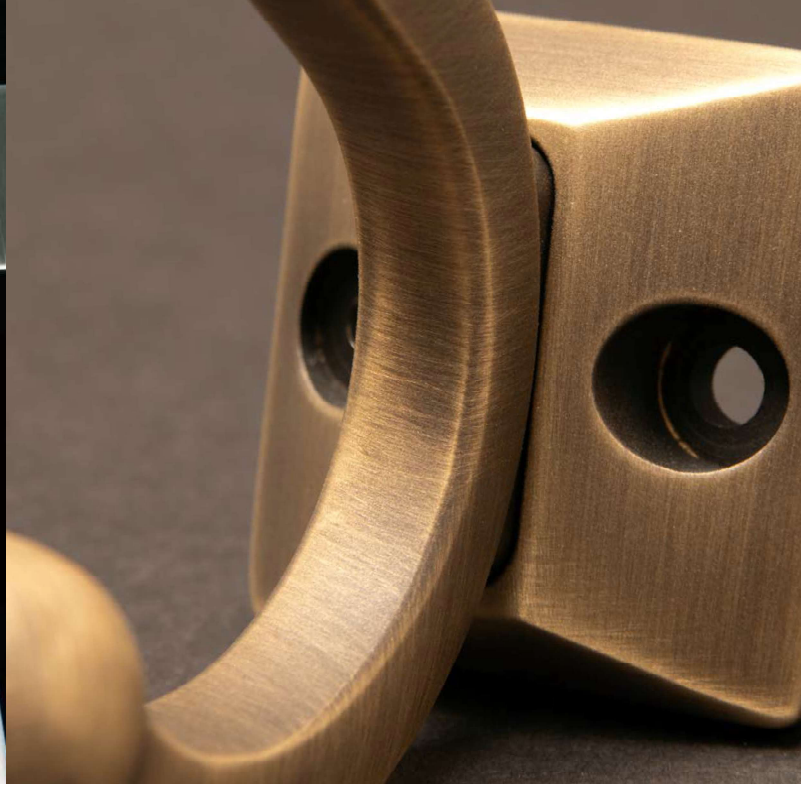
LAMP®

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







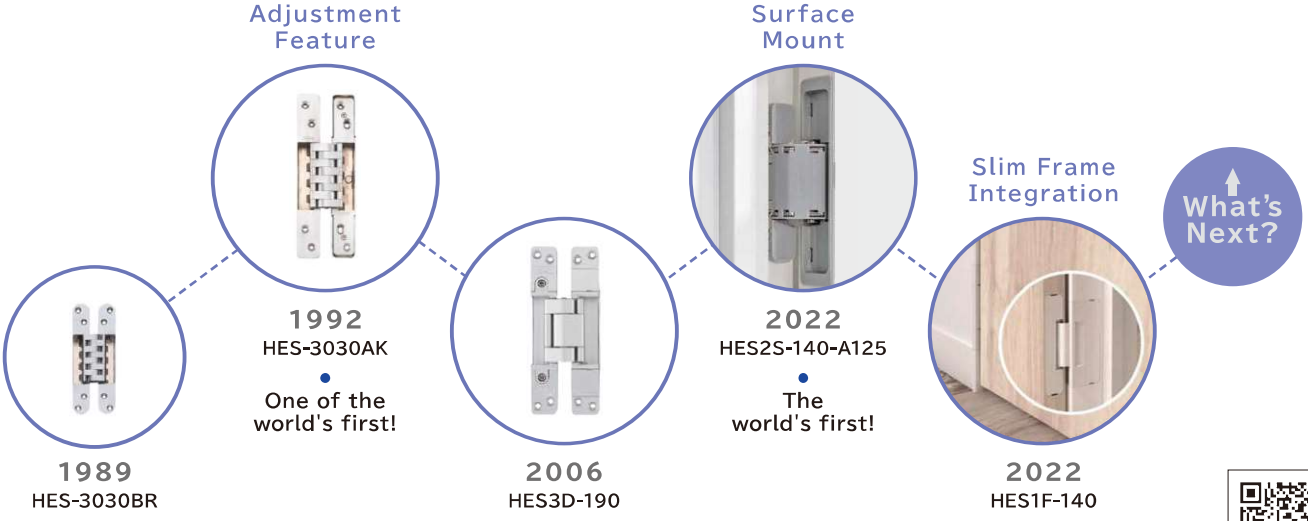
HES1F



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

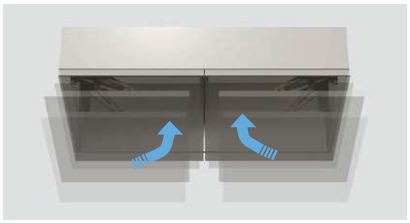
LAMP

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

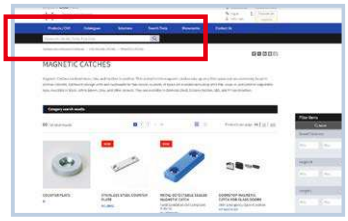
Build Better with Sugatsune!

Explore Our Comprehensive Support Resources

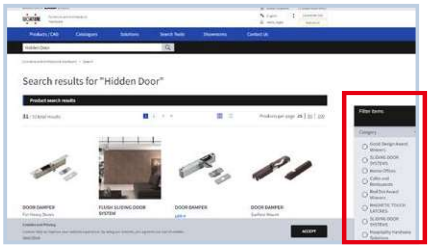


Keyword Search & Product Filters

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"!

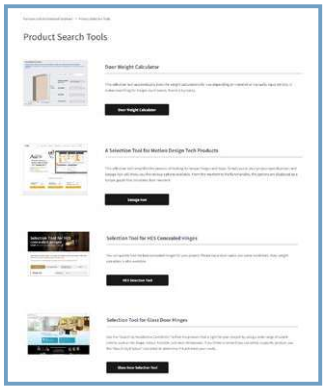


Filter by size, colour, or material as well!

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.










D

WARDROBE & CABINET DOOR HARDWARE

POCKET DOOR SYSTEMS
These components enable opened doors to be retract inside the cabinet. They lead to effective use of the space around the cabinet, without blocking any pathways.

LATERAL OPENING DOOR SYSTEMS
These components stack doors flat against the neighbouring door or wall. With a minimised trajectory when opened/closed, they can also be installed in narrow spaces where swing doors cannot be used. The door stays out of the way even when open.

SLIDING DOOR SYSTEMS
Smooth-motion doors are also available. Choose from various specifications, including doors that stack flat when closed, soft-closing doors, soft-opening doors, and more.

FOLDING DOOR SYSTEMS
Compared to sliding doors, these provide a wider opening.

HANGERS
These fittings are ideal for hanging clothes and other items.

Selection Guide for Wardrobe & Cabinet Door Hardware

Product Types

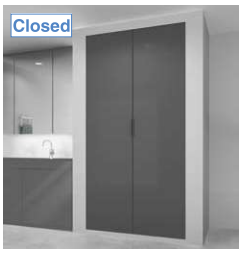
Pocket Door Systems





ALT-2V-10 NEW
P.438





ALT-ST20-D360 NEW
P.454

Lateral Opening Door Systems

Toilet / Bathroom



FAD-5
P.474

Kitchen



LIN-X450/600
P.476



FAD-20
P.487

Closet



LIN-X800
P. 482



LIN-X1000
P. 484

Restaurant



LIN-X1000
P. 484

Sliding Door Systems

Sliding Door (Wooden Door)



OX
P.488

Sliding Door (Glass Door)



XL-GC Series
P.491

Folding Door Systems

Top Mount



KF28
P.498

Sliding Type



FD30-F
P.494

Hangers

Tallman / Slide Coat Hanger



TAS
P.501

Hanger Bracket



CK
P.506

Tie Racks

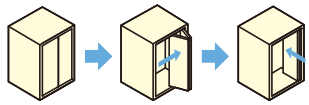


MST-20
P.508

Pocket Door Systems

Folding Door

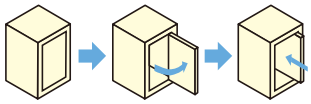
For more information on products, see individual product listing page.



Door weight per door	Type category / Size range	Door size: Door weight (kg)	Door size: Door width (mm)	Door size: Door height (mm)	Door size: Door thickness (mm)	Door Type	Features	
Max. 10 kg	LAMP. Folding Pocket Door System ALT-F							P.432
		Folding pocket door hardware, ideal for laundry spaces and other areas where the space in front of the door can be effectively utilised.						
	2 rail system	Max. 10	Max. 450	Max.1830	23-30	Inset	–	
	3 rail system			1831-2400				

Swing Door

For more information on products, see individual product listing page.



Door weight per door	Type category / Size range	Door size: Door weight (kg)	Door size: Door width (mm)	Door size: Door height (mm)	Door size: Door thickness (mm)	Door Type	Features	
Max. 10 kg	LAMP. Pocket Door System ALT-2V-10 Overlay NEW							P.438
		Wide range of sizes. Overlay-specification swing door storage hardware.						
	S-type (2 slides)	Max. 5	Max. 560	830-1060	18-20	Overlay	–	
	M-type (3 slides)	Max. 6		1250-1500				
	L-type (3 slides)	Max. 8		1650-1840				
	LL-type (4 slides)	Max. 10	Max. 600	1990-2300				
	LAMP. Pocket Door System ALT-2V-360 Inset NEW							P.434
		Wide range of sizes. Inset specification of swing pocket door hardware.						
	S-type (2 slides)	Max. 5	Max. 560	820-1060	18-30	Inset	Soft-close	
	M-type (3 slides)	Max. 6		1240-1500				
	L-type (3 slides)	Max. 8		1640-1840				
	LL-type (4 slides)	Max. 10	Max. 600	1980-2300				
Max. 20 kg	LAMP. Pocket Door System ALT-SN15-D10 Outside-mount Slides / Overlay / Soft Close NEW							P.460
		Swing pocket door hardware with external mounting cover that allows adjustment of the door hanging.						
	S-type (2 slides)	Max. 6	Max. 600	500-700	18-20	Overlay	Soft-close	
	M-type (2 slides)	Max. 9		700-900				
	L-type (2 slides)	Max. 12		900-1200				
	LL-type (3 slides)	Max. 15		1200-1600				
	LAMP. Pocket Door System ALT-SN15-D360 Outside-mount Slides / Inset / Soft Close NEW							P.464
		Open door storage hardware with outside-mounted inset for adjustable door hanging.						
	S-type (2 slides)	Max. 6	Max. 600	500-700	18-30	Inset	Soft-close	
	M-type (2 slides)	Max. 9		700-900				
	L-type (2 slides)	Max. 12		900-1200				
	LL-type (3 slides)	Max. 15		1200-1600				

Retraction of doors: The doors are set inside the cabinet frame, sitting flush with the surface. The doors completely cover the cabinet frame when closed.

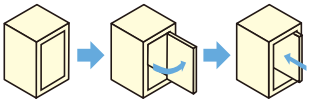
SELECTION GUIDE
POCKET DOOR SYSTEMS
LATERAL OPENING DOOR
SLIDING DOOR
FOLDING DOOR
HANGERS

Swing Door

For more information on products, see individual product listing page.

Door weight per door

Max. 20 kg



Type category Size range	Door size: Door weight (kg)	Door size: Door width (mm)	Door size: Door height (mm)	Door size: Door thickness (mm)	Door Type	Features

LAMP Pocket Door System ALT-ST15-D10 Overlay / Soft Close NEW

P.442



Overlay, swing-pocket door hardware with adjustable door hanging.

Type category Size range	Door weight (kg)	Door width (mm)	Door height (mm)	Door thickness (mm)	Door Type	Features
S-type (2 slides)	Max. 9	Max. 600	500-700	18-20	Overlay	Soft-close
M-type (2 slides)	Max. 9		700-900			
L-type (4 slides)	Max. 15		900-1200			
LL-type (4 slides)	Max. 15		1200-1600			

LAMP Pocket Door System ALT-ST15-D360 Inset / Soft Close NEW

P.446



Inset pocket door system with door alignment adjustability.

Type category Size range	Door weight (kg)	Door width (mm)	Door height (mm)	Door thickness (mm)	Door Type	Features
S-type (2 slides)	Max. 9	Max. 600	500-700	18-30	Inset	Soft-close
M-type (2 slides)	Max. 9		700-900			
L-type (4 slides)	Max. 15		900-1200			
LL-type (4 slides)	Max. 15		1200-1600			

LAMP Pocket Door System ALT-ST20-D10 Overlay / Soft Close NEW

P.450



Overlay, swing-pocket door hardware with adjustable door hanging.

Type category Size range	Door weight (kg)	Door width (mm)	Door height (mm)	Door thickness (mm)	Door Type	Features
S-type (2 slides)	Max. 9	Max. 600	800-1200	18-20	Overlay	Soft-close
M-type (3 slides)	Max. 15		1200-1600			
L-type (4 slides)	Max. 20		1600-2000			
LL-type (4 slides)	Max. 20		2000-2400			

LAMP Pocket Door System ALT-ST20-D360 Inset / Soft Close NEW

P.454

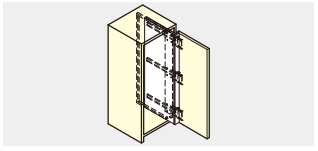


Inset pocket door system with door alignment adjustability.

Type category Size range	Door weight (kg)	Door width (mm)	Door height (mm)	Door thickness (mm)	Door Type	Features
S-type (2 slides)	Max. 9	Max. 600	800-1200	18-30	Inset	Soft-close
M-type (3 slides)	Max. 15		1200-1600			
L-type (4 slides)	Max. 20		1600-2000			
LL-type (4 slides)	Max. 20		2000-2400			

LAMP Pocket Door System (Inset) TSSL-2V

P.470



Can be used in storage areas with a wide frontage. Swing pocket door hardware with a maximum door width of 800 mm.

Type category Size range	Door weight (kg)	Door width (mm)	Door height (mm)	Door thickness (mm)	Door Type	Features
–	Max. 20	Max. 800	1760-2300	18-30	Inset	–

Retraction of doors: The doors are set inside the cabinet frame, sitting flush with the surface. The doors completely cover the cabinet frame when closed.

Lateral Opening Door Systems

Door weight per door	Sliding Doors (Wooden Doors)	Door size: Door width (mm)	Door size: Door height (mm)	Door size: Door thickness (mm)	Cycle Test	Features
Max. 5 kg	LAMP MonoFlat FAD-5 For Light Doors					P.474
		270-350	260-650	15-20	Passed Private 40K Cycle Test	Soft-close
Max. 17 kg	LAMP MonoFlat LIN-X Hinge LIN-X450					P.476
		400-500	600-2400	15-24	Passed Private 40K Cycle Test	Soft-close
Max. 20 kg	LAMP MonoFlat FAD-20 For Medium-Weight Doors					P.487
		Cabinet width internal dimensions: 500-550	Internal cabinet height: 1000-2420	Max. 35	Passed Private 40K Cycle Test	–
Max. 24 kg	LAMP MonoFlat LIN-X Hinge LIN-X600					P.476
		550-650	600-2400	15-24	Passed Private 40K Cycle Test	Soft-close
Max. 40 kg	LAMP MonoFlat LIN-X Hinge LIN-X800					P.482
		750-850	1600-2400 (LIN-X800) 1600-2980 (LIN-X800H)	24-40	Passed Private 100K Cycle Test	Soft-close
Max. 90 kg	LAMP MonoFlat LIN-X Hinge LIN-X1000					P.484
		750-1100	2400-2980	24-40	Passed Private 100K Cycle Test	Soft-close

Retraction of doors: The doors are set inside the cabinet frame, sitting flush with the surface. The doors completely cover the cabinet frame when closed.

Sliding Door Systems

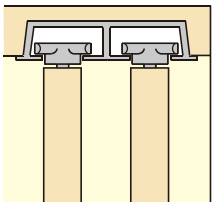
Sliding doors (wooden doors)

Door weight per door	Number of Doors	Door size: Door width (mm)	Door size: Door height (mm)	Door size: Door thickness (mm)	Load method	Door Type	Soft close · open

LAMP Runner For Sliding Door ASDF-1 — P.490

Max. 4 kg



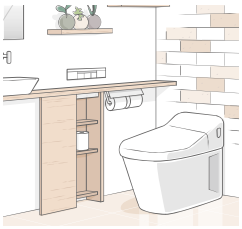


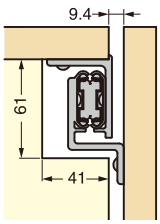
Consists of only two components and features a vertical adjustment mechanism.

Number of Doors	Door width (mm)	Door height (mm)	Door thickness (mm)	Load method	Door Type	Soft close · open
1 door						
2 doors	–	–	16-20	Top hung	Inset	–
3 doors						
4 doors or more						

LAMP Over Travel Sliding Door System OX — P.488

Max. 5 kg





Ideal for small doors such as in vanity units and lavatory storage.

Number of Doors	Door width (mm)	Door height (mm)	Door thickness (mm)	Load method	Door Type	Soft close · open
1 door	305-328	Max. 900	20	Top hung	Overlay	–
2 doors						
3 doors						
4 doors or more						

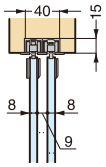
Sliding doors (glass doors) For furniture

Door weight per door	Number of Doors	Door size: Door width (mm)	Door size: Door height (mm)	Door size: Door thickness (mm)	Load method	Retraction of doors	Soft close · open	Frame	Glass processing

LAMP XL-GC Series (For Sliding Doors) — P.491

Max. 12 kg





Hardware For glass showcases with unified hardware design.

Number of Doors	Door width (mm)	Door height (mm)	Door thickness (mm)	Load method	Retraction of doors	Soft close · open	Frame	Glass processing
1 door								
2 doors	Max. 500	Max. 1200	8	Top hung	Inset	–	Corner bracket	●
3 doors								
4 doors or more								

Retraction of doors: The doors are set inside the cabinet frame, sitting flush with the surface. The doors completely cover the cabinet frame when closed.

Folding Door Systems

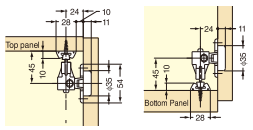
Top Mount

Door weight per door	Number of doors	Door size: Door width (mm)	Door size: Door height (mm)	Door size: Door thickness (mm)	Mounting Type	Hanging Method	Retraction of doors	Built-in Top Bracket	Vertical Adjustment

LAMP Folding Door System KF28 — P.498

Max. 7 kg





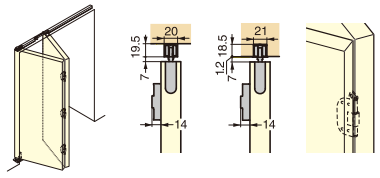
Overlay folding door with concealed hinges.

Number of doors	Door width (mm)	Door height (mm)	Door thickness (mm)	Mounting Type	Hanging Method	Retraction of doors	Built-in Top Bracket	Vertical Adjustment
2 doors x 1 2 doors x 1 + 1 door 2 doors x 2	Max. 450	Max. 2400	15-20	Surface mount / Recessed mount	Top hung	Overlay	–	●

LAMP Folding Door System FD30-F For Pivoted Folding w/ Roller — P.494

Max. 15 kg

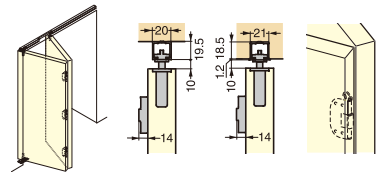
For simple storage without the need for a lower guide rail.



Number of doors	Door width (mm)	Door height (mm)	Door thickness (mm)	Mounting Type	Hanging Method	Retraction of doors	Built-in Top Bracket	Vertical Adjustment
2 doors x 1	Max. 450	Max. 2400	Min. 30	Surface mount / Recessed mount	Top hung	Inset	●	●

LAMP Folding Door System FD30-F For Pivoted Folding Door — P.494

Low-cost version with pivoting upper hardware and no need for a lower guide rail. Ideal for storage.



Number of doors	Door width (mm)	Door height (mm)	Door thickness (mm)	Mounting Type	Hanging Method	Retraction of doors	Built-in Top Bracket	Vertical Adjustment
2 doors x 1	Max. 450	Max. 2400	Min. 28	Surface mount / Recessed mount	Pivot type	Inset	●	●

*Please see the individual product listing pages for details of the drawings.

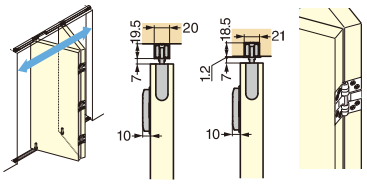
Sliding Type

Door weight per door	Number of doors	Door size: Door width (mm)	Door size: Door height (mm)	Door size: Door thickness (mm)	Mounting Type	Hanging Method	Retraction of doors	Built-in Top Bracket	Vertical Adjustment

LAMP Folding Door System FD30-F For Slidable Folding (For Partition Use) — P.494

Max. 15 kg

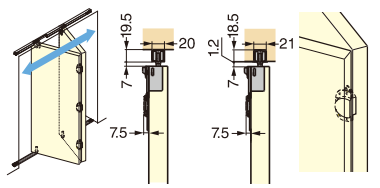
Can be used for partitioning, as the hinges connecting the two folding doors are wood-mounted and not visible from the back.



Number of doors	Door width (mm)	Door height (mm)	Door thickness (mm)	Mounting Type	Hanging Method	Retraction of doors	Built-in Top Bracket	Vertical Adjustment
2 doors x 1	Max. 450	Max. 2400	Min. 30	Surface mount / Recessed mount	Top hung	Inset	●	●

LAMP Folding Door System FD30-F For Slidable Folding (For Cabinet Use) — P.494

The hinges connecting the two folding doors are recess mounted and visible from the rear, making them ideal for storage.



Number of doors	Door width (mm)	Door height (mm)	Door thickness (mm)	Mounting Type	Hanging Method	Retraction of doors	Built-in Top Bracket	Vertical Adjustment
2 doors x 1	Max. 450	Max. 2400	Min. 30	Surface mount / Recessed mount	Top hung	Inset	●	●

*Please see the individual product listing pages for details of the drawings.

Retraction of doors: The doors are set inside the cabinet frame, sitting flush with the surface. The doors completely cover the cabinet frame when closed.

LAMP FOLDING POCKET DOOR SYSTEM ALT-F Inset

Latest Info





	2 rail system	3 rail system
Door Width	Max. 450 mm	
Door Height	Max. 1830 mm	1831 - 2400 mm
Door Thickness	23 - 30 mm	
Door Weight	Max. 10 kg/Door	

Feature

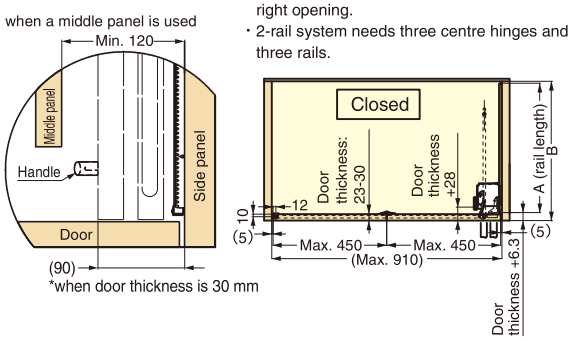
Selection Tool

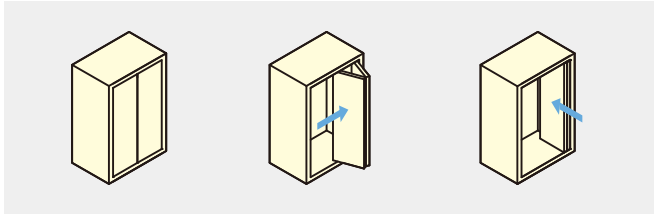
Pocket Door

- Combines folding doors for wider door spaces.
- Folding doors retract into cabinet interior, full access (besides pocket) to the interior.
- Great solution for home and residential in-suite storage including laundry rooms.
- Max door width: 450 mm per door. 2 doors per folding side. Total 1800 mm wide cabinet entrance.

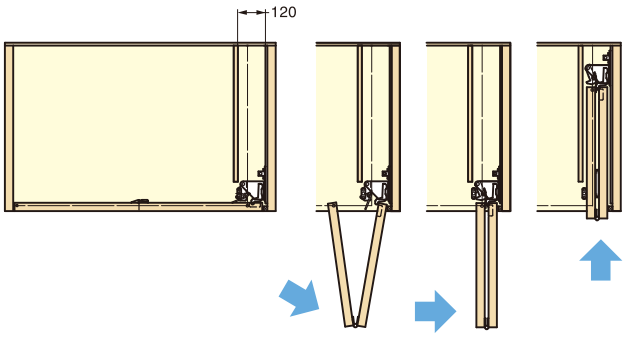
INSTRUCTIONS SCREW

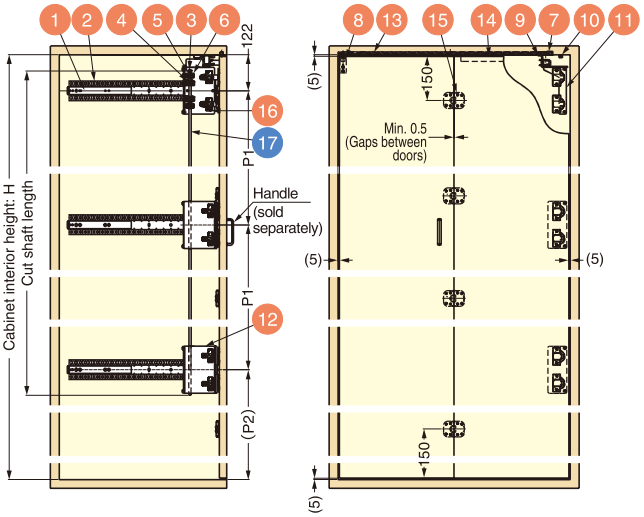
Installation





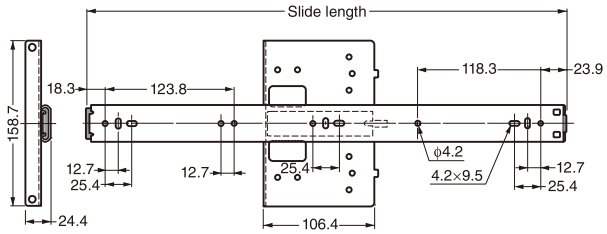
Top View





	2 rail system	3 rail system	
Door height	Max. 1830	1831~1903	1904~2400
Cabinet interior height	Max. 1840	1841~1913	1914~2410
Cut shaft length	H-110		1803
P1	H-250	(H-250)/2	831
(P2)	128		H-1784

Rail 1 Dimensions



Item Name	Rails	Opening	Rail Length	Door Storing	Cabinet Depth
ALT-F18LV2	2	Left Opening	460.4	345.9 + Door Thickness	466.7 + Door Thickness
ALT-F18RV2		Right Opening			
ALT-F20LV2		Left Opening	511.2	396.7 + Door Thickness	517.5 + Door Thickness
ALT-F20RV2		Right Opening			
ALT-F18LV3	3	Left Opening	460.4	345.9 + Door Thickness	466.7 + Door Thickness
ALT-F18RV3		Right Opening			
ALT-F20LV3		Left Opening	511.2	396.7 + Door Thickness	517.5 + Door Thickness
ALT-F20RV3		Right Opening			

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.

How to Order ALT-F

• Required Parts ..... **Parts Set** + **Shaft**

Parts Set

Required Parts

Please refer to "Qty [a] - [h]" for parts included in each set.

	Name (DS: Door Storing / DT: Door Thickness)		Item Code	Item Name
[a]	2 Rail System	Left Opening (DS=345.9+DT)	180-035-215	ALT-F18LV2
[b]		Right Opening (DS=345.9+DT)	180-035-216	ALT-F18RV2
[c]		Left Opening (DS=396.7+DT)	180-035-217	ALT-F20LV2
[d]		Right Opening (DS=396.7+DT)	180-035-218	ALT-F20RV2
[e]	3 Rail System	Left Opening (DS=345.9+DT)	180-034-370	ALT-F18LV3
[f]		Right Opening (DS=345.9+DT)	180-034-371	ALT-F18RV3
[g]		Left Opening (DS=396.7+DT)	180-034-372	ALT-F20LV3
[h]		Right Opening (DS=396.7+DT)	180-034-373	ALT-F20RV3

Parts Included

No.	Qty [a], [b], [e], [f]	Qty [c], [d], [g], [h]	Part Name	Dimensions	Description
①	2 pcs	3 pcs	Rail	See P.432	• Material Steel • Finish Black Chromate
②	2 pcs	3 pcs	Rack	-	• Material ABS • Finish Black
③	1 pc	1 pc	Cap		• Material Steel • Finish Black Chromate
④	4 pcs	6 pcs	Gear		• Material POM • Finish Black
⑤	4 pcs	6 pcs	Bush		• Material POM • Finish Black
⑥	4 pcs	6 pcs	Stationary Block		• Material POM • Finish Black Screw : Binding Head Self Tapping Screw UNC8-32
⑦	1 pc	1 pc	Upper Rail Joint		• Material POM • Finish White
⑧	1 pc	1 pc	End Guide		• Material Steel (SPCC) / POM • Finish Yellow Zinc Chromate / Natural
⑨	1 pc	1 pc	Angle Stopper		• Material Steel (SPCC) • Finish Nickel
⑩	1 pc	1 pc	Inner Guide		• Material POM • Finish White
⑪	1 pc	1 pc	Interlock	Right type shown.	• Material Steel / POM • Finish Black / White
⑫	1 pc	2 pcs	Hinge Cover Bracket		• Material Steel (SPCC) • Finish Black Paint
⑬	1 pc	1 pc	Upper Rail (1820 mm)	Bore Pitch : Approx. 300 mm Pitch End : Approx. 30 mm	• Material Aluminium • Finish Anodized Silver
⑭	1 pc	1 pc	Bottom Guide Rail (1500 mm)		• Material Aluminium • Finish Anodized Silver
⑮	3 pcs	4 pcs	Centre Hinge		• Material Steel • Finish Black Screw : Countersunk Head Tapping Screw 3.5×16
⑯	4 pcs	6 pcs	Hinge Set		**Item Code : 180-026-432** **Item Name :** ALT-F-8086HKEZX • Material Steel / Zinc Alloy • Finish Yellow Zinc Chromate / Black
Included Screws	8 pcs	12 pcs	Cross-recessed pan head tapping screw 4×20 (for ⑥)		
	18 pcs	27 pcs	Cross-recessed truss head tapping screw 4×20 (for ①)		
	8 pcs	8 pcs	Cross-recessed countersunk screw 4×20 (for ⑦⑩⑭)		
	4 pcs	6 pcs	Cross-recessed pan head screw M6×8 (for ⑪⑫)		
	2 pcs	2 pcs	Cross-recessed binding head tapping screw 4.5×20 (for ⑨)		
	2 pcs	2 pcs	Hexagon head tapping screw with flange 4×16 (for ⑧)		
	2 pcs	2 pcs	Spring washer 4 (for ⑧)		
	10 pcs	10 pcs	Cross-recessed countersunk tapping screw 3.5×16 head diameter 6 (for ⑬)		
	8 pcs	12 pcs	Cross-recessed countersunk tapping screw 3.5×20 (for ⑯)		

Shaft

Required Parts (Select One)

1 pc is necessary for a pair of doors.

No.	Length	Qty	Item Code	Part Name	Dimensions	Description
⑰	902±13 mm	1 pc	180-121-047 Item Name 29475-36	Shaft		• Material Steel • Finish Black Chromate
	1207±13 mm	1 pc	180-121-048 Item Name 29475-48			
	1816±13 mm	1 pc	180-121-049 Item Name 29475-72			

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 POCKET DOOR SYSTEM ALT-2V-360 Inset NEW

Latest Info





Size Type	ALT-2V-C/D360S S (2 slides)	ALT-2V-C/D360M M (3 slides)	ALT-2V-C/D360L L (3 slides)	ALT-2V-C/D360LL LL (4 slides)
Width	Max. 560mm	Max. 560mm	Max. 560mm	Max. 600mm
Heigth	820 - 1060mm	1240 - 1500mm	1640 - 1840mm	1980 - 2300mm
Thickness	18 - 30mm (In case of using with 360-C26-0T or 360-D26-0T: 18 - 20mm)			
Weight	Max. 5kg	Max. 6kg	Max. 8kg	Max. 10kg

Inset pocket door system with various size options.

- Sliding system allows doors to retract inside cabinets. Doors will not occupy space, providing full access to inside of cabinets.
- Has slides for smooth door motion.
- The slides hold doors in position when they slide out of cabinets. This prevents doors from sagging.
- Has easier hinge position adjustment than previous model.
- 2 types are available: "with catch" and "with damper" types.
- Can also be used with 360-C26-0T and 360-D26-0T hinges (P.83). The 360-26-0T (without catch type) is also availabe.

INSTRUCTION SCREW

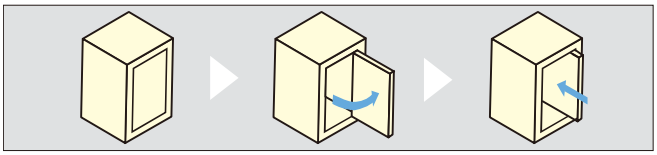
Remarks

- To get best performance of this product, cabinet requires precise mortice. Please contact us for details.
- Never cut the slides.
- Do not close doors until they slide out and catch has activated.

Feature Selection Tool

Pocket Door

Door Motion



Item Name of Parts Set

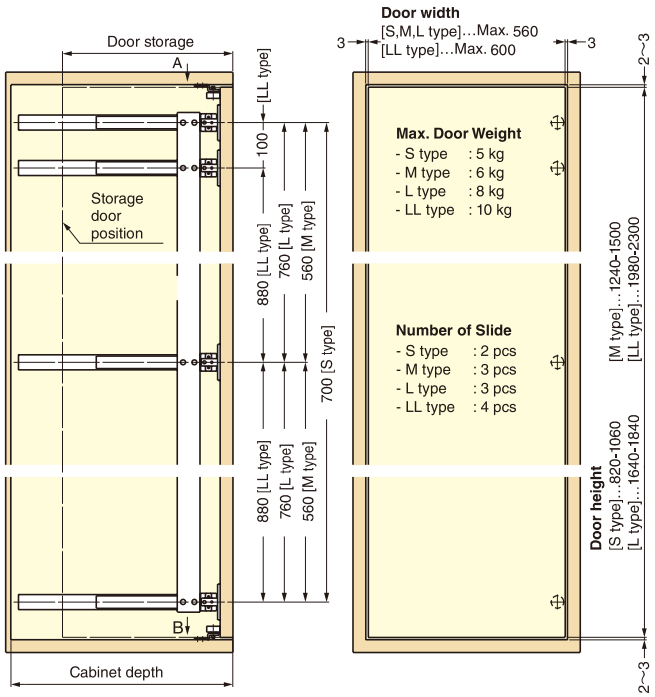
ALT-2V- C/D 360 S - 16

C: with catch
D: with damper

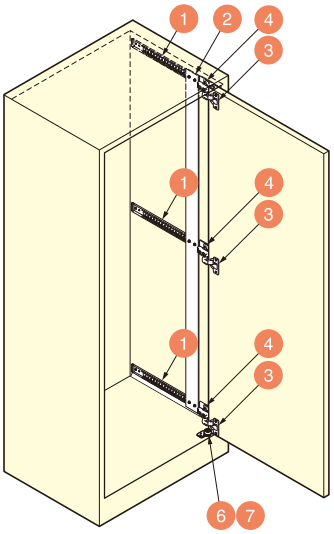
Size type

Last letter of item name of slides
(See P.436)

Installation

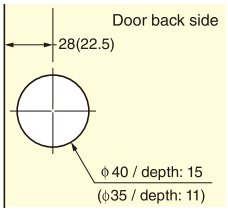


Installation Example



Details about parts: (P.436 - 437)

Cut Out Dimensions



Note that there are some differences with the ALT-2V-220. (previous model)

The () shows the dimensions when usign with 360-C26-0T and 360-D26-0T .

Last Letter of Item Name (parts set)	Door Storage Amount	Min. Cabinet Depth
16	269 + DT (270 + DT)	412 + DT
19	345 + DT (346 + DT)	488 + DT
22	421 + DT (422 + DT)	564 + DT
24	472 + DT (473 + DT)	615 + DT
28	574 + DT (575 + DT)	717 + DT

*DT: Door Thickness

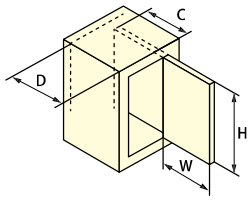
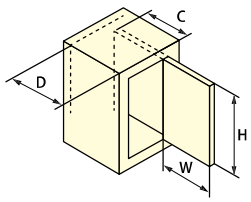
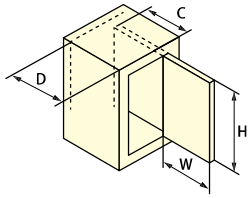
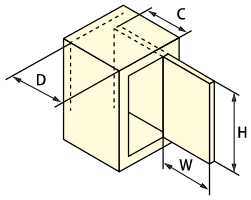
This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

How to Order ALT-2V-360

• Required Parts ..... Parts Set

Parts set

Necessary to order. Each item includes required parts as a set.

Type	Door Spec (Thickness: 18 - 30mm*)	C	D (minimum)	With	Item Code	Item Name
S	 W=Max.560mm Weight: Max.5kg H=820-1060mm	269 + DT	412 + DT	catch	180-046-756	ALT-2V-C360S-16
				damper	180-046-776	ALT-2V-D360S-16
		345 + DT	488 + DT	catch	180-046-757	ALT-2V-C360S-19
				damper	180-046-777	ALT-2V-D360S-19
		421 + DT	564 + DT	catch	180-046-758	ALT-2V-C360S-22
				damper	180-046-778	ALT-2V-D360S-22
		472 + DT	615 + DT	catch	180-046-759	ALT-2V-C360S-24
				damper	180-046-779	ALT-2V-D360S-24
		574 + DT	717 + DT	catch	180-046-760	ALT-2V-C360S-28
				damper	180-046-780	ALT-2V-D360S-28
M	 W=Max.560mm Weight: Max.6kg H=1240-1500mm	269 + DT	412 + DT	catch	180-046-761	ALT-2V-C360M-16
				damper	180-046-781	ALT-2V-D360M-16
		345 + DT	488 + DT	catch	180-046-762	ALT-2V-C360M-19
				damper	180-046-782	ALT-2V-D360M-19
		421 + DT	564 + DT	catch	180-046-763	ALT-2V-C360M-22
				damper	180-046-783	ALT-2V-D360M-22
		472 + DT	615 + DT	catch	180-046-764	ALT-2V-C360M-24
				damper	180-046-784	ALT-2V-D360M-24
		574 + DT	717 + DT	catch	180-046-765	ALT-2V-C360M-28
				damper	180-046-785	ALT-2V-D360M-28
L	 W=Max.560mm Weight:Max.8kg H=1640-1840mm	269 + DT	412 + DT	catch	180-046-766	ALT-2V-C360L-16
				damper	180-046-786	ALT-2V-D360L-16
		345 + DT	488 + DT	catch	180-046-767	ALT-2V-C360L-19
				damper	180-046-787	ALT-2V-D360L-19
		421 + DT	564 + DT	catch	180-046-768	ALT-2V-C360L-22
				damper	180-046-788	ALT-2V-D360L-22
		472 + DT	615 + DT	catch	180-046-769	ALT-2V-C360L-24
				damper	180-046-789	ALT-2V-D360L-24
		574 + DT	717 + DT	catch	180-046-770	ALT-2V-C360L-28
				damper	180-046-790	ALT-2V-D360L-28
LL	 W=Max.600mm Weight=Max.10kg H=1980-2300mm	269 + DT	412 + DT	catch	180-046-771	ALT-2V-C360LL-16
				damper	180-046-791	ALT-2V-D360LL-16
		345 + DT	488 + DT	catch	180-046-772	ALT-2V-C360LL-19
				damper	180-046-792	ALT-2V-D360LL-19
		421 + DT	564 + DT	catch	180-046-773	ALT-2V-C360LL-22
				damper	180-046-793	ALT-2V-D360LL-22
		472 + DT	615 + DT	catch	180-046-774	ALT-2V-C360LL-24
				damper	180-046-794	ALT-2V-D360LL-24
		574 + DT	717 + DT	catch	180-046-775	ALT-2V-C360LL-28
				damper	180-046-795	ALT-2V-D360LL-28

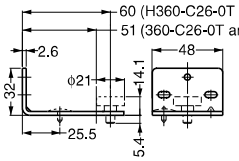
*In case of using with 360-C26-0T and 360-D26-0T, available door thickness is 18 - 20 mm.

* DT: Door Thickness

Optional Parts

No.	Qty	Item Code	Part Name
11	1	180-120-340	Bracket
		Item Name: ALT-BR	

Dimensions



Specification

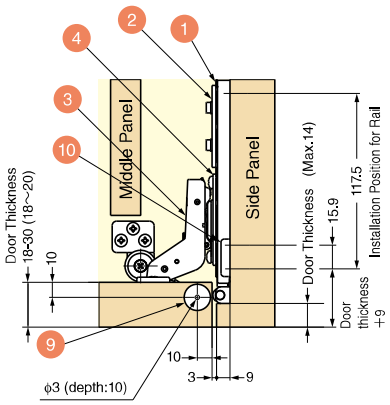
- Material: Steel
- Finish: Coloured Chromate (trivalent)

[Application]
Use this bracket when there is space between door and floor.

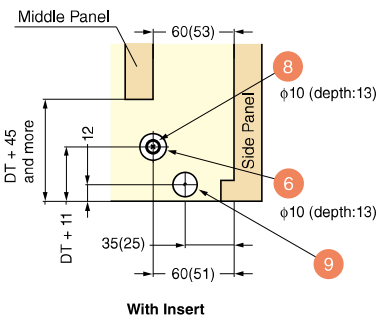
New slide lengths added.
For the latest information, please refer to
the digital New Products Catalogue on pages P.D1-.

Installation of Slide

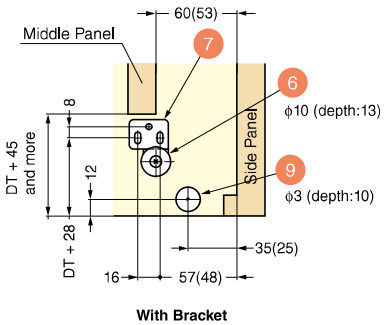
Cross section A (P.434)



Cross section B (P.434)



With Insert



With Bracket

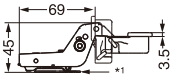
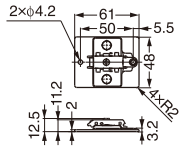
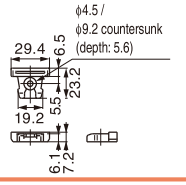
If slides need to be concealed, install a middle panel.

The () shows the dimensions when using with 360-C26-0T and 360-D26-0T.

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.

ALT-2V-360 Parts Set Details

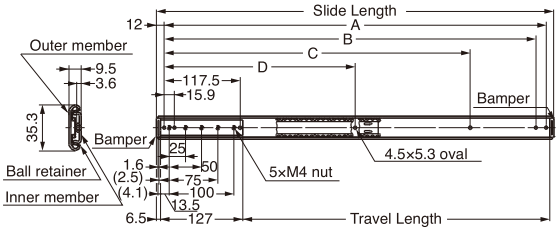
These parts are included in the parts set, and are also sold seperately.

No.	Quantity S	M	L	LL	Parts	Dimension	Item Code
1	2	3	3	4	Slide 	See also the drawing on the right.	190-113-867 Item Name: **AL127C-16** (included in ALT-2V-***-16) 190-113-868 Item Name: **AL127C-19** (included in ALT-2V-***-19) 190-113-869 Item Name: **AL127C-22** (included in ALT-2V-***-22) 190-113-870 Item Name: **AL127C-24** (included in ALT-2V-***-24) 190-113-871 Item Name: **AL127C-28** (included in ALT-2V-***-28) Spec • Material: Steel • Finish: Chrome
2	1	1	1	1	Connecting Plate 	See also the drawing on the right.	180-120-526 Item Name: **ALT55-S** (included in S type) 180-120-525 Item Name: **ALT55-M** (included in M type) 180-120-524 Item Name: **ALT55-L** (included in L type) 180-120-523 Item Name: **ALT55-LL** (included in LL type) Spec • Material: Aluminium Alloy • Finish: Silver Anodized
3	2	3	3	4	Hinge*2 		160-029-080 [With catch type] H360-C26-0T 160-029-086 [With damper type] H360-D26-0T Spec • Main Material: Steel • Finish: Nickel
4	2	3	3	4	Mounting Plate 		160-046-459 Item Name: **ALT-MP360** Spec • Material: Steel • Finish: Nickel
5	1	2	2	2	Catch 		180-120-522 Item Name: **AL127-CH** Spec • Material: Polyurethane/ Elastomer (TPU) • Colour: Black

* For numbers of parts which are included in the parts set, please see the instruction manual.
*1 The mounting plate is not included.
*2 When using concealed hinges 360-C26-0T / 360-D26-0T, please order the hinge separately.

Option 11 is not included.

Drawing of Slide

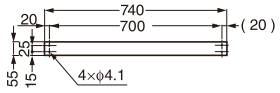


For details about size type: P.434 - 435

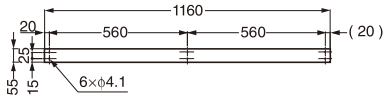
Item Name	Slide Length	Travel	Door Storage	A	B	C	D
AL127C-16	411.4	269.4	268	387.4	371.5	269.9	–
AL127C-19	487.6	345.6	344	463.6	447.7	346.1	231.8
AL127C-22	563.8	421.8	420	539.8	523.9	422.3	269.9
AL127C-24	614.6	472.6	471	590.6	574.7	473.1	295.3
AL127C-28	716.2	574.2	573	692.2	676.3	574.7	346.1

Drawing of Connecting Plate

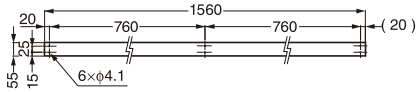
ALT55-S



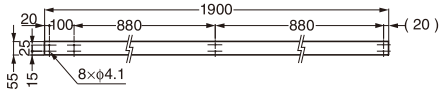
ALT55-M



ALT55-L



ALT55-LL



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.

Components Set 6 - 10

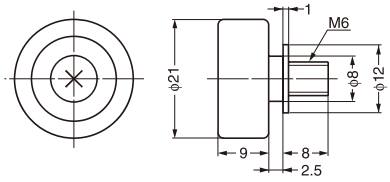
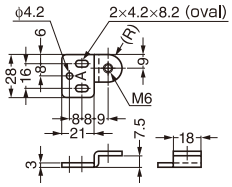
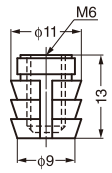
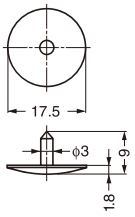
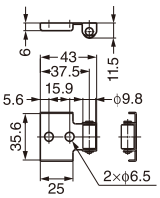
Each item includes required parts as a set.

[S type]
- Item Code : 180-046-917
- Item Name : **ALT-2V-360SP**

[M/L type]
- Item Code : 180-046-918
- Item Name : **ALT-2V-360LP**

[LL type]
- Item Code : 180-046-919
- Item Name : **ALT-2V-360LLP**

Details These parts are included in the components set, and are also sold seperately.

No.	Quantity			Parts	Drawing	Specs
	S type	M/L type	LL type			
6	2	2	2	Roller 		Item Code : 180-940-144 Item Name : **DU19-B4SBR** • Material: Ethylene propylene rubber (EPDM)/Steel • Finish/Colour: Chromate (trivalent)/White
7	1 (Left and Right)	1 (Left and Right)	1 (Left and Right)	Roller Bracket 	 Letter stamped indicates type.	[Type A] Item Code : 180-930-145 Item Name : **ALT-2V-AB** [Type B] Item Code : 180-930-146 Item Name : **ALT-2V-BB** • Material : Steel • Finish : Yellow Zinc Chromate
8	2	2	2	Insert 		Item Code : 120-041-310 Item Name : **SC-107-13** • Material : Polyamide (PA) • Colour : White
9	2	2	2	Slider 		Item Code : 210-030-123 Item Name : **G-175** • Material : polyethylene (PE) • Colour : Natural
10	2	3	4	Door Stopper 		Item Code : 180-930-416 Item Name : **ALT-AD** • Material: Steel / Ethylene propylene rubber (EPDM) • Finish/Colour: Chrome / White

Included Parts

Hex key, Pan head screw M4 x 6, binding head tapping screw, countersunk head tapping screw, hexagon top bolt M4 x 6
(These are not included in parts which are sold singly.)

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 POCKET DOOR SYSTEM ALT-2V-10 Overlay NEW

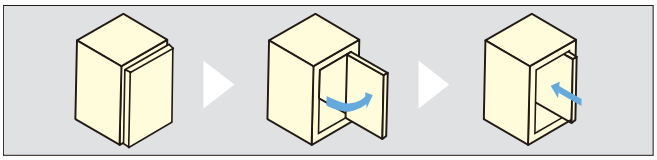
Latest Info



When Closed



Door Motion



Size Type	ALT-2V-10S S (2 slides)	ALT-2V-10M M (3 slides)	ALT-2V-10L L (3 slides)	ALT-2V-10LL LL (4 slides)
Width	Max. 560 mm	Max. 560 mm	Max. 560 mm	Max. 600 mm
Height	830-1060 mm	1250-1500 mm	1650-1840 mm	1990-2300 mm
Thickness	18 - 20 mm			
Weight	Max. 5 kg	Max. 6 kg	Max. 8 kg	Max. 10 kg

Outset pocket door system with various size options.

- Sliding system allows doors to retract inside cabinets. Doors will not occupy space, providing full access to inside of cabinets.
- The slides hold doors in position when they slide out of cabinets. This prevents doors from sagging.
- Overlay amount is up to 10 mm.
- Has easier hinge position adjustment than previous model.

INSTRUCTION SCREW

Remarks

- For use on wooden doors only.
- Mount hinge cups into door side, so the movable section will not get dislodged.
- To get best performance of this product, cabinet requires precise mortise.
- Never cut the slides.
- Do not close doors until they slide out and catch has activated.
- Please prepare a door stopper, in case of use on double doors. Top and bottom panels are inset.

Selection Tool
Pocket Door

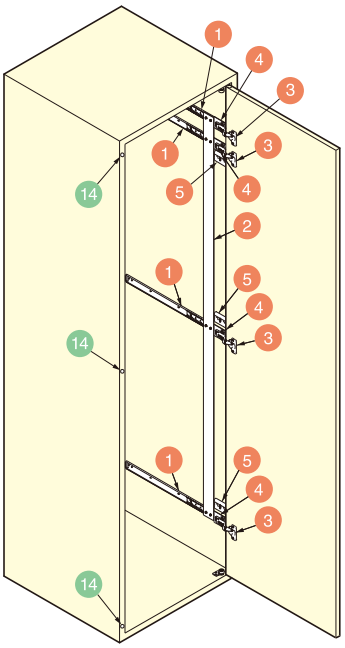
Item Name of Parts Set

ALT-2V-10 S - 16

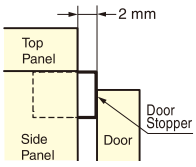
- 16: Last digits of item name of slides (see P.440)
- S: Size type
- ALT-2V-10: Model

Installation Example

Details about parts: P.439 - 440

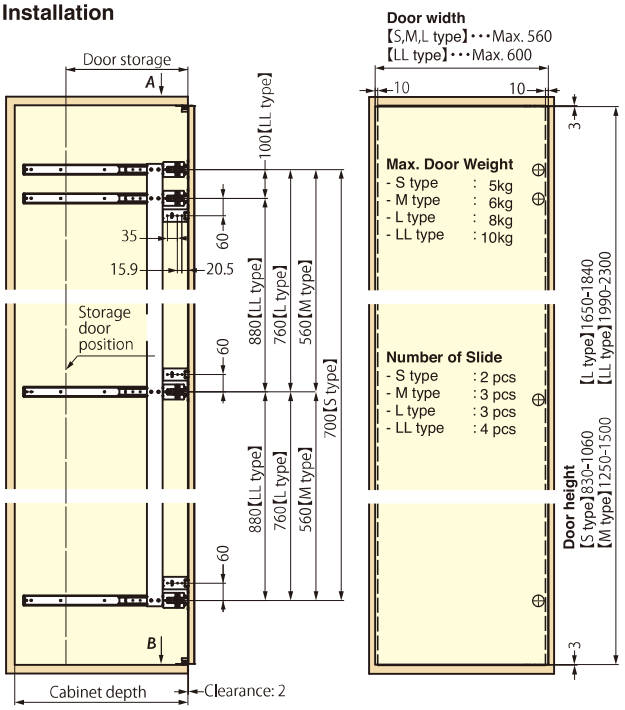


Use on double doors

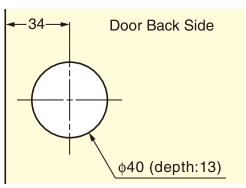


Set a door stopper and make clearance of 2 mm.

Installation



Cut Out Dimensions



Last Digits of Item Name (parts set)	Door Storage Amount	Min. Cabinet Depth
16	268	420
19	344	496
22	420	572
24	471	623
28	573	725

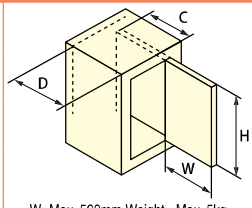
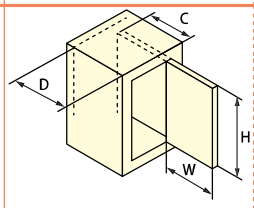
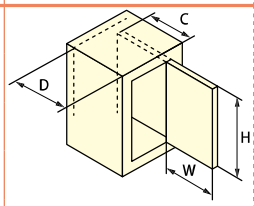
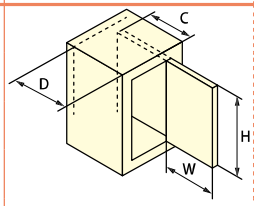
This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

How to Order ALT-2V-10

• Required Parts ..... Parts Set

Parts Set

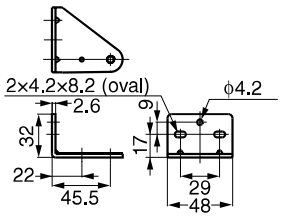
Necessary to order. Each item includes required parts as a set.

Type	Door Spec (Thickness: 20mm)	C	D (minimum)	Item Code	Item Name
S	 W=Max. 560mm Weight= Max. 5kg H=830-1060mm	268	420	180-048-724	ALT-2V-10S-16
		344	496	180-048-725	ALT-2V-10S-19
		420	572	180-048-726	ALT-2V-10S-22
		471	623	180-048-727	ALT-2V-10S-24
		573	725	180-048-728	ALT-2V-10S-28
M	 W=Max. 560mm Weight=Max. 6kg H=1250-1500mm	268	420	180-048-729	ALT-2V-10M-16
		344	496	180-048-730	ALT-2V-10M-19
		420	572	180-048-731	ALT-2V-10M-22
		471	623	180-048-732	ALT-2V-10M-24
		573	725	180-048-733	ALT-2V-10M-28
L	 W=Max. 560mm Weight=Max. 8kg H=1650-1840mm	268	420	180-048-734	ALT-2V-10L-16
		344	496	180-048-735	ALT-2V-10L-19
		420	572	180-048-736	ALT-2V-10L-22
		471	623	180-048-737	ALT-2V-10L-24
		573	725	180-048-738	ALT-2V-10L-28
LL	 W=Max. 600mm Weight=Max. 10kg H=1990-2300mm	268	420	180-048-739	ALT-2V-10LL-16
		344	496	180-048-740	ALT-2V-10LL-19
		420	572	180-048-741	ALT-2V-10LL-22
		471	623	180-048-742	ALT-2V-10LL-24
		573	725	180-048-743	ALT-2V-10LL-28

Optional Parts

No.	Type	Qty	Item Code	Part Name
12	Installation position bottom-right/ top-left	1	180-120-342 Item Name: ALT-2V5BR1	Bracket 
13	Installation position: top-right/ bottom left	1	180-120-343 Item Name: ALT-2V5BR2	

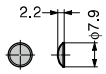
Dimensions



Specification

- Material: Steel
- Finish: Coloured Chromate (trivalent)

[Application] Use this bracket when there is space between door and floor.

No.	Qty	Item Code	Part Name
14	450 pcs /sheet (12 sheets in total)	210-032-020 Item Name: BS-27	Bamper 

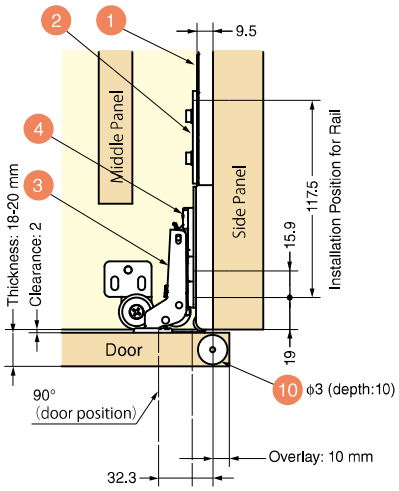
Specification

- Material: PUR
- Colour: Clear
- Application: Single swing door (make a clearance of 2 mm on door end)

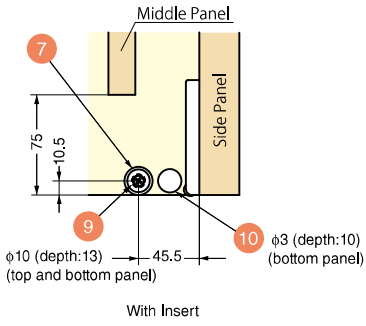
New slide lengths added.
For the latest information, please refer to
the digital New Products Catalogue on pages P.D7-.

Installation of Slide

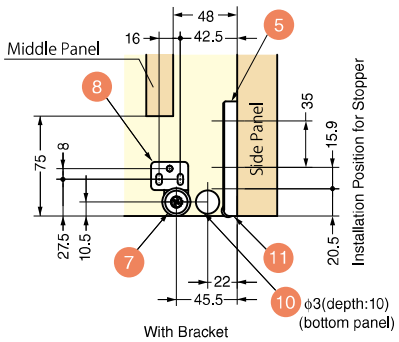
Cross section A (P.438)



Cross section B (P.438)



With Insert



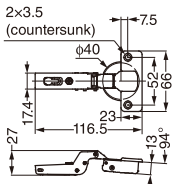
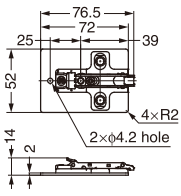
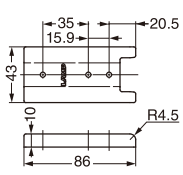
With Bracket

Parts Set Detail: P.440 - 441

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.

ALT-2V-10 Parts Set Details

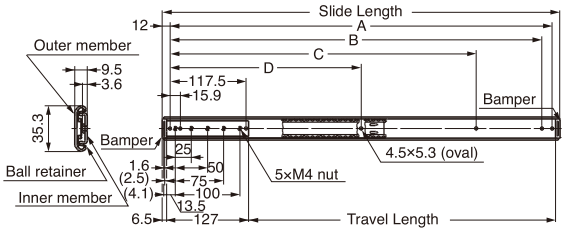
These parts are included in the parts set, and are also sold seperately

No.	Quantity S	M	L	LL	Parts	Dimensions	Item Code
1	2	3	3	4	Slide 	See also the drawing on the right.	190-113-867 Item Name: **AL127C-16** (included in ALT-2V-***-16) 190-113-868 Item Name: **AL127C-19** (included in ALT-2V-***-19) 190-113-869 Item Name: **AL127C-22** (included in ALT-2V-***-22) 190-113-870 Item Name: **AL127C-24** (included in ALT-2V-***-24) 190-113-871 Item Name: **AL127C-28** (included in ALT-2V-***-28) Spec • Material: Steel • Finish: Chromate
2	1	1	1	1	Connecting Plate 	See also the drawing on the right.	180-120-526 Item Name: **ALT55-S** (included in S type) 180-120-525 Item Name: **ALT55-M** (included in M type) 180-120-524 Item Name: **ALT55-L** (included in L type) 180-120-523 Item Name: **ALT55-LL** (included in LL type) Spec • Material: Aluminium Alloy • Finish: Plain
3	2	3	3	4	Hinge 		160-046-187 Item Name: **SCAF-7G99** Spec • Material: Zinc Alloy (ZDC) • Finish:Nickel
4	2	3	3	4	Mounting Plate 		180-047-960 Item Name: **ALT-MPS** Spec • Material: Steel (SPCC) Zinc Alloy(ZDC) • Finish: Nickel
5	2	3	3	3	Protector 		180-047-931 Item Name: **ALT-ADP** Spec • Material: POM • Colour: Grey

*For numbers of parts which are included in the parts set, please see the instruction manual.

Option 12-14 are not included.

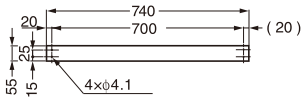
Drawing of Slide



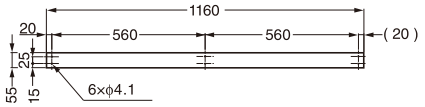
Item Name	Slide Length	Travel	Door Storage	A	B	C	D
AL127C-16	411.4	269.4	268	387.4	371.5	269.9	–
AL127C-19	487.6	345.6	344	463.6	447.7	346.1	231.8
AL127C-22	563.8	421.8	420	539.8	523.9	422.3	269.9
AL127C-24	614.6	472.6	471	590.6	574.7	473.1	295.3
AL127C-28	716.2	574.2	573	692.2	676.3	574.7	346.1

Drawing of Connecting Plate

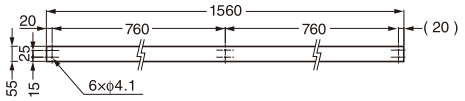
ALT55-S



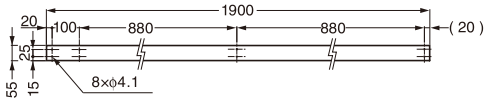
ALT55-M



ALT55-L



ALT55-LL



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.

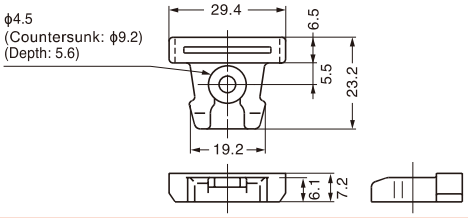
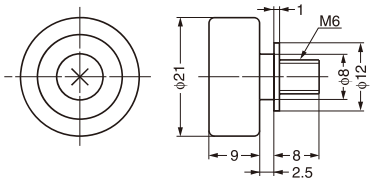
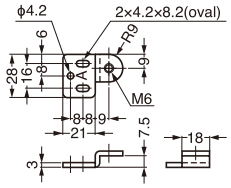
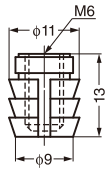
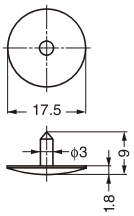
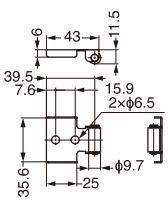
Components Set 6-11 Each item includes required parts as a set.

[S type]
- Item Code: 180-048-963
- Item Name: **ALT-2V-10SP**

[M/L type]
- Item Code: 180-048-964
- Item Name: **ALT-2V-10LP**

[LL type]
- Item Code: 180-048-965
- Item Name: **ALT-2V-10LLP**

Details These parts are included in the components set, and are also sold seperately.

No.	Quantity S Type	Quantity M/L Type	Quantity LL Type	Parts	Dimensions	Specifications
6	1	2	2	Catch 		Item Code: 180-120-522 Item Name: **AL127-CH** • Material: PUR • Colour: Black
7	2	2	2	Roller 		Item Code: 180-940-144 Item Name: **DU19-B4SBR** • Material: EPDM/steel • Finish/Colour: Chromate/White
8	Left/Right 1 each	Left/Right 1 each	Left/Right 1 each	Roller Bracket 	 The drawing shows A type (bottom right/upper left)	Item Code: 180-930-145 Item Name: **ALT-2V-AB** * Type A (bottom right/ upper left) Item Code: 180-930-146 Item Name: **ALT-2V-BB** * Type B (upper right/bottom left) • Material: Steel • Finish: Yellow Zinc Chromate
9	2	2	2	Insert 		Item Code: 120-041-310 Item Name: **SC-107-13** • Material: Polyamide (PA) • Colour: White
10	2	2	2	Slider 		Item Code: 210-030-123 Item Name: **G-175** • Material: Polyethylene (PE) • Colour: Natural
11	2	3	3	Stopper 		Item Code: 180-048-461 Item Name: **ALT-ADS** • Material: Steel / EPDM • Finish/Colour: Chrome / White

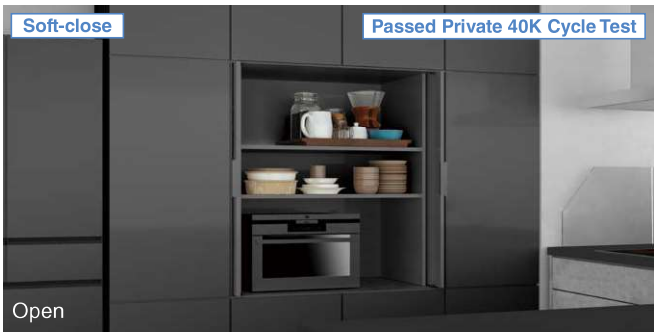
Included Parts

Cross-recessed binding tapping screw 3.5×15, Cross-recessed binding tapping 4×16, Cross-recessed countersunk tapping screw 3.5×15, Cross-recessed countersunk screw M4×8, Hexagon top bolt M4×6, Hex key
(These are not included in parts which are sold singly)

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 POCKET DOOR SYSTEM ALT-ST15-D10 Overlay / Soft Close NEW

Latest Info





Size Type	ALT-ST15-D10S S (2 slides)	ALT-ST15-D10M M (2 slides)	ALT-ST15-D10L L (4 slides)	ALT-ST15-D10LL LL (4 slides)
Width	Max. 600 mm			
Height	500-700 mm	700-900 mm	900-1200 mm	1200-1600 mm
Thickness	18-20 mm			
Weight	Max. 9 kg		Max. 15 kg	

Overlay pocket door system with door alignment adjustability.

- The sliding system allows doors to retract inside cabinets. Doors will not occupy space, providing full access to inside of cabinets.
- The hanging angle of the door can be easily adjusted. When installing, the door can be lifted upward into 5 different angles.
- The fittings allow the door to retract further into the cabinet than the ALT-ST20-D10 (P.450).
- Overlay amount is up to 10 mm.
- After door installation, adding a damper unit allows the doors to close slowly.

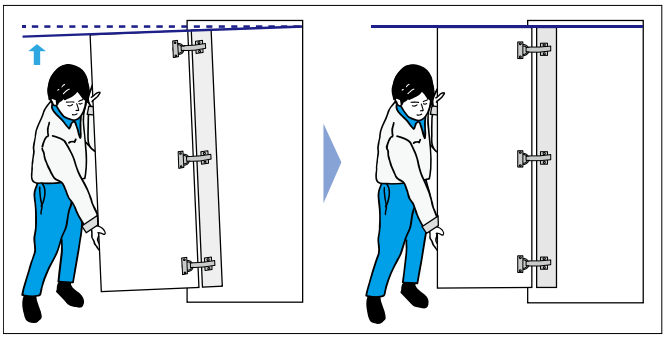
INSTRUCTION SCREW

Remarks

- For best performance, precise mortising is required.
- Do not cut slides.
- Do not close doors until they are fully slid out and the catch has activated.
- Doors are set inside the cabinet's frame.
- Install a door stopper (not provided) on the door leading edge of the door.

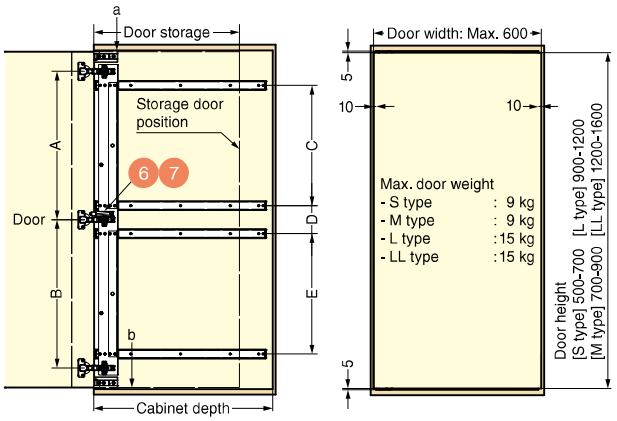
Feature | Installation | Selection Tool
Pocket Door

Easy Door Alignment Adjustment



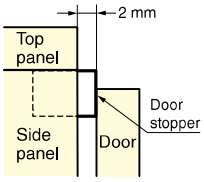
When installing, you can adjust the hanging angle just by lifting up the door.

Installation



Type	Hinge Pitch		Slide Pitch		
	A	B	C	D	E
S	360	–	260	–	–
M	560	–	460	–	–
L	380	380	260	140	260
LL	530	530	430	100	430

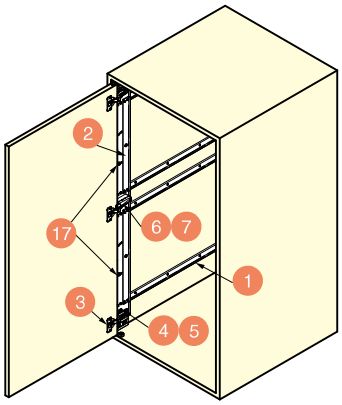
Use on Double Doors



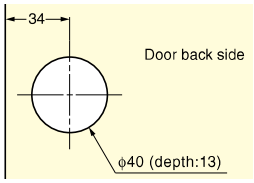
Set a door bumper or stopper on the leading edge side to prevent contact between door and side panel.

Installation Example

Details about parts: P.443 - 445



Cut Out Dimensions



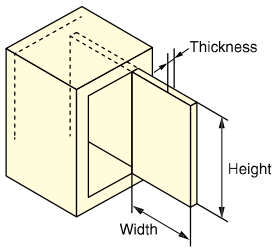
Slide Part Name	Door Storage Amount	Min. Cabinet Depth	Number of Slides			
			S	M	L	LL
AL80C-**15**	290	395	2	2	4	4
AL80C-**16**	315	420				
AL80C-**17**	340	445				
AL80C-**19**	391	496				
AL80C-**21**	442	547				
AL80C-**22**	467	572				
AL80C-**24**	518	623				
AL80C-**26**	569	674				
AL80C-**28**	620	725				

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.

How to Order ALT-ST15-D10

STEP 1 Select a Size Type

Check the door spec and select "Synchronized panel" and "Part kit".



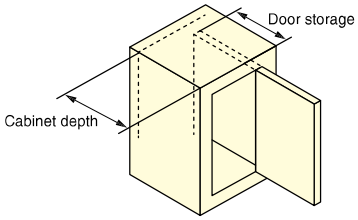
*All types require the door sizes below:
-Width : Max. 600 mm
-Thickness : 18~20 mm

Type	Door Spec*	No.	Parts	Item Code	Item Name	Qty/Door
S	Height : 500-700 mm Weight : Max. 9 kg	2	Synchronized panel	180-050-419	ALT-ST15-S	1 each
		3~17	Part kit	180-055-058	ALT-ST15-D10SM-KIT	
M	Height : 700-900 mm Weight : Max. 9 kg	2	Synchronized panel	180-050-420	ALT-ST15-M	1 each
		3~17	Part kit	180-055-058	ALT-ST15-D10SM-KIT	
L	Height : 900-1200 mm Weight : Max. 15 kg	2	Synchronized panel	180-050-421	ALT-ST15-L	1 each
		3~17	Part kit	180-055-059	ALT-ST15-D10LLL-KIT	
LL	Height :1200-1600 mm Weight : Max. 15 kg	2	Synchronized panel	180-050-422	ALT-ST15-LL	1 each
		3~17	Part kit	180-055-059	ALT-ST15-D10LLL-KIT	

The part kit includes multiple parts. For details, see P.445.

STEP 2 Select a Slide

Check the cabinet depth and select a slide. The required quantity depends on the size types.

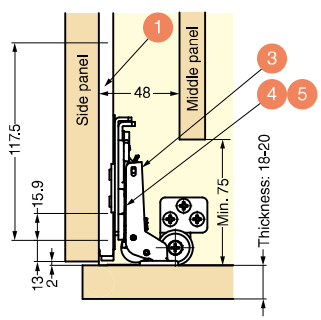


Cabinet Spec	No.	Parts	Item Code	Item Name	Qty/Door
Cabinet depth : Min. 395 mm Door storage : 290 mm	1	Slide	190-057-095	AL80C-15	S type : 2 pcs M type : 2 pcs L type : 4 pcs LL type : 4 pcs
Cabinet depth : Min. 420 mm Door storage : 315 mm	1	Slide	190-052-735	AL80C-16	
Cabinet depth : Min. 445 mm Door storage : 340 mm	1	Slide	190-057-096	AL80C-17	
Cabinet depth : Min. 496 mm Door storage : 391 mm	1	Slide	190-052-736	AL80C-19	
Cabinet depth : Min. 547 mm Door storage : 442 mm	1	Slide	190-057-097	AL80C-21	
Cabinet depth : Min. 572 mm Door storage : 467 mm	1	Slide	190-052-737	AL80C-22	
Cabinet depth : Min. 623 mm Door storage : 518 mm	1	Slide	190-052-738	AL80C-24	
Cabinet depth : Min. 674 mm Door storage : 569 mm	1	Slide	190-057-313	AL80C-26	
Cabinet depth : Min. 725 mm Door storage : 620 mm	1	Slide	190-052-739	AL80C-28	

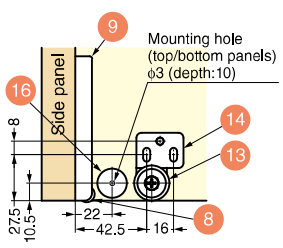
The required quantity per door depends on the size types.

Mounting Positions

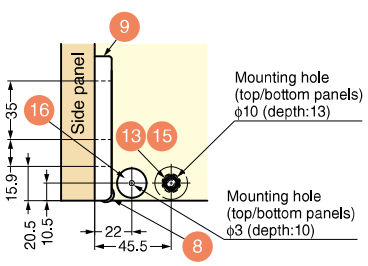
Cross section a: Slide/hinge mounting



Cross section b: For roller bracket mounting



Cross section b: For mounting with female screw

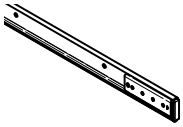
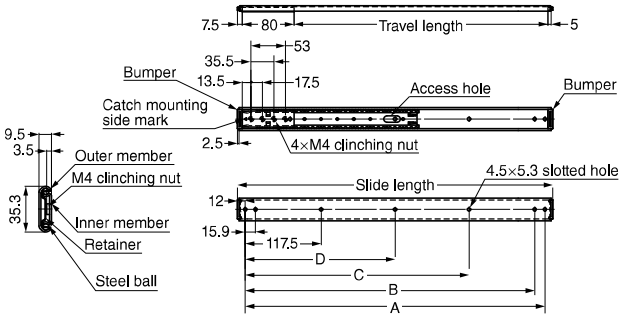
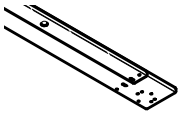
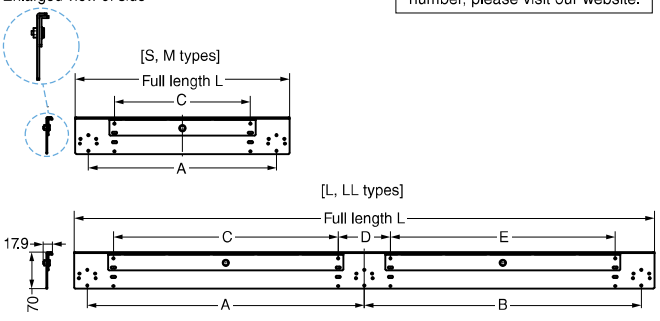


To hide the metal fittings, install a middle panel (not included).
(An attachable/detachable middle panel is recommended for easier maintenance.)

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.

Parts (ALT-ST15-D10)

For detailed information on size types, please see P.442 - 443.

No.	Qty/Door S	M	L	LL	Parts	Dimensions	Item Code
1	2	2	4	4	**Slide** 		190-057-095 [Item Name] **AL80C-15** 190-052-735 [Item Name] **AL80C-16** 190-057-096 [Item Name] **AL80C-17** 190-052-736 [Item Name] **AL80C-19** 190-057-097 [Item Name] **AL80C-21** 190-052-737 [Item Name] **AL80C-22** 190-052-738 [Item Name] **AL80C-24** 190-057-313 [Item Name] **AL80C-26** 190-052-739 [Item Name] **AL80C-28**
2	1	1	1	1	**Synchronized panel**  The end of the item number indicates the corresponding size.	Enlarged view of side  For the drawing for each item number, please visit our website.	180-050-419 [Item Name] **ALT-ST15-S** 180-050-420 [Item Name] **ALT-ST15-M** 180-050-421 [Item Name] **ALT-ST15-L** 180-050-422 [Item Name] **ALT-ST15-LL**

Item Name	Slide Length	Travel Length	Door Storage	A	B	C	D
AL80C-15	386	291	290	362	346.1	244.5	–
AL80C-16	411.4	316.4	315	387.4	371.5	269.9	–
AL80C-17	436.8	341.8	340	412.8	396.9	295.3	–
AL80C-19	487.6	392.6	391	463.6	447.7	346.1	231.8
AL80C-21	538.4	443.4	442	514.4	498.5	396.9	257.2
AL80C-22	563.8	468.8	467	539.8	523.9	422.3	269.9
AL80C-24	614.6	519.6	518	590.6	574.7	473.1	295.3
AL80C-26	665.4	570.4	569	641.4	625.5	523.9	320.7
AL80C-28	716.2	621.2	620	692.2	676.3	574.7	346.1

Specifications
- Material: Steel
- Finish: Chromate

Item Name	Hinge Pitch A	B	Track Pitch C	D	E	Full Length L
ALT-ST15-S	360	–	260	–	–	410
ALT-ST15-M	560	–	460	–	–	610
ALT-ST15-L	380	380	260	140	260	810
ALT-ST15-LL	530	530	430	100	430	1110

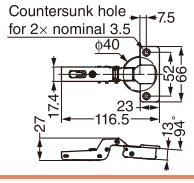
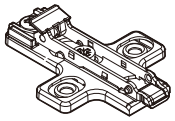
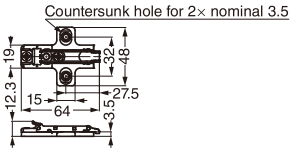
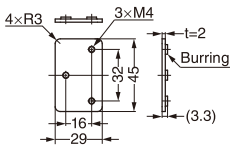
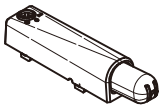
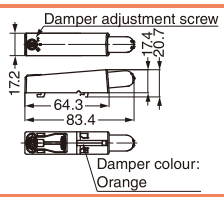
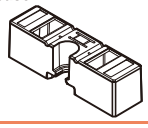
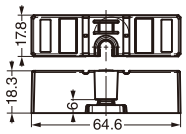
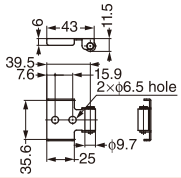
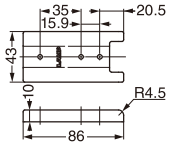
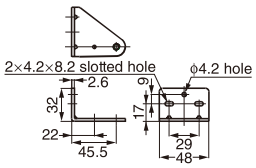
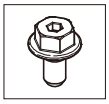
Specifications
- Material: Aluminium Alloy
- Finish: Silver Anodized

*Please see the instructions for more information.

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.

Part Kit (ALT-ST15-D10)

These parts are included in the "part kit" (P.443).

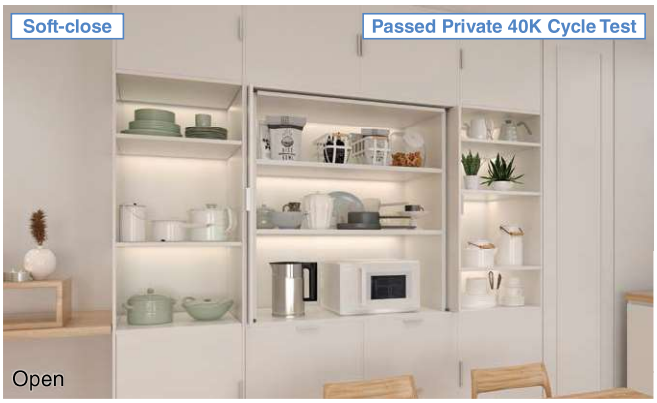
No.	Qty S	Qty M	Qty L	Qty LL	Parts	Dimensions	Item Code
3	2	2	3	3	**Hinge body (with catch)** 		160-046-187 [Item Name] **SCAF-7G99** Specifications • Material: Zinc Alloy (ZDC) • Finish: Nickel
4	2	2	3	3	**Hinge mounting plate** 		160-046-188 [Item Name] **SBAR3R** Specifications • Material: Zinc Alloy (ZDC) • Finish: Nickel
5	2	2	3	3	**Mounting plate** 		180-053-369 [Item Name] **ALT-MP32** Specifications • Material: Stainless Steel • Finish: Barrel Polished
6	1	1	1	1	**Damper unit** 		160-048-935 [Item Name] **SD0S8SNG** Specifications • Material: Zinc Alloy • Finish: Nickel
7	1	1	1	1	**Damper base** 		160-048-936 [Item Name] **SDARX99** Specifications • Material: Zinc Alloy • Finish: Nickel
8	2	2	3	3	**Stopper** 		180-048-461 [Item Name] **ALT-ADS** Specifications • Material: Steel/Ethylene Propylen Rubber (EPDM) • Finishing/colour: Gloss Chromate/White
9	2	2	2	2	**Protector** 		180-047-931 [Item Name] **ALT-ADP** Specifications • Material: Polyacetal (POM) • Colour: Grey Helps prevent door damage.
10	1	1	1	1	**Side panel bracket**		bottom-right/ top-left: 180-120-342 [Item Name] **ALT-2V5BR1** top-right/ bottom-left: 180-120-343 [Item Name] **ALT-2V5BR2** Specifications • Material: Steel • Finish: Coloured Chromate (trivalent) [Application] To keep distance between door and floor surface (e.g., laundry room). For the compatible door height and installation, see the instructions.
11	1	1	1	1			
12 - 17	1		1		**Parts set** 12 Catch  13 Roller  14 Roller bracket  15 Insert female screw  16 G-type sliding tack  17 Adjustment bolt  For detailed information, including the dimensions of each part, please see P.458.	S type / M type: 180-054-281 [Item Name] **ALT-ST15-D10-MP** L type / LL type: 180-054-282 [Item Name] **ALT-ST15-D10-LLP** • Necessary types and numbers of screws and hexagon spanners are included. For detailed information, see the instructions.

*Please see the instructions for more information.

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.

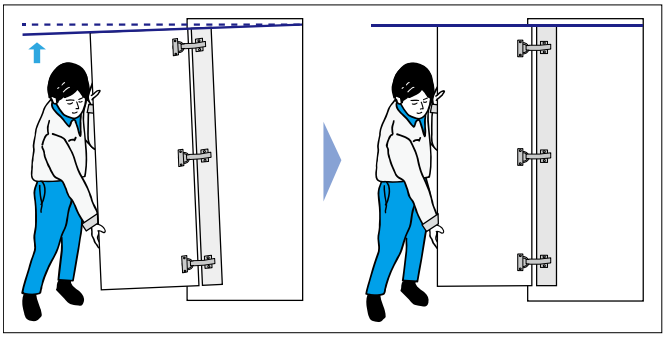
LAMP POCKET DOOR SYSTEM ALT-ST15-D360 Inset / Soft Close NEW

Latest Info





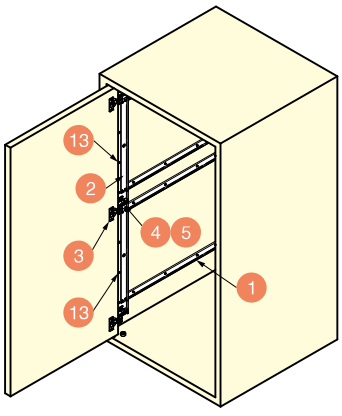
Easy Door Alignment Adjustment



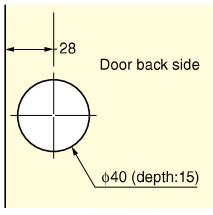
When installing, you can adjust the hanging angle just by lifting up the door.

Installation Example

Details about parts: P.447 - 449



Door cutout dimensions



Size Type	ALT-ST15-D360S S (2 slides)	ALT-ST15-D360M M (2 slides)	ALT-ST15-D360L L (4 slides)	ALT-ST15-D360LL LL (4 slides)
Width	Max. 600 mm			
Height	500-700 mm	700-900 mm	900-1200 mm	1200-1600 mm
Thickness	18-30 mm			
Weight	Max. 9 kg		Max. 15 kg	

Inset pocket door system with door alignment adjustability.

- The sliding system allows doors to retract inside cabinets. Doors will not occupy space, providing full access to inside of cabinets.
- The hanging angle of the door can be easily adjusted. When installing, the door can be lifted upward into 5 different angles.
- The fittings allow the door to retract further into the cabinet than the ALT-ST20-D360 (P.454).
- The door closes slowly and quietly.
- The damper hinges can be replaced with hinges with catch function.

INSTRUCTION SCREW

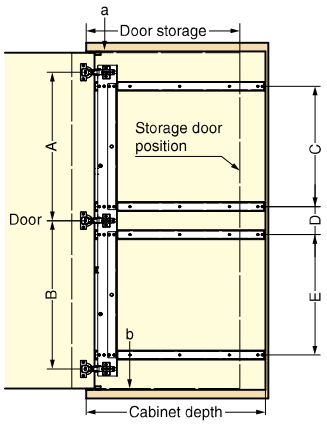
Remarks

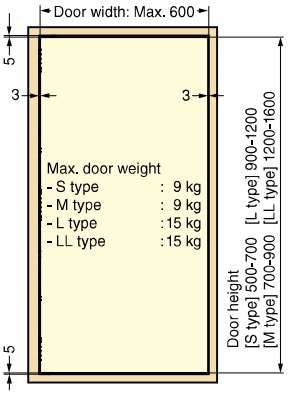
- For best performance, precise mortising is required.
- Do not cut slides.
- Do not close doors until they are fully slid out and the catch has activated.
- Install a door stopper (not provided) on the door leading edge of the door.

Feature Installation Selection Tool

Pocket Door

Installation





Type	Hinge Pitch		Slide Pitch		
	A	B	C	D	E
S	360	–	260	–	–
M	560	–	460	–	–
L	380	380	260	140	260
LL	530	530	430	100	430

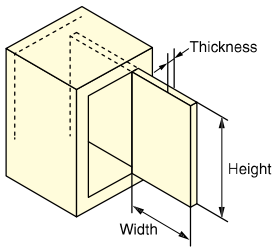
Slide Part Name	Door Storage Amount	Min. Cabinet Depth	Number of Slides			
			S	M	L	LL
AL80C-**15**	291 + Thickness	387 + Thickness	2	2	4	4
AL80C-**16**	316 + Thickness	412 + Thickness				
AL80C-**17**	341 + Thickness	437 + Thickness				
AL80C-**19**	392 + Thickness	488 + Thickness				
AL80C-**21**	443 + Thickness	539 + Thickness				
AL80C-**22**	468 + Thickness	564 + Thickness				
AL80C-**24**	519 + Thickness	615 + Thickness				
AL80C-**26**	570 + Thickness	666 + Thickness				
AL80C-**28**	621 + Thickness	717 + Thickness				

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.

How to Order ALT-ST15-D360

STEP 1 Select a Size Type

Check the door spec and select "Synchronized panel" and "Part kit".



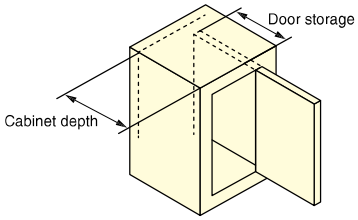
*All types require the door sizes below:
-Width : Max. 600 mm
-Thickness : 18~30 mm

Type	Door Spec*	No.	Parts	Item Code	Item Name	Qty/Door
S	Height : 500-700 mm Weight : Max. 9 kg	2	Synchronized panel	180-050-419	ALT-ST15-S	1 each
		3~13	Part kit	180-055-056	ALT-ST15-D360SM-KIT	
M	Height : 700-900 mm Weight : Max. 9 kg	2	Synchronized panel	180-050-420	ALT-ST15-M	1 each
		3~13	Part kit	180-055-056	ALT-ST15-D360SM-KIT	
L	Height : 900-1200 mm Weight : Max. 15 kg	2	Synchronized panel	180-050-421	ALT-ST15-L	1 each
		3~13	Part kit	180-055-057	ALT-ST15-D360LLL-KIT	
LL	Height :1200-1600 mm Weight : Max. 15 kg	2	Synchronized panel	180-050-422	ALT-ST15-LL	1 each
		3~13	Part kit	180-055-057	ALT-ST15-D360LLL-KIT	

The part kit includes multiple parts. For details, see P.449.

STEP 2 Select a Slide

Check the cabinet depth and select a slide. The required quantity depends on the size types.



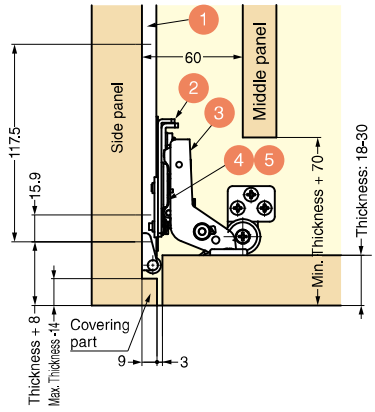
Cabinet Spec	No.	Parts	Item Code	Item Name	Qty/Door
Cabinet depth : Min. 387 mm + DT Door storage : 291 mm + DT	1	Slide	190-057-095	AL80C-15	S type : 2 pcs M type : 2 pcs L type : 4 pcs LL type : 4 pcs
Cabinet depth : Min. 412 mm + DT Door storage : 316 mm + DT	1	Slide	190-052-735	AL80C-16	
Cabinet depth : Min. 437 mm + DT Door storage : 341 mm + DT	1	Slide	190-057-096	AL80C-17	
Cabinet depth : Min. 488 mm + DT Door storage : 392 mm + DT	1	Slide	190-052-736	AL80C-19	
Cabinet depth : Min. 539 mm + DT Door storage : 443 mm + DT	1	Slide	190-057-097	AL80C-21	
Cabinet depth : Min. 564 mm + DT Door storage : 468 mm + DT	1	Slide	190-052-737	AL80C-22	
Cabinet depth : Min. 615 mm + DT Door storage : 519 mm + DT	1	Slide	190-052-738	AL80C-24	
Cabinet depth : Min. 666 mm + DT Door storage : 570 mm + DT	1	Slide	190-057-313	AL80C-26	
Cabinet depth : Min. 717 mm + DT Door storage : 621 mm + DT	1	Slide	190-052-739	AL80C-28	

*DT: Door Thickness

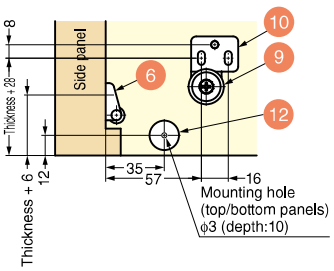
The required quantity per door depends on the size types.

Mounting Positions

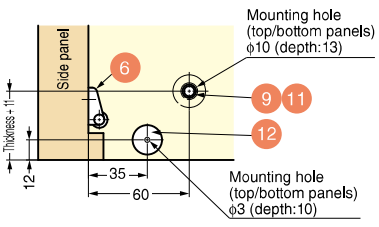
Cross section a: Slide/hinge mounting



Cross section b: For roller bracket mounting



Cross section b: For mounting with female screw

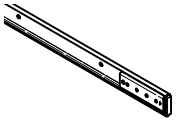
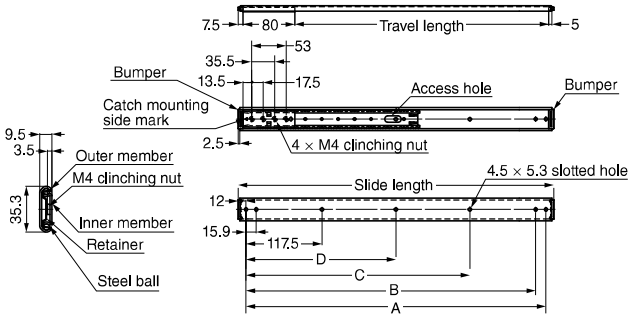


To hide the metal fittings, install a middle panel (not included).
(An attachable/detachable middle panel is recommended for easier maintenance.)

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.

Parts (ALT-ST15-D360)

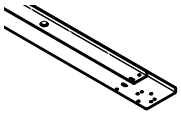
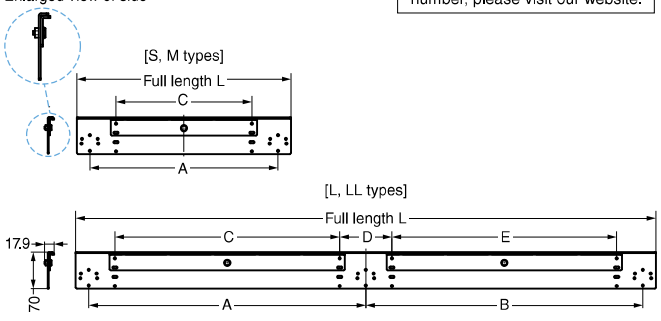
For detailed information on size types, please see P.446 - 447.

No.	Qty/Door S	M	L	LL	Parts	Dimensions	Item Code
1	2	2	4	4	**Slide** 		190-057-095 [Item Name] **AL80C-15** 190-052-735 [Item Name] **AL80C-16** 190-057-096 [Item Name] **AL80C-17** 190-052-736 [Item Name] **AL80C-19** 190-057-097 [Item Name] **AL80C-21** 190-052-737 [Item Name] **AL80C-22** 190-052-738 [Item Name] **AL80C-24** 190-057-313 [Item Name] **AL80C-26** 190-052-739 [Item Name] **AL80C-28**

Item Name	Slide Length	Travel Length	Door Storage	A	B	C	D
AL80C-15	386	291	291 + DT	362	346.1	244.5	–
AL80C-16	411.4	316.4	316 + DT	387.4	371.5	269.9	–
AL80C-17	436.8	341.8	341 + DT	412.8	396.9	295.3	–
AL80C-19	487.6	392.6	392 + DT	463.6	447.7	346.1	231.8
AL80C-21	538.4	443.4	443 + DT	514.4	498.5	396.9	257.2
AL80C-22	563.8	468.8	468 + DT	539.8	523.9	422.3	269.9
AL80C-24	614.6	519.6	519 + DT	590.6	574.7	473.1	295.3
AL80C-26	665.4	570.4	570 + DT	641.4	625.5	523.9	320.7
AL80C-28	716.2	621.2	621 + DT	692.2	676.3	574.7	346.1

* DT: Door Thickness

Specifications
- Material: Steel
- Finish: Chromate

No.	Qty/Door S	M	L	LL	Parts	Dimensions	Item Code
2	1	1	1	1	**Synchronized panel**  The end of the item number indicates the corresponding size.	For the drawing for each item number, please visit our website. 	180-050-419 [Item Name] **ALT-ST15-S** 180-050-420 [Item Name] **ALT-ST15-M** 180-050-421 [Item Name] **ALT-ST15-L** 180-050-422 [Item Name] **ALT-ST15-LL**

Item Name	Hinge Pitch A	B	Track Pitch C	D	E	Full Length L
ALT-ST15-S	360	–	260	–	–	410
ALT-ST15-M	560	–	460	–	–	610
ALT-ST15-L	380	380	260	140	260	810
ALT-ST15-LL	530	530	430	100	430	1110

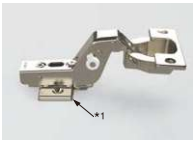
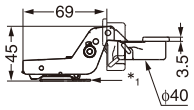
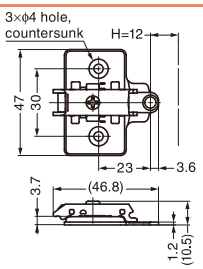
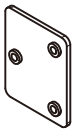
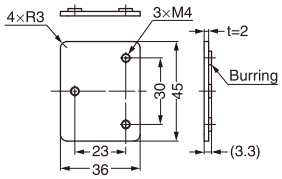
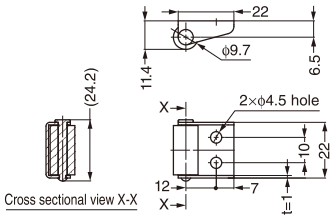
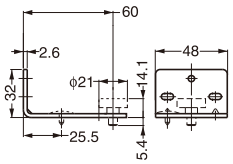
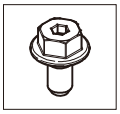
Specifications
- Material: Aluminium Alloy
- Finish: Silver Anodized

*Please see the instructions for more information.

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.

Part Kit (ALT-ST15-D360)

These parts are included in the "part kit" (P.447).

No.	Qty S	Qty M	Qty L	Qty LL	Parts	Dimensions	Item Code
3	2	2	3	3	**Hinge body (with built-in damper)** 		160-029-086 [Item Name] **H360-D26-0T** Specifications • Material: Steel • Finish: Nickel
4	2	2	3	3	**Hinge mounting plate** 		160-026-844 [Item Name] **360-P4W-30T** Specifications • Material: Steel • Finish: Nickel
5	2	2	3	3	**Mounting plate** 		180-053-368 [Item Name] **ALT-MP30** Specifications • Material: Stainless Steel • Finish: Barrel Polished
6	2	2	3	3	**Guide roller** 		180-053-310 [Item Name] **ALT-GR** Specifications • Material: Steel (SPCC)/Ethylene Propylen Rubber (EPDM) • Finishing/colour: Nickel/White
7	1	1	1	1	**Side panel bracket** 		180-120-340 [Item Name] **ALT-BR** Specifications • Material: Steel • Finish: Coloured Chromate (trivalent) [Application] To keep distance between door and floor surface (e.g., laundry room). For the compatible door height and installation, see the instructions.
8 - 13	1		1		**Parts set** 8 Catch  9 Roller  10 Roller bracket  11 Insert female screw  12 G-type sliding tack  13 Adjustment bolt  For detailed information, including the dimensions of each part, please see P.458.		S type / M type: 180-054-279 [Item Name] **ALT-ST15-D360-MP** L type / LL type: 180-054-280 [Item Name] **ALT-ST15-D360-LLP** • Necessary types and numbers of screws and hexagon spanners are included. For detailed information, see the instructions.

*Please see the instructions for more information.
*1 The mounting plates in the images and drawings are not included in the set.

LAMP POCKET DOOR SYSTEM ALT-ST20-D10 Overlay / Soft Close NEW

Latest Info





Size Type	ALT-ST20-D10S S (2 slides)	ALT-ST20-D10M M (3 slides)	ALT-ST20-D10L L (4 slides)	ALT-ST20-D10LL LL (4 slides)
Width	Max. 600 mm			
Height	800-1200 mm	1200-1600 mm	1600-2000 mm	2000-2400 mm
Thickness	18-20 mm			
Weight	Max. 9 kg	Max. 15 kg	Max. 20 kg	

Overlay pocket door system with door alignment adjustability.

- The sliding system allows doors to retract inside cabinets. Doors will not occupy space, providing full access to inside of cabinets.
- The hanging angle of the door can be easily adjusted. When installing, the door can be lifted upward into 5 different angles.
- Overlay amount is up to 10 mm.
- After door installation, adding a damper unit allows the doors to close slowly.

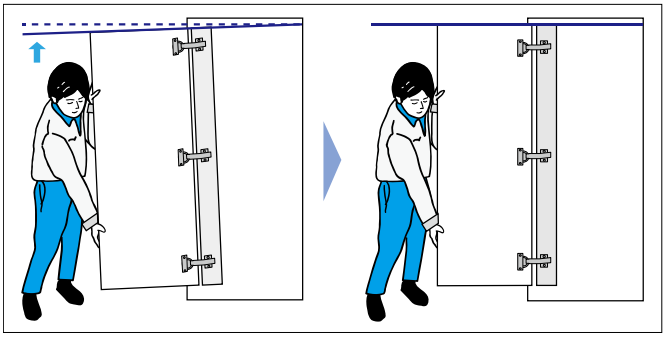
INSTRUCTION SCREW

Remarks

- For best performance, precise mortising is required.
- Do not cut slides.
- Do not close doors until they are fully slid out and the catch has activated.
- Doors are set inside the cabinet's frame.
- Install a door stopper (not provided) on the door leading edge of the door.

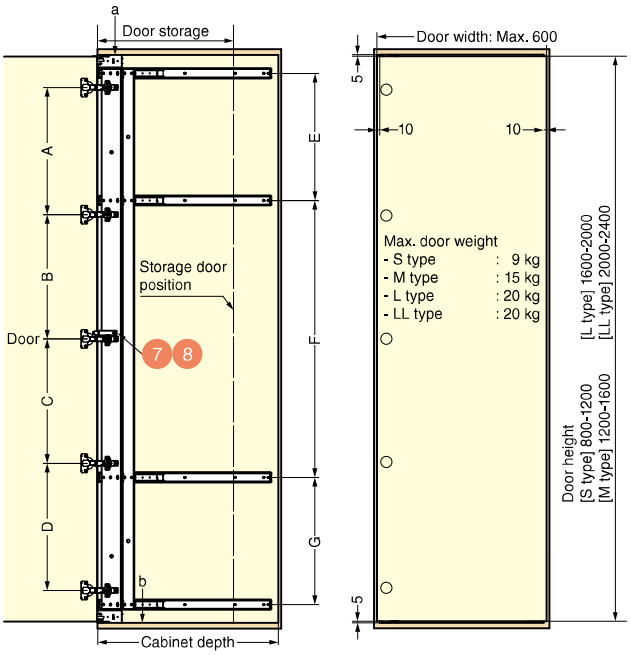
Feature | Installation | Selection Tool
Pocket Door

Easy Door Alignment Adjustment



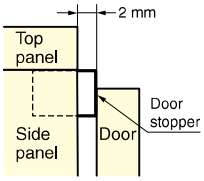
When installing, you can adjust the hanging angle just by lifting up the door.

Installation



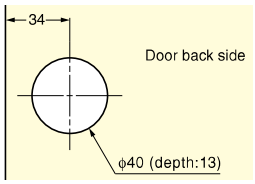
Type	Hinge Pitch				Slide Pitch		
	A	B	C	D	E	F	G
S	580	–	–	–	680	–	–
M	490	490	–	–	590	490	–
L	500	380	500	–	500	480	500
LL	450	440	440	450	450	980	450

Double doors



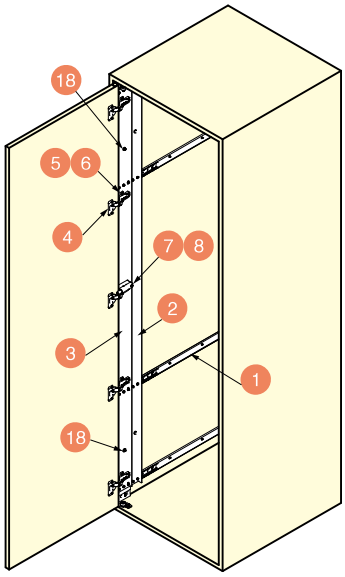
Set a door bumper or stopper on the leading edge side to prevent contact between door and side panel.

Door cutout dimensions



Installation Example

Details about parts: P.451 - 453



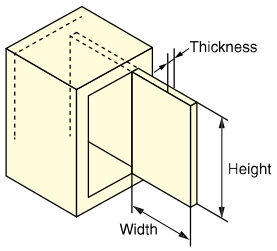
Slide Part Name	Door Storage Amount	Min. Cabinet Depth	Number of Slides			
			S	M	L	LL
AL127C-**15**	243	395	2	3	4	4
AL127C-**16**	268	420				
AL127C-**17**	293	445				
AL127C-**19**	344	496				
AL127C-**21**	395	547				
AL127C-**22**	420	572				
AL127C-**23**	446	598				
AL127C-**24**	471	623				
AL127C-**26**	522	674				
AL127C-**28**	573	725				

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.

How to Order ALT-ST20-D10

STEP 1 Select a Size Type

Check the door spec and select "Synchronized panel", "Coupling plate", and "Part kit".



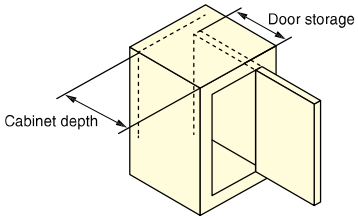
*All types require the door sizes below:
-Width : Max. 600 mm
-Thickness : 18~20 mm

Type	Door Spec*	No.	Parts	Item Code	Item Name	Qty/Door
S	Height : 800-1200 mm Weight : Max. 9 kg	2	Synchronized panel	180-050-427	ALT-ST20-S	1 each
		3	Coupling plate	180-050-423	ALT-ST20-LPS	
		4~18	Part kit	180-055-064	ALT-ST20-D10S-KIT	
M	Height : 1200-1600 mm Weight : Max. 15 kg	2	Synchronized panel	180-050-428	ALT-ST20-M	1 each
		3	Coupling plate	180-050-424	ALT-ST20-LPM	
		4~18	Part kit	180-055-065	ALT-ST20-D10M-KIT	
L	Height : 1600-2000 mm Weight : Max. 20 kg	2	Synchronized panel	180-050-429	ALT-ST20-L	1 each
		3	Coupling plate	180-050-425	ALT-ST20-LPL	
		4~18	Part kit	180-055-066	ALT-ST20-D10L-KIT	
LL	Height : 2000-2400 mm Weight : Max. 20 kg	2	Synchronized panel	180-050-430	ALT-ST20-LL	1 each
		3	Coupling plate	180-050-426	ALT-ST20-LPLL	
		4~18	Part kit	180-055-067	ALT-ST20-D10LL-KIT	

The part kit includes multiple parts. For details, see P.453.

STEP 2 Select a Slide

Check the cabinet depth and select a slide. The required quantity depends on the size types.

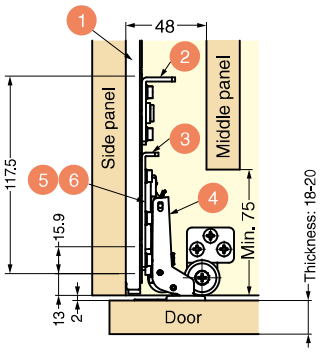


Cabinet Spec	No.	Parts	Item Code	Item Name	Qty/Door
Cabinet depth : Min. 395 mm Door storage : 243 mm	1	Slide	190-057-098	AL127C-15	S type : 2 pcs M type : 3 pcs L type : 4 pcs LL type : 4 pcs
Cabinet depth : Min. 420 mm Door storage : 268 mm	1	Slide	190-113-867	AL127C-16	
Cabinet depth : Min. 445 mm Door storage : 293 mm	1	Slide	190-057-099	AL127C-17	
Cabinet depth : Min. 496 mm Door storage : 344 mm	1	Slide	190-113-868	AL127C-19	
Cabinet depth : Min. 547 mm Door storage : 395 mm	1	Slide	190-057-100	AL127C-21	
Cabinet depth : Min. 572 mm Door storage : 420 mm	1	Slide	190-113-869	AL127C-22	
Cabinet depth : Min. 598 mm Door storage : 446 mm	1	Slide	190-057-101	AL127C-23	
Cabinet depth : Min. 623 mm Door storage : 471 mm	1	Slide	190-113-870	AL127C-24	
Cabinet depth : Min. 674 mm Door storage : 522 mm	1	Slide	190-057-314	AL127C-26	
Cabinet depth : Min. 725 mm Door storage : 573 mm	1	Slide	190-113-871	AL127C-28	

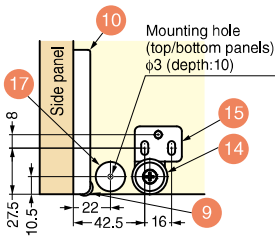
The required quantity per door depends on the size types.

Mounting Positions

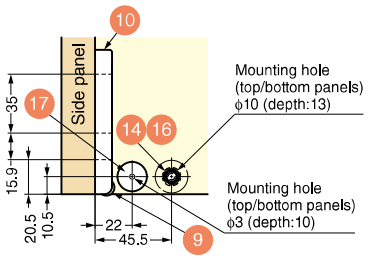
Cross section a: Slide/hinge mounting



Cross section b: For roller bracket mounting



Cross section b: For mounting with female screw

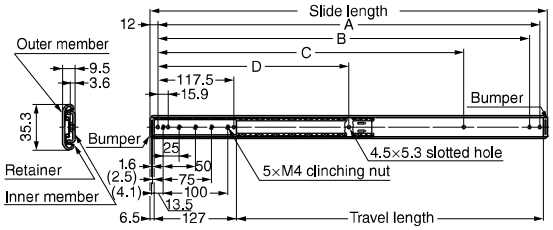
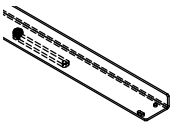
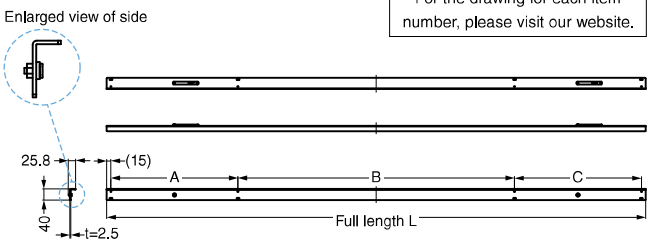
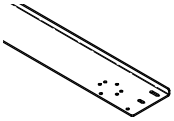
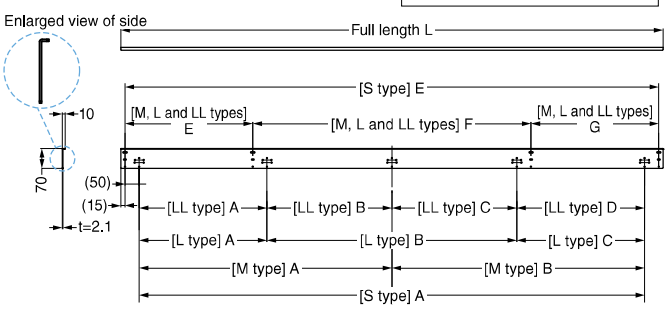


To hide the metal fittings, install a middle panel (not included).
(An attachable/detachable middle panel is recommended for easier maintenance.)

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.

Parts (ALT-ST20-D10)

For detailed information on size types, see P.450 - 451.

No.	Qty/Door S	M	L	LL	Parts	Dimensions	Item Code
1	2	3	4	4	**Slide** 		190-057-098 [Item Name] **AL127C-15** 190-113-867 [Item Name] **AL127C-16** 190-057-099 [Item Name] **AL127C-17** 190-113-868 [Item Name] **AL127C-19** 190-057-100 [Item Name] **AL127C-21** 190-113-869 [Item Name] **AL127C-22** 190-057-101 [Item Name] **AL127C-23** 190-113-870 [Item Name] **AL127C-24** 190-057-314 [Item Name] **AL127C-26** 190-113-871 [Item Name] **AL127C-28** Specifications • Material: Steel • Finish: Chromate
2	1	1	1	1	**Synchronized panel**  The end of the item number indicates the corresponding size.	For the drawing for each item number, please visit our website. 	180-050-427 [Item Name] **ALT-ST20-S** 180-050-428 [Item Name] **ALT-ST20-M** 180-050-429 [Item Name] **ALT-ST20-L** 180-050-430 [Item Name] **ALT-ST20-LL** Specifications • Material: Aluminium Alloy • Finish: Silver Anodized
3	1	1	1	1	**Coupling plate**  Used in combination with the synchronized panel. The end of the item number indicates the corresponding size.	For the drawing for each item number, please visit our website. 	180-050-423 [Item Name] **ALT-ST20-LPS** 180-050-424 [Item Name] **ALT-ST20-LPM** 180-050-425 [Item Name] **ALT-ST20-LPL** 180-050-426 [Item Name] **ALT-ST20-LPLL** Specifications • Material: Aluminium Alloy • Finish: Silver Anodized

Item Name	Slide Length	Travel Length	Door Storage	A	B	C	D
AL127C-15	386	244	243	362	346.1	244.5	–
AL127C-16	411.4	269.4	268	387.4	371.5	269.9	–
AL127C-17	436.8	294.8	293	412.8	396.9	295.3	–
AL127C-19	487.6	345.6	344	463.6	447.7	346.1	231.8
AL127C-21	538.4	396.4	395	514.4	498.5	396.9	257.2
AL127C-22	563.8	421.8	420	539.8	523.9	422.3	269.9
AL127C-23	589.2	447.2	446	565.2	549.3	447.7	282.6
AL127C-24	614.6	472.6	471	590.6	574.7	473.1	295.3
AL127C-26	665.4	523.4	522	641.4	625.5	523.9	320.7
AL127C-28	716.2	574.2	573	692.2	676.3	574.7	346.1

Item Name	A	B	C	Full Length L
ALT-ST20-S	680	–	–	710
ALT-ST20-M	490	100	490	1110
ALT-ST20-L	500	480	500	1510
ALT-ST20-LL	450	980	450	1910

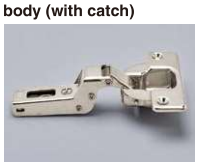
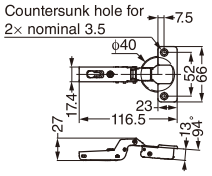
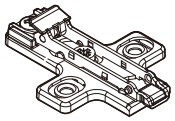
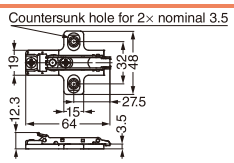
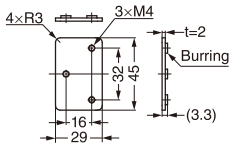
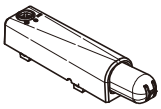
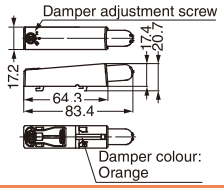
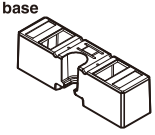
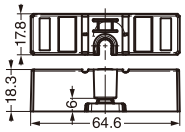
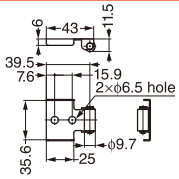
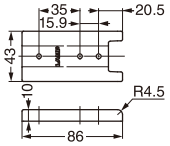
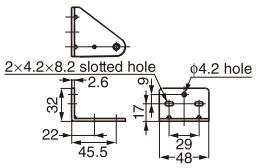
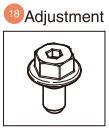
Item Name	Hinge Pitch A	B	C	D	Track Pitch E	F	G	Full Length L
ALT-ST20-LPS	580	–	–	–	680	–	–	710
ALT-ST20-LPM	490	490	–	–	490	100	490	1110
ALT-ST20-LPL	500	380	500	–	500	480	500	1510
ALT-ST20-LPLL	450	440	440	450	450	980	450	1910

*Please see the instructions for more information.

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.

Part Kit (ALT-ST20-D10)

These parts are included in the "part kit" (P.451).

No.	Qty S	Qty M	Qty L	Qty LL	Parts	Dimensions	Item Code
4	2	3	4	5	**Hinge body (with catch)** 		160-046-187 [Item Name] **SCAF-7G99** Specifications • Material: Zinc Alloy • Finish: Nickel
5	2	3	4	5	**Hinge mounting plate** 		160-046-188 [Item Name] **SBAR3R** Specifications • Material: Zinc Alloy • Finish: Nickel
6	2	3	4	5	**Mounting plate** 		180-053-369 [Item Name] **ALT-MP32** Specifications • Material: Stainless Steel • Finish: Barrel Polished
7	1	1	1	1	**Damper unit** 		160-048-935 [Item Name] **SD0S8SNG** Specifications • Material: Zinc Alloy • Finish: Nickel
8	1	1	1	1	**Damper base** 		160-048-936 [Item Name] **SDARX99** Specifications • Material: Zinc Alloy • Finish: Nickel
9	2	3	3	3	**Stopper** 		180-048-461 [Item Name] **ALT-ADS** Specifications • Material: Steel/Ethylene Propylen Rubber (EPDM) • Finishing/colour: Gloss Chromate/White
10	2	2	2	2	**Protector** 		180-047-931 [Item Name] **ALT-ADP** Specifications • Material: Polyacetal (POM) • Colour: Grey Helps prevent door damage.
11	1	1	1	1	**Side panel bracket**		bottom-right/ top-left: 180-120-342 [Item Name] **ALT-2V5BR1** top-right/ bottom-left: 180-120-343 [Item Name] **ALT-2V5BR2** Specifications • Material: Steel • Finish: Coloured Chromate (trivalent) [Application] To keep distance between door and floor surface (e.g., laundry room). For the compatible door height and installation, see the instructions.
12	1	1	1	1			
13 - 18	1	1	1		**Parts set** 13 Catch  14 Roller  15 Roller bracket  16 Insert female screw  17 G-type sliding tack  18 Adjustment bolt  For detailed information, including the dimensions of each part, please see P.458.	S type: 180-054-286 [Item Name] **ALT-ST20-D10-SP** M type: 180-054-287 [Item Name] **ALT-ST20-D10-MP** L type / LL type: 180-054-288 [Item Name] **ALT-ST20-D10-LLP** • Necessary types and numbers of screws and hexagon spanners are included. For detailed information, see the instructions.

*Please see the instructions for more information.

LAMP POCKET DOOR SYSTEM ALT-ST20-D360 Inset / Soft Close NEW

Latest Info





Size Type	ALT-ST20-D360S S (2 slides)	ALT-ST20-D360M M (3 slides)	ALT-ST20-D360L L (4 slides)	ALT-ST20-D360LL LL (4 slides)
Width	Max. 600 mm			
Height	800-1200 mm	1200-1600 mm	1600-2000 mm	2000-2400 mm
Thickness	18-30 mm			
Weight	Max. 9 kg	Max. 15 kg	Max. 20 kg	

Inset pocket door system with door alignment adjustability.

- The sliding system allows doors to retract inside cabinets. Doors will not occupy space, providing full access to inside of cabinets.
- The hanging angle of the door can be easily adjusted. When installing, the door can be lifted upward into 5 different angles.
- The door closes slowly and quietly.
- The damper hinges can be replaced with hinges with catch function.

INSTRUCTION SCREW

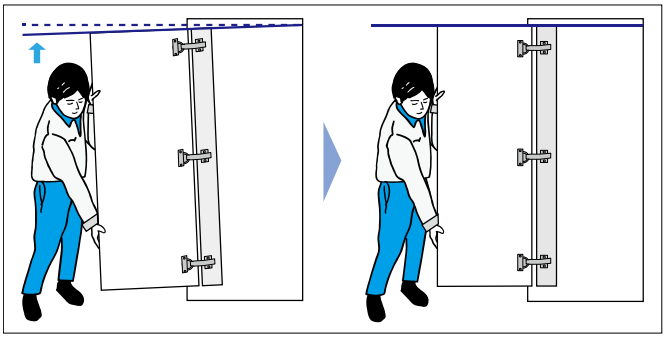
Remarks

- For the product to function as intended, accuracy is required in making, including cabinet machining and installation, due to the nature of the product.
- Do not cut slides.
- Do not close doors until they are fully slid out and the catch has activated.
- Install a door stopper (not provided) on the door leading edge of the door.

Feature | Installation | Selection Tool

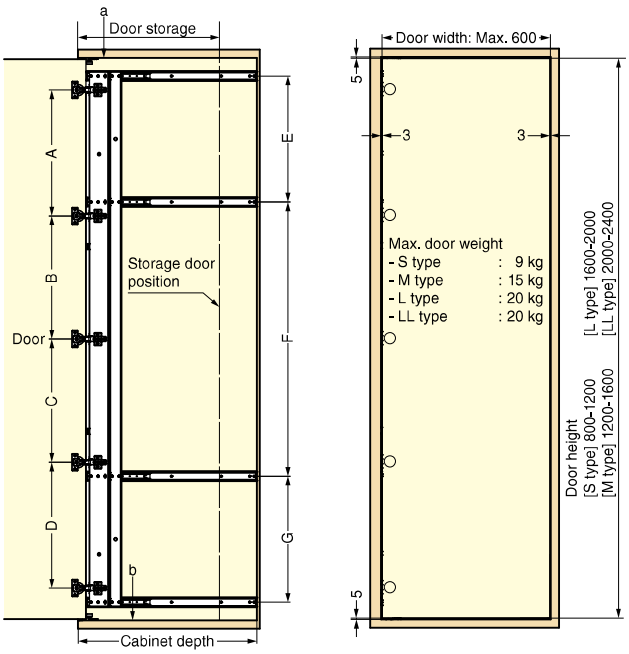
Pocket Door

Easy Door Alignment Adjustment



When installing, you can adjust the hanging angle just by lifting up the door.

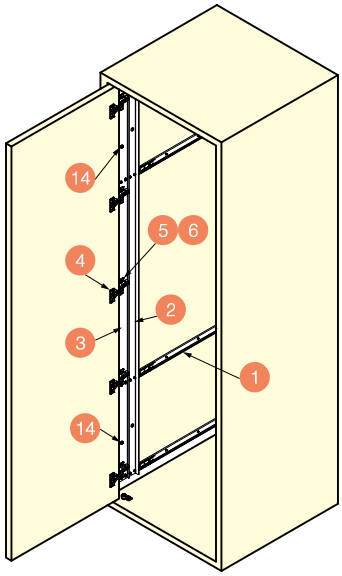
Installation



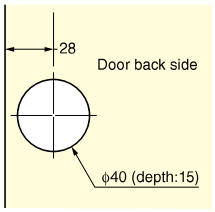
Type	Hinge Pitch				Slide Pitch		
	A	B	C	D	E	F	G
S	580	–	–	–	680	–	–
M	490	490	–	–	590	490	–
L	500	380	500	–	500	480	500
LL	450	440	440	450	450	980	450

Installation Example

Details about parts: P.455 - 457



Door cutout dimensions



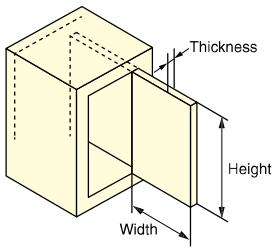
Slide Part Name	Door Storage Amount	Min. Cabinet Depth	Number of Slides			
			S	M	L	LL
AL127C-**15**	244 + Thickness	387 + Thickness	2	3	4	4
AL127C-**16**	269 + Thickness	412 + Thickness				
AL127C-**17**	294 + Thickness	437 + Thickness				
AL127C-**19**	345 + Thickness	488 + Thickness				
AL127C-**21**	396 + Thickness	539 + Thickness				
AL127C-**22**	421 + Thickness	564 + Thickness				
AL127C-**23**	447 + Thickness	590 + Thickness				
AL127C-**24**	472 + Thickness	615 + Thickness				
AL127C-**26**	523 + Thickness	666 + Thickness				
AL127C-**28**	574 + Thickness	717 + Thickness				

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.

How to Order ALT-ST20-D360

STEP 1 Select a Size Type

Check the door spec and select "Synchronized panel", "Coupling plate", and "Part kit".



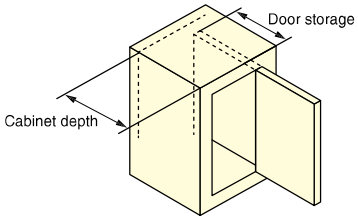
*All types require the door sizes below:
-Width : Max. 600 mm
-Thickness : 18~30 mm

Type	Door Spec*	No.	Parts	Item Code	Item Name	Qty/Door
S	Height : 800-1200 mm Weight : Max. 9 kg	2	Synchronized panel	180-050-427	ALT-ST20-S	1 each
		3	Coupling plate	180-050-423	ALT-ST20-LPS	
		4~14	Part kit	180-055-060	ALT-ST20-D360S-KIT	
M	Height : 1200-1600 mm Weight : Max. 15 kg	2	Synchronized panel	180-050-428	ALT-ST20-M	1 each
		3	Coupling plate	180-050-424	ALT-ST20-LPM	
		4~14	Part kit	180-055-061	ALT-ST20-D360M-KIT	
L	Height : 1600-2000 mm Weight : Max. 20 kg	2	Synchronized panel	180-050-429	ALT-ST20-L	1 each
		3	Coupling plate	180-050-425	ALT-ST20-LPL	
		4~14	Part kit	180-055-062	ALT-ST20-D360L-KIT	
LL	Height : 2000-2400 mm Weight : Max. 20 kg	2	Synchronized panel	180-050-430	ALT-ST20-LL	1 each
		3	Coupling plate	180-050-426	ALT-ST20-LPLL	
		4~14	Part kit	180-055-063	ALT-ST20-D360LL-KIT	

The part kit includes multiple parts. For details, see P.457.

STEP 2 Select a Slide

Check the cabinet depth and select a slide. The required quantity depends on the size types.



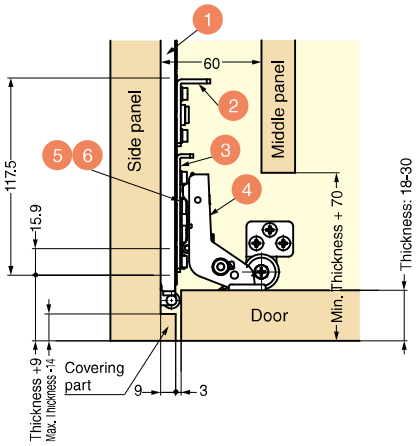
Cabinet Spec	No.	Parts	Item Code	Item Name	Qty/Door
Cabinet depth : Min. 387 mm + DT Door storage : 244 mm + DT	1	Slide	190-057-098	AL127C-15	S type : 2 pcs M type : 3 pcs L type : 4 pcs LL type : 4 pcs
Cabinet depth : Min. 412 mm + DT Door storage : 269 mm + DT	1	Slide	190-113-867	AL127C-16	
Cabinet depth : Min. 437 mm + DT Door storage : 294 mm + DT	1	Slide	190-057-099	AL127C-17	
Cabinet depth : Min. 488 mm + DT Door storage : 345 mm + DT	1	Slide	190-113-868	AL127C-19	
Cabinet depth : Min. 539 mm + DT Door storage : 396 mm + DT	1	Slide	190-057-100	AL127C-21	
Cabinet depth : Min. 564 mm + DT Door storage : 421 mm + DT	1	Slide	190-113-869	AL127C-22	
Cabinet depth : Min. 590 mm + DT Door storage : 447 mm + DT	1	Slide	190-057-101	AL127C-23	
Cabinet depth : Min. 615 mm + DT Door storage : 472 mm + DT	1	Slide	190-113-870	AL127C-24	
Cabinet depth : Min. 666 mm + DT Door storage : 523 mm + DT	1	Slide	190-057-314	AL127C-26	
Cabinet depth : Min. 717 mm + DT Door storage : 574 mm + DT	1	Slide	190-113-871	AL127C-28	

*DT: Door Thickness

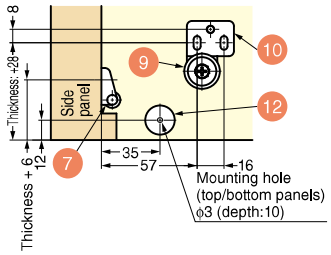
The required quantity per door depends on the size types.

Mounting Positions

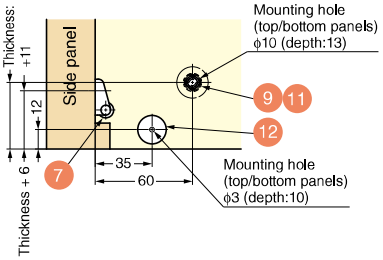
Cross section a: Slide/hinge mounting



Arrow view b: For roller bracket mounting



Cross section b: For mounting with female screw

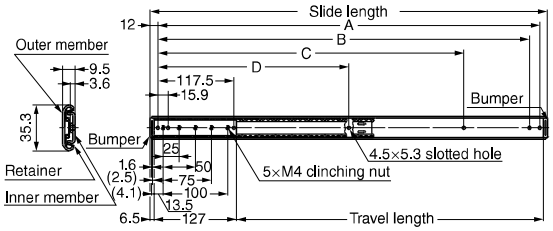
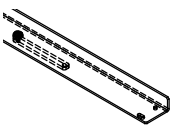
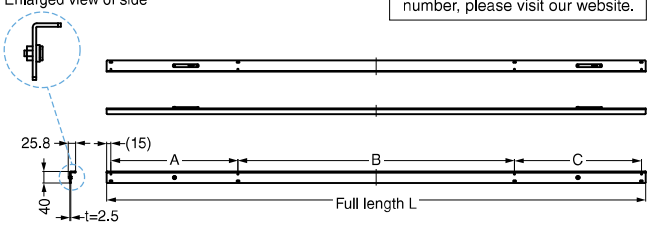
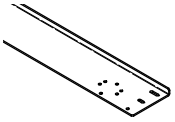
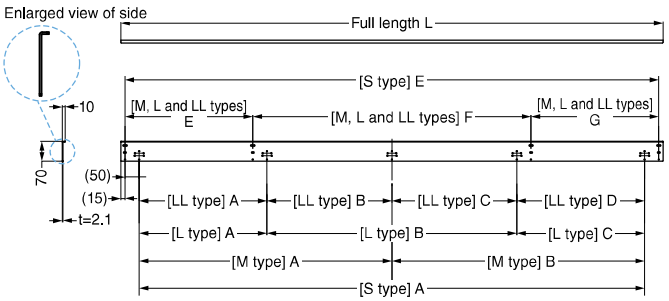


To hide the metal fittings, install a middle panel (not included).
(An attachable/detachable middle panel is recommended for easier maintenance.)

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.

Parts (ALT-ST20-D360)

For detailed information on size types, see P.454 - 455.

No.	Qty/Door S	M	L	LL	Parts	Dimensions	Item Code
1	2	3	4	4	**Slide** 		190-057-098 [Item Name] **AL127C-15** 190-113-867 [Item Name] **AL127C-16** 190-057-099 [Item Name] **AL127C-17** 190-113-868 [Item Name] **AL127C-19** 190-057-100 [Item Name] **AL127C-21** 190-113-869 [Item Name] **AL127C-22** 190-057-101 [Item Name] **AL127C-23** 190-113-870 [Item Name] **AL127C-24** 190-057-314 [Item Name] **AL127C-26** 190-113-871 [Item Name] **AL127C-28** Specifications • Material: Steel • Finish: Chromate
2	1	1	1	1	**Synchronized panel**  The end of the item number indicates the corresponding size.	For the drawing for each item number, please visit our website. Enlarged view of side 	180-050-427 [Item Name] **ALT-ST20-S** 180-050-428 [Item Name] **ALT-ST20-M** 180-050-429 [Item Name] **ALT-ST20-L** 180-050-430 [Item Name] **ALT-ST20-LL** Specifications • Material: Aluminium Alloy • Finish: Silver Anodized
3	1	1	1	1	**Coupling plate**  Used in combination with the synchronized panel. The end of the item number indicates the corresponding size.	For the drawing for each item number, please visit our website. Enlarged view of side 	180-050-423 [Item Name] **ALT-ST20-LPS** 180-050-424 [Item Name] **ALT-ST20-LPM** 180-050-425 [Item Name] **ALT-ST20-LPL** 180-050-426 [Item Name] **ALT-ST20-LPLL** Specifications • Material: Aluminium Alloy • Finish: Silver Anodized

Item Name	Slide Length	Travel Length	Door Storage	A	B	C	D
AL127C-15	386	244	244 + DT	362	346.1	244.5	–
AL127C-16	411.4	269.4	269 + DT	387.4	371.5	269.9	–
AL127C-17	436.8	294.8	294 + DT	412.8	396.9	295.3	–
AL127C-19	487.6	345.6	345 + DT	463.6	447.7	346.1	231.8
AL127C-21	538.4	396.4	396 + DT	514.4	498.5	396.9	257.2
AL127C-22	563.8	421.8	421 + DT	539.8	523.9	422.3	269.9
AL127C-23	589.2	447.2	447 + DT	565.2	549.3	447.7	282.6
AL127C-24	614.6	472.6	472 + DT	590.6	574.7	473.1	295.3
AL127C-26	665.4	523.4	523 + DT	641.4	625.5	523.9	320.7
AL127C-28	716.2	574.2	574 + DT	692.2	676.3	574.7	346.1

* DT: Door Thickness

Item Name	A	B	C	Full Length L
ALT-ST20-S	680	–	–	710
ALT-ST20-M	490	100	490	1110
ALT-ST20-L	500	480	500	1510
ALT-ST20-LL	450	980	450	1910

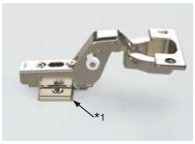
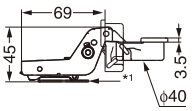
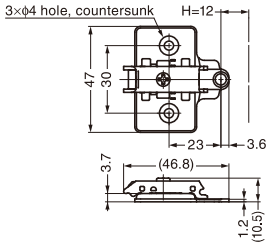
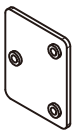
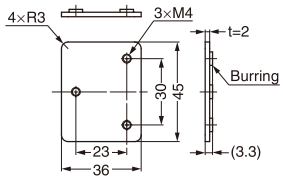
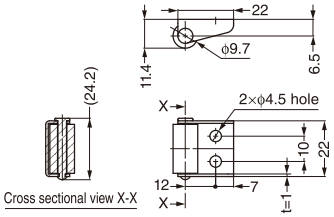
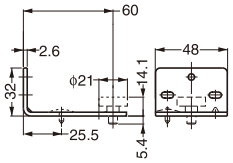
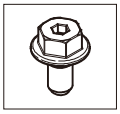
Item Name	Hinge Pitch A	B	C	D	Track Pitch E	F	G	Full Length L
ALT-ST20-LPS	580	–	–	–	680	–	–	710
ALT-ST20-LPM	490	490	–	–	490	100	490	1110
ALT-ST20-LPL	500	380	500	–	500	480	500	1510
ALT-ST20-LPLL	450	440	440	450	450	980	450	1910

*Please see the instructions for more information.

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.

Part Kit (ALT-ST20-D360)

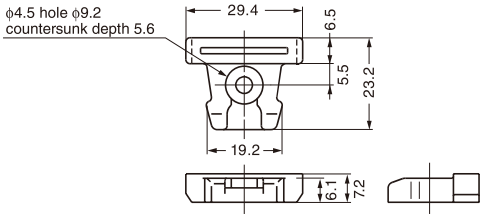
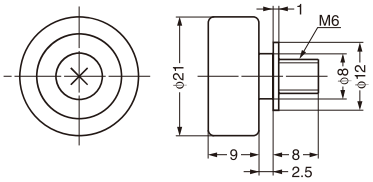
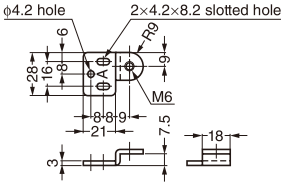
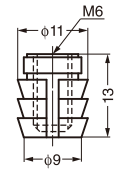
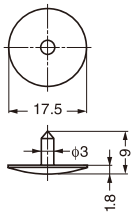
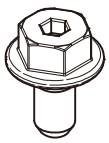
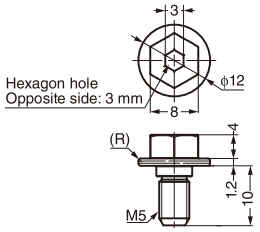
These parts are included in the "part kit" (P.455).

No.	Qty S	Qty M	Qty L	Qty LL	Parts	Dimensions	Item Code
4	2	3	4	5	**Hinge body (with built-in damper)** 		160-029-086 [Item Name] **H360-D26-0T** Specifications • Material: Steel • Finish: Nickel
5	2	3	4	5	**Hinge mounting plate** 		160-026-844 [Item Name] **360-P4W-30T** Specifications • Material: Steel • Finish: Nickel
6	2	3	4	5	**Mounting plate** 		180-053-368 [Item Name] **ALT-MP30** Specifications • Material: Stainless Steel • Finish: Barrel Polished
7	2	3	3	3	**Guide roller** 		180-053-310 [Item Name] **ALT-GR** Specifications • Material: Steel (SPCC)/Ethylene Propylen Rubber (EPDM) • Finishing/colour: Nickel/White
8	1	1	1	1	**Side panel bracket** 		180-120-340 [Item Name] **ALT-BR** Specifications • Material: Steel • Finish: Coloured Chromate (trivalent) [Application] To keep distance between door and floor surface (e.g., laundry room). For the compatible door height and installation, see the instructions.
9 ' 14	1	1	1		Parts set 9 Catch  10 Roller  11 Roller bracket  12 Insert female screw  13 G-type sliding tack  14 Adjustment bolt  For detailed information, including the dimensions of each part, please see P.458.		S type: 180-054-283 [Item Name] **ALT-ST20-D360-SP** M type: 180-054-284 [Item Name] **ALT-ST20-D360-MP** L type LL type: 180-054-285 [Item Name] **ALT-ST20-D360-LLP** • Necessary types and numbers of screws and hexagon spanners are included. For detailed information, see the instructions.

*Please see the instructions for more information.
*1 The mounting plates in the images and drawings are not included in the set.

ALT-ST15, ALT-ST20 Parts Set Details

Detailed information on the parts sets used for ALT-ST15 (P.442 - 449) and ALT-ST20 (P.450 - 457) is shown below. For the order code and item number of the set, please see the ALT-ST15 and ALT-ST20 product pages.

Qty S type	Qty M type	Qty L type	Qty LL type	Parts	Dimensions	Item Code
2	2	3	3	Catch 		180-120-522 [Item Name] **AL127-CH** Specifications • Material: Polyurethane (PUR) • Colour: Black
2	2	2	2	Roller 		180-940-144 [Item Name] **DU19-B4SBR** Specifications • Material: Ethylene Propylen Rubber (EPDM)/Steel • Finishing/colour: Gloss Chromate/White
Left/ Right 1 each	Left/ Right 1 each	Left/ Right 1 each	Left/ Right 1 each	Roller bracket* 	 * The drawing shows A type (bottom right/upper left)	180-930-145 [Item Name] **ALT-2V-AB** * Type A (bottom right/ upper left) 180-930-146 [Item Name] **ALT-2V-BB** * Type B (upper right/bottom left) Specifications • Material: Steel • Finish: Coloured Chromate
2	2	2	2	Insert female screw* 		120-041-310 [Item Name] **SC-107-13** Specifications • Material: Polyamide (PA) • Colour: White
2	2	2	2	G-type sliding tack 		210-030-123 [Item Name] **G-175** Specifications • Material: Polyethylene (PE) • Colour: Natural
ALT-ST15 1	ALT-ST15 1	2	2	Adjustment bolt 		180-921-817 [Item Name] **ALT-AB-M5** Specifications • Material: Steel (SWCH) • Finishing/colour: Coloured Chromate (Trivalemt)/ White Dedicated bolt for hanging adjustment
ALT-ST20 1	ALT-ST20 2	2	2			

*Use either roller bracket or insert female screw, depending on the mounting method.

• Necessary types and numbers of screws and hexagon spanners are included. For detailed information, see the instructions.

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.

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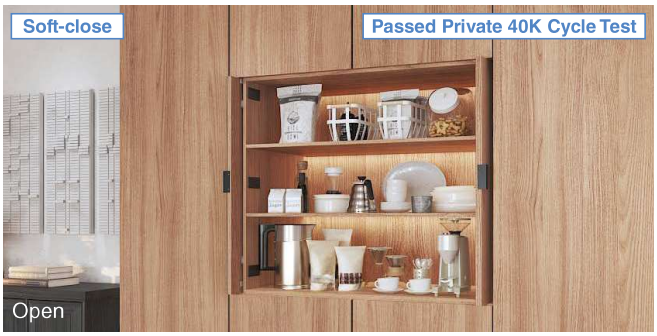
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LAMP POCKET DOOR SYSTEM ALT-SN15-D10 Outside-mount Slides / Overlay / Soft Close NEW

Latest Info





Size Type	ALT-SN15-D10S S (2 slides)	ALT-SN15-D10M M (2 slides)	ALT-SN15-D10L L (2 slides)	ALT-SN15-D10LL LL (3 slides)
Width	Max. 600 mm			
Height	500-700 mm	700-900 mm	900-1200 mm	1200-1600 mm
Thickness	18-20 mm			
Weight	Max. 6 kg	Max. 9 kg	Max. 12 kg	Max. 15 kg

Overlay pocket door system with door alignment adjustability.

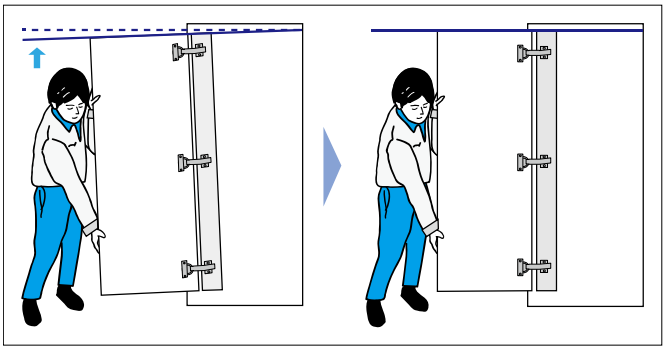
- Doors can be retracted and stored when opened.
- Slides are mounted outside of carcass/on middle panel and hidden from view.
- The hanging angle of the door can be easily adjusted. When installing, the door can be lifted upward into 5 different angles.
- Overlay amount is up to 10mm.
- After door installation, adding a damper unit allows the doors to close slowly.

INSTRUCTION SCREW

Remarks

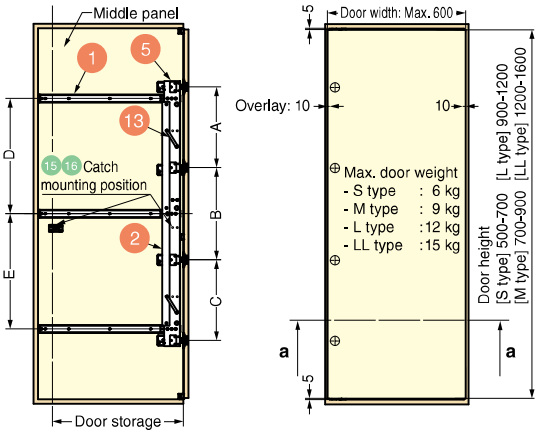
- For best performance, precise mortising is required.
- Do not cut slides.
- Do not close doors until they are fully slid out and the catch has activated.
- Doors are set inside the top and bottom frames.
- Install a door stopper (not provided) on the door leading edge.

Easy Door Alignment

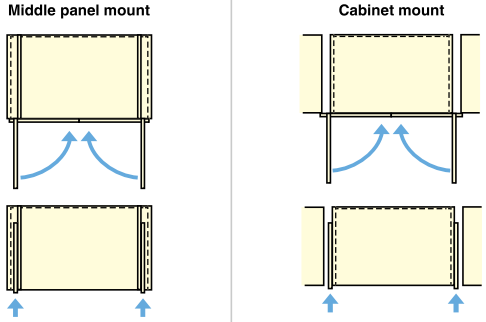


When installing, you can adjust the hanging angle just by lifting up the door.

Installation



Two Ways of Slide Mounting

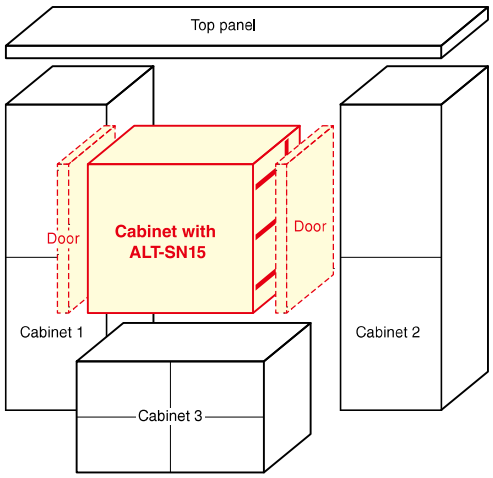


The middle panels create a storage space, enabling doors to slide inside the cabinet.

The doors retract on the outside of the cabinet.

Application Example

Selection Tool
Pocket Door



To conceal the exterior-mounted slides, it is recommended to pair this cabinet with others on its sides.

Type	Hinge Pitch			Slide Pitch	
	A	B	C	D	E
S	400	–	–	300	–
M	600	–	–	500	–
L	400	400	–	700	–
LL	350	400	350	500	500

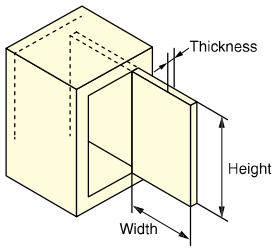
Slide Part Name	Door Storage Amount	Min. Cabinet Depth	Number of Slides			
			S	M	L	LL
AL80C-**15**	290	402	2	2	2	3
AL80C-**16**	315	427				
AL80C-**17**	340	452				
AL80C-**19**	391	503				
AL80C-**21**	442	554				
AL80C-**22**	467	579				
AL80C-**24**	518	630				
AL80C-**26**	569	681				
AL80C-**28**	620	732				

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.

How to Order ALT-SN15-D10

STEP 1 Select a Size Type

Check the "Door Spec" on the table and select "Synchronized panel" and "Part kit".



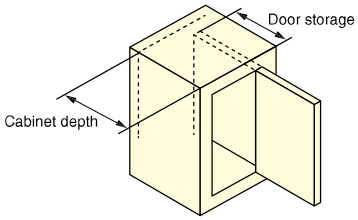
*All types require the door sizes below:
-Width : Max. 600 mm
-Thickness : 18~20 mm

Type	Door Spec*	No.	Parts	Item Code	Item Name	Qty/Door
S	Height : 500-700 mm Weight : Max. 6 kg	2	Synchronized panel	180-055-301	ALT-SN15-S	1 each
		3~13	Part kit	180-056-163	ALT-SN15-D10SM-KIT	
M	Height : 700-900 mm Weight : Max. 9 kg	2	Synchronized panel	180-055-302	ALT-SN15-M	1 each
		3~13	Part kit	180-056-163	ALT-SN15-D10SM-KIT	
L	Height : 900-1200 mm Weight : Max. 12 kg	2	Synchronized panel	180-055-303	ALT-SN15-L	1 each
		3~13	Part kit	180-056-164	ALT-SN15-D10L-KIT	
LL	Height :1200-1600 mm Weight : Max. 15 kg	2	Synchronized panel	180-055-304	ALT-SN15-LL	1 each
		3~13	Part kit	180-056-165	ALT-SN15-D10LL-KIT	

The part kit includes multiple parts. For details, see P.463.

STEP 2 Select a Slide

Check the cabinet depth and select a slide. The required quantity depends on the size types.



Cabinet Spec	No.	Parts	Item Code	Item Name	Qty/Door
Cabinet depth : Min. 402 mm Door storage : 290 mm	1	Slide	190-057-095	AL80C-15	S type : 2 pcs M type : 2 pcs L type : 2 pcs LL type : 3 pcs
Cabinet depth : Min. 427 mm Door storage : 315 mm	1	Slide	190-052-735	AL80C-16	
Cabinet depth : Min. 452 mm Door storage : 340 mm	1	Slide	190-057-096	AL80C-17	
Cabinet depth : Min. 503 mm Door storage : 391 mm	1	Slide	190-052-736	AL80C-19	
Cabinet depth : Min. 554 mm Door storage : 442 mm	1	Slide	190-057-097	AL80C-21	
Cabinet depth : Min. 579 mm Door storage : 467 mm	1	Slide	190-052-737	AL80C-22	
Cabinet depth : Min. 630 mm Door storage : 518 mm	1	Slide	190-052-738	AL80C-24	
Cabinet depth : Min. 681 mm Door storage : 569 mm	1	Slide	190-057-313	AL80C-26	
Cabinet depth : Min. 732 mm Door storage : 620 mm	1	Slide	190-052-739	AL80C-28	

The required quantity per door depends on the size types.

STEP 3 Select Option Parts as Needed

Cap



Bumper

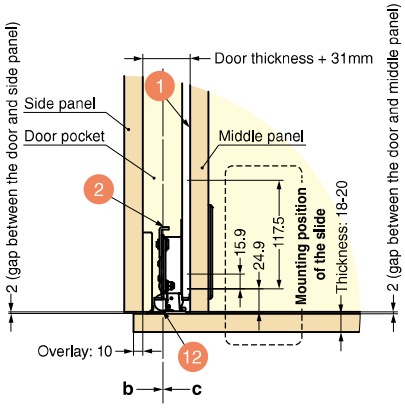


No.	Parts	Colour	Item Code	Item Name	Feature
14	Cap	White	210-031-800	S100-50W	Covers hinge-access holes on cabinets.
		Beige	210-031-801	S100-50BE	
		Dark Beige	210-031-840	S100-50DBE	
		Black	210-031-841	S100-50BL	
15	Bumper	Clear	210-032-020	BS-27	Absorbs the shock when doors close and creates a 2 mm gap on the leading edge side.

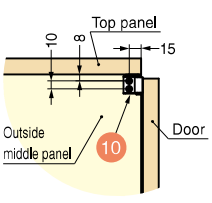
For details, please see P.468.

Mounting Positions

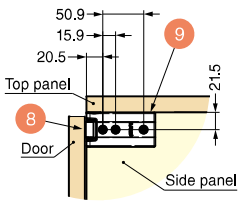
Cross section a: Slide/hinge mounting



Cross section b

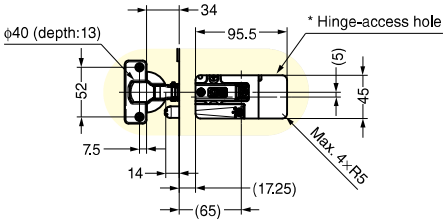


Cross section c



Cut-outs on Doors/Middle Panels

Holes are required on the hinge sections to mount/remove/adjust doors. Please see the instruction manual for details.



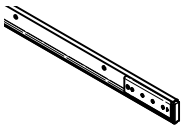
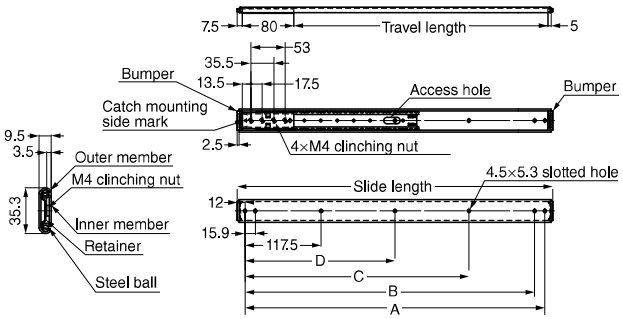
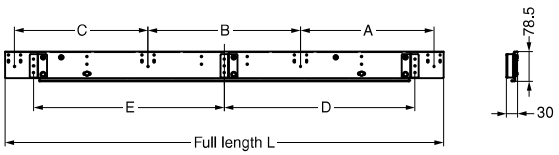
*The hinge-access holes are required even when the optional caps are not used.

An attachable/detachable middle panel is recommended for easier 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.

Parts (ALT-SN15-D10)

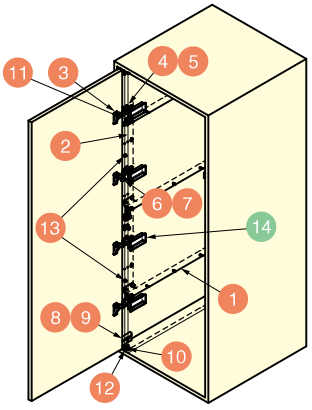
For detailed information on size types, please see P.460 - 461.

No.	Qty/Door S	M	L	LL	Parts	Dimensions	Item Code
1	2	2	2	3	**Slide**  Install the slides so that the catch mounting side mark are on the front side of the cabinet.	 **Item Name / Slide Length / Travel Length / Door Storage / A / B / C / D** AL80C-15: 386 / 291 / 290 / 362 / 346.1 / 244.5 / – AL80C-16: 411.4 / 316.4 / 315 / 387.4 / 371.5 / 269.9 / – AL80C-17: 436.8 / 341.8 / 340 / 412.8 / 396.9 / 295.3 / – AL80C-19: 487.6 / 392.6 / 391 / 463.6 / 447.7 / 346.1 / 231.8 AL80C-21: 538.4 / 443.4 / 442 / 514.4 / 498.5 / 396.9 / 257.2 AL80C-22: 563.8 / 468.8 / 467 / 539.8 / 523.9 / 422.3 / 269.9 AL80C-24: 614.6 / 519.6 / 518 / 590.6 / 574.7 / 473.1 / 295.3 AL80C-26: 665.4 / 570.4 / 569 / 641.4 / 625.5 / 523.9 / 320.7 AL80C-28: 716.2 / 621.2 / 620 / 692.2 / 676.3 / 574.7 / 346.1	190-057-095 [Item Name] **AL80C-15** 190-052-735 [Item Name] **AL80C-16** 190-057-096 [Item Name] **AL80C-17** 190-052-736 [Item Name] **AL80C-19** 190-057-097 [Item Name] **AL80C-21** 190-052-737 [Item Name] **AL80C-22** 190-052-738 [Item Name] **AL80C-24** 190-057-313 [Item Name] **AL80C-26** 190-052-739 [Item Name] **AL80C-28** Specifications • Material: Steel • Finish: Chromate
2	1	1	1	1	**Synchronized panel**  The end of the item number indicates the corresponding size.	 **Item Name / Hinge Pitch A / B / C / Slide Pitch D / E / Full length L** ALT-SN15-S: 400 / – / – / 300 / – / 450 ALT-SN15-M: 600 / – / – / 500 / – / 650 ALT-SN15-L: 400 / 400 / – / 700 / – / 850 ALT-SN15-LL: 350 / 400 / 350 / 500 / 500 / 1150	180-055-301 [Item Name] **ALT-SN15-S** 180-055-302 [Item Name] **ALT-SN15-M** 180-055-303 [Item Name] **ALT-SN15-L** 180-055-304 [Item Name] **ALT-SN15-LL** Specifications • Material: Aluminium Alloy • Finish: Silver Anodized

*Please see the instructions for more information.

Installation Example

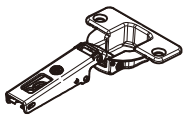
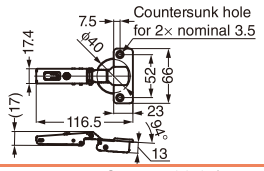
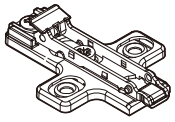
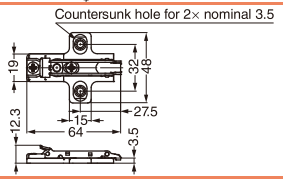
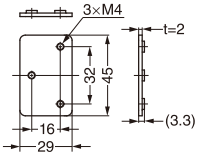
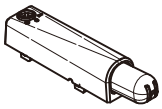
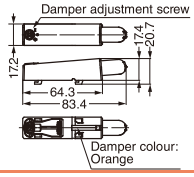
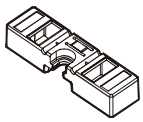
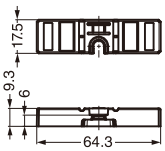
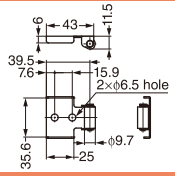
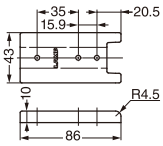
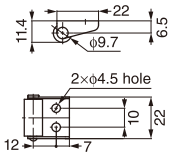
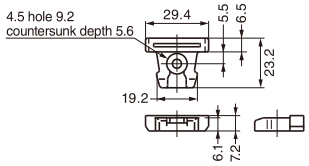
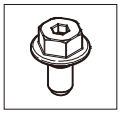
Details about parts: P.461 - 463



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.

Part Kit (ALT-SN15-D10)

These parts are included in the "part kit" (P.461).

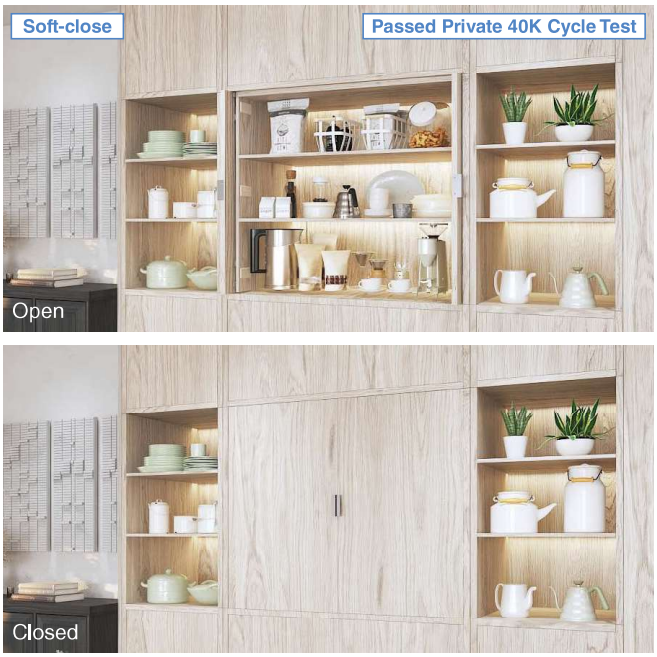
No.	Qty S	Qty M	Qty L	Qty LL	Parts	Dimensions	Item Code
3	2	2	3	4	**Hinge body (with catch)** 		160-048-934 [Item Name] **SCFA7A99** Specifications • Material: Zinc Alloy (ZDC) • Finish: Nickel
4	2	2	3	4	**Hinge mounting plate** 		160-046-188 [Item Name] **SBAR3R** Specifications • Material: Zinc Alloy (ZDC) • Finish: Nickel
5	2	2	3	4	**Mounting plate** 		180-053-369 [Item Name] **ALT-MP32** Specifications • Material: Stainless Steel • Finish: Barrel Polished
6	1	1	1	1	**Damper unit** 		160-048-935 [Item Name] **SD0S8SNG** Specifications • Material: Zinc Alloy • Finish: Nickel
7	1	1	1	1	**Damper base** 		160-048-937 [Item Name] **SDARX09** Specifications • Material: Zinc Alloy • Finish: Nickel
8	2	2	2	2	**Stopper** 		180-048-461 [Item Name] **ALT-ADS** Specifications • Material: Steel/Ethylene Propylene Rubber (EPDM) • Finishing/colour: Gloss Chromate/White
9	2	2	2	2	**Protector** 		180-047-931 [Item Name] **ALT-ADP** Specifications • Material: Polyacetal (POM) • Colour: Grey Helps prevent door damage.
10	2	2	4	4	**Guide roller** 		180-053-310 [Item Name] **ALT-GR** Specifications • Material: Steel (SPCC)/Ethylene Propylene Rubber (EPDM) • Finishing/colour: Nickel/White
11	2	2	2	3	**Catch** 		180-120-522 [Item Name] **AL127-CH** Specifications • Material: Polyurethane (PUR) • Colour: Black
12 13	1		1		**Parts set** 12 G-type sliding tack  13 Adjustment bolt  For detailed information, including the dimensions of each part, please see P.468.		S type / M type: 180-055-431, [Item Name] **ALT-SN15-D10-MP** L type / LL type: 180-055-432, [Item Name] **ALT-SN15-D10-LLP** • Screws, a hexagon spanner and a washer are included. For detailed information, see the instructions.

*Please see the instructions for more information.

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 POCKET DOOR SYSTEM ALT-SN15-D360 Outside-mount Slides / Inset / Soft Close NEW

Latest Info



Size Type	ALT-SN15-D360S S (2 slides)	ALT-SN15-D360M M (2 slides)	ALT-SN15-D360L L (2 slides)	ALT-SN15-D360LL LL (3 slides)
Width	Max. 600 mm			
Height	500-700 mm	700-900 mm	900-1200 mm	1200-1600 mm
Thickness	18-30 mm			
Weight	Max. 6 kg	Max. 9 kg	Max. 12 kg	Max. 15 kg

Inset pocket door system with door alignment adjustability.

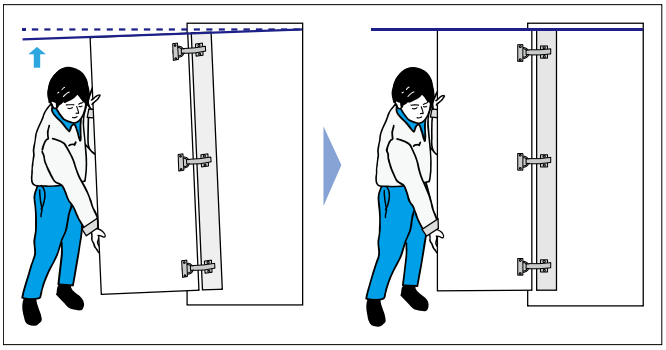
- Doors can be retracted and stored when opened.
- Slides are mounted outside of carcass/on middle panel and hidden from view.
- The hanging angle of the door can be easily adjusted. When installing, the door can be lifted upward into 5 different angles.
- The door closes slowly and quietly.
- The damper hinges can be replaced with hinges with catch function.

INSTRUCTION SCREW

Remarks

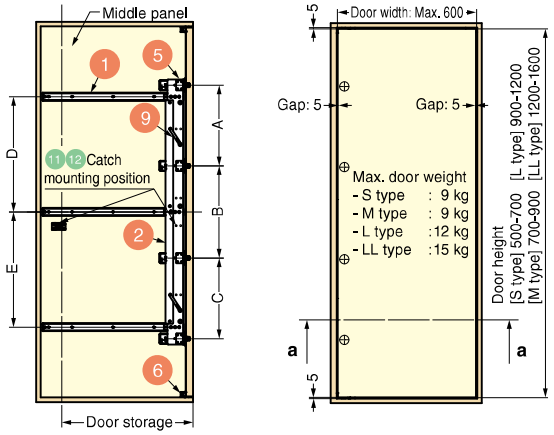
- For best performance, precise mortising is required.
- Do not cut slides.
- Do not close doors until they are fully slid out and the catch has activated.
- Install a door stopper (not provided) on the door leading edge.

Easy Door Alignment

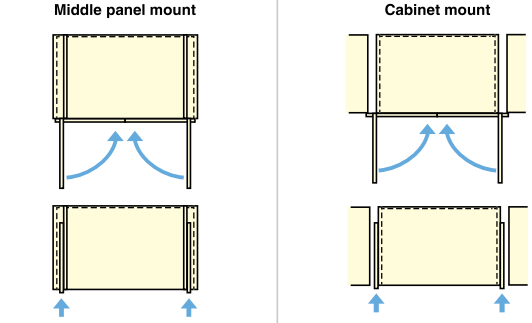


When installing, you can adjust the hanging angle just by lifting up the door.

Installation



Two Ways of Slide Mounting

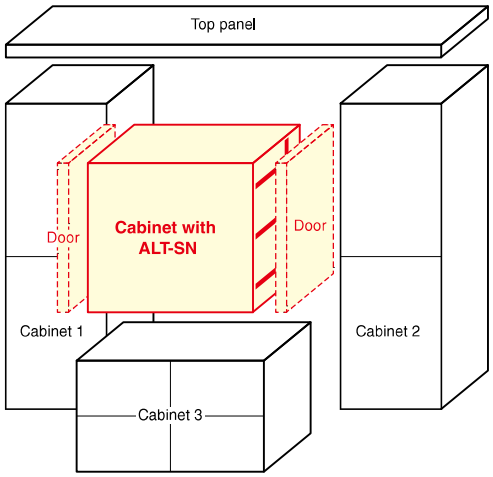


The middle panels create a storage space, enabling doors to slide inside the cabinet.

The doors retract on the outside of the cabinet.

Application Example

Selection Tool
Pocket Door



To conceal the exterior-mounted slides, it is recommended to pair this cabinet with others on its sides.

Type	Hinge Pitch			Slide Pitch	
	A	B	C	D	E
S	400	–	–	300	–
M	600	–	–	500	–
L	400	400	–	700	–
LL	350	400	350	500	500

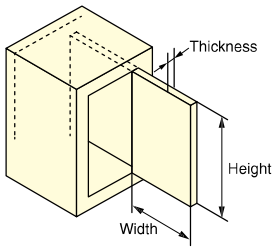
Slide Part Name	Door Storage Amount	Min. Cabinet Depth	Number of Slides			
			S	M	L	LL
AL80C-**15**	287 + Thickness	397 + Thickness	2	2	2	3
AL80C-**16**	312 + Thickness	422 + Thickness				
AL80C-**17**	337 + Thickness	447 + Thickness				
AL80C-**19**	388 + Thickness	498 + Thickness				
AL80C-**21**	439 + Thickness	549 + Thickness				
AL80C-**22**	464 + Thickness	574 + Thickness				
AL80C-**24**	515 + Thickness	625 + Thickness				
AL80C-**26**	566 + Thickness	676 + Thickness				
AL80C-**28**	617 + Thickness	727 + Thickness				

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.

How to Order ALT-SN15-D360

STEP 1 Select a Size Type

Check the "Door Spec" on the table and select "Synchronized panel" and "Part kit".



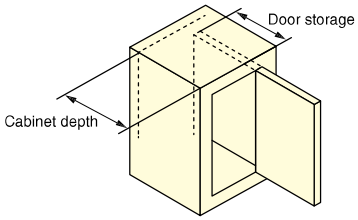
*All types require the door sizes below:
-Width : Max. 600 mm
-Thickness : 18~30 mm

Type	Door Spec*	No.	Parts	Item Code	Item Name	Qty/Door
S	Height : 500-700 mm Weight : Max. 6 kg	2	Synchronized panel	180-055-301	ALT-SN15-S	1 each
		3~9	Part kit	180-056-160	ALT-SN15-D360SM-KIT	
M	Height : 700-900 mm Weight : Max. 9 kg	2	Synchronized panel	180-055-302	ALT-SN15-M	1 each
		3~9	Part kit	180-056-160	ALT-SN15-D360SM-KIT	
L	Height : 900-1200 mm Weight : Max. 12 kg	2	Synchronized panel	180-055-303	ALT-SN15-L	1 each
		3~9	Part kit	180-056-161	ALT-SN15-D360L-KIT	
LL	Height :1200-1600 mm Weight : Max. 15 kg	2	Synchronized panel	180-055-304	ALT-SN15-LL	1 each
		3~9	Part kit	180-056-162	ALT-SN15-D360LL-KIT	

The part kit includes multiple parts. For details, see P.467.

STEP 2 Select a Slide

Check the cabinet depth and select a slide. The required quantity depends on the size types.



Cabinet Spec	No.	Parts	Item Code	Item Name	Qty/Door
Cabinet depth : Min. 397 mm + DT Door storage : 287 mm + DT	1	Slide	190-057-095	AL80C-15	S type : 2 pcs M type : 2 pcs L type : 2 pcs LL type : 3 pcs
Cabinet depth : Min. 422 mm + DT Door storage : 312 mm + DT	1	Slide	190-052-735	AL80C-16	
Cabinet depth : Min. 447 mm + DT Door storage : 337 mm + DT	1	Slide	190-057-096	AL80C-17	
Cabinet depth : Min. 498 mm + DT Door storage : 388 mm + DT	1	Slide	190-052-736	AL80C-19	
Cabinet depth : Min. 549 mm + DT Door storage : 439 mm + DT	1	Slide	190-057-097	AL80C-21	
Cabinet depth : Min. 574 mm + DT Door storage : 464 mm + DT	1	Slide	190-052-737	AL80C-22	
Cabinet depth : Min. 625 mm + DT Door storage : 515 mm + DT	1	Slide	190-052-738	AL80C-24	
Cabinet depth : Min. 676 mm + DT Door storage : 566 mm + DT	1	Slide	190-057-313	AL80C-26	
Cabinet depth : Min. 727 mm + DT Door storage : 617 mm + DT	1	Slide	190-052-739	AL80C-28	

*DT: Door Thickness

The required quantity per door depends on the size types.

STEP 3 Select Option Parts as Needed

Cap



Bumper

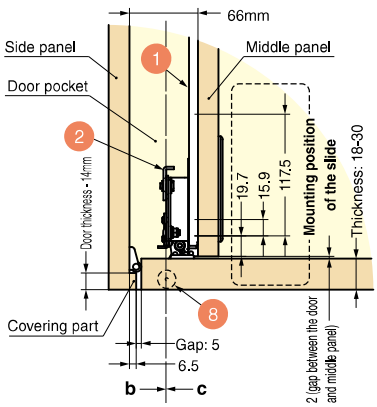


No.	Parts	Colour	Item Code	Item Name	Feature
14	Cap	White	210-031-800	S100-50W	• Covers hinge-access holes on cabinets.
		Beige	210-031-801	S100-50BE	
		Dark Beige	210-031-840	S100-50DBE	
		Black	210-031-841	S100-50BL	
15	Bumper	Clear	210-032-020	BS-27	• Absorbs the shock when doors close and creates a 2 mm gap on the leading edge side.

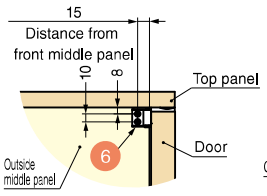
For details, please see P.468.

Mounting Positions

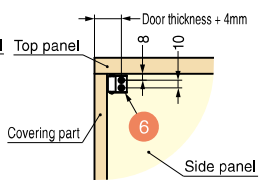
Cross section a: Slide/hinge mounting



Cross section b

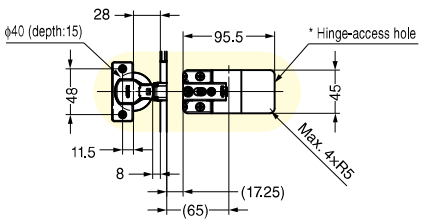


Cross section c



Cut-outs on Doors/Middle Panels

Holes are required on the hinge sections to mount/remove/adjust doors. Please see the instruction manual for details.



*The hinge-access holes are required even when the optional caps are not used.

An attachable/detachable middle panel is recommended for easier maintenance.

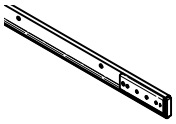
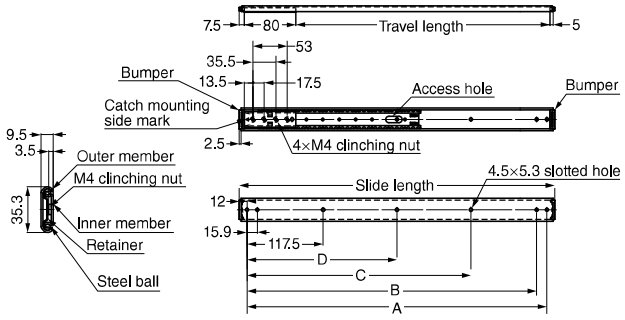
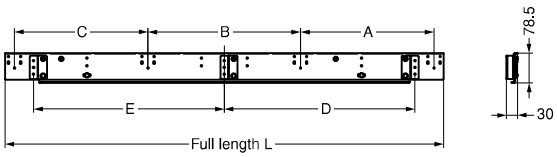
This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

Update: 11.14.2024

SELECTION GUIDE
POCKET DOOR SYSTEMS
LATERAL OPENING DOOR
SLIDING DOOR
FOLDING DOOR
HANGERS

Parts (ALT-SN15-D360)

For detailed information on size types, please see P.464 to P.465.

No.	Qty/Door S	M	L	LL	Parts	Dimensions	Item Code
1	2	2	2	3	**Slide**  Install the slides so that the catch mounting side mark are on the front side of the cabinet.	 * DT: Door Thickness	190-057-095 [Item Name] **AL80C-15** 190-052-735 [Item Name] **AL80C-16** 190-057-096 [Item Name] **AL80C-17** 190-052-736 [Item Name] **AL80C-19** 190-057-097 [Item Name] **AL80C-21** 190-052-737 [Item Name] **AL80C-22** 190-052-738 [Item Name] **AL80C-24** 190-057-313 [Item Name] **AL80C-26** 190-052-739 [Item Name] **AL80C-28** Specifications • Material: Steel • Finish: Chromate
2	1	1	1	1	**Synchronized panel**  The end of the item number indicates the corresponding size.		180-055-301 [Item Name] **ALT-SN15-S** 180-055-302 [Item Name] **ALT-SN15-M** 180-055-303 [Item Name] **ALT-SN15-L** 180-055-304 [Item Name] **ALT-SN15-LL** Specifications • Material: Aluminium Alloy • Finish: Silver Anodized

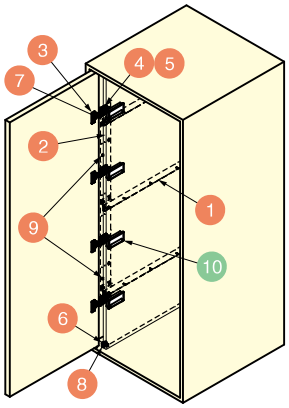
Item Name	Slide Length	Travel Length	Door Storage	A	B	C	D
AL80C-15	386	291	287 + DT	362	346.1	244.5	–
AL80C-16	411.4	316.4	312 + DT	387.4	371.5	269.9	–
AL80C-17	436.8	341.8	337 + DT	412.8	396.9	295.3	–
AL80C-19	487.6	392.6	388 + DT	463.6	447.7	346.1	231.8
AL80C-21	538.4	443.4	439 + DT	514.4	498.5	396.9	257.2
AL80C-22	563.8	468.8	464 + DT	539.8	523.9	422.3	269.9
AL80C-24	614.6	519.6	515 + DT	590.6	574.7	473.1	295.3
AL80C-26	665.4	570.4	566 + DT	641.4	625.5	523.9	320.7
AL80C-28	716.2	621.2	617 + DT	692.2	676.3	574.7	346.1

Item Name	Hinge Pitch A	B	C	Slide Pitch D	E	Full length L
ALT-SN15-S	400	–	–	300	–	450
ALT-SN15-M	600	–	–	500	–	650
ALT-SN15-L	400	400	–	700	–	850
ALT-SN15-LL	350	400	350	500	500	1150

*Please see the instructions for more information.

Installation Example

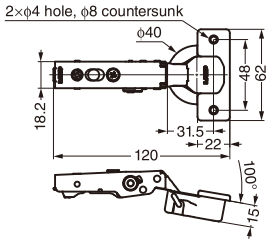
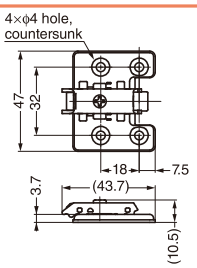
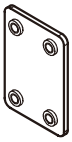
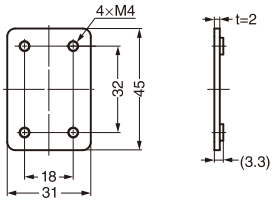
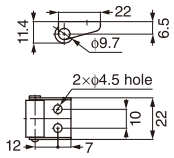
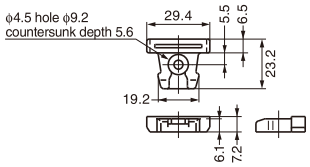
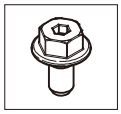
Details about parts: P.465 to P.467



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.

Parts (ALT-SN15-D360)

These parts are included in the "part kit" (P.465).

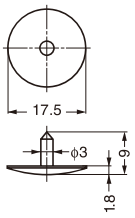
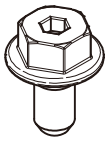
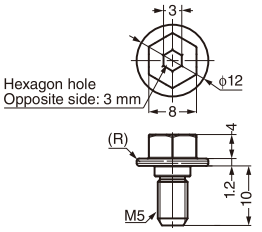
No.	Qty S	Qty M	Qty L	Qty LL	Parts	Dimensions	Item Code
3	2	2	3	4	**Hinge body (with built-in damper)** 		160-029-084 [Item Name] **H360-D26-26T** Specifications • Material: Steel • Finish: Nickel
4	2	2	3	4	**Hinge mounting plate** 		160-026-846 [Item Name] **360-P6WT** Specifications • Material: Steel • Finish: Nickel
5	2	2	3	4	**Mounting plate** 		180-054-260 [Item Name] **ALT-MP4** Specifications • Material: Stainless Steel • Finish: Barrel Polished
6	4	4	6	6	**Guide roller** 		180-053-310 [Item Name] **ALT-GR** Specifications • Material: Steel (SPCC)/Ethylene Propylene Rubber (EPDM) • Finishing/colour: Nickel/White
7	2	2	2	3	**Catch** 		180-120-522 [Item Name] **AL127-CH** Specifications • Material: Polyurethane (PUR) • Colour: Black
8 9	1		1		**Parts set** 8 G-type sliding tack  9 Adjustment bolt  For detailed information, including the dimensions of each part, please see P.468.		S type / M type: 180-055-429 [Item Name] **ALT-SN15-D360-MP** L type / LL type: 180-055-430 [Item Name] **ALT-SN15-D360-LLP** • Screws, a hexagon spanner and a washer are included. For detailed information, see the instructions.

*Please see the instructions for more information.

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.

ALT-SN15 Parts Set Details

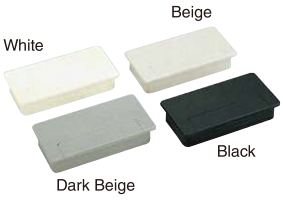
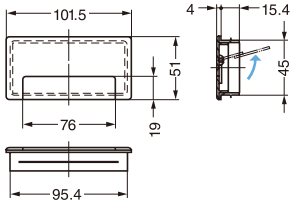
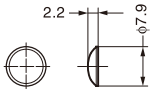
Details of the ALT-SN15's parts set (P.460 to P.467)

Qty S	Qty M	Qty L	Qty LL	Parts	Dimensions	Item Code
2	2	2	2	**G-type sliding tack** 		210-030-123 [Item Name] **G-175** Specifications • Material: Polyethylene (PE) • Colour: Natural
1	1	2	2	**Adjustment bolt** 		180-921-817 [Item Name] **ALT-AB-M5** Specifications • Material: Steel (SWCH) • Finishing/colour: Coloured Chromate (Trivalemt)/ White Dedicated bolt for door alignment adjustment

●Screws, a hexagon spanner and a washer are included. For detailed information, see the instructions.

ALT-SN15 Option Parts Details

Details of the ALT-SN15's option parts (P.460 to P.467)

Qty S	Qty M	Qty L	Qty LL	Parts	Dimensions	Colour	Item Code
2	2	3	4	**Cap** 		White	210-031-800 [Item Name] **S100-50W**
						Beige	210-031-801 [Item Name] **S100-50BE**
						Dark Beige	210-031-840 [Item Name] **S100-50DBE**
						Black	210-031-841 [Item Name] **S100-50BL**
						Specifications • Material: ABS	
1	1	1	1	**Bumper**		210-032-020 [Item Name] **BS-27** Specifications • Material: Polyurethane (PUR) • Colour: Clear (black colour is also available) • Quantity: 450 pcs / sheet	

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.

Discover What Sugatsune's Website Has to Offer!

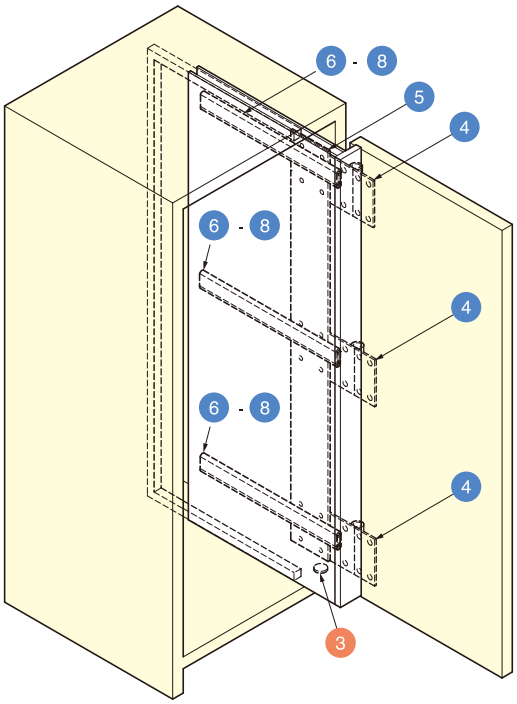
sugatsune global Search

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 POCKET DOOR SYSTEM (INSET) TSSL-2V

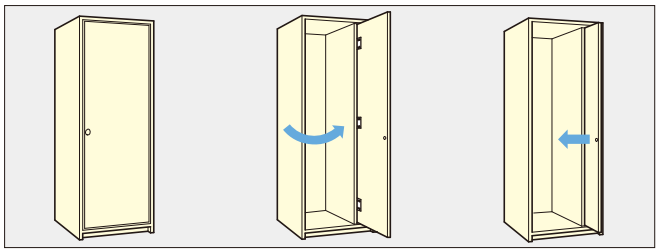
Latest Info



Door Width	Max. 800 mm
Door Height	1760 - 2300 mm
Door Weight	Max. 20 kg/Door

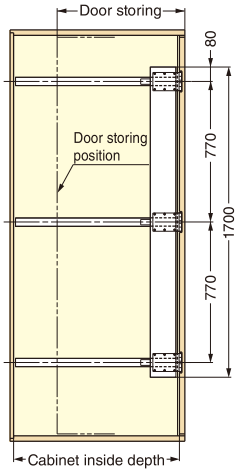
- Opening door is stored inside the cabinet.
- One touch door installation & removal.

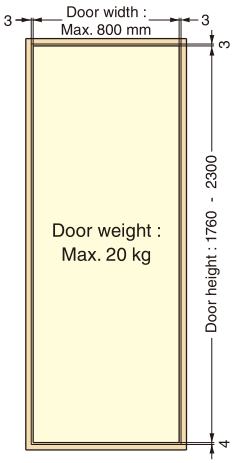
INSTRUCTION SCREW



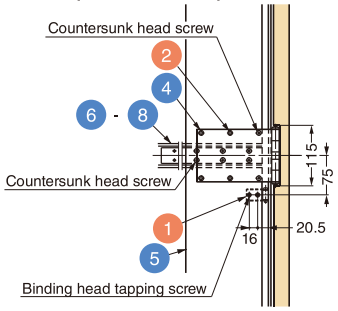
Selection Tool
Pocket Door

Installation

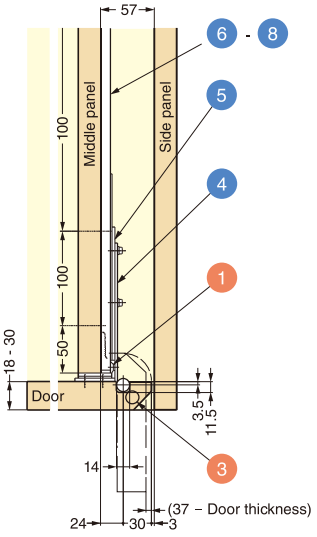




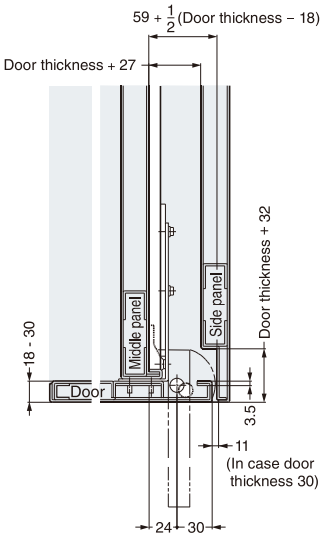
Side view (Wooden door)



Top view (Wooden door)

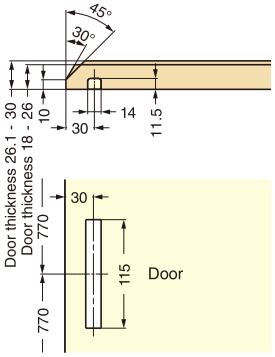


Top view (Steel door)

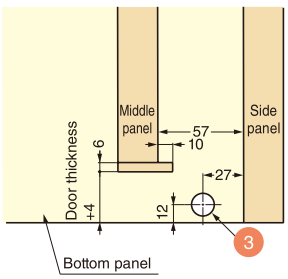


Cut Out Dimensions

Door



Cabinet



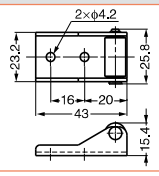
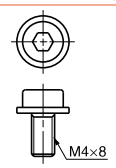
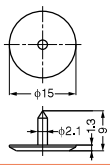
This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

How to Order TSSL-2V • Required Parts..... Parts Set + Hinge + Connecting Plate + Rails

Parts Set (Per Door) — Required Parts

Type	Item Code	Item Name
a 600 mm Rails	180-110-575	TSSL-2VD600
b 800 mm Rails	180-110-576	TSSL-2VD800
c 900 mm Rails	180-110-577	TSSL-2VD900

Parts Set

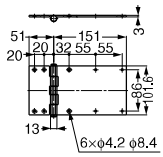
No.	Qty a	Qty b	Qty c	Part Name	Dimensions	Description
1	3 pcs	3 pcs	3 pcs	Door Stopper 		• Material Steel • Finish Clear Zinc Chromate
2	12 pcs	12 pcs	12 pcs	Bolt 		• Material Steel • Finish Clear Zinc Chromate
3	1 pc	1 pc	1 pc	Slider 		Item Code : 210-030-122 Item Name : F-15 • Material POM • Finish Natural

Parts Included

Binding head tapping screw 3.5×15..... a 36 pcs, b 48 pcs, c 54 pcs
Countersunk head screw..... 24 pcs

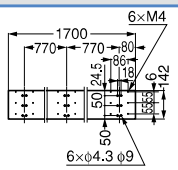
Hinge — Required Parts

3 pcs are necessary for 1 door.

No.	Qty	Item Code	Part Name	Dimensions	Description
4	1 pc	180-110-562 / TSSL-2VH	Hinge 		• Material Steel • Finish White

Connecting Plate — Required Parts

1 pc is necessary for 1 door.

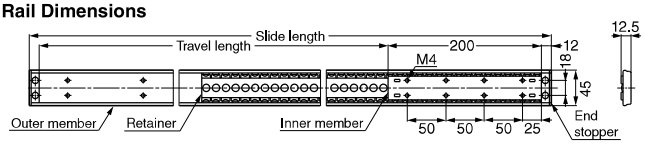
No.	Qty	Item Code	Part Name	Dimensions	Description
5	1 pc	180-110-563 / TSSL-2VP	Connecting Plate 		• Material Steel • Finish Yellow Zinc Chromate

Rail — Required Parts (Select One)

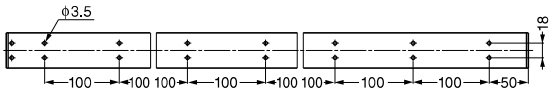
3 pcs are necessary for 1 door.

No.	Type	Qty	Item Code	Part Name	Description
6	Slide Length 600 mm	1 pc	190-110-570 / TSSL-600SV	Rail 	• Material SUS304
7	Slide Length 800 mm	1 pc	190-110-571 / TSSL-800SV		
8	Slide Length 900 mm	1 pc	190-110-572 / TSSL-900SV		

Rail Dimensions



<Bore Pitch>



Item Name	Slide Length	Travel Length	Bore Qty N	Door Storage	Depth Inside Cabinet
TSSL-600SV	600	376	12	402.5+Door thickness	Min. 620
TSSL-800SV	800	576	16	602.5+Door thickness	Min. 820
TSSL-900SV	900	676	18	702.5+Door thickness	Min. 920

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LAMP LATERAL DOOR OPENING SYSTEMS



Elegant Flush Design for Compact & Functional Spaces

Monoflat LIN-X Hinge series and FAD series are arm-type flat door hinges. The space required to open the door is smaller compared to a swing door, making it suitable even for outward-opening doors in narrow spaces. Enhance your design possibilities with the flexibility to choose from options such as single or double door openings.

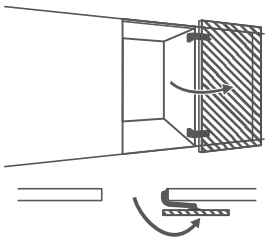




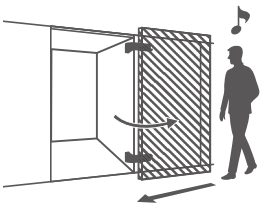
This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

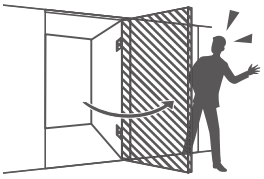
Features





Unique movement for a compact and extremely smooth opening of the door.

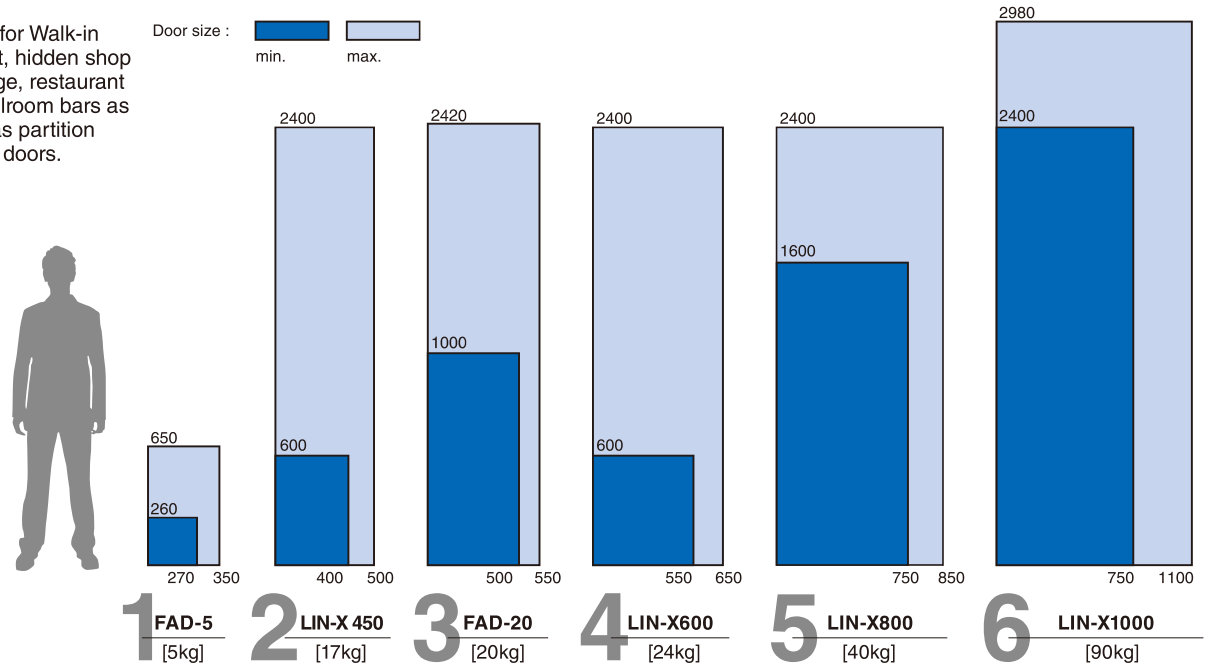




Door opens in front of the contiguous wall or cabinet, giving a full access from all directions.

Product lineup

Ideal for Walk-in closet, hidden shop storage, restaurant or ballroom bars as well as partition office doors.



More information



1
MONOFLAT FAD
(FOR SMALL SIZE CABINET)
FAD-5
P.474



2&4
MONOFLAT
LIN-X HINGE
LIN-X450,600
P.476



3
MONOFLAT FAD
(FOR MEDIUM SIZE CABINET)
FAD-20
P.487



5
MONOFLAT
LIN-X HINGE
LIN-X800
P.482



6
MONOFLAT
LIN-X HINGE
(HEAVY-DUTY)
LIN-X1000
P.484

Feature

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 MONOFLAT FAD (FOR SMALL SIZE CABINET) FAD-5

Latest Info



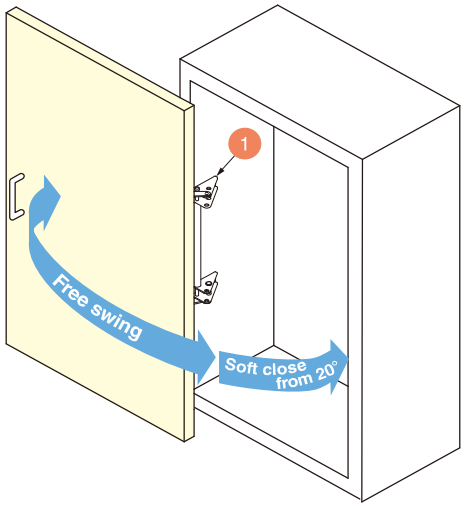
MonoFlat FAD®

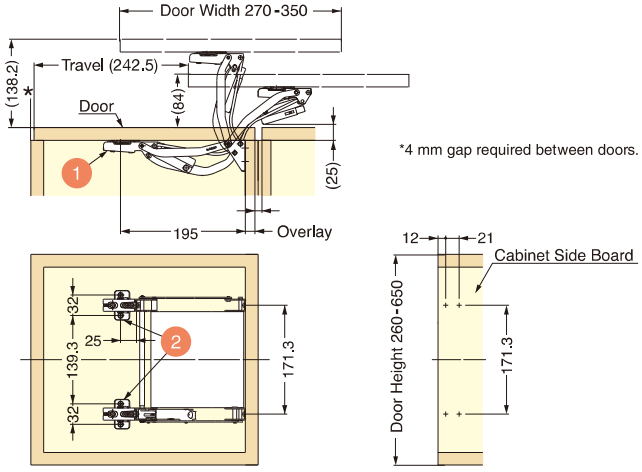
Door Width	270-350 mm
Door Height	260-650 mm
Door Thickness	15-20 mm
Door Weight	Max. 5 kg/Door

- Lateral swing system for smaller cabinets with an overlay installation.
- Smaller opening radius than swing open doors. Does not get in the way after being opened.
- Doors close gently and quietly.
- 3way adjustment post-installation: vertical(±3mm), horizontal(±2.5mm), paralel (5°).
- Great solution for kitchen, bathroom and laundry room cabinets.
- Various types of installations: Can be used on single or double doors.

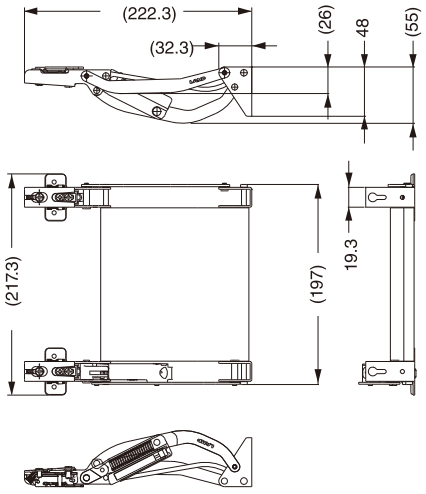
INSTRUCTION

Feature





Hinge Dimensions

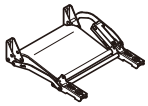


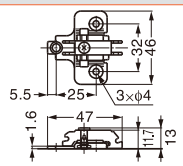
Parts Set (Per Door)

Required Parts

Item Code	Item Name
250-016-605	FAD-5

Parts Included

No.	Qty	Part Name	Drawing	Description
1	1 pc	Hinge Body	 As above.	• Material Aluminium Alloy /Polyacetal(POM) /Steel • Finish Anodized Silver /Grey/Nickel

No.	Qty	Part Name	Drawing	Description
2	2 pcs	Mounting Plate	 	Item Code : 160-070-041 Part Name : 230-P4W-32T • Material Steel • Finish 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.

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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 MONOFLAT LIN-X HINGE LIN-X450, LIN-X600

LIN-X450 LIN-X600



MonoFlat LIN-X hinge®

	LIN-X450	LIN-X600
Door Width	400 - 500 mm	550 - 650 mm
Door Height	600 - 2400 mm	
Door Thickness	15 - 24 mm	
Door Weight	Max. 17 kg/Door	Max. 24 kg/Door
Overlay	19 mm	

When opening or opened, cabinet doors will not get in the way. Unique and innovative design.

- Overlay installation that is flush with wall on both sides.
- Full access to cabinet interior: door will not get in the way when fully opened.
- Smooth operation: door is easy to move with little resistance no matter the position.
- Soft-closing: built-in damper makes door close gently, preventing slamming.
- Easy installation: Snap-in type installation. Same type of surface installation as concealed hinge mounting plate.
- Various applications including corner doors, double doors, overlapping doors.

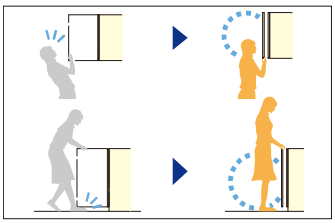
INSTRUCTION SCREW



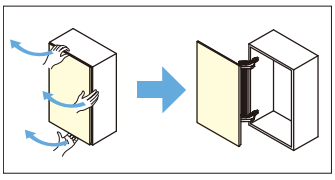








• Swing door laterally



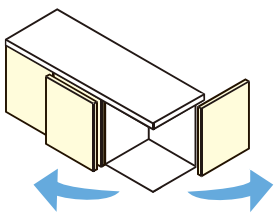
• Free swing

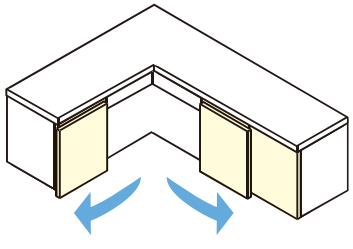


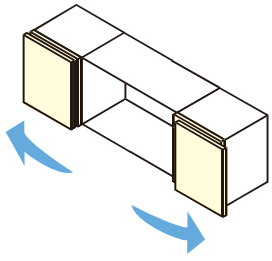
Hinge body (Close)



Hinge body (Open)

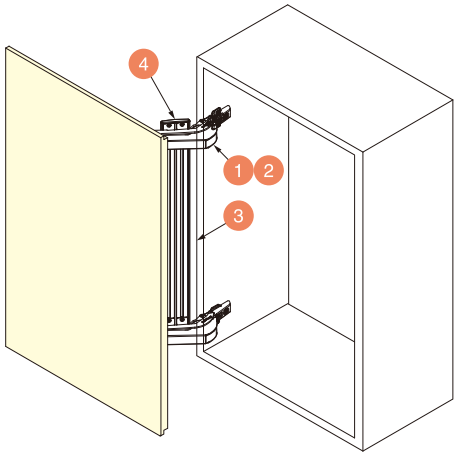


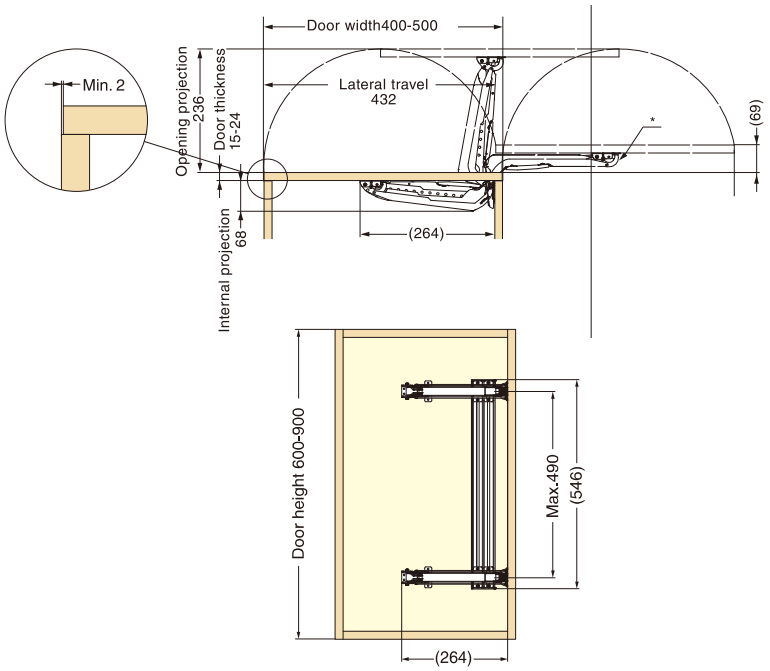




This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

LAMP STANDARD KIT LIN-X450



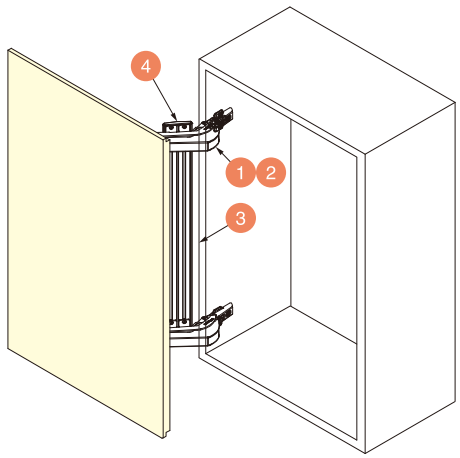


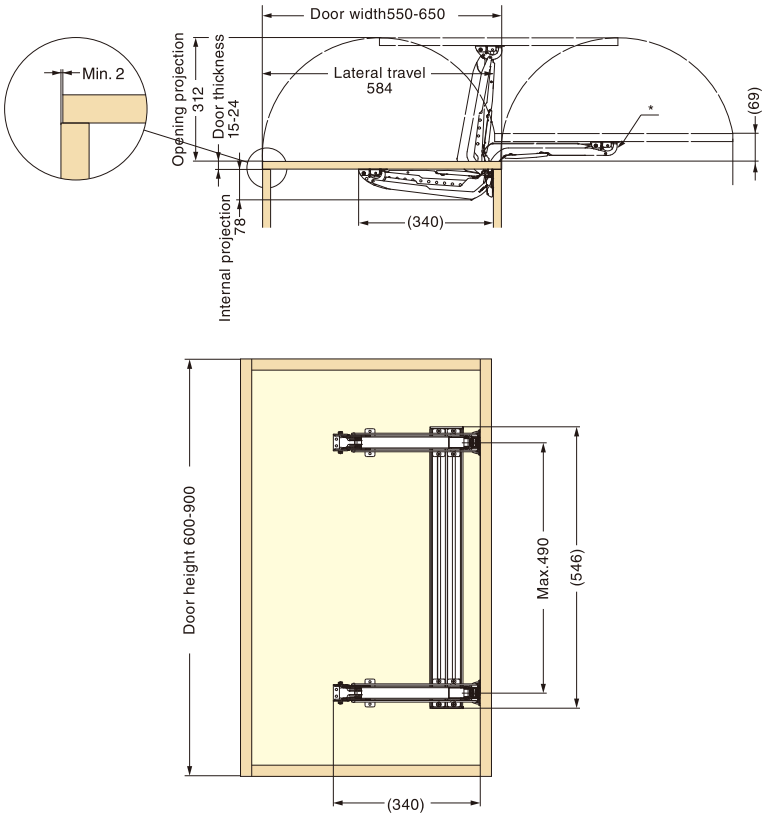
Door Width	400-500 mm
Door Height	600-900 mm
Door Thickness	15-24 mm
Door Weight	Max. 7 kg / Door

Feature Feature

Item Code	Item Name	Overlay	Mounting Plate	Material	Finish	Weight	Box	Carton
250-014-240	LIN-X450	19 mm	230-P4W-32T	Steel/Aluminium	Nickel/Anodized	2.2 kg	1 set	6 sets
250-014-553	LIN-X450+5	14 mm	230-P4W-32T+5	Steel/Aluminium	Nickel/Anodized	2.2 kg	1 set	6 sets

LAMP STANDARD KIT LIN-X600





Door Width	550-650 mm
Door Height	600-900 mm
Door Thickness	15-24 mm
Door Weight	Max. 9 kg / Door

Feature

Item Code	Item Name	Overlay	Mounting Plate	Material	Finish	Weight	Box	Carton
250-017-590	LIN-X600	19 mm	230-P4W-32T	Steel/Aluminium	Nickel/Anodized	3.2 kg	1 set	6 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.

How to Order LIN-X450

• Required Parts..... Part Set (per door) + Mounting Plate

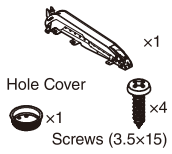
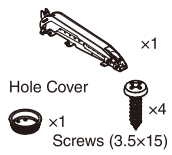
Parts Set (Per Door)

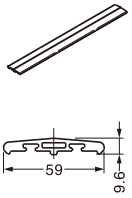
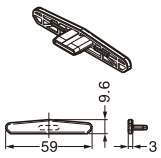
Required Parts

Please refer to parts included in each set.

Item Code	Item Name	Door Height	Door Weight	Parts Included			
				Hinge Set (With Damper) Item Name : LIN-X450ACD	Hinge Set (Without Damper) Item Name : LIN-X450A	Connecting Bar Item Name : LIN-X45-Lxxx	End Cap For Connecting Bar Item Name : LIN-X45C
250-016-704	LIN-X450S-1210	901-1200 mm	7.1-10.5 kg	3 sets	–	840 mm x 1 pc	2 pcs
250-016-705	LIN-X450S-1214		10.6-14 kg	3 sets	1 set		2 pcs
250-016-707	LIN-X450S-1510	1201-1500 mm	7.1-10.5 kg	3 sets	–	1140 mm x 1 pc	2 pcs
250-016-708	LIN-X450S-1514		10.6-14 kg	3 sets	1 set		2 pcs
250-016-709	LIN-X450S-1517		14.1-17 kg	3 sets	2 sets		2 pcs
250-016-711	LIN-X450S-1810	1501-1800 mm	7.1-10.5 kg	3 sets	–	1440 mm x 1 pc	2 pcs
250-016-712	LIN-X450S-1814		10.6-14 kg	3 sets	1 set		2 pcs
250-016-713	LIN-X450S-1817		14.1-17 kg	3 sets	2 sets		2 pcs
250-016-716	LIN-X450S-2110	1801-2100 mm	7.1-10.5 kg	3 sets	–	1740 mm x 1 pc	2 pcs
250-016-717	LIN-X450S-2114		10.6-14 kg	3 sets	1 set		2 pcs
250-016-718	LIN-X450S-2117		14.1-17 kg	3 sets	2 sets		2 pcs
250-016-723	LIN-X450S-2414	2101-2400 mm	10.6-14 kg	3 sets	1 set	2040 mm x 1 pc	2 pcs
250-016-724	LIN-X450S-2417		14.1-17 kg	3 sets	2 sets		2 pcs

Parts Included

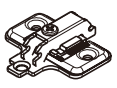
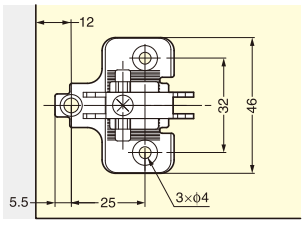
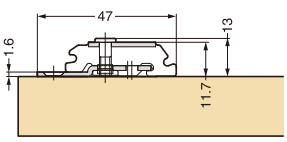
No.	Part Name	Description
1	**Hinge Body with Damper** 	**Item Code : 250-016-240** **Part Name : LIN-X450ACD** • Material Steel • Finish Nickel
2	**Hinge Body without Damper** 	**Item Code : 250-016-242** **Part Name : LIN-X450A** • Material Steel • Finish Nickel

No.	Part Name	Description
3	**Connecting Bar** 	**Item Code : 250-016-250** **Part Name : LIN-X45-L540** **Item Code : 250-016-252** **Part Name : LIN-X45-L840** **Item Code : 250-016-254** **Part Name : LIN-X45-L1140** **Item Code : 250-016-255** **Part Name : LIN-X45-L1440** **Item Code : 250-016-256** **Part Name : LIN-X45-L1740** **Item Code : 250-016-259** **Part Name : LIN-X45-L2040** • Material Aluminium Alloy • Finish Anodized
4	**End Cap for Connecting Bar** 	**Item Code : 250-016-260** **Part Name : LIN-X45C** • Material Polyacetal (POM) • Color Grey

Mounting Plate

Required Parts

Same qty as hinge is necessary.

Item Code	Part Name	Dimensions	Description
160-070-041 230-P4W-32T	**Mounting Plate** 	 	• Material Steel • Finish Nickel Same quantity with hinge is necessary.
160-070-030 TAP3515NI	**Raised Countersunk Head Tapping Screw 3.5×15**  ×3 per mounting plate		• Material Steel • Finish 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.

How to Order LIN-X600

• Required Parts..... Part Set (per door) + Mounting Plate

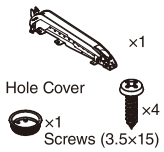
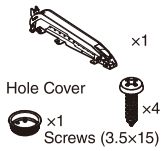
Parts Set (Per Door)

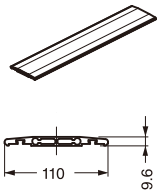
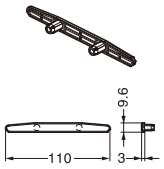
Required Parts

Please refer to parts included in each set.

Item Code	Item Name	Door Height	Door Weight	Parts Included			
				Hinge Set (With Damper) Item Name : LIN-X600ACD	Hinge Set (Without Damper) Item Name : LIN-X600A	Connecting Bar Item Name : LIN-X60-Lxxx	End Cap For Connecting Bar Item Name : LIN-X60C
250-017-068	LIN-X600S-1212	901-1200 mm	Less than 12 kg	2 sets	–	840 mm x 1 pc	2 pcs
250-017-069	LIN-X600S-1216		12.1-16 kg	3 sets	–		2 pcs
250-017-071	LIN-X600S-1516	1201-1500 mm	Less than 16 kg	3 sets	–	1140 mm x 1 pc	2 pcs
250-017-072	LIN-X600S-1520		16.1-20 kg	3 sets	1 set		2 pcs
250-017-074	LIN-X600S-1816	1501-1800 mm	Less than 16 kg	3 sets	–	1440 mm x 1 pc	2 pcs
250-017-075	LIN-X600S-1820		16.1 kg-20 kg	3 sets	1 set		2 pcs
250-017-493	LIN-X600S-1824		20.1-24 kg	3 sets	2 sets		2 pcs
250-017-077	LIN-X600S-2116	1801-2100 mm	Less than 16 kg	3 sets	–	1740 mm x 1 pc	2 pcs
250-017-078	LIN-X600S-2120		16.1 kg-20 kg	3 sets	1 set		2 pcs
250-017-079	LIN-X600S-2124		20.1-24 kg	3 sets	2 sets		2 pcs
250-017-082	LIN-X600S-2420	2101-2400 mm	Less than 20 kg	3 sets	1 set	2040 mm x 1 pc	2 pcs
250-017-083	LIN-X600S-2424		20.1-24 kg	3 sets	2 sets		2 pcs

Parts Included

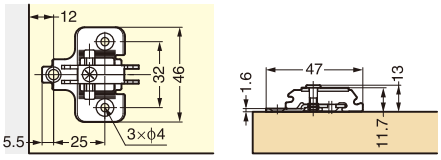
No.	Part Name	Description
1	**Hinge Body with Damper** 	**Item Code : 250-016-962** **Part Name : LIN-X600ACD** • Material Steel • Finish Nickel
2	**Hinge Body without Damper** 	**Item Code : 250-016-963** **Part Name : LIN-X600A** • Material Steel • Finish Nickel

No.	Part Name	Description
3	**Connecting Bar** 	**Item Code : 250-016-964** **Part Name : LIN-X60-L540** **Item Code : 250-016-965** **Part Name : LIN-X60-L840** **Item Code : 250-016-966** **Part Name : LIN-X60-L1140** **Item Code : 250-016-967** **Part Name : LIN-X60-L1440** **Item Code : 250-016-968** **Part Name : LIN-X60-L1740** **Item Code : 250-016-969** **Part Name : LIN-X60-L2040** • Material Aluminium Alloy • Finish Anodized
4	**End Cap for Connecting Bar** 	**Item Code : 250-016-970** **Part Name : LIN-X60C** • Material Polyacetal (POM) • Colour Grey

Mounting Plate

Required Parts

Same qty as hinge is necessary.

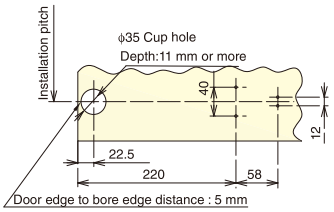
Item Code	Part Name	Dimensions	Description
160-070-041 Item Name : 230-P4W-32T	**Mounting Plate** 		• Material Steel • Finish Nickel *Same quantity with hinge is necessary.
160-070-030 Item Name : TAP3515NI	**Raised Countersunk Head Tapping Screw 3.5×15**  ×3 per mounting plate		• Material Steel • Finish Nickel

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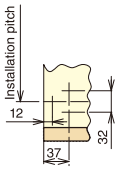
Hinge Installation Pitch and Other Dimensions

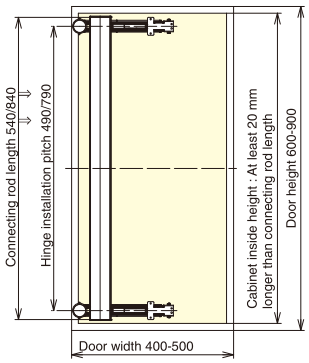
LIN-X450

Door Preparation



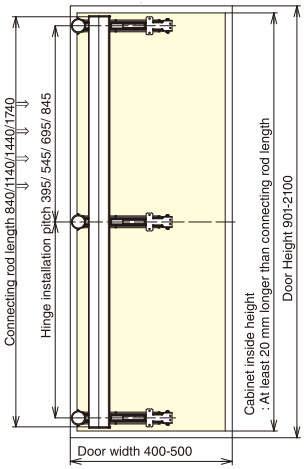
Cabinet Preparation





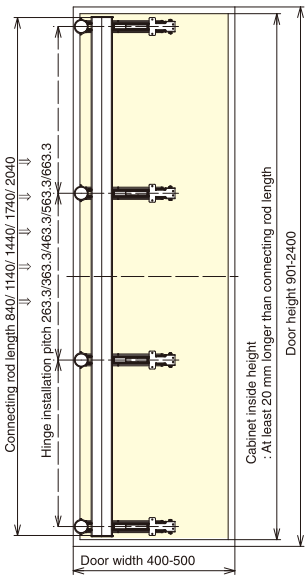
Door thickness 15-24
Door weight up to 7 kg

2 Hinges per door
(①LIN-X450ACD : 2 pcs)



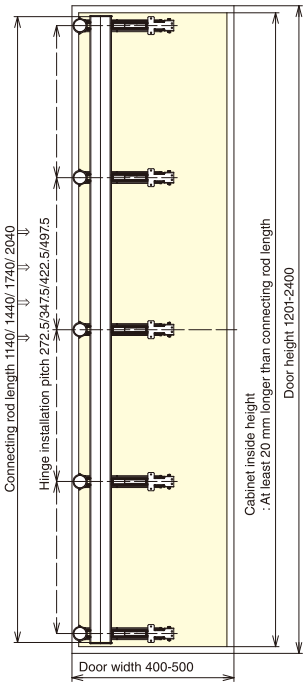
Door thickness 15-24
Door weight up to 10.5 kg

3 Hinges per door
(①LIN-X450ACD : 3 pcs)



Door thickness 15-24
Door weight up to 14 kg

4 Hinges per door
(①LIN-X450ACD : 3 pcs)
(②LIN-X450A : 1 pc)
*Please install the ②to the second place from the bottom.



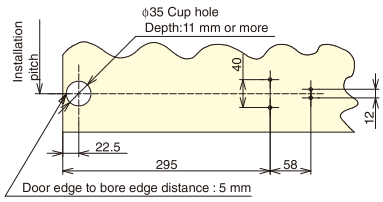
Door thickness 15-24
Door weight up to 17 kg

5 Hinges per door
(①LIN-X450ACD : 3 pcs)
(②LIN-X450A : 2 pcs)
*Please install the ②to the 2nd and 3rd place from the bottom.

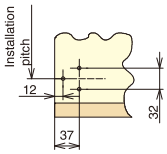
Hinge Installation Pitch and Other Dimensions

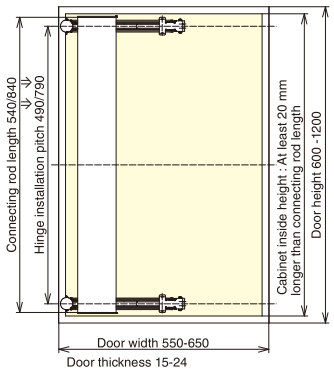
LIN-X600

Door Preparation



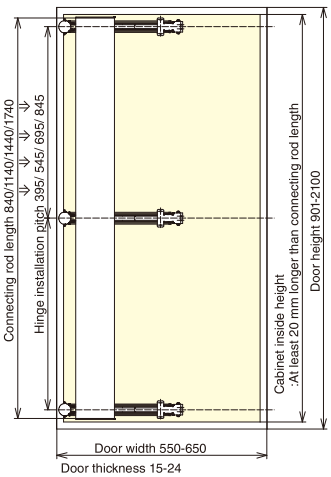
Cabinet Preparation





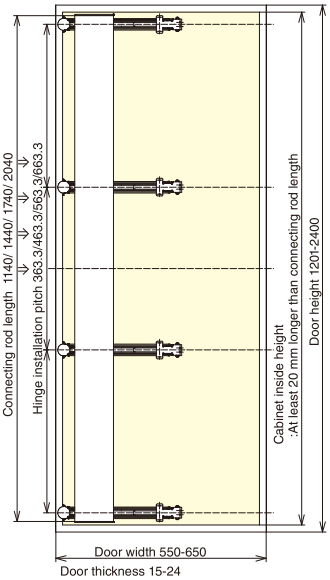
Door thickness 15-24
Door weight
Door height 600-1200
⇒Door weight up to 9 kg
Door height 901-1200
⇒Door weight up to 12 kg

2 Hinges per door
(①LIN-X600 ACD : 2 pcs)



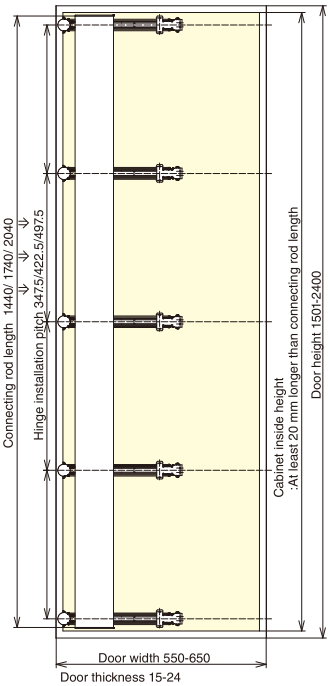
Door thickness 15-24
Door weight
Door height 901-2100
⇒Door weight up to 16 kg

3 Hinges per door
(①LIN-X600 ACD : 3 pcs)



Door thickness 15-24
Door weight up to 20 kg

4 Hinges per door
(①LIN-X600 ACD : 3 pcs)
(②LIN-X600 A : 1 pc)
* Please install the ②to the 2nd place from the bottom.



Door thickness 15-24
Door weight up to 24 kg

5 Hinges per door
(①LIN-X600 ACD : 3 pcs)
(②LIN-X600 A : 2 pcs)
* Please install the ②to the 2nd and 3rd place from the bottom.

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.

Discover What Sugatsune's Website Has to Offer!

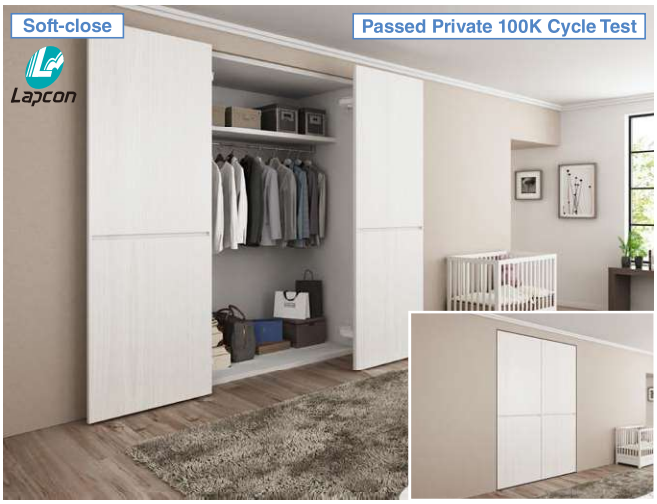
sugatsune global Search

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 MONOFLAT LIN-X HINGE LIN-X800

Latest Info




Damper causes doors to close softly.

MonoFlat LIN-X hinge®

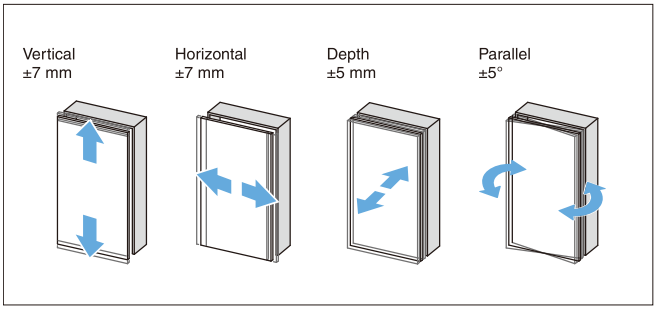
	LIN-X800	LIN-X800H
Door Width	750 - 850 mm	
Door Height	Max. 2400 mm	Max. 2980 mm
Door Thickness	24 - 40 mm	
Door Weight	Max. 40 kg per door	
Usage	1 per door (Overlay)	

- Innovative movement keeps doors discretely out of the way.
  Door closes flush with surrounding walls for a sleek and clean design.
  No need to do special processing on any wall for grooves or rails.
  Can be used on aluminium frames (if the frame has a thickness over 120 mm).
- Whether open or closed, door stays out of the way
  Compared to regular swing doors, has a small radius allowing the space in front of the door to be used effectively.
- Opens fully for access to entire cabinet.
  Whether installing cabinets or just getting access, the entire cabinet interior is easily accessible.
- Built-in soft close mechanism
  When the door closes, the internal damper will cause the door to close softly, preventing slamming.
- 4 Way adjustment post installation
  Can be adjusted vertically, horizontally, depth or paralel.
- Wide amount of applicable cabinets
  Can be used on dual opening, single opening cabinets. Can also be used on L shaped corner spaces.

INSTRUCTION SCREW

Parts Included

- OTruss head tapping screw 6*25
- Truss head screw M5 × 10
- M5 Square Nut
- One end mouth wrench

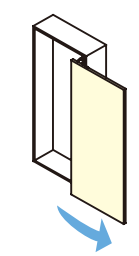


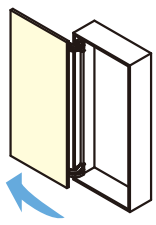
•Vertical, Horizontal, Depth and Parallel adjustment possible post-installation.

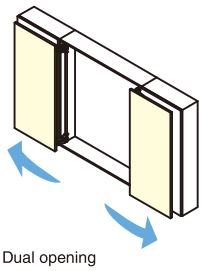
Colour Variation

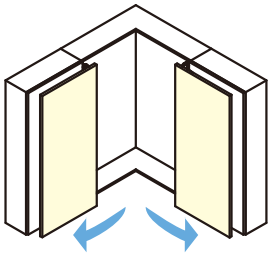

Black


White


Right opening


Left opening


Dual opening


L Shaped corner space

Feature Installation

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.

How to Order LIN-X800

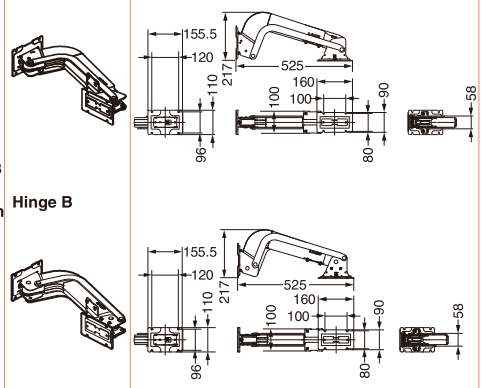
• Required Parts ..... Part Set (per door)

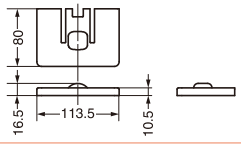
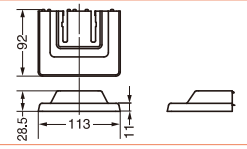
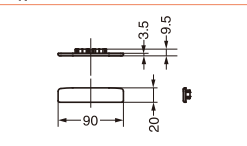
Part Set (per door)

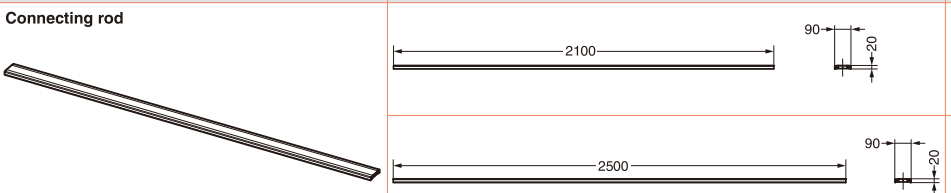
This set must be ordered. Select a suitable set according to the door height.

Item Code	Item Name	Door Height	Colour	Set Content (for LIN-X800)			
				①Hinge + ②③Washer Cover + ④Rod Cover		⑤Connecting Rod	
				Item Code	Item Name	Item Code	Item Name
250-043-897	LIN-X800-BL-S	2400 mm or Less	Black	250-043-834	LIN-X800-BL	250-043-842	LIN-X80-L2100-BL
250-043-898	LIN-X800-WT-S		White	250-043-835	LIN-X800-WT	250-043-843	LIN-X80-L2100-SL
250-043-899	LIN-X800H-BL-S	2980 mm or Less	Black	250-043-834	LIN-X800-BL	250-043-844	LIN-X80-L2500-BL
250-043-900	LIN-X800H-WT-S		White	250-043-835	LIN-X800-WT	250-043-845	LIN-X80-L2500-SL

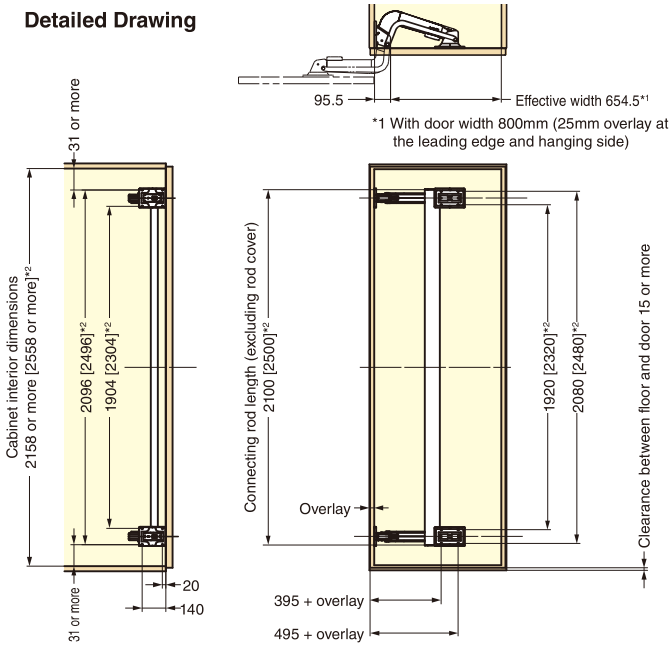
Part Set Contents

No.	Quantity	Parts in Set	Dimensions	Specifications
①	A· B 1 each	Hinge A Hinge B		•Material Steel (SPCC)/ Polyacetal (POM) •Finish Nickel Plating Baked enamel finish

No.	Quantity	Parts in Set	Dimensions	Specifications
②	4 pcs	Washer cover (hanging side)		•Material ABS resin
③	4 pcs	Washer cover (leading edge)		•Material ABS resin
④	2 pcs	Rod cover		•Material Polyacetal (POM)

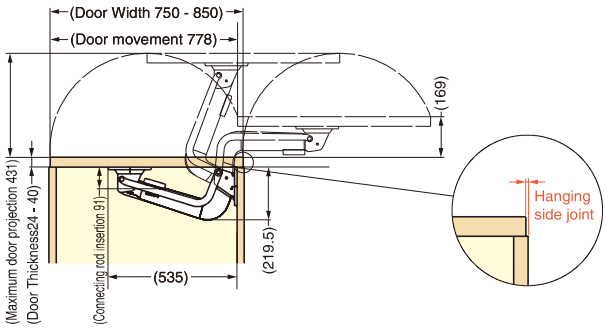
No.	Quantity	Parts in Set	Dimensions	Specifications
⑤	Either part	Connecting rod		• Material: Aluminium alloy • Finish: Anodised: Black/silver
				• Material: Aluminium alloy • Finish: Anodised: Black/silver

Detailed Drawing



*1 With door width 800mm (25mm overlay at the leading edge and hanging side)

Range of Motion



*2 The dimensions in [ ] indicate LIN-X800H specifications.

*2 For cabinet interior dimensions smaller than the minimum value, reduce the other dimensions marked with *2 by an equivalent amount. The connecting rod must be cut by the customer.

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 MONOFLAT LIN-X HINGE (HEAVY DUTY) LIN-X1000

Latest Info



GOOD DESIGN

reddot award 2017 winner

MonoFlat LIN-X hinge®

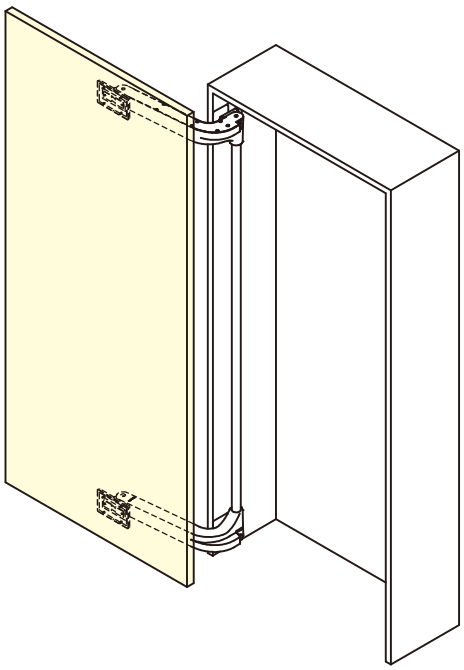
	LIN-X1000
Door Width	750 - 1100 mm
Door Height	2400* - 2980 mm
Door Thickness	24 - 40 mm
Door Weight	Max. 90 kg/Door

* If the connecting bar is cut, it can be made to be less than 2400 mm. Please contact us for details.

- Unique lateral swinging movement.
- Swings out in small radius. Closes flush.
- Full access to cabinet interior: door will not get in the way when fully opened.
- Easier installation due to simplification of components.
- Free-stop: holds position at desired location within its open radius.
- Soft-closing: built-in damper slows down door near closing radius, preventing slamming.
- 4way post-installation adjustment: vertical (±7 mm), horizontal (±7 mm), depth (±5 mm) and parallel (±3°).
- Good Design Show winner 2016
- Reddot Product Design winner 2017

SCREW

Parts Included
- Truss head tapping screw 6×25 (16 pieces)



Applicable Door Load Capacity

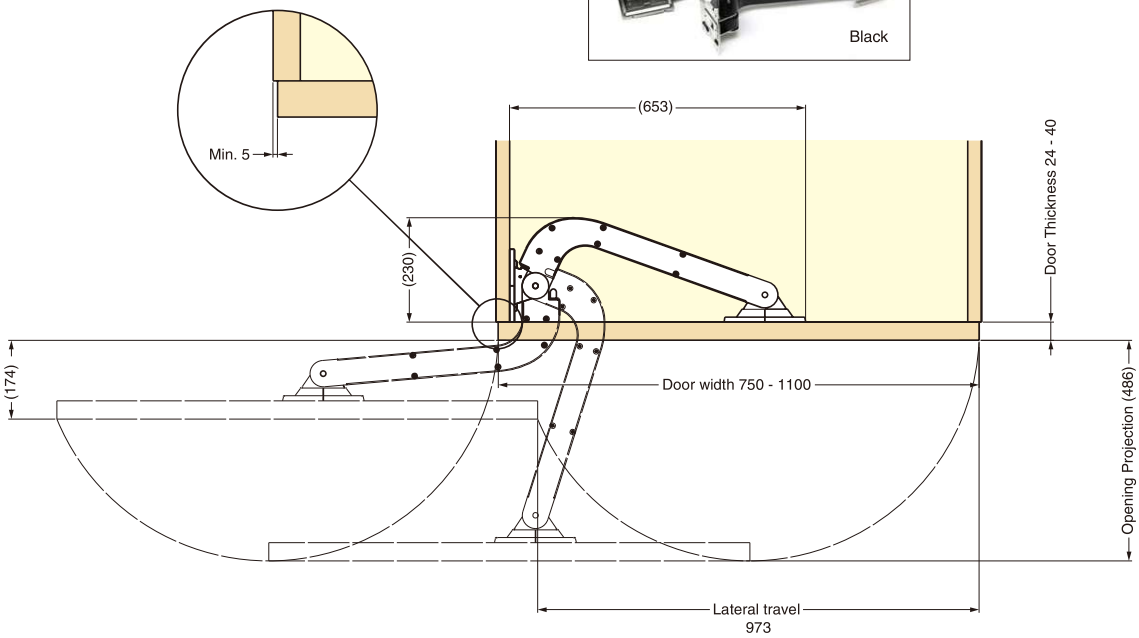
Door sagging / Open/Close cycles	3 mm	5 mm
60,000	70 kg	90 kg
80,000	50 kg	80 kg
100,000	40 kg	70 kg

Colour variation



Feature

Installation



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.

How to Order LIN-X1000

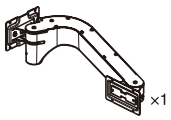
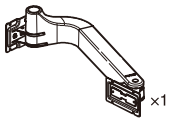
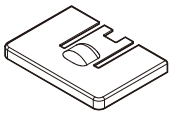
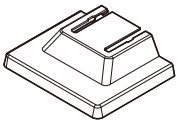
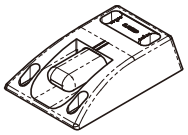
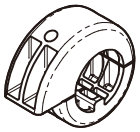
• Required Parts..... **Parts Set** + **Connecting Bar**

Parts Set (Per Door) Required Parts

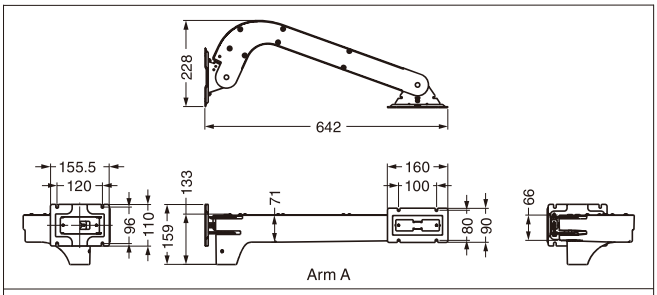
Item Code	Item Name
250-034-706	*LIN-X1000-WT
250-042-288	LIN-X1000-BL

Parts Included

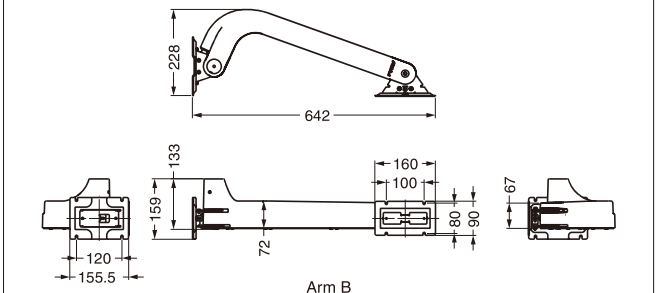
*The item name has been changed.

No.	Qty	Part Name	Description
1	1 pc	Arm A  ×1	• Material Aluminium Alloy • Finish Powder Coating/ White/Black
2	1 pc	Arm B  ×1	• Material Aluminium Alloy • Finish Powder Coating/ White/Black
3	4 pcs	Cover for Mounting Plate (Hinge Side) 	• Material ABS Resin • Finish White/Black
4	4 pcs	Cover for Mounting Plate (Door Side) 	• Material ABS Resin • Finish White/Black
5	1 pc	Damper for Opening  	• Material PBT Resin • Finish White/Black

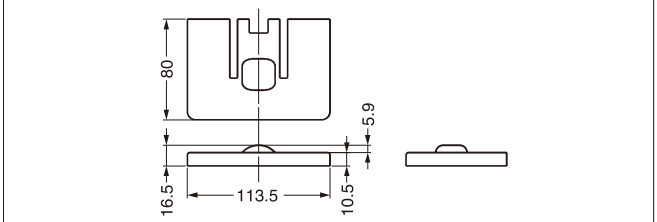
Parts Drawing



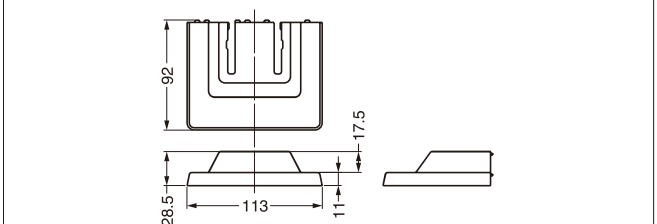
Arm A



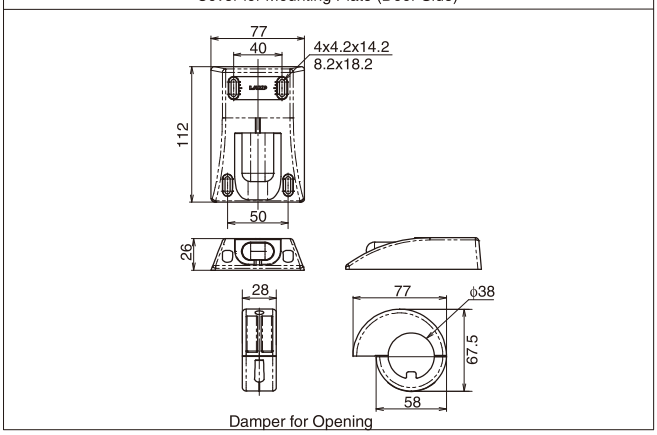
Arm B



Cover for Mounting Plate (Hinge Side)

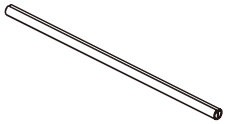


Cover for Mounting Plate (Door Side)

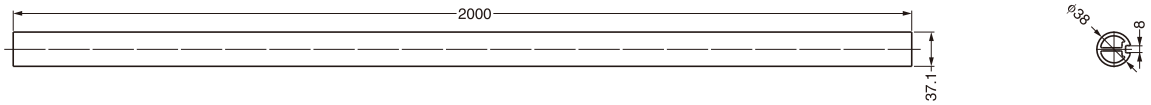


Damper for Opening

Connecting Bar Required Parts

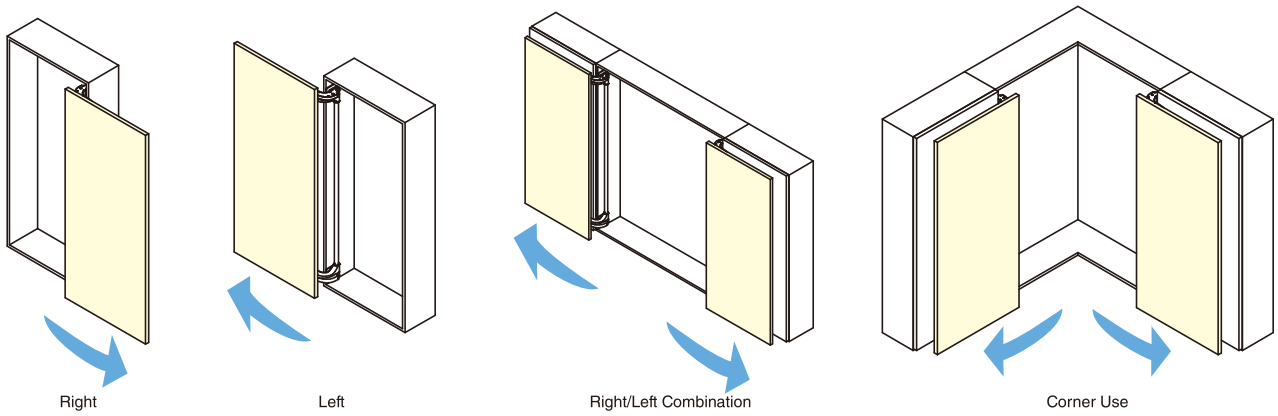
No.	Qty	Part Name	Item Code	Item Name	Description
5	1 pc	Connecting Bar 	250-034-707	*LIN-X100-L2000-WT	• Material Aluminium Extrusion • Finish White Enamel
			250-042-289	LIN-X100-L2000-BL	• Material Aluminium Extrusion • Finish Black Anodized

*The item name has been changed.

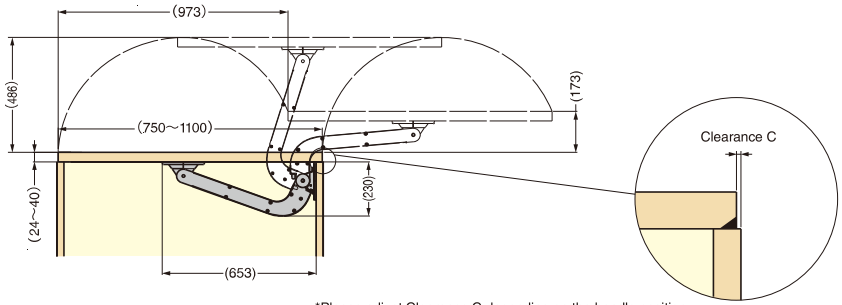


This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

Various Applications



Door arc



*Please adjust Clearance C depending on the handle position.
For detail, refer to a manual.

Installation

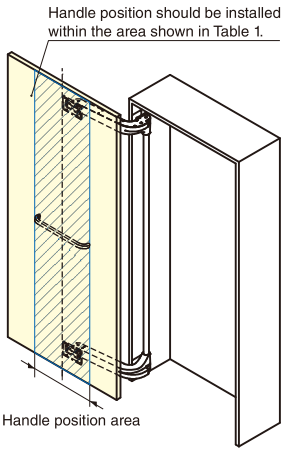
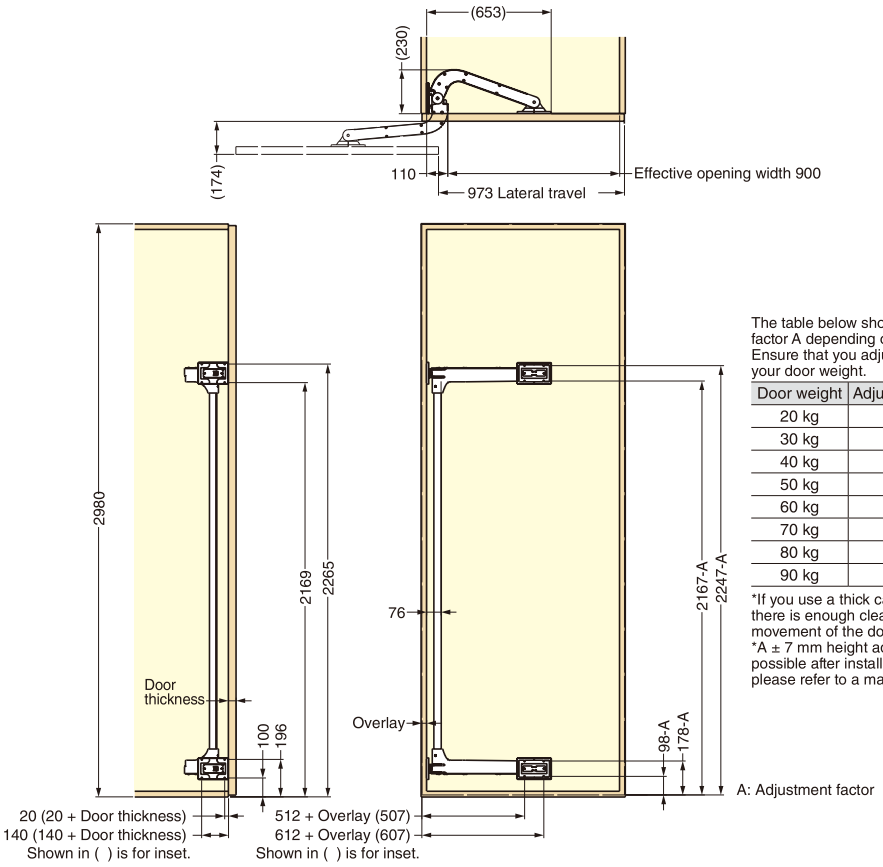


Table 1 : Handle position area [mm]

Door width \ Clearance C	10	15	20
750-900	Max.300	Max.350	Max.500
900-1000	Max.200	Max.250	Max.400
1000-1100	Max.100	Max.150	Max.300

*Door thickness : 40 mm
*Handle position area is centered on the door width.



The table below shows the adjustment factor A depending on the door weight. Ensure that you adjust according to your door weight.

Door weight	Adjustment factor A
20 kg	2 mm
30 kg	3.5 mm
40 kg	5 mm
50 kg	6.5 mm
60 kg	8 mm
70 kg	9.5 mm
80 kg	11 mm
90 kg	12.5 mm

*If you use a thick carpet, ensure that there is enough clearance for free movement of the door.
*A ± 7 mm height adjustment is possible after installation. For detail, please refer to a manual.

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 MONOFLAT FAD (FOR MEDIUM SIZE CABINET) FAD-20

Latest Info



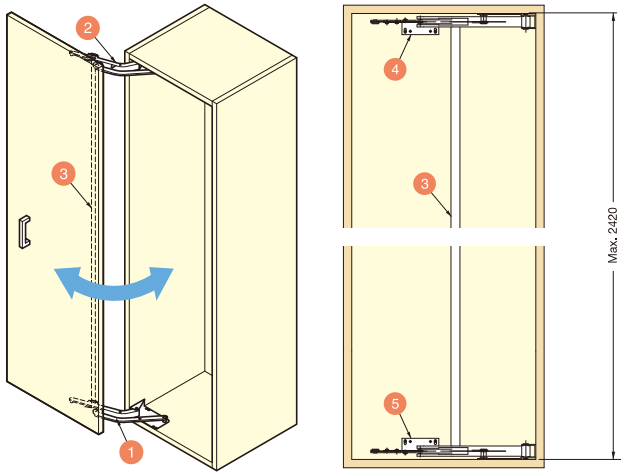
MonoFlat FAD®

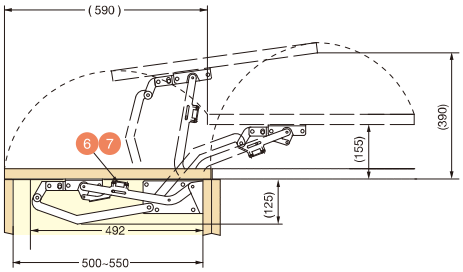
Inside Cabinet Width	500 - 550 mm
Inside Cabinet Height	Max. 2420 mm
Door Thickness	Max. 35 mm
Door Weight	Max. 20 kg/Door

- Lateral swing system for medium-sized cabinets with an overlay installation.
- Smaller opening radius than swing open doors. Does not get in the way after being opened.
- Uses a gas spring to make opening and closing smooth with little resistance.
- Holds door firmly in fully opened and fully closed positions.
- Various types of installations: Can be used on single or double doors.

INSTRUCTION SCREW

Feature



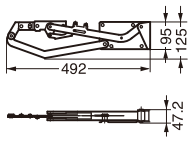
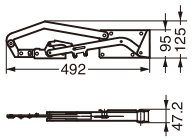
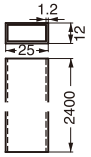
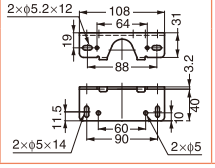
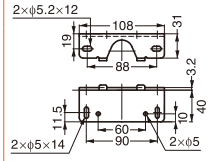
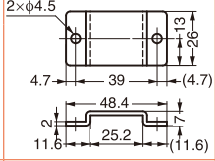
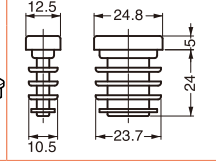


Parts Set (Per Door)

Required Parts

Item Code	Item Name
250-180-908	FAD-20

Parts Details

No.	Qty	Part Name	Dimensions	Description
1	1 pc	Arm A		• Material Aluminium Alloy/Steel • Finish Matte Silver
2	1 pc	Arm B		• Material Aluminium Alloy/Steel • Finish Matte Silver
3	1 pc	Connecting Pipe		• Material Steel • Finish Matte Silver
4	1 pc	Upper Bracket		• Material Steel • Finish Matte Silver
5	1 pc	Lower Bracket		• Material Steel • Finish Matte Silver
6	2 pcs	Pipe Clamp		• Material Steel • Finish Matte Silver
7	2 pcs	Cap		• Material Polyethylene (PE) • Colour Black
8	1 pc	Sticker		–

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 OVER TRAVEL SLIDING DOOR SYSTEM OX

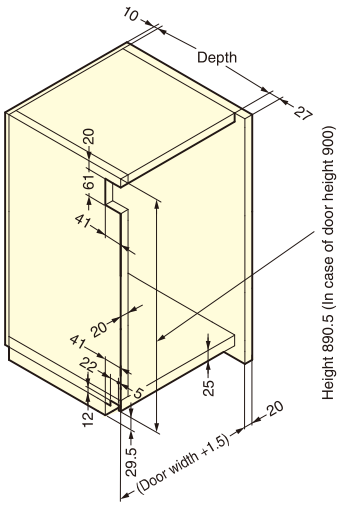
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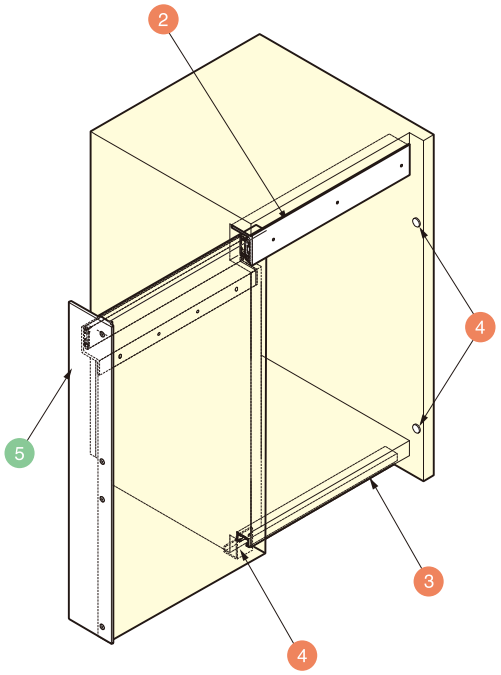


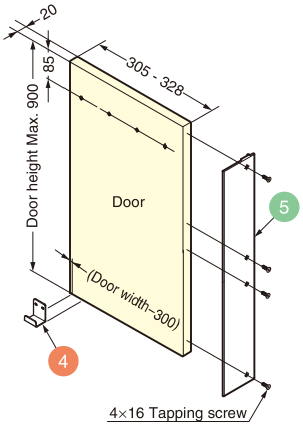
Door Width	305 - 328 mm
Door Height	Max. 900 mm
Door Thickness	20 mm
Door Weight	Max. 5 kg/Door

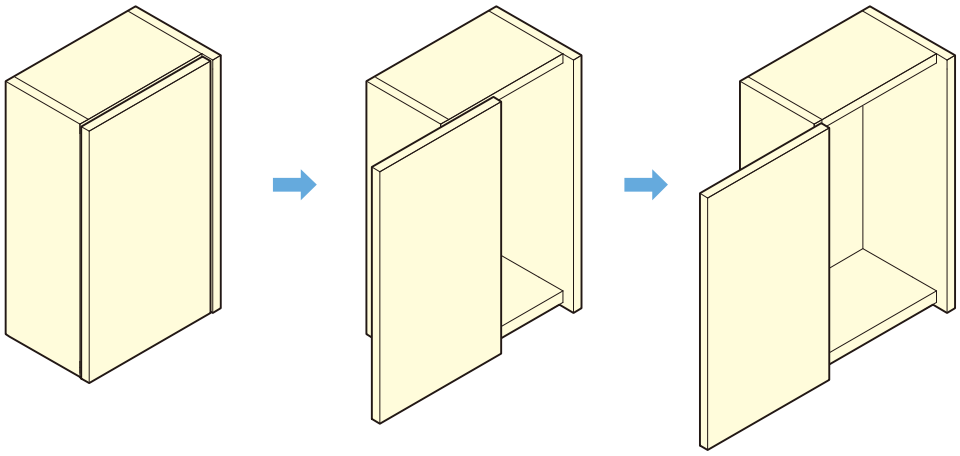
- Over travel rail allows full access to cabinet inside.
- Suitable for limited space.

INSTRUCTION







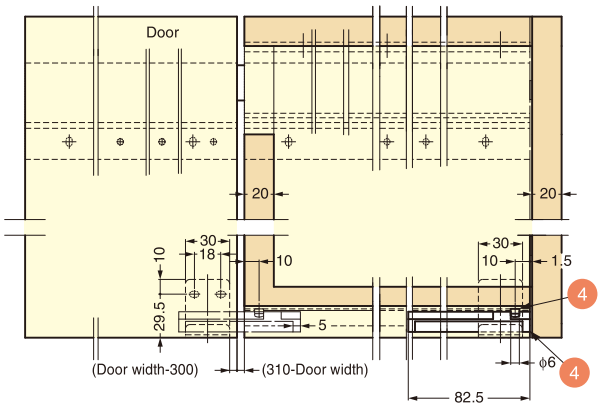


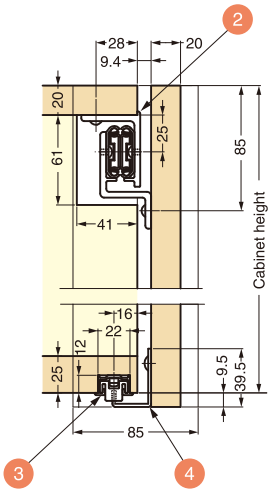
This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

How to Order OX

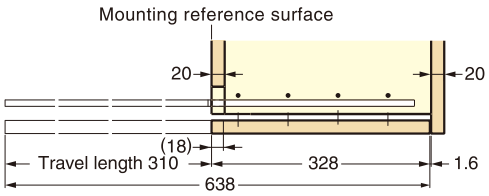
• Required Parts ..... **Parts Set**

Installation

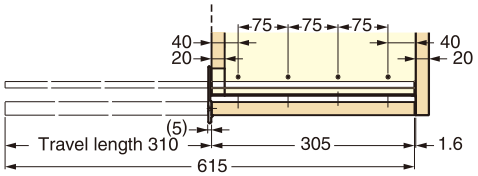




Door width 328 mm



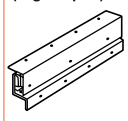
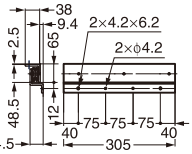
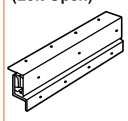
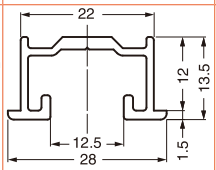
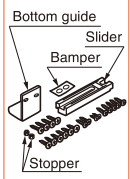
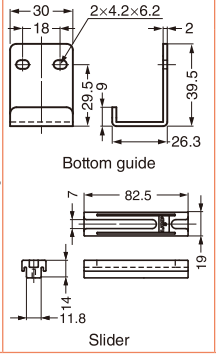
Door width 305 mm



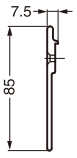
Parts Set (Per Door) — Required Parts

Set Name	Item Code	Item Name
a Parts Set for Right Open	250-121-436	OX-300R
b Parts Set for Left Open	250-121-435	OX-300L

Items

No.	Qty a	Qty b	Part Name	Dimensions	Description
1	1 pc	–	Upper Rail (Right Open)	 	**Item Code : 250-121-434** **Item Name : OX-U300R** • Material Aluminium Alloy/Steel • Finish Anodized Silver /Yellow Zinc Chromate
2	–	1 pc	Upper Rail (Left Open)		**Item Code : 250-121-433** **Item Name : OX-U300L** • Material Aluminium Alloy/Steel • Finish Anodized Silver /Yellow Zinc Chromate
3	1 pc	1 pc	Bottom Rail (305 mm)		**Item Code : 250-121-431** **Item Name : OX-L300** • Material Aluminium Alloy • Finish Anodized Silver
4	1 set	1 set	Parts Set	 	**Item Code : 250-121-432** **Item Name : OX-P** • Parts Included: Bottom guide, Slider, Stopper, Bumper, Screw ·Truss Head Tapping Screw 4×18……4 pcs ·Truss Head Tapping Screw 4×16……6 pcs ·Countersunk Head Tapping Screw 3×12……2 pcs ·Round Head Wood Screw 3.5×16……2 pcs ·Countersunk Head Tapping Screw 4×16……5 pcs

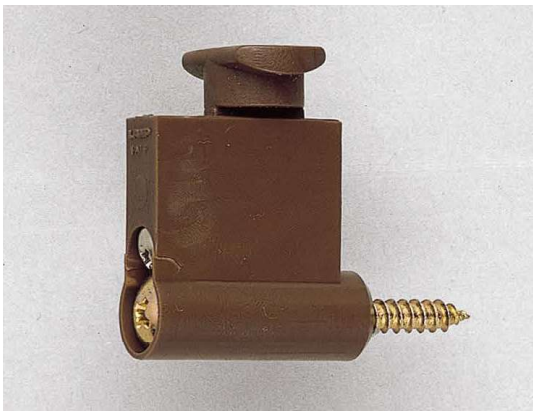
Optional Parts

No.	Item Code	Part Name	Dimensions	Description
5	250-121-430 Item Name: OX-COV	Cover 		• Material Aluminium Alloy • Finish Anodized Silver • Length 900 mm

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.

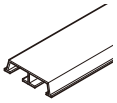
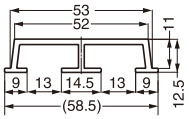
LAMP RUNNER FOR SLIDING DOOR ASDF-1

Latest Info

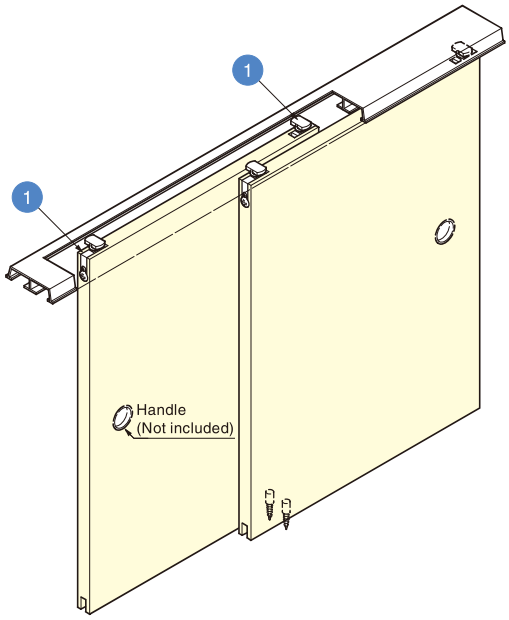


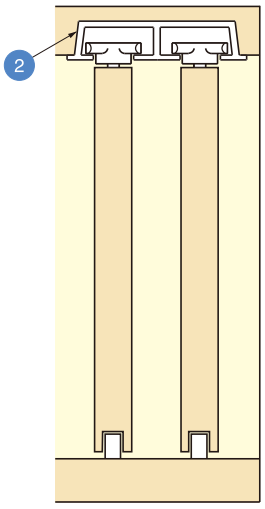
Door Thickness	16 - 20 mm
Door Weight	Max. 4 kg
Vertical Adjustment	3 mm
Door Type	2 Panels (Inset)

- Inset type.
- Adjustable for door height.
- Upper Rail also available (Sold Separately).

No.	Item Code	Part Name	Dimensions	Description
1	250-120-075 Item Name: ASDF-1	Runner 	–	2 pcs per door are necessary. • Material Plastic • Colour Brown
2	250-129-035 Item Name: GR1820	Upper Rail (1820 mm) 		• Material Polyviny Chlorides • Colour Brown

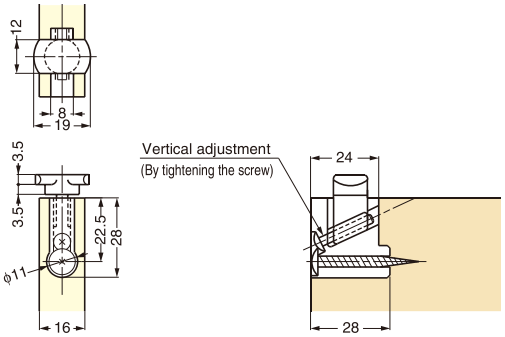
Bottom guide and handle are not included.



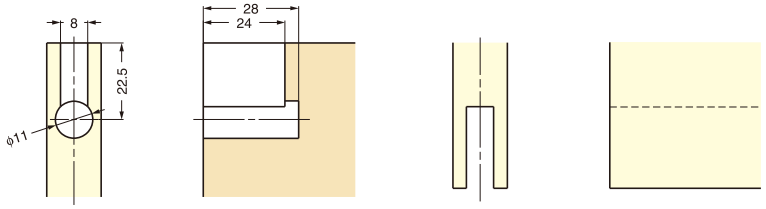


Upper rail 2
Mortise dimension
Width 52.2
Depth 11.5

Installation



Cut Out Dimensions



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 XL-GC SERIES (FOR SLIDING DOORS)

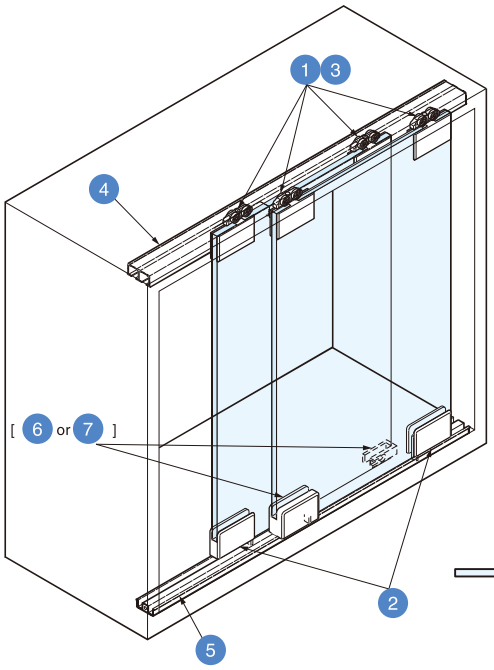


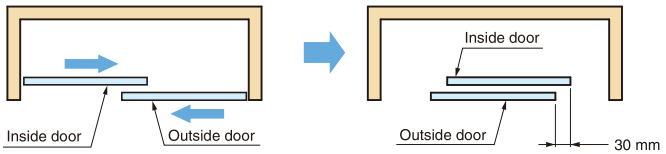
Door Width	Max. 500 mm
Door Height	Max. 1200 mm
Glass Thickness	8 mm
Glass Weight	Max. 12 kg / Door
Door Type	☐ 2 Sliding Inset Door

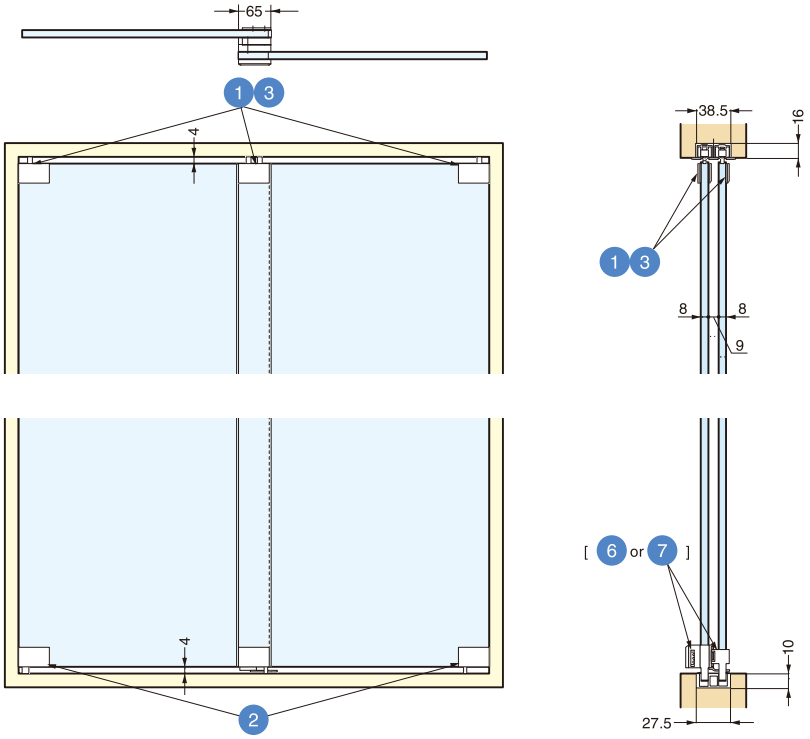
Total solution for coherent design of glass showcase

• See the cut out dimensions in P.493.

INSTRUCTION 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.

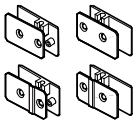
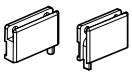
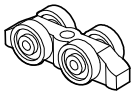
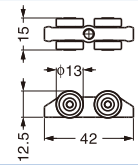
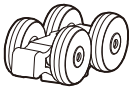
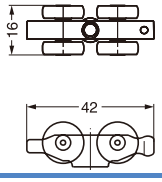
How to Order XL-GC SERIES (FOR SLIDING DOORS)

• Required Parts.... **Sliding Door Parts** + **Rail** + **Sliding Door Lock**

Sliding Door Parts

Required Parts (Select one from each)

For 2 sliding doors, ❶ 2 set, ❷ 2 set and ❸ 4 pcs are necessary.

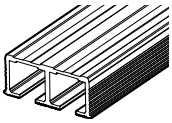
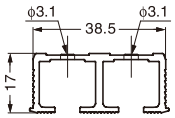
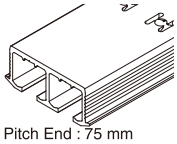
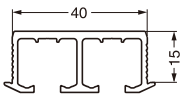
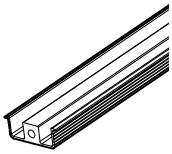
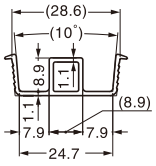
No.	Item Code	Part Name	Dimensions	Description
❶	250-121-960 XL-GC06-CR	Upper Bracket (with Hanger Bolt) 	See Dimension in P.493	• Material Zinc Alloy (ZDC) • Finish Chrome
❷	250-121-961 XL-GC08-CR	Bottom Guide 	See Dimension in P.493	• Material Zinc Alloy (ZDC) • Finish Chrome
❸	250-120-688 53-3061-081	Roller (drawing 1) 	(drawing 1) 	• Material Body: Zinc Alloy (ZDC) Roller: Polyacetal (POM)
	250-037-471 57-3149-071	(drawing 2) 	(drawing 2) 	• Material Zinc Alloy (ZDC) Polyacetal (POM) • Finish Zinc Chromate

When the current stock of the roller ❸ and upper rail ❹ run out, their item names, codes, and shapes respectively will change to the specs featured in drawing 2. Please note that the old type and the new type can not be used together.

Rail

Required Parts (Select one from each)

❹ 1 pc and ❺ 1 pc

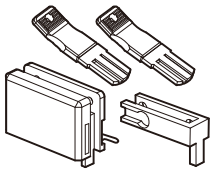
No.	Item Code	Part Name	Dimensions	Description
❹	250-012-117 XL-GC06-UL1200	Upper Rail (1200 mm) (drawing 1)  Pitch End : 50 mm Pitch : 150 mm	(drawing 1) 	• Material Aluminium Alloy • Finish Plain
	250-037-472 XL-GC06-UL1200N	(drawing 2)  Pitch End : 75 mm Pitch : 150 mm	(drawing 2) 	• Material Aluminium Alloy • Finish Anodized
❺	250-121-962 XL-GC03-GL1200	Bottom Rail (1200 mm) 		• Material ABS • Finish Black

When the current stock of the roller ❸ and upper rail ❹ run out, their item names, codes, and shapes respectively will change to the specs featured in drawing 2. Please note that the old type and the new type can not be used together.

Sliding Door Lock

Required Parts (Select One)

❻ or ❼ 1 pc

No.	Item Code	Part Name	Dimensions	Description
❻	150-061-103 XL-GC03-CR-B (Key Different)	Sliding Door Lock 	See Dimension in P.493	• Material Zinc Alloy (ZDC) • Finish Chrome • Max. 24 key changes available.
❼	150-001-055 XL-GC03-CR-D (Key Alike)			

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.

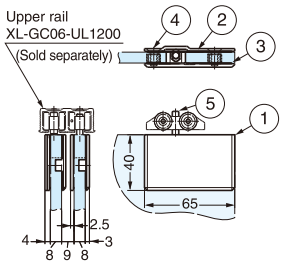
LAMP. UPPER BRACKET XL-GC06

Latest Info

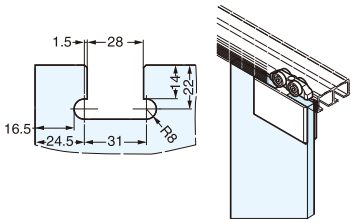


- Upper bracket for glass sliding door.
- Can be used with XL-GC03.

INSTRUCTION | SCREW



Cut Out Dimensions



No	Part Name	Material	Finish/Colour
①	Body	Zinc Alloy (ZDC)	Chrome
②	Backplate	Steel	Chrome
③	Spacer	Rubber	Natural
④	Screws	Stainless Steel (SUS304)	Plain
⑤	Bolt	Steel	Clear Zinc Chromate

Item Code	Item Name	Glass Thickness	Load Capacity		Weight	Box	Carton
250-121-960	XL-GC06-CR	8	117.7 N/door	12 kgf/door	400 g	1 pc	24 pcs

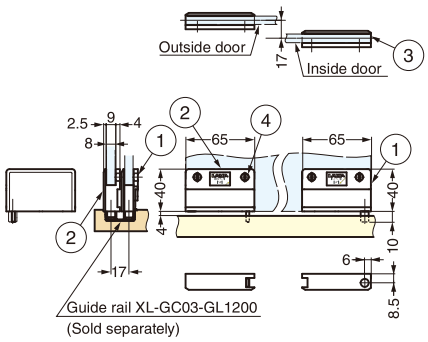
LAMP. BOTTOM GUIDE BRACKET XL-GC08

Latest Info

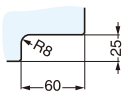


- Bottom bracket for glass sliding door.
- Can be used with XL-GC03.

INSTRUCTION | SCREW



Cut Out Dimensions



No	Part Name	Material	Finish/Colour
①	Body (Left)	Zinc Alloy (ZDC)	Chrome
②	Body (Right)	Zinc Alloy (ZDC)	Chrome
③	Spacer	Rubber	Black
④	Screws	Stainless Steel (SUS304)	Plain

Item Code	Item Name	Glass Thickness	Weight	Box	Carton
250-121-961	XL-GC08-CR	8	400 g	1 pc	24 pcs

LAMP. GLASS DOOR LOCK FOR SLIDING DOOR XL-GC03

Latest Info



- Non-handed. Key hole located on the right side for a clean appearance and high security.
- 24 key numbers available.

INSTRUCTION | SCREW

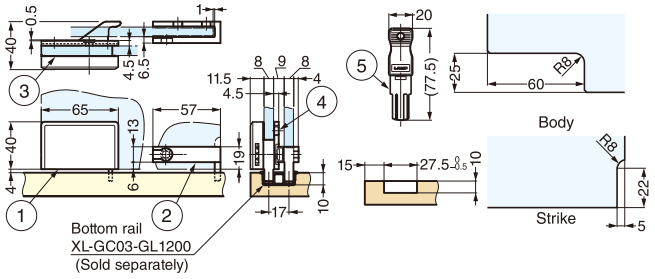
Remarks

- Please order 1 pc for 2 doors.

Option

- XL-GC03-GL1200 (P.492)

Cut Out Dimensions



No	Part Name	Material	Finish/Colour
①	Body	Zinc Alloy (ZDC)	Chrome
②	Strike	Zinc Alloy (ZDC)	Chrome
③	Spacer	Rubber	Black
④	Screws	Stainless Steel (SUS304)	Plain
⑤	Key	Brass/ABS	Nickel/Black

Item Code	Item Name	Key Type	Glass Thickness	Weight	Box	Carton
150-061-103	XL-GC03-CR-B	Key Different	8	400 g	1 pc	24 pcs
150-001-055	XL-GC03-CR-D	Key Alike	8	400 g	1 pc	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 FOLDING DOOR SYSTEM FD30-F

FD30 FKP FD30 UKP FD30 URP-1 FD30 UMP-1



	a	b	c	d
Item Code	250-017-905	250-017-908	250-018-312	250-018-316
Item Name	FD30FKP	FD30UKP	FD30URP-1	FD30UMP-1
Application	Standard Folding (One Pivot Fixed)	Standard Folding with Roller (One Pivot Fixed)	Slidable (For Partition Use)	Slidable (For Cabinet Use)
Door Width	Max. 450 mm			
Door Height	Max. 2400 mm			
Door Thickness	Min. 28 mm	Min. 30 mm		
Door Weight	Max. 15 kg/Door			

Installation

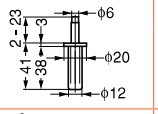
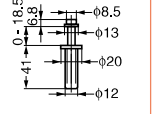
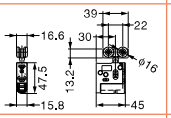
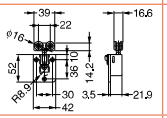
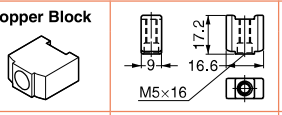
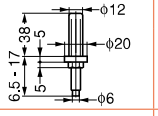
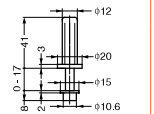
Parts Set (Per Door)

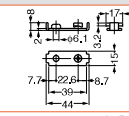
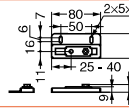
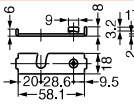
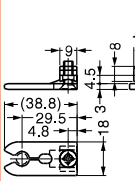
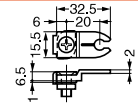
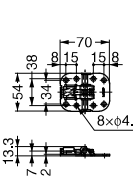
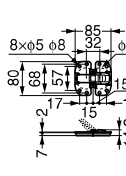
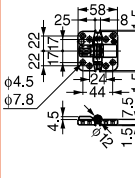
Required Parts

Please refer to "Qty a - d "for parts included in each set.

	Item Code	Item Name	Description
a	250-017-905	FD30FKP	For Pivoted Folding Door
b	250-017-908	FD30UKP	For Pivoted Folding w/ Roller
c	250-018-312	FD30URP-1	For Slidable Folding (For Partition Use)
d	250-018-316	FD30UMP-1	For Slidable Folding (For Cabinet Use)

Parts Included

No.	Qty a	Qty b	Qty c	Qty d	Part Name	Dimensions	Description
1	1 pc	-	-	-	Upper Pivot		Item Code : 250-017-162 Item Name : FD30-FTP • Material Steel / Polyamide • Finish Chromate / White
2	1 pc	-	-	-	Guide Roller		Item Code : 250-017-140 Item Name : FD30-FGRU • Material Steel / Polyacetal • Finish Coloured zinc chromate (trivalent) / White, Black
3	-	2 pcs	2 pcs	-	Upper Roller (Recessed Mount)		Item Code : 250-026-120 Item Name : FD30-WRH • Material Zinc Alloy Polyacetal • Finish Chromate / Light Brown
4	-	-	-	2 pcs	Upper Roller (Side Mount)		Item Code : 250-017-142 Item Name : FD30-WRU • Material Steel / Polyacetal • Finish Chromate / Brown
5	-	1 pc	-	-	Stopper Block		Item Code : 250-017-139 Item Name : FD30-HSB • Material Polyacetal • Finish Dark Brown
6	1 pc	1 pc	-	-	Bottom Pin		Item Code : 250-017-163 Item Name : FD30-FBP • Material Steel / Polyacetal • Finish Chromate / White
7	-	-	2 pcs	2 pcs	Guide Pin		Item Code : 250-017-164 Item Name : FD30-FGR • Material Steel / Polyacetal • Finish Coloured zinc chromate (trivalent) / White
8	1 pc	1 pc	1 pc	1 pc	Pin Insert Jig		Item Code : 250-017-169 Item Name : FD30-FSJ
9	1 pc	1 pc	-	-	Spanner Wrench		Item Code : 250-017-168 Item Name : FD30-FSP
10	-	-	-	-	Top Bracket		Item Code : 250-017-165 Item Name : FD30-FSK • Material Steel • Finish Chromate

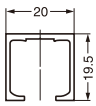
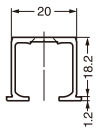
No.	Qty a	Qty b	Qty c	Qty d	Part Name	Dimensions	Description
11	1 pc	-	-	-	Pivot Bracket (Upper)		Item Code : 250-017-141 Item Name : FD30-FSKU • Material Steel • Finish Chromate
12	1 pc	1 pc	-	-	Pivot Bracket (Bottom)		Item Code : 250-017-170 Item Name : FD30-FPU • Material Steel • Finish Chromate
13	-	1 pc	-	-	Fixing Plate		Item Code : 250-017-144 Item Name : FD30-FKK • Material Steel • Finish Chromate
14	-	-	2 pcs	2 pcs	Upper Stopper		Item Code : 250-017-143 Item Name : FD30-FTST-DB • Material Steel / Polyacetal • Finish Chromate / Brown
15							Item Code : 250-019-297 Item Name : FD30-FTST-GR • Material Steel / Polyacetal • Finish Chromate / Grey
16	-	-	2 pcs	2 pcs	Bottom Stopper		Item Code : 250-017-166 Item Name : FD30-FBKS • Material Steel / Polyacetal • Finish Chromate / Brown
17	3 pcs	3 pcs	-	-	Centre Hinge (Surface Mount, Angle Adjustable)		Item Code : 250-017-146 Item Name : FD30-CHM • Material Steel • Finish Baking Finish / Black
18							Item Code : 250-019-899 Item Name : FD30-CHM-WT • Material Steel • Finish Baking Finish / White
19	-	-	-	3 pcs	Centre Hinge (Recessed Mount, Angle Adjustable, W/Detent Stop)		Item Code : 250-017-147 Item Name : FD30-CHH • Material Steel • Finish Baking Finish / Black
20							Item Code : 250-019-900 Item Name : FD30-CHH-WT • Material Steel • Finish Baking Finish / White
21	-	-	3 pcs	-	Centre Hinge (Door Edge, Angle Adjustable, W/Detent Stop)		Item Code : 250-017-167 Item Name : FD30-CHK • Material Zinc Alloy • Finish Dark Brown
22							Item Code : 250-019-901 Item Name : FD30-CHK-WT • Material Zinc Alloy • Finish 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.

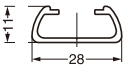
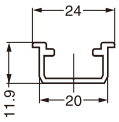
How to Order FD30-F

• Required Parts..... Upper Track + Bottom Guide Track + Cover Cap + Centre Hinge

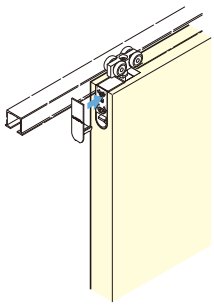
Upper Track — Required Parts (Select one from each)

No.	Installation	Length	Item Code	Dimensions	Description
23	Surface Mount	910 mm	250-017-962 FD30-TRM910SIL		• Material Aluminium • Finish Anodized Silver
24		1820 mm	250-017-131 FD30-TRM1820SIL		
25		2730 mm	250-017-966 FD30-TRM2730SIL		
26		3640 mm	250-017-970 FD30-TRM3640SIL		
27	Recessed Mount	910 mm	250-017-964 FD30-TRH910SIL		• Material Aluminium • Finish Anodized Silver
28		1820 mm	250-017-133 FD30-TRH1820SIL		
29		2730 mm	250-017-968 FD30-TRH2730SIL		
30		3640 mm	250-017-972 FD30-TRH3640SIL		

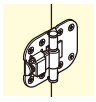
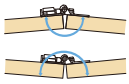
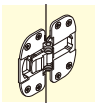
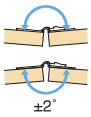
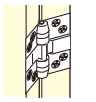
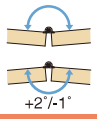
Bottom Guide Track — Required Parts (Select one from each) for c d

No.	Installation	Length	Item Code	Dimensions	Description
31	Floor Surface Mount	910 mm	250-018-080 FD30-FBRM910SIL		• Material Aluminium • Finish Anodized Silver
32		1820 mm	250-017-160 FD30-FBRM1820SIL		
33		2730 mm	250-018-082 FD30-FBRM2730SIL		
34		3640 mm	250-018-084 FD30-FBRM3640SIL		
35	Floor Recessed Mount	910 mm	250-018-074 FD30-FBRH910SIL		• Material Aluminium • Finish Anodized Silver
36		1820 mm	250-017-158 FD30-FBRH1820SIL		
37		2730 mm	250-018-076 FD30-FBRH2730SIL		
38		3640 mm	205-018-078 FD30-FBRH3640SIL		

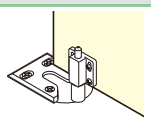
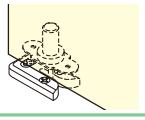
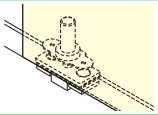
Cover Cap — Required Parts for b c

No.	Item Code	Item Name	Installation	Description	
39	250-018-785 FD30-WRH-CP-WT	Cover Cap for Upper Roller		End Cap (For Roller 3) 	• Material Polypropylene • Finish White
40	250-017-138 FD30-WRH-CP-LBR				• Material Polypropylene • Finish Light Brown
41	250-018-786 FD30-WRH-CP-DB				• Material Polypropylene • Finish Dark Brown

Centre Hinge — Required Parts

No.	Item Code	Installation	Angle Adjustment	Detent
17	250-017-146 FD30-CHM	 Surface Mount		37° Angle
18	250-019-899 FD30-CHM-WT			
19	250-017-147 FD30-CHH	 Recessed Mount		50° Angle
20	250-019-900 FD30-CHH-WT			
21	250-017-167 FD30-CHK	 Door Edge Recessed Mount		47°Angle
22	250-019-901 FD30-CHK-WT			

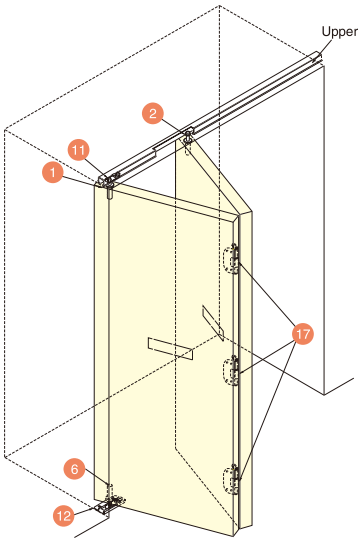
Optional Parts

No.	Item Code	Installation	Description	
42	250-017-171 FD30-FMF		Guide Pin (Magnetic) 	• Material Polycarbonate Neodymium • Finish Dark Brown
43	250-017-173 FD30-FTF		Guide Pin (Pin) 	• Material Polyamide / Steel • Finish White / Chromate
44	250-017-172 FD30-FHL		Latch Unit (To be Used When Ordering c, d) 	• Material Polyacetal • Finish Dark Brown

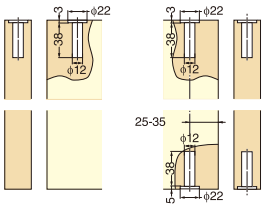
This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

a Pivoted Folding Door - Surface Mount Hinge

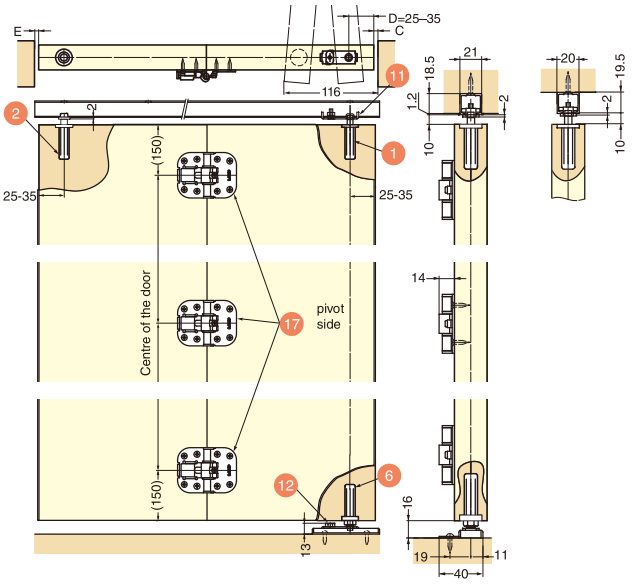
- Centre Hinge has angle adjustment, detent stop feature and is mounted on surface at back side of door for easy installation.



Door Preparation



Installation Example (In case of 40 mm thick, 450 mm wide door)

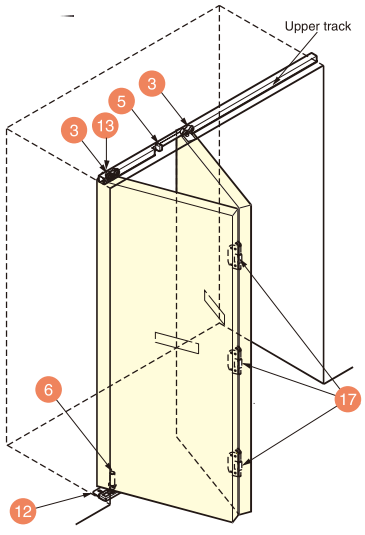


Gap Required - Door and Frame

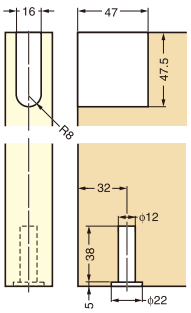
Door Thickness	Gap C Min.	Gap E Min. in Case D=30			
		Width 300	Width 350	Width 400	Width 450
30	4.0	3.5	3.0	2.7	2.4
35	5.2	4.3	3.7	3.3	3.0
40	6.5	5.2	4.5	4.0	3.6

b Pivoted Folding Door (With Roller) - Surface Mount Hinge

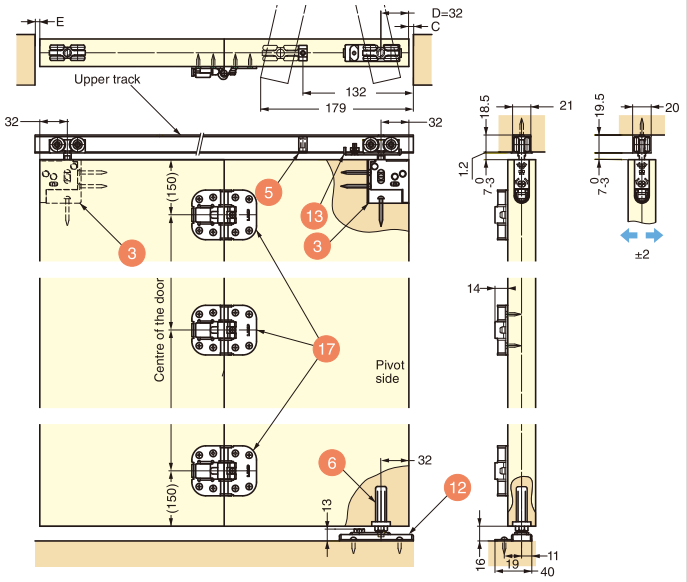
- Centre Hinge has angle adjustment, detent stop feature and is mounted on surface at back side of door for easy installation.



Door Preparation



Installation Example (In case of 40 mm thick, 450 mm wide door)



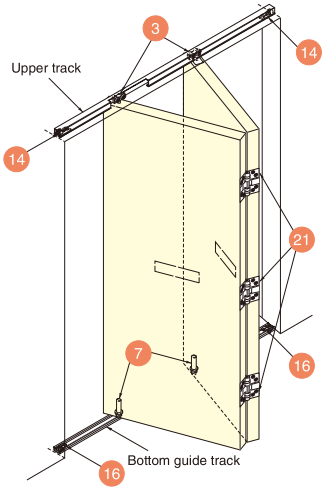
Gap Required - Door and Frame

Door Thickness	Gap C Min.	Gap E Min. in Case D=30			
		Width 300	Width 350	Width 400	Width 450
30	4.0	3.5	3.0	2.7	2.4
35	5.2	4.3	3.7	3.3	3.0
40	6.5	5.2	4.5	4.0	3.6

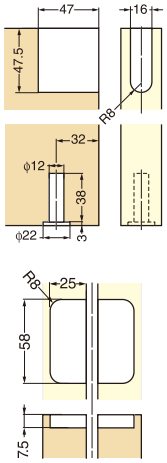
This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

c Slidable Folding Door – Door Edge Recessed Mount Hinge

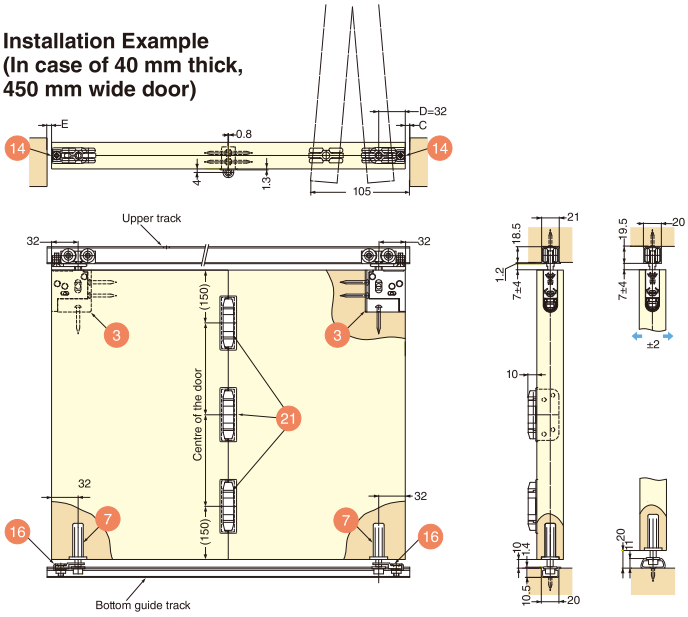
- Centre Hinge has angle adjustment, detent stop feature and is mounted in recess at door edge which is invisible from both side.
- Detent centre hinge allows the folding door to slide freely for easy access and to maximize the space.



Door Preparation



Installation Example (In case of 40 mm thick, 450 mm wide door)

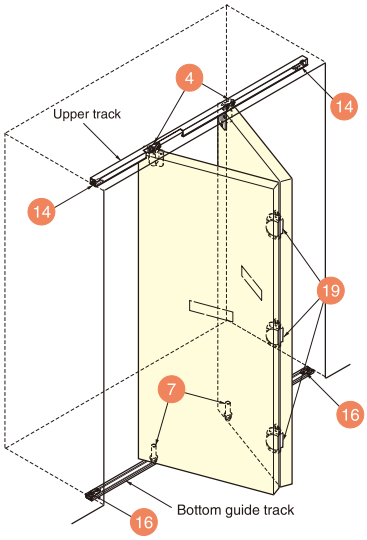


Gap Required - Door and Frame

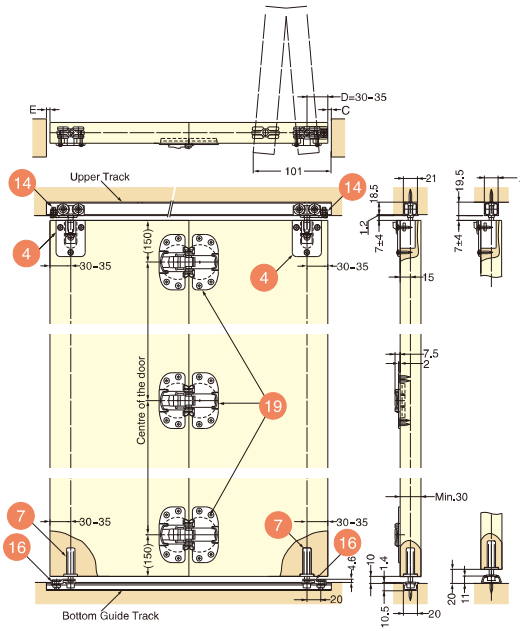
Door Thickness	Gap C Min.	Gap E Min. in Case D=30			
		Width 300	Width 350	Width 400	Width 450
30	4.0	3.5	3.0	2.7	2.4
35	5.2	4.3	3.7	3.3	3.0
40	6.5	5.2	4.5	4.0	3.6

d Slidable Folding Door – Back Side Recessed Mount Hinge

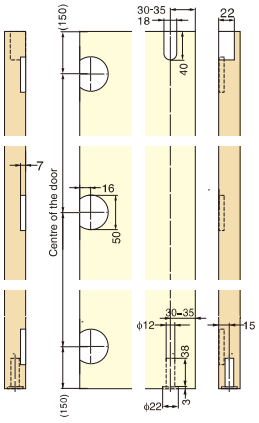
- Centre Hinge has angle adjustment, detent stop feature and is mounted in recess at back side of door.
- Detent centre hinge allows the folding door to slide freely for easy access and to maximize the space.



Installation Example (In case of 40 mm thick, 450 mm wide door)



Door Preparation



Gap Required - Door and Frame

Door Thickness	Gap C Min.	Gap E Min. in Case D=30			
		Width 300	Width 350	Width 400	Width 450
30	3.6	2.4	2.1	1.9	1.7
35	5.8	3.0	2.6	2.3	2.1
40	8.5	3.5	3.1	2.7	2.5

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.

LAMP FOLDING DOOR SYSTEM KF28

Latest Info

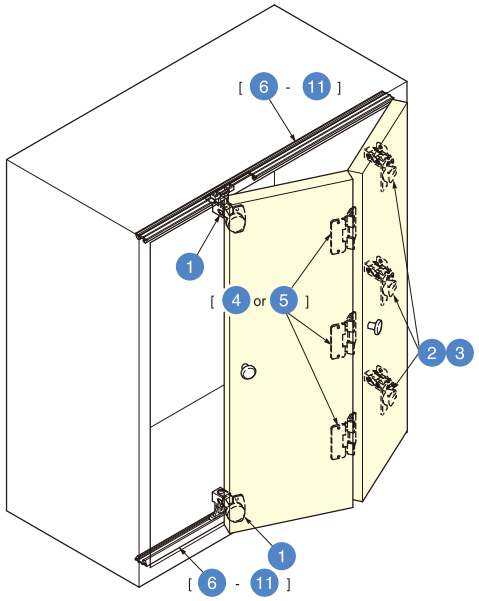


Door Width	Max. 450 mm/Door
Door Height	Max. 2400 mm
Door Thickness	15 - 20 mm
Door Weight	Max. 7 kg/Door*1
Coverage	19 mm
Door Type	2 Folding Door (Overlay)

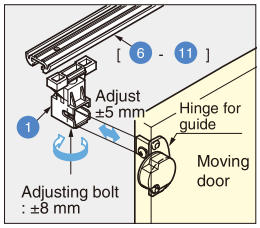
*1 Door weight has priority over door size.

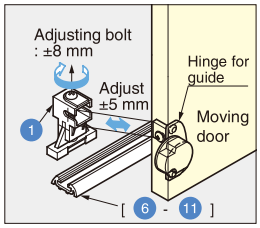
Overlay folding door with concealed hinges.

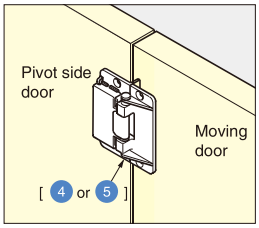
- Can be used on overlay installations of lightweight folding doors.
- Hardware is hidden when closed.
- Easy installation: rail is surface installed.
- Position can be adjusted horizontally and vertically post installation.



Installation



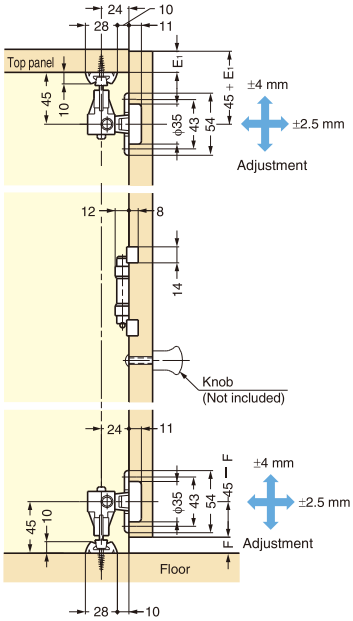




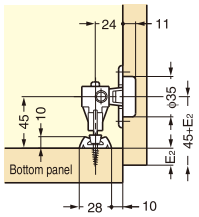
Door Height	Concealed Hinge 2 3	Centre Hinge 4 5
900 mm	2 pcs	2 pcs
1600 mm	3 pcs	2 pcs
2000 mm	4 pcs	3 pcs
2400 mm	5 pcs	4 pcs

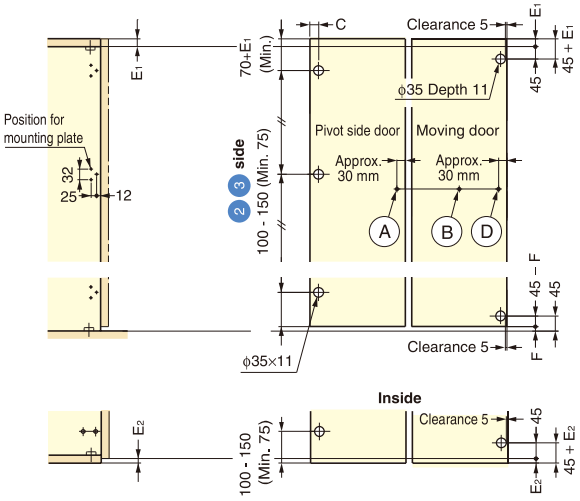
Coverage at Hinge Door Side	Door Edge to Bore Edge Distance
19 mm	5 mm
18 mm	4 (5) mm
17 mm	3 (4) mm

( ) shows hinge adjustable range.



C =Door edge to bore edge distance
F =Clearance between door bottom edge and floor (5 - 15 mm)
E1=Overlay (Upper side)
E2=Overlay (Bottom side)

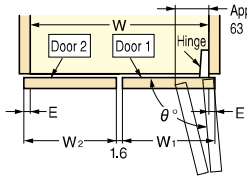
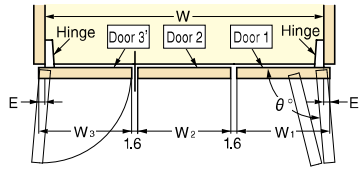
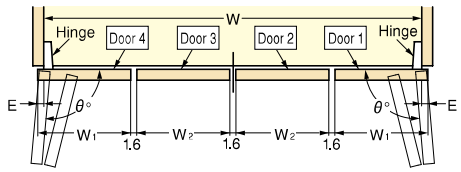




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How to Order KF28 • Required Parts ..... Slide Guide / Concealed Hinge / Mounting Plate / Centre Hinge / Rail

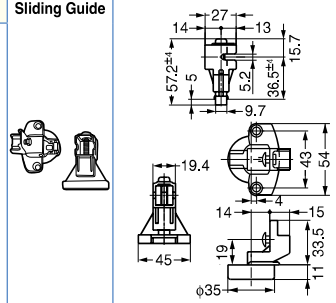
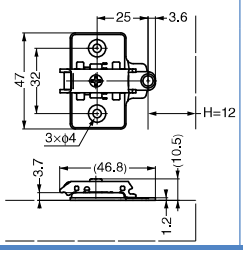
Door Width

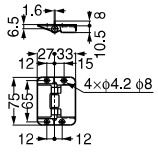
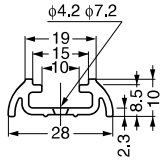
Application	Pivot Side Door at 90° Open	Pivot Side Door at 95° Open	Same Door Width Pivot Side Door at 87° Open
 W : Width of inside cabinet W1 : Width of Door 1 and Door 4 W2 : Width of Door 2 and Door 3 W3 : Width of Door 3' E : Coverage θ° : Opening angle at pivot side door 2 folding doors	$W_1=\frac{W+2E-4.8}{2}$ $W_2=W_1+3.2$	$W_1=\frac{W+2E-7.8}{2}$ $W_2=W_1+6.2$	$W_1=\frac{W+2E-1.6}{2}$ $W_2=W_1$ Opening Angle=87°
 2 folding doors+1 swing door	• $W_3=W_1$ $W_1=W_3=\frac{W+2E-6.4}{3}$ $W_2=W_1+3.2$ • $W_3=W_2$ $W_1=\frac{W+2E-9.6}{3}$ $W_2=W_3=W_1+3.2$	• $W_3=W_1$ $W_1=W_3=\frac{W+2E-9.4}{3}$ $W_2=W_1+6.2$ • $W_3=W_2$ $W_1=\frac{W+2E-15.6}{3}$ $W_2=W_3=W_1+6.2$	$W_1=\frac{W+2E-3.2}{3}$ $W_1=W_2=W_3$ Opening Angle=87°
 2 folding doors+2 folding doors	$W_1=\frac{W+2E-11.2}{4}$ $W_2=W_1+3.2$	$W_1=\frac{W+2E-17.2}{4}$ $W_2=W_1+6.2$	$W_1=\frac{W+2E-4.8}{4}$ $W_1=W_2$ Opening Angle=87°

Slide Guide Concealed Hinge Mounting Plate Centre Hinge Rail

Required Parts (Select one from each)

1 2 pcs are necessary for a pair of doors. Please order necessary qty of 2, 3 and 4 / 5 based on door height (refer to chart on P.498). Please order suitable rail 6 - 11 for the application.

No.	Item Code	Part Name	Dimensions	Description
1	250-120-029 FD28-SG	Sliding Guide		• Material Zinc Alloy (ZDC) Polyacetal (POM) • Finish Body: Nickel
2	160-026-836 360-26-19T	Concealed Hinge	*Please see the product pages (P.46).	• Material Steel • Finish Nickel
3	160-026-845 360-P4W-32T	Mounting Plate		• Material Steel • Finish Nickel

No.	Item Code	Part Name	Dimensions	Description
4	250-129-208 CH-75NI Nickel	Centre Hinge		• Material Zinc Alloy (ZDC) Polyamide (PA) Polyacetal (POM) Hinge Axis: Steel • Finish Body: Nickel (NI) Bronze (GB)
5	250-120-031 CH-75GB Bronze			
6	250-120-039 FD28-910-SIL Silver 910 mm	Rail		• Material Aluminium Alloy • Finish Anodized/Silver
7	250-120-037 FD28-1220-SIL Silver 1220 mm			
8	250-120-035 FD28-1820-SIL Silver 1820 mm			
9	250-120-038 FD28-910-GB Bronze 910 mm	Pitch End : 25 mm		• Material Aluminium Alloy • Finish Anodized/Bronze
10	250-120-036 FD28-1220-GB Bronze 1220 mm			
11	250-120-034 FD28-1820-GB Bronze 1820 mm			

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Update: 01.17.2025

SELECTION GUIDE
POCKET DOOR SYSTEMS
LATERAL OPENING DOOR
SLIDING DOOR
FOLDING DOOR
HANGERS

LAMP TALLMAN CLOSET ROD LIFT MECHANISM



Feature

- An innovative closet storage mechanism designed to optimize space by allowing efficient hanging of clothes in elevated areas.
- Easily raise and lower the hanger using the pull bar for convenient access.
- Features lift-assist and damper functions, enabling effortless lifting and ensuring a controlled stop even if the operator releases their hand during the process.
- The hanger can be securely held in a fully lowered position, simplifying the task of hanging clothes.
- Choose from three available models (TAS/TAW/TAT) based on your specific application needs.

Remarks

- Ensure the side panel or wall surface where the unit will be mounted is constructed with hardwood or a sturdy material, and firmly tighten the screws to prevent the risk of the main unit falling off.
- When hanging clothes on the hanger, consider the weight distribution. Light loads may result in the hanger feeling heavier during lowering. Achieving a balanced load, such as hanging approximately 5 jackets, enhances the lifting and lowering stability.
- For ease of use, we recommend pulling the pull bar from the front. Pulling it slowly at a 45-degree diagonal angle in front of you facilitates a smoother operation.
- When pushing up the hanger pipe, use your hand to push up the end of the arm for single types (TAS type) and T types (TAT type), or the centre part of the hanger pipe for double types (TAW type). This manual assistance simplifies the upward movement.

Easy to Use



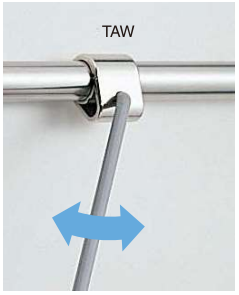
Easy to return the rod to normal position.

Simple Installation





Install mounting plate on the wall, fasten rod unit to the mounting plate with one hidden screw.





Flexible pull-down rod allows smooth operation.

Size Variation



We offer single, double or T-type to accommodate your space requirements.

Lower Hanging Pipe



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. CLOSET ROD LIFT MECHANISM (SINGLE TYPE) TAS

Latest Info



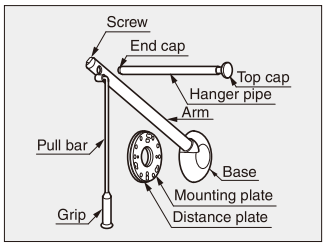
- Single-type model for installation on a side wall of a cabinet or closet.
- Both right-handed and left-handed models available.

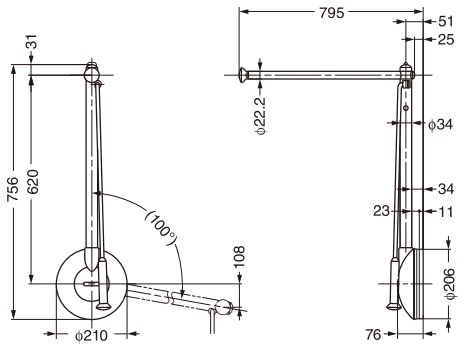
SCREW

Remarks
- MOQ upon request.

Parts Included
- Countersunk head wood screw 4.1x32

Feature





Item Code	Item Name	Type	Material	Colour	Load Capacity		Weight	Box	Carton
110-029-228	TAS-800R-G	Right-Hand	Polystyrene (PS)/Steel	Grey	39.2 - 49 N	4 - 5 kgf	6 kg	1 set	3 sets
110-029-229	TAS-800L-G	Left-Hand	Polystyrene (PS)/Steel	Grey	39.2 - 49 N	4 - 5 kgf	6 kg	1 set	3 sets
110-029-230	TAS-800R-U	Right-Hand	Polystyrene (PS)/Steel	Umber	39.2 - 49 N	4 - 5 kgf	6 kg	1 set	3 sets
110-029-231	TAS-800L-U	Left-Hand	Polystyrene (PS)/Steel	Umber	39.2 - 49 N	4 - 5 kgf	6 kg	1 set	3 sets

LAMP. CLOSET ROD LIFT MECHANISM (DOUBLE TYPE) TAW

Latest Info



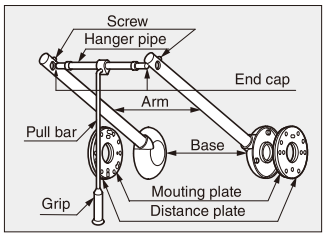
- Double-type model for installation on side walls of a cabinet or closet, using it in full width.
- Easy adjustment of rod length in just one step.

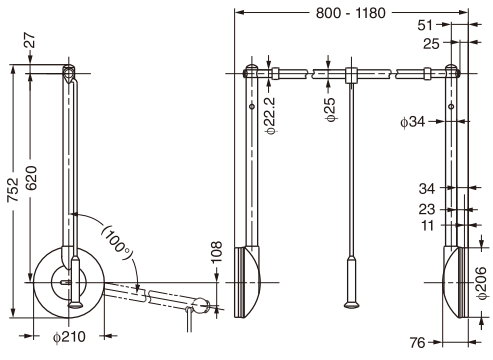
SCREW

Remarks
- Not possible to cut the hanger pipe.

Parts Included
- Countersunk head wood screw 4.1x32

Feature





Item Code	Item Name	Material	Colour	Load Capacity		Weight	Box	Carton
110-020-168	TAW-1200-G	Polystyrene (PS)/Steel	Grey	68.6 - 78.4 N	7 - 8 kgf	11 kg	1 set	2 sets
110-020-169	TAW-1200-U	Polystyrene (PS)/Steel	Umber	68.6 - 78.4 N	7 - 8 kgf	11 kg	1 set	2 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. CLOSET ROD LIFT MECHANISM (T-TYPE) TAT

Latest Info



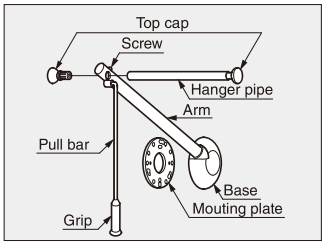
- TAB, the bracket required for installation is sold separately.
- Create space more efficiently by separating short and long clothes.

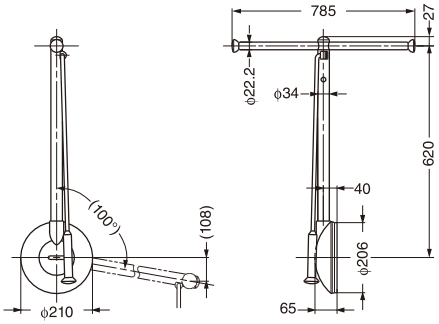
SCREW

Remarks
- MOQ upon request.

Parts Included
- Countersunk head wood screw 4.1x20

Feature



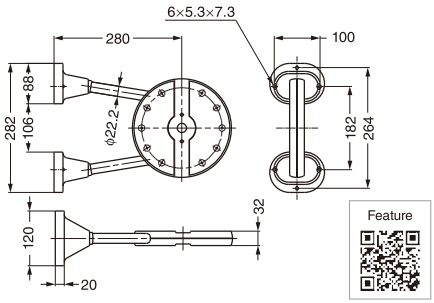


Item Code	Item Name	Type	Material	Colour	Load Capacity		Weight	Box	Carton
110-029-005	TAT-800R-G	Right-Hand	Polystyrene (PS)/Steel	Grey	39.2 - 49 N	4 - 5 kgf	6 kg	1 set	3 sets
110-029-004	TAT-800L-G	Left-Hand	Polystyrene (PS)/Steel	Grey	39.2 - 49 N	4 - 5 kgf	6 kg	1 set	3 sets

LAMP. BRACKET TAB

Latest Info





Feature

- Back wall mount bracket for TAS, TAW and TAT.

SCREW

Remarks
- Do not use impact driver.

Parts Included
- Wood screw 6 pcs
- Countersunk head screw 16 pcs

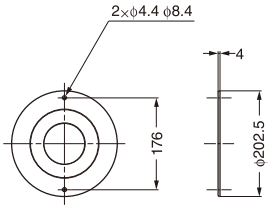
Item Code	Item Name	Material	Colour	Weight	Box	Carton
110-020-170	TAB-G	Steel and Polystyrene (PS)	Grey	1.5 kg	1 pc	4 pcs
110-020-171	TAB-U	Steel and Polystyrene (PS)	Umber	1.5 kg	1 pc	4 pcs

LAMP. COVER FOR TAB BRACKET TAC

Latest Info







SCREW

Parts Included
- Countersunk head screw 2 pcs

Feature

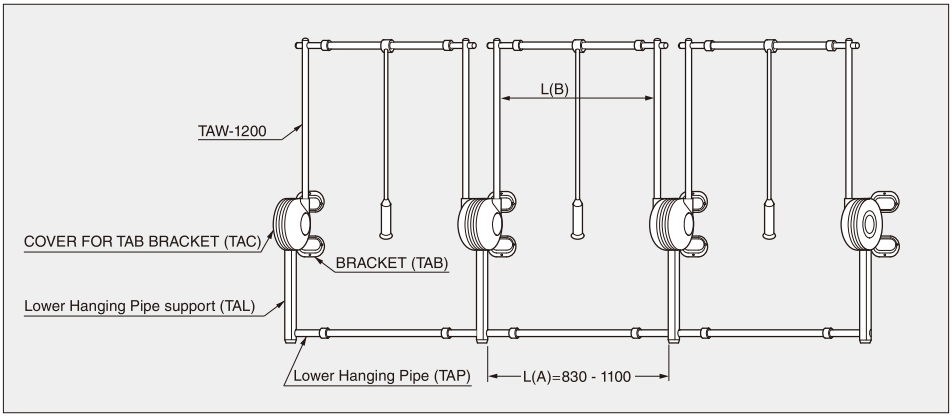
Item Code	Item Name	Material	Colour	Weight	Box
110-020-176	TAC-G	Steel	Grey	0.21 kg	1 pc
110-020-177	TAC-U	Steel	Umber	0.21 kg	1 pc

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.

LAMP LOWER HANGING PIPE TAP, TAL

Latest Info





- Allows to use the space under the unit more effectively.

Remarks
- L(B) will be 120 mm shorter than L(A) in case using with TAW.

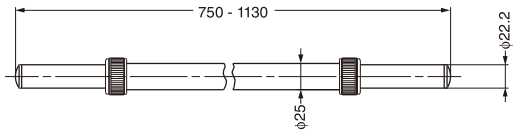
Parts Included
- Wood screw 2 pcs

Feature

Item Name	Qty.
TAW-1200	3
BRACKET (TAB)	4
COVER FOR TAB BRACKET (TAC)	2
Lower Hanging Pipe (TAP)	3
Lower Hanging Pipe Support (TAL)	4

Lower Hanging Pipe (TAP)



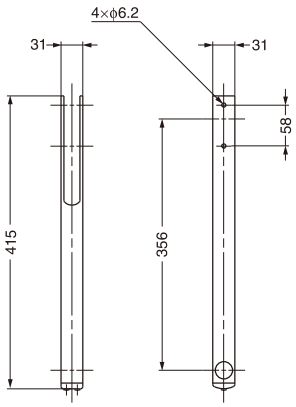


Item Code	Item Name	Material	Colour	Weight	Box
110-020-184	TAP-1200WG	Stainless Clad Pipe	Grey	0.85 kg	1 pc
110-020-185	TAP-1200WU	Stainless Clad Pipe	Umber	0.85 kg	1 pc

Lower Hanging Pipe Support (TAL)





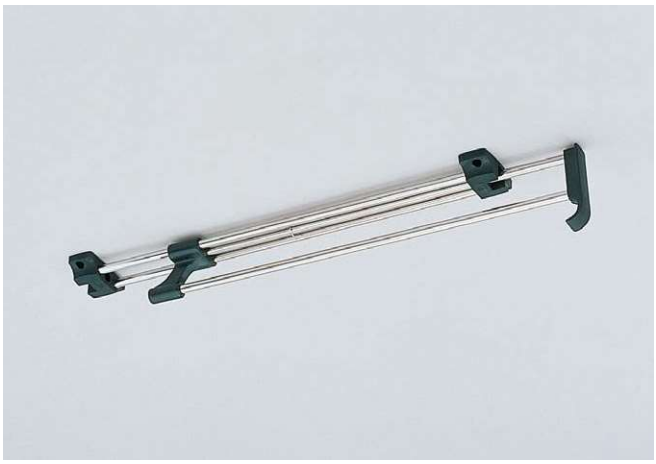


Item Code	Item Name	Material	Colour	Weight	Box
110-020-180	TAL-G	Steel	Grey	0.42 kg	1 pc
110-020-181	TAL-U	Steel	Umber	0.42 kg	1 pc

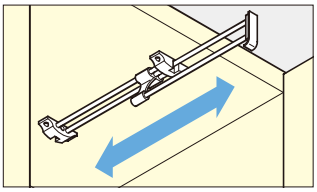
This information provides a range of quality for the component. It does not ensure the performance or safety of the final product incorporating the component.

LAMP. EXTENSION HANGER W

Latest Info





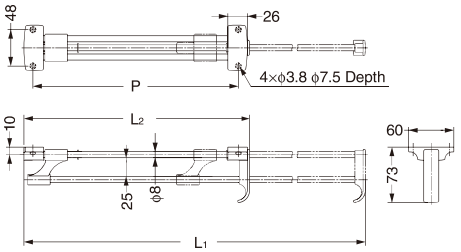


- Space-saving, undermount design for narrow spaces.

TEST METHOD 5 | SCREW

Parts Included
- Pan head tapping screw 3.5×20

Feature



Part Name	Material	Finish/Colour
Hanger Rod	Steel	Nickel
Retainer Guide	Polyamide (PA)	Black

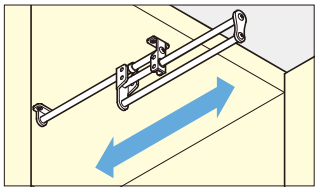
Item Code	Item Name	L1	L2	P	Load Capacity		Weight	Box	Carton
110-020-131	WH-300	498	300	273	58.8 N	6 kgf	485 g	5 pcs	30 pcs
110-020-132	WH-350	570	350	323	49 N	5 kgf	560 g	5 pcs	30 pcs
110-020-133	WH-400	628	400	373	49 N	5 kgf	630 g	5 pcs	30 pcs
110-020-134	WH-450	698	450	423	39.2 N	4 kgf	715 g	5 pcs	30 pcs

LAMP. EXTENSION HANGER A

Latest Info





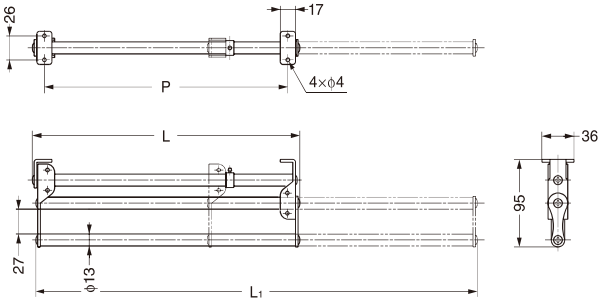


- Space-saving, undermount design for narrow spaces.

TEST METHOD 5 | SUS | SCREW

Parts Included
- Raised countersunk head wood screw 3.5×25 (SUS)

Feature



Item Code	Item Name	Material	Finish	L1	L	P	Load Capacity		Weight	Box	Carton
110-020-138	AS-300	Stainless Steel (SUS430)	Satin	495	300	273	49 N	5 kgf	395 g	5 pcs	50 pcs
110-020-139	AS-330	Stainless Steel (SUS430)	Satin	545	330	303	49 N	5 kgf	420 g	5 pcs	50 pcs
110-020-140	AS-360	Stainless Steel (SUS430)	Satin	598	360	333	49 N	5 kgf	405 g	5 pcs	50 pcs
110-020-141	AS-400	Stainless Steel (SUS430)	Satin	665	400	373	49 N	5 kgf	440 g	5 pcs	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. EXTENSION HANGER UH

Latest Info





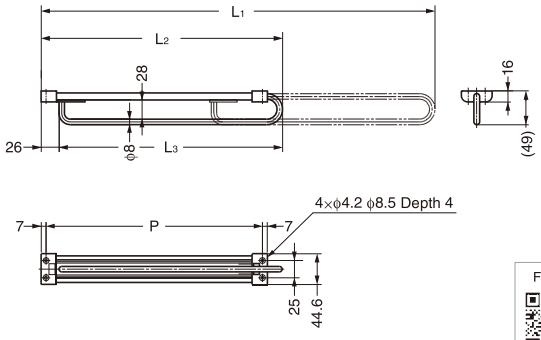


- Space-saving, undermount design for narrow spaces.

TEST METHOD 5 | SUS | SCREW

Parts Included

- Tapping screw 4×25 (SUS)



Feature

Part Name	Material	Finish/Colour
End Cap	Polyamide (PA)	Black
Guide Block	Polyethylene (PE)	Black
Hanger Rod	Stainless Steel (SUS304)	–
Rod Retainer	Steel	Chrome

Item Code	Item Name	L1	L2	L3	P	Load Capacity		Weight	Box	Carton
110-021-045	UH-300	491	300	274	264	29.4 N	3 kgf	365 g	5 pcs	30 pcs
110-021-046	UH-350	571	350	324	314	29.4 N	3 kgf	440 g	5 pcs	30 pcs
110-021-047	UH-400	636	400	374	364	29.4 N	3 kgf	505 g	5 pcs	30 pcs
110-021-048	UH-450	721	450	424	414	29.4 N	3 kgf	570 g	5 pcs	30 pcs

LAMP. EXTENSION HANGER TE700, TE800

Latest Info



- Space-saving, undermount design for narrow, deep spaces.
- Ideal for wardrobe and large storage furniture which have a deep depth.
- 200 mm rear support can be adjusted for shorter/longer spaces.

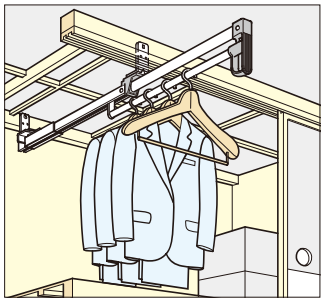
TEST METHOD 5 | SCREW

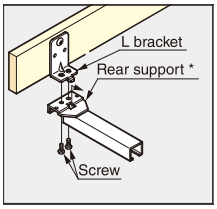
Remarks

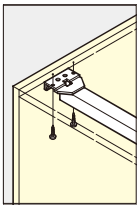
- Cabinet depth : TE700 (Min. 700 mm), TE800 (Min. 800 mm).

Parts Included

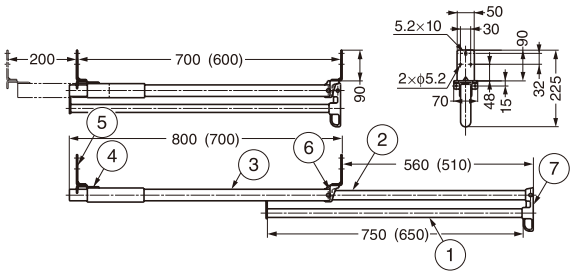
- Round head wood screws 4.5×20







* Use L bracket (included) for side-mount.



( ) : TE700

No.	Part Name	Material	Finish/Colour
①	Hanger Pipe	Steel	Chrome
②	Sliding Rail	Steel	Chrome
③	Fix Rail	Steel	Metalic Brown
④	Rear Support	Steel	Metalic Brown
⑤	L Bracket	Steel	Metalic Brown
⑥	Guide Cap	Plastic	Black
⑦	Knob	Plastic	Black

Item Code	Item Name	Length	Travel Length	Depth Dimension	Load Capacity		Weight	Box	Carton
110-020-147	TE-700	700	520	600 - 800	196 N	20 kgf	2.4 kg	1 pc	6 pcs
110-020-148	TE-800	800	570	700 - 900	196 N	20 kgf	2.7 kg	1 pc	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 HANGER BRACKET CK

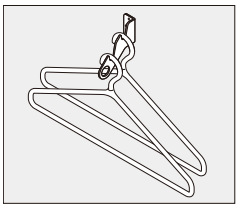
Latest Info

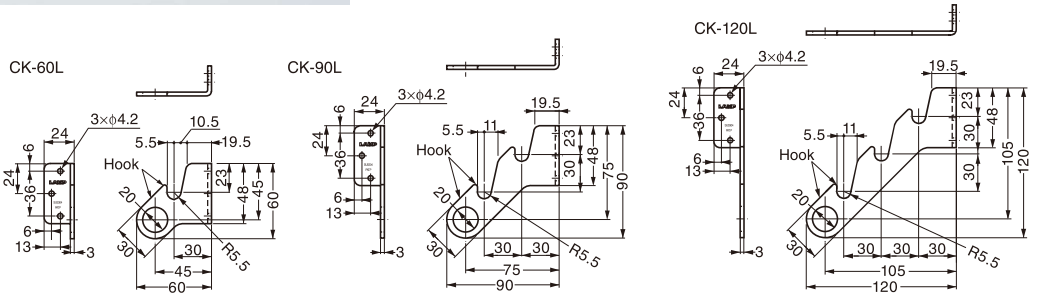


- Light duty hanger brackets for garments, umbrellas, etc.

TEST METHOD 4 | SUS | SCREW

Parts Included
- Truss tapping screw 4×20





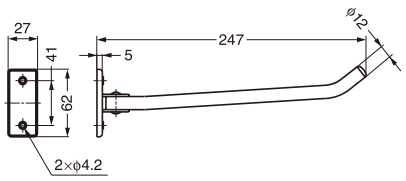
Item Code	Item Name	Material	Finish	Load Capacity/position		Weight	Box	Carton
110-020-260	CK- 60L	Stainless Steel (SUS304)	Satin	14.7 N	1.5 kgf	66 g	15 pcs	150 pcs
110-020-261	CK- 90L	Stainless Steel (SUS304)	Satin	14.7 N	1.5 kgf	90 g	15 pcs	150 pcs
110-020-262	CK-120L	Stainless Steel (SUS304)	Satin	14.7 N	1.5 kgf	113 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.

LAMP. SWINGING HANGER HM-250V

Latest Info

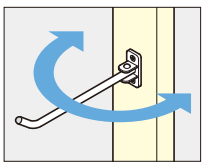




TEST METHOD 4 | SUS | SCREW

Parts Included
- Raised countersunk head wood screw 3.5×20 (SUS)

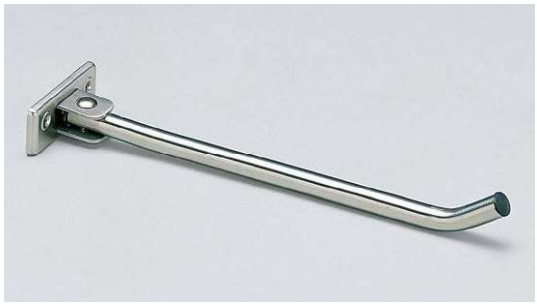
Feature

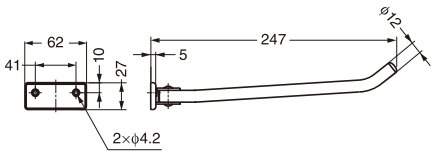


Item Code	Item Name	Material	Finish	Load Capacity		Weight	Box	Carton
110-020-086	HM-250V	Stainless Steel (SUS304)/EPDM	Satin	29.4 N	3 kgf	120 g	10 pcs	100 pcs

LAMP. SWINGING HANGER HM-250Y

Latest Info

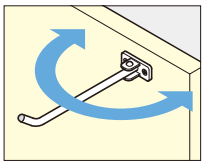




TEST METHOD 4 | SUS | SCREW

Parts Included
- Raised countersunk head wood screw 3.5×20 (SUS)

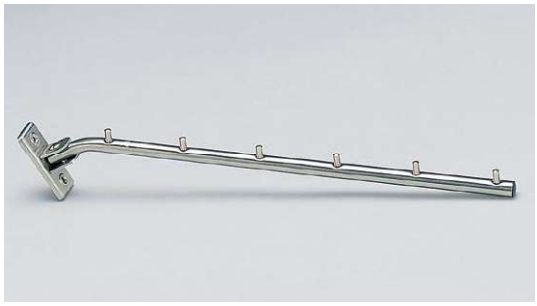
Feature

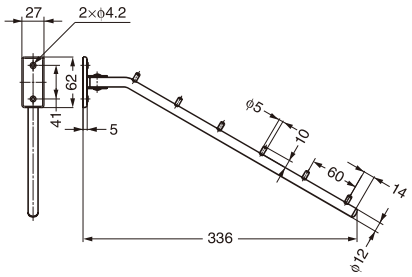


Item Code	Item Name	Material	Finish	Load Capacity		Weight	Box	Carton
110-020-088	HM-250Y	Stainless Steel (SUS304)/EPDM	Satin	29.4 N	3 kgf	136 g	10 pcs	100 pcs

LAMP. SWINGING HANGER HM-330

Latest Info

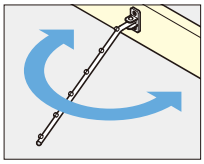




TEST METHOD 4 | SUS | SCREW

Parts Included
- Raised countersunk head wood screw 3.5×20 (SUS)

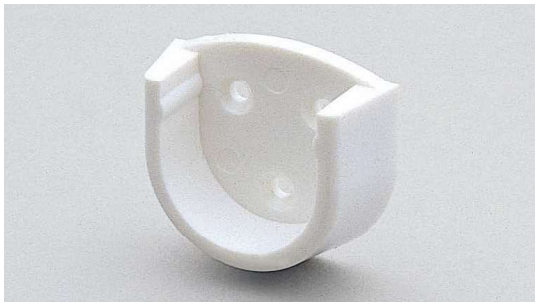
Feature

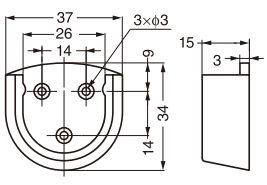


Item Code	Item Name	Material	Finish	Load Capacity		Weight	Box	Carton
110-020-089	HM-330	Stainless Steel (SUS304)/EPDM	Satin	29.4 N	3 kgf	190 g	10 pcs	100 pcs

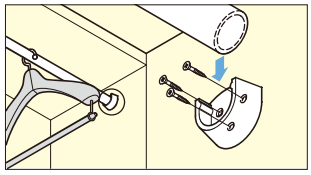
LAMP. PLASTIC SOCKET PS-37

Latest Info





- Ideal for holding pipes in wardrobes.

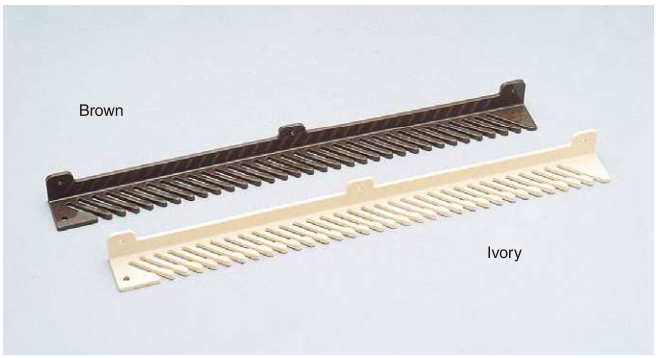


Item Code	Item Name	Material	Colour	Load Capacity		Weight	Box	Carton
110-030-118	PS-37	Polystyrene	White	196 N/2 pcs	20 kgf/2 pcs	8 g	100 pcs	900 pcs

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.

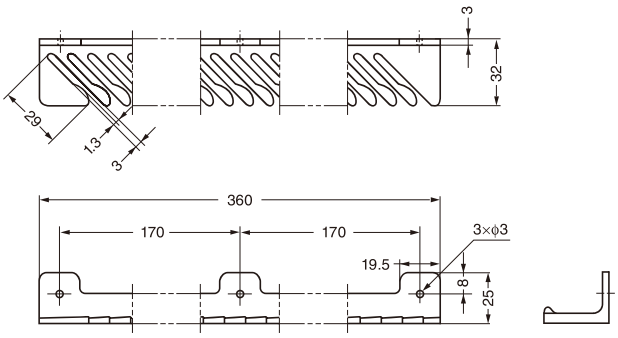
LAMP TIE RACK TIE-33

Latest Info



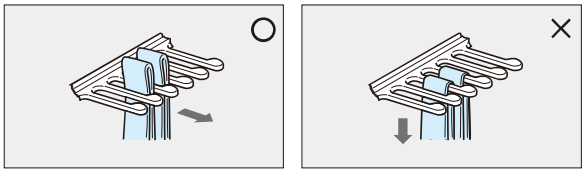
SCREW

Parts Included
- Wood screws



Application Example

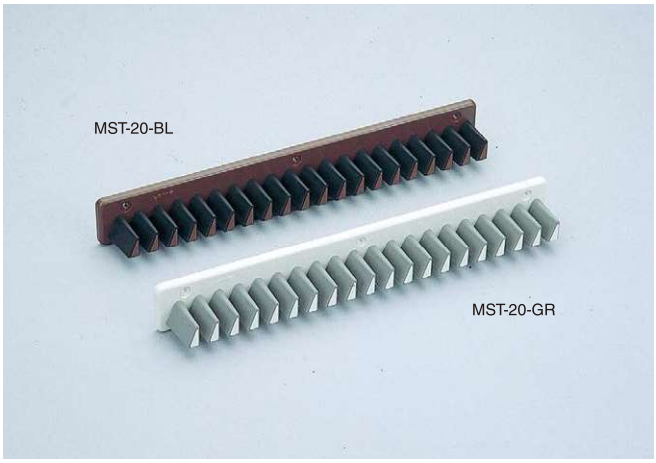




Item Code	Item Name	Material	Colour	Load Capacity/position		Weight	Box	Carton
110-020-126	TIE-33BR	Polycarbonate (PC)	Brown	2.94 N	0.3 kgf	50 g	20 pcs	300 pcs
110-020-127	TIE-33I	Polycarbonate (PC)	Ivory	2.94 N	0.3 kgf	50 g	20 pcs	300 pcs

LAMP TIE RACK MST-20

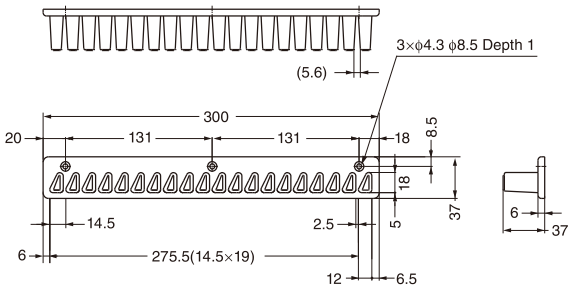
Latest Info



- 2 ways of holding possible depending on tie thickness.

SCREW

Parts Included
- Binding head tapping screw 4 × 14 (SUS)



Application Example





Part Name	Material
Body	ABS
Stopper	Elastomer (TPE)

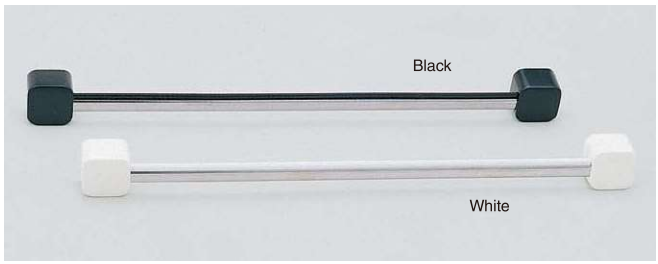
Item Code	Item Name	Colour	Load Capacity/position		Weight	Box	Carton
110-025-304	MST-20BL	Brown+Black	2.94 N	0.3 kgf	116 g	10 pcs	120 pcs
110-025-305	*MST-20GR	Ivory+Grey	2.94 N	0.3 kgf	116 g	10 pcs	120 pcs

*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.

LAMP TIE RACK S-350

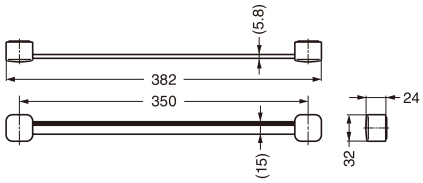
Latest Info





SUS SCREW

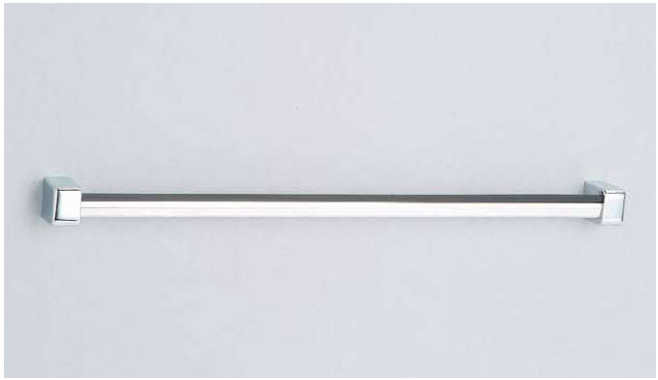
Parts Included
- Truss head tapping screw 3 × 16



Item Code	Item Name	Material	Colour/Finish	Weight	Box	Carton
110-020-118	S-350W	ABS/Stainless Steel (SUS304)	White/Polished	80 g	10 pcs	100 pcs
110-020-119	S-350B	ABS/Stainless Steel (SUS304)	Black/Polished	80 g	10 pcs	100 pcs

LAMP TIE RACK STR

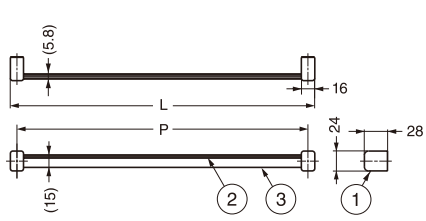
Latest Info



SUS SCREW

Parts Included
- Round head wood screw 3.1 × 16 (Chromate)
- Countersunk head screw M3 × 8 (Chrome)

Installation



Item Code	Item Name	L	P	Weight	Box	Carton
110-020-244	STR-300	316	300	160 g	10 pcs	60 pcs
110-020-245	STR-350	366	350	170 g	10 pcs	60 pcs
110-020-246	STR-400	416	400	180 g	10 pcs	60 pcs
110-020-153	STR-450	466	450	190 g	10 pcs	60 pcs

No.	Material	Finish/Colour
①	Zinc Alloy (ZDC)	Chrome
②	Vinyl Cloride Resin (PVC)	Black
③	Stainless Steel (SUS304)	Mirror

LAMP TIE RACK DTR

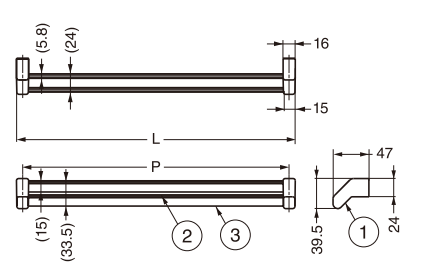
Latest Info



SUS SCREW

Parts Included
- Round head wood screw 3.1 × 16 (Chromate)
- Countersunk head screw M3 × 8 (Chrome)

Installation



Item Code	Item Name	L	P	Weight	Box	Carton
110-020-154	DTR-350	366	350	250 g	5 pcs	30 pcs
110-020-155	DTR-400	416	400	270 g	5 pcs	30 pcs
110-020-156	DTR-450	466	450	285 g	5 pcs	30 pcs

No.	Material	Finish/Colour
①	Zinc Alloy (ZDC)	Chrome
②	Vinyl Cloride Resin (PVC)	Black
③	Stainless Steel (SUS304)	Mirror

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.

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- Customer Solution Case Studies
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- Installation Instructions
- CAD Data (2D, 3D)
- Product Videos
- Selection Tools

Technical Information

1364 | TEST METHODS
1366 | SURFACE TREATMENT
1367 | MATERIALS
1368 | DOOR WEIGHT TABLE

September 2024

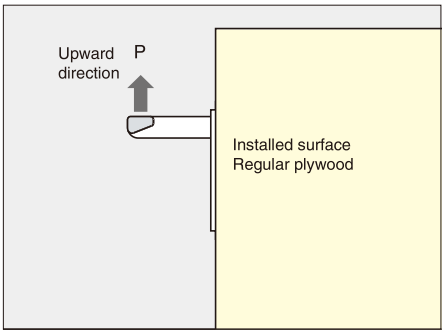
TEST METHODS

■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.

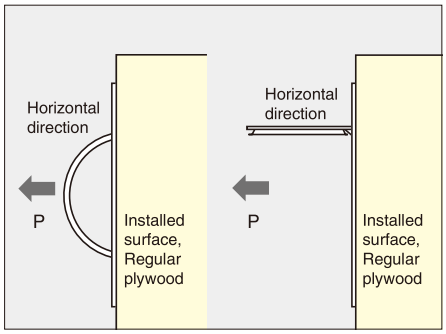
Product without TEST METHOD icon may not be based on these criteria in some cases.

TEST METHOD 1 HANDLE LOAD CAPACITY TEST



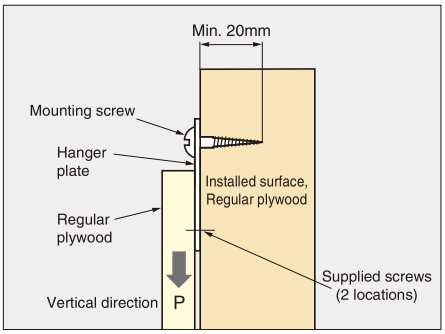
The load capacity is measured when the force (P) is gently applied in the direction of the arrow under the condition indicated by the figure.

TEST METHOD 2 HANDLE, PULL, HOOK LOAD CAPACITY TEST



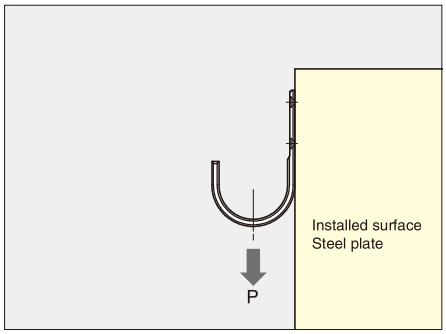
The load capacity is measured when the force (P) is gently applied in the direction of the arrow under the condition indicated by the figure.
Product may fail or distort if the force is applied in a direction other than the frontal direction. Please do not use on application other than in the pull direction.

TEST METHOD 3 HANGING-LOAD CAPACITY TEST



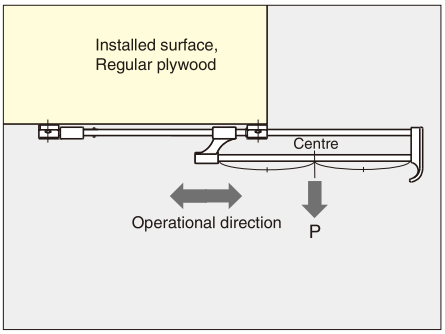
The hanging-load capacity is measured when the force (P) is gently applied in the direction of the arrow under the condition indicated by the figure. This value will vary according to the diameter / length of the screw(s) used and strength of the installed surface.
Hanging load of 10 kgf, in case of using round head wood screw 3.8 x 25.

TEST METHOD 4 HOOK LOAD CAPACITY TEST



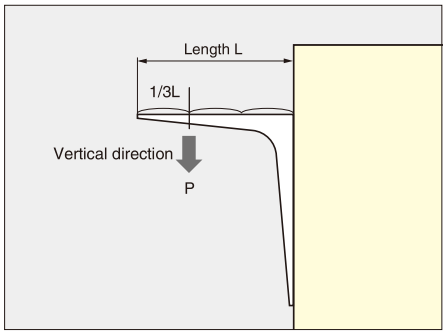
Under the conditions shown in the figure, a force (P) is gently applied to the centre of the hanging part in the vertical direction. The indicated load capacity value is about one-third of the limit load value (safety factor: 3). Therefore, this safety factor changes depending on the usage conditions. If you use it under adverse conditions, please be sure to check the actual product.

TEST METHOD 5 MAXIMUM HANGING-LOAD TEST



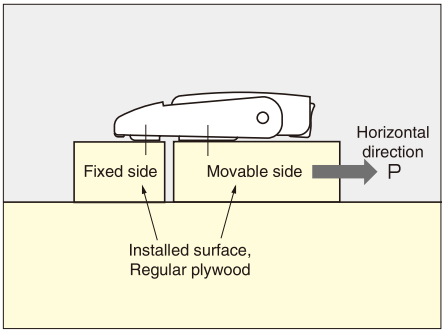
The maximum hanging-load capacity is measured when the force (P) is gently applied in the direction of the arrow and operated under the condition indicated by the figure. If the load is concentrated at the front tip of the hanger, the front tip may sag or the movement may become heavy.

TEST METHOD 6 BRACKET LOAD CAPACITY TEST



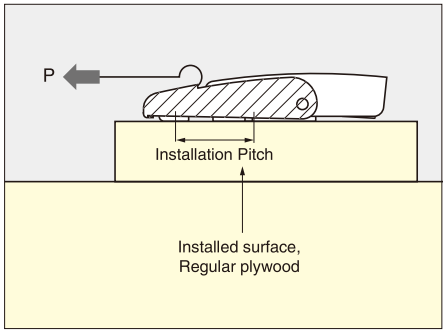
The load capacity is measured when the force (P) is gently applied in the direction of the arrow under the condition indicated by the figure.
(This is based on the force (W) applied at the centre of the shelf board with its length 4/3 times longer than the shelf bracket or angle bracket.)

TEST METHOD 7 FASTENER LOAD CAPACITY TEST



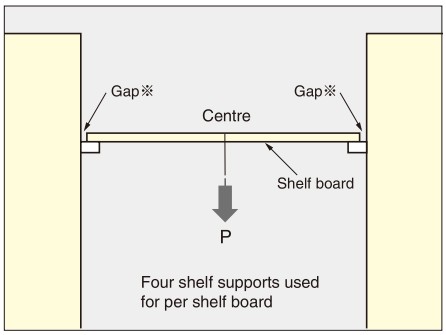
The load capacity is measured when the force (P) is gently applied in the direction of the arrow under the condition indicated by the figure.

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



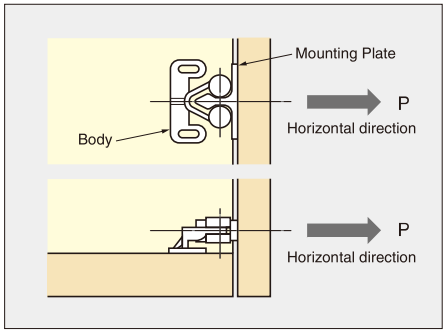
The load capacity is measured when the force (P) is gently applied in the direction of the arrow under the condition indicated by the figure.
Follow the conditions below to prevent the shelf supports or shelf board from falling off.

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.

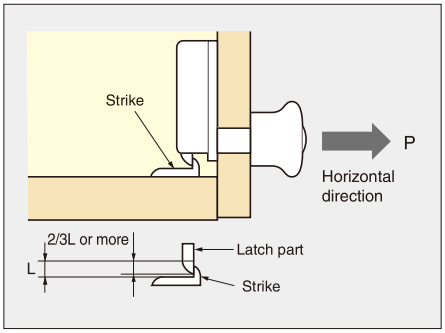
TEST METHOD 10 CATCH FORCE TEST



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.

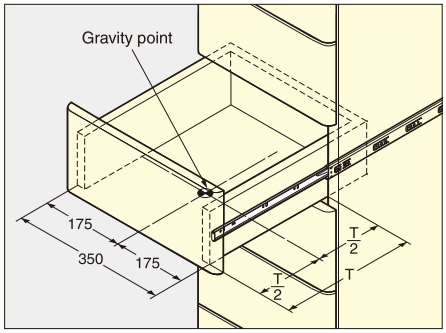
TEST METHOD 11 RETAINING FORCE TEST



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).

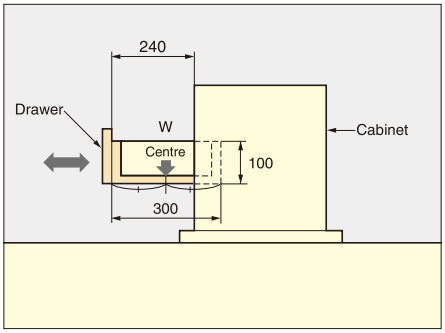
TEST METHOD 12 DRAWER SLIDE LOAD CAPACITY TEST



Calculation of slide centre of gravity

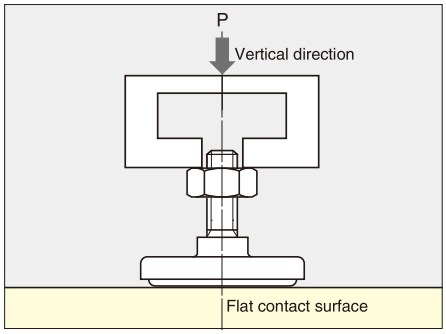
The load capacity is measured based on the condition:
- Continuous open-close: 50,000 cycles
- Speed: 10 cycles per minute
- Load is applied on the gravity point. The figure of load capacity includes drawer itself.
- Drawer width: 350mm

TEST METHOD 13 DRAWER SLIDE LOAD CAPACITY TEST



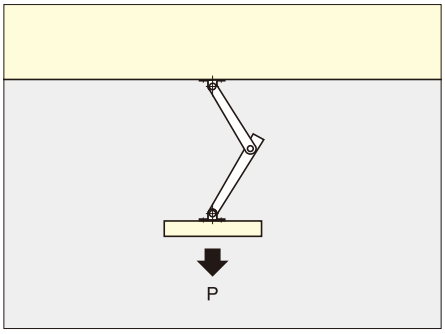
The load capacity is measured when the weight (W) is applied at the centre of the drawer under the condition indicated by the figure and the operation to pull out the drawer by 240mm is repeated. The gap between drawer and cabinet shall be 1 mm or less.

TEST METHOD 14 LEVELLING GLIDE LOAD CAPACITY TEST



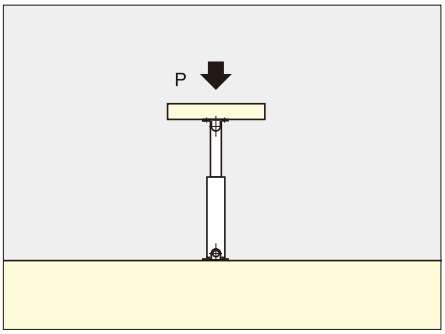
The load capacity is measured when the force (P) is applied in the direction of the arrow under the condition indicated in the figure.
Product may break or distort if the contact surface is not flat.

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



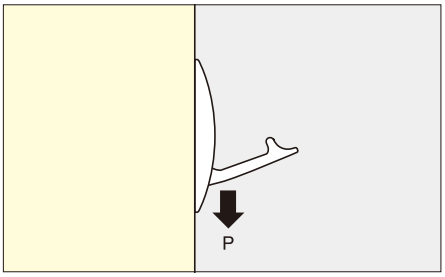
The compression load capacity is measured when the force (P) is gently applied in the direction of the arrow under the condition indicated by the figure.

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

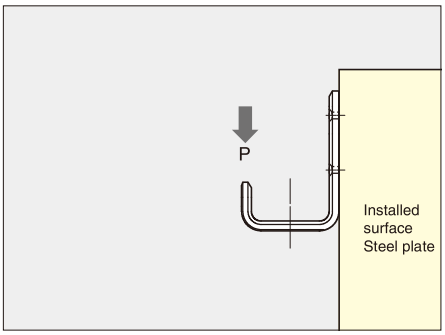


The load capacity is measured when the force (P) is gently applied in the direction of the arrow under the condition indicated by the figure.

Load capacity kgf = Ultimate Load ÷ 3

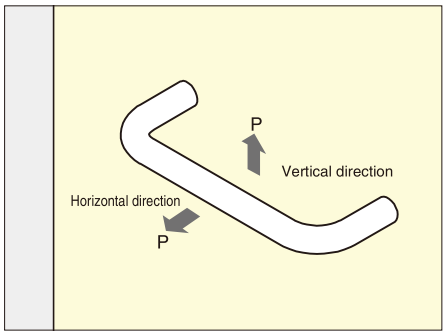
However, the safety factor will vary depending on the conditions of use.
When used under adverse conditions, please test the hook in intended application.

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

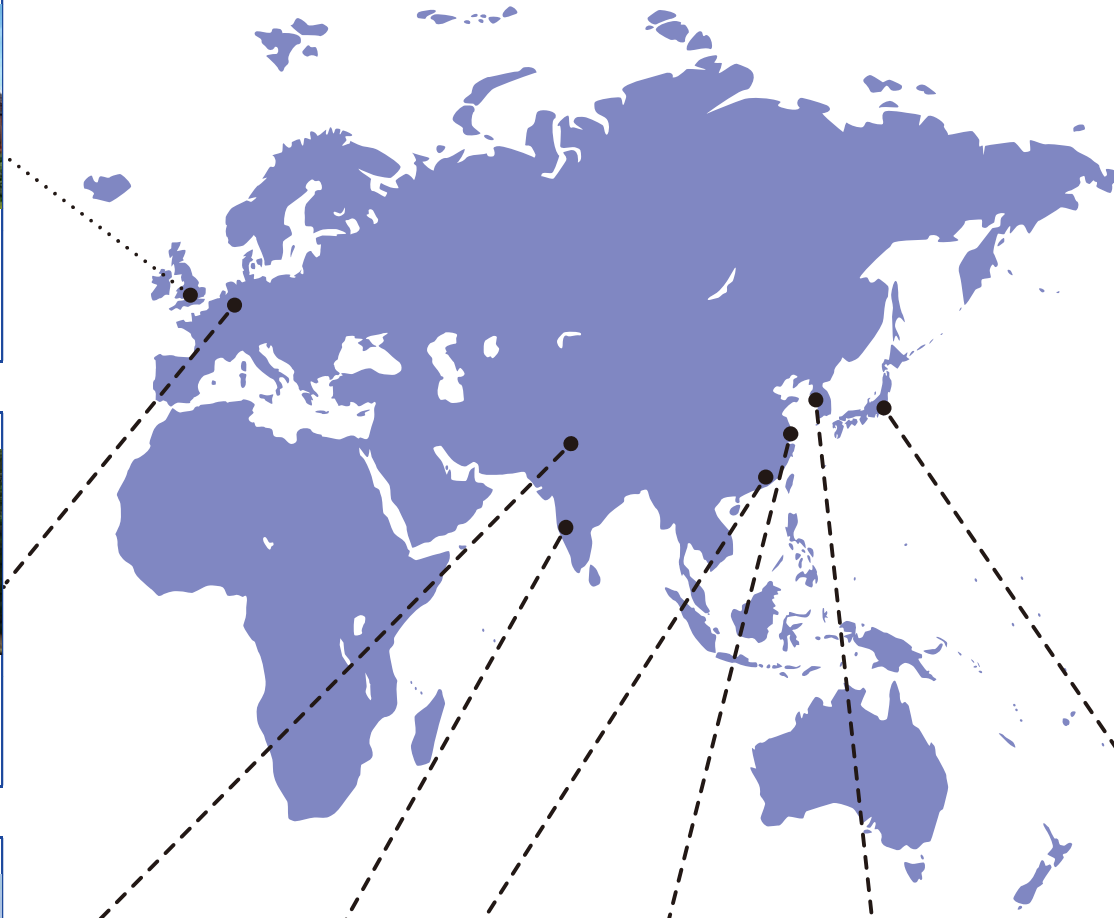
Glass Door Weight (kg)

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

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September 2024

Global Network



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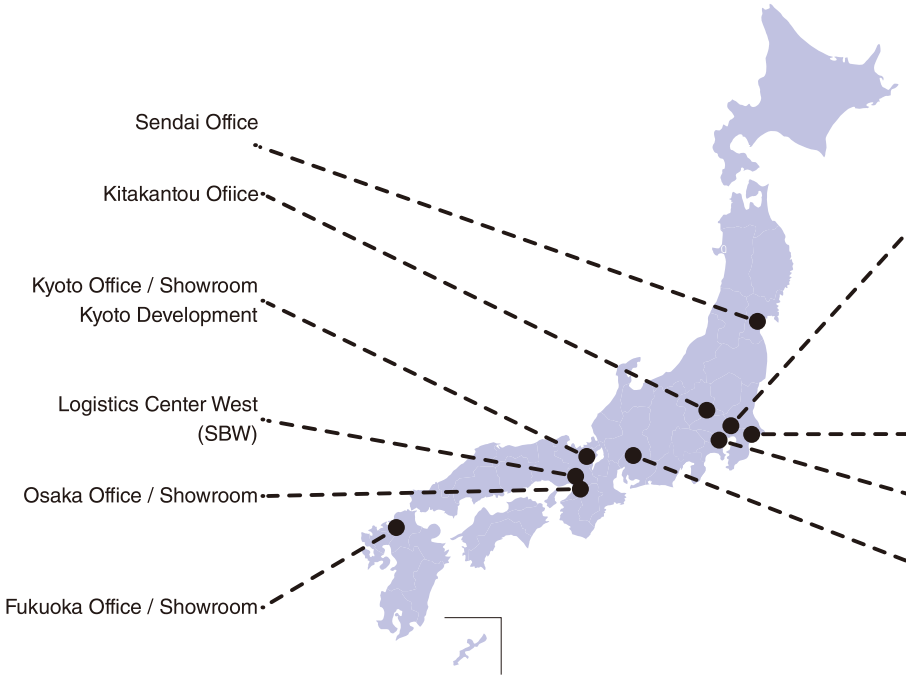
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Kitakantou Ofiice
Kyoto Office / Showroom
Kyoto Development
Logistics Center West
(SBW)
Osaka Office / Showroom
Fukuoka Office / Showroom

Tokyo Head Office / Showroom
Tokyo Development

Export Department
1-8-11 Higashikanda, Chiyoda-ku
Tokyo 101-8633,Japan
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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. 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. 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. A technical centre is built at the site of Chiba Factory. 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. 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. 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) 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. Fukuoka Sales Office is moved and a showroom is opened. 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. A new logistics centre (SBW) is established in Osaka.
2016	Sugatsune Europe GmbH is established in Germany. 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.

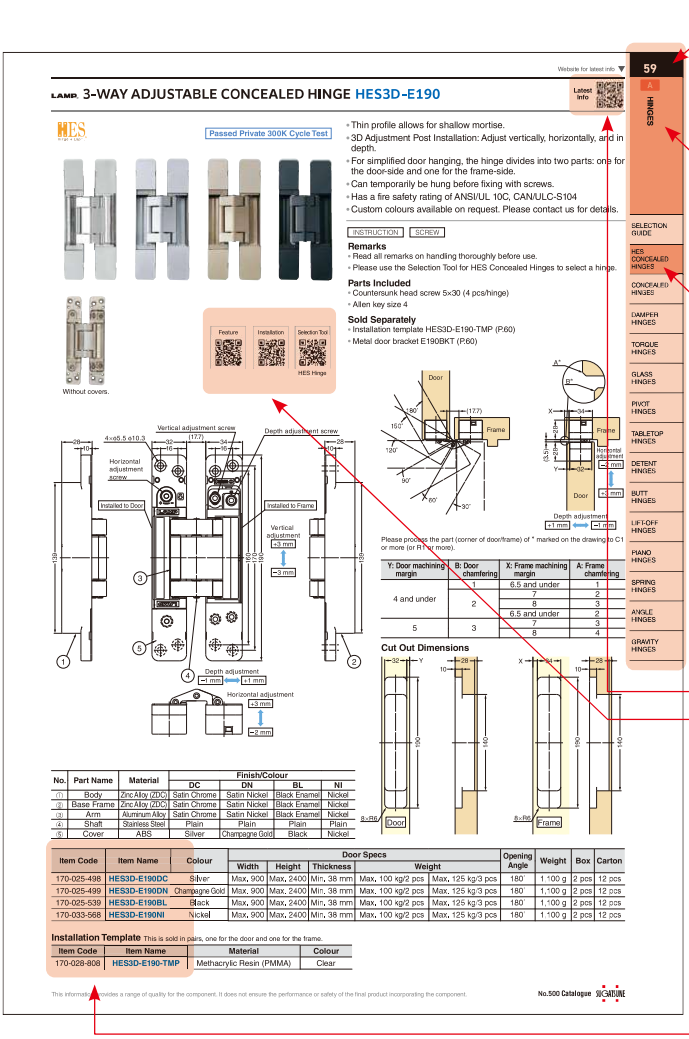
Sugatsune Global

Explore our product applications and stay updated on Instagram and Facebook.

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Description of Main Text

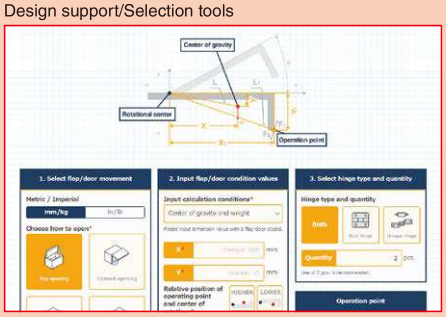


Viewable from the QR code.

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

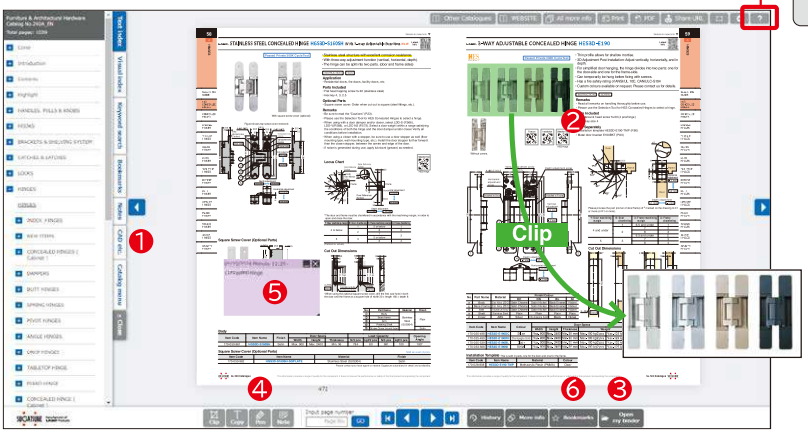
• Please specify the Item Name. and quantity when ordering.

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