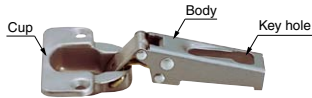


# CONCEALED HINGE 100 SERIES

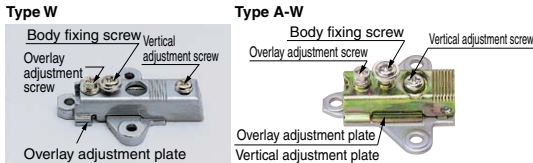
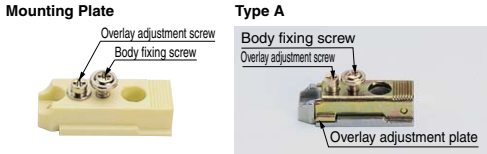
## Part Names

### [Concealed Hinge 1 ]



- Body** Install to mounting plate.
- Cup** Cut out a  $\phi 35$  (or  $\phi 26$ ,  $\phi 40$ ) hole on the door, and install concealed hinge.
- Key hole** When fixing to the mounting plate, insert body fixing screw in this hole and tighten.
- Mounting plate** First install to the side board, then insert and tighten the body.
- Body fixing screw** Used to fix the body to the mounting plate. It can also be used for door depth adjustment.
- Overlay adjustment screw** Used to adjust overlay of door.
- Overlay adjustment plate** (In case of type A or type A-W mounting plate) Turning overlay adjustment screw can adjust door overlay without affecting door depth and vertical adjustment.
- Vertical adjustment screw** (In case of type W or type A-W mounting plate) Used for vertical adjustment of door.
- Vertical adjustment plate** (In case of type W or type A-W mounting plate) Turning door vertical adjustment screw can move the door vertically.
- Spacer** Used for decreasing door overlay, or increasing door gap for inset type.

### [Mounting Plate 2 ]

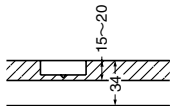


### [Spacer 3 ]



## Suitable for Various Door Thickness

100 Series are suitable for door thickness 15mm~34mm. Besides, performance can be maximised by using locus chart.



## Superior Corrosion Resistance

### [All Stainless Steel]

The world's first stainless steel (SUS304) concealed hinge. Stainless steel features superior corrosion resistance, suitable for damp places like combined kitchen and washroom, etc. It can also be used for fields such as medical, laboratory and ship, etc.

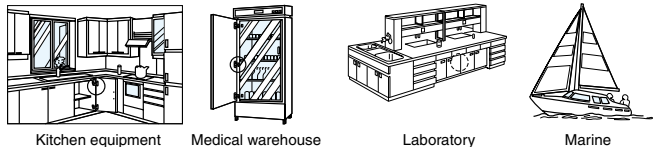
### [Satin Chrome]

Plated type is highly corrosion-resistant thanks to satin chrome finish of main metal parts. And metallic silver colour makes high-tech furniture more eye-catching. (Nickel plating type also available by made to order)

## Full Range of Mounting Plates

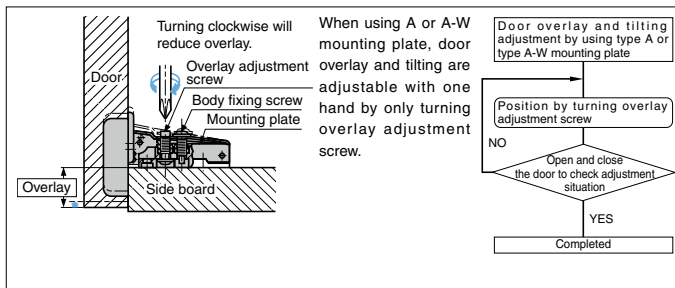
Nearly 20 different mounting plates are available for 100 series to meet diversified installation requirements. Each one can be installed quickly, accurately and reliably.

## <Main Purpose of Stainless Steel Concealed Hinge>



## Easy and Fast Adjustment TYPE A, A-W MOUNTING PLATE

### [100 Series Concealed Hinge Type A, A-W Mounting Plate]



Note) Be sure to use a manual screwdriver to fine tune adjustment screws within the adjustment range. Do not use a pneumatic, electric or rechargeable screwdriver, or excessive tightening torque may damage thread and cause malfunction.

Refer to 1 : P.114~116, 2 : P.117, 3 : P.129

## How to Adjust

### Door Adjustment by Using Type A or Type A-W Mounting Plate

#### [Type A]

100-02A-30, 100-03A, 100-04A-30, 100-04A-32-3, 100-06A, 100-P3A, 100-P4A-30

##### Depth Adjustment

Loosen the body fixing screw, move the door back and forth to select appropriate position, and then tighten the screw.

##### Overlay Adjustment (Horizontal Adjustment)

Turning the overlay adjustment screw clockwise (↻) to decrease and counterclockwise (↺) to increase the overlay.

Operate with the body fixing screw tightened.

##### Tilting Adjustment

Turn the overlay adjustment screw. Operate with the body fixing screw tightened.

#### [Type A-W]

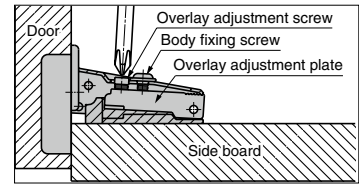
100-04A-W-30, 100-04A-W-30-2, 100-04A-W-32, 100-06AW

Depth Adjustment Overlay Adjustment Tilting Adjustment are the same as type A.

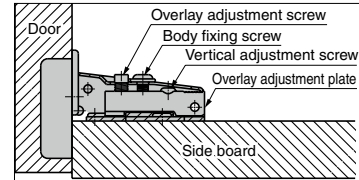
##### Vertical Adjustment

Loosen the vertical adjustment screw, move the door up and down to select appropriate position, and then tighten the screw.

Type A



Type A-W



### Door Adjustment by Using Mounting Plate Other Than Type A and Type A-W

[100-01, 100-02-30, 100-03, 100-04-30, 100-06, 100-P6]

##### Depth Adjustment

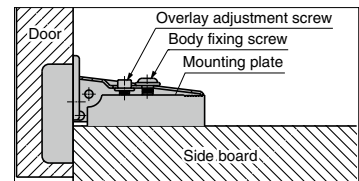
Loosen the body fixing screw, move the door back and forth to select appropriate position, and then tighten the screw.

##### Overlay Adjustment (Horizontal Adjustment)

Loosen the body fixing screw first. Turn the overlay adjustment screw to determine appropriate position. Turning the overlay adjustment screw clockwise (↻) to increase and counterclockwise (↺) to decrease the overlay. Finally tighten the body fixing screw.

##### Tilting Adjustment

Loosen the body fixing screw first. Turn the overlay adjustment screw to determine appropriate position, and finally tighten the body fixing screw securely.



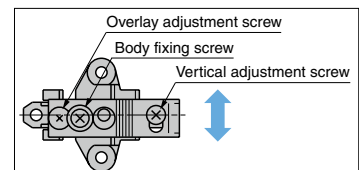
#### [Type W]

100-04W-30

Depth Adjustment Overlay Adjustment Tilting Adjustment are the same as the above method.

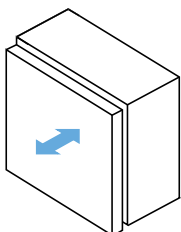
##### Vertical Adjustment

Loosen the vertical adjustment screw, move the door up and down to select appropriate position, and then tighten the screw.

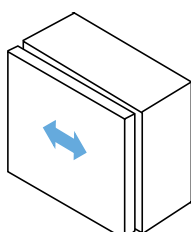


#### [Remarks]

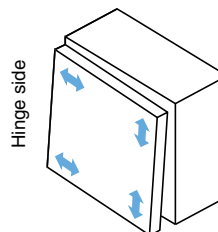
Body fixing screw may become loose due to door opening and closing. Regularly check and tighten to prevent the door from falling off.



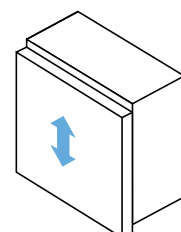
Depth Adjustment



Overlay Adjustment  
(Horizontal Adjustment)



Tilting Adjustment



Vertical Adjustment

TORQUE  
HINGES

DAMPER  
HINGES

LIFT  
ASSIST  
HINGES

DETENT  
HINGES

CONCEALED  
HINGES

BUTT  
HINGES

PIANO  
HINGES

STEP  
HINGES

LIFT-  
OFF  
HINGES

PIVOT  
HINGES

SPRING  
HINGES

CLEAN  
ROOM  
HINGES

HINGES FOR  
ALUMINIUM  
FRAME

DROP  
HINGES

GLASS  
DOOR  
HINGES

SPECIAL  
HINGES

100° Opening

14mm Overlay

Overlay  
10~14mm

Cup Dia  $\phi$ 35 Bore Depth 11mm  
Door Thickness 15~20mm

Stainless Steel Mounting Plate 1  
100 Series



# CONCEALED HINGE (STAINLESS STEEL) 100



[Sold Separately]

- Stainless steel 100 series mounting plate 1

[Recommended Screws]

- M4 raised countersunk head screw

RohS	CAD	Item Code	Item Name	Description	Material	Finish	Weight (g)	Box (pcs)
G	SD	160-073-875	100-46/14SUS304B	Without Catch	Stainless Steel	Polished	39.8	200
G	SD	160-073-880	100-C46/14SUS304B	With Catch	(SUS304)		44	200

A mounting plate (sold separately) is required for installation. Please order separately.

Picture above is the combination of concealed hinge and mounting plate (sold separately).

TORQUE HINGES

DAMPER HINGES

LIFT ASSIST HINGES

DETENT HINGES

CONCEALED HINGES

BUTT HINGES

PIANO HINGES

STEP HINGES

LIFT-OFF HINGES

PIVOT HINGES

SPRING HINGES

CLEAN ROOM HINGES

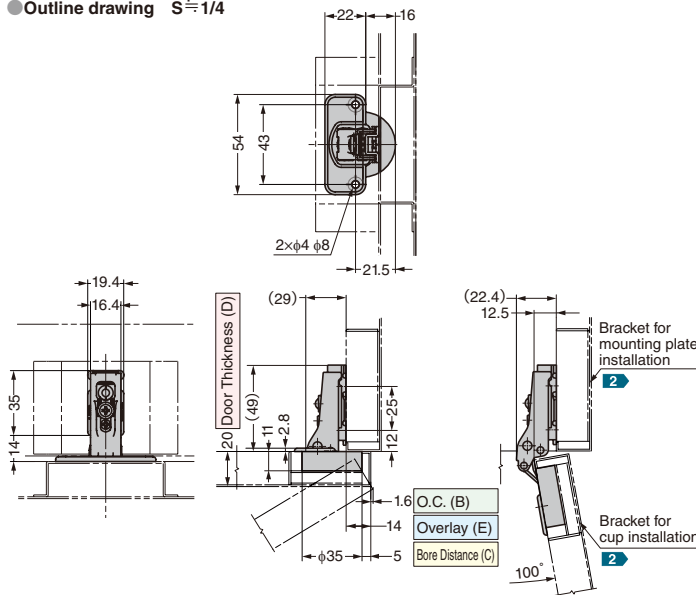
HINGES FOR ALUMINIUM FRAME

DROP HINGES

GLASS DOOR HINGES

SPECIAL HINGES

● Outline drawing S ≒ 1/4



Picture above is the combination of 100-46/14 or 100-C46/14 (w/catch) and mounting plate 100-P3A (sold separately).

[Bore Distance (C)]

Table-1

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

For standard type shown in the table above mounting plate 0mm thickness.

Turning the overlay adjustment screw or using spacer (2mm thickness) to adjust overlay (Max. -6mm).

[Opening Clearance (O.C.)]

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

[O.C.(B)]

Table-2

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

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

(O.C. (B) can be made smaller by R chamfering (round chamfer) and C chamfering (chamfer plane) on the door.)

[O.C.(A)]

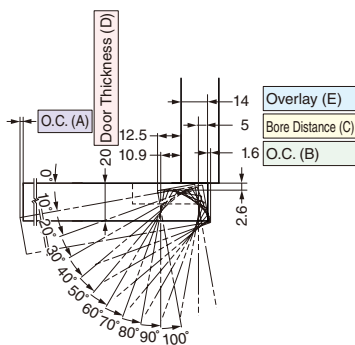
Table-3

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

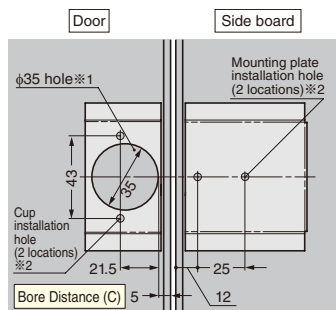
[Door Dimensions and Number of Hinges] 4

● Locus chart S ≒ 1/4

(How to Use the Locus Chart 3)



● Cut out dimensions For metal door



\*1: Support the cup bottom at position of 11mm deep.

\*2: Internal threads need to be made by welding nut or burring.

Refer to 1 : P.117, 2 : P.131, 3 : P.111, 4 : P.110

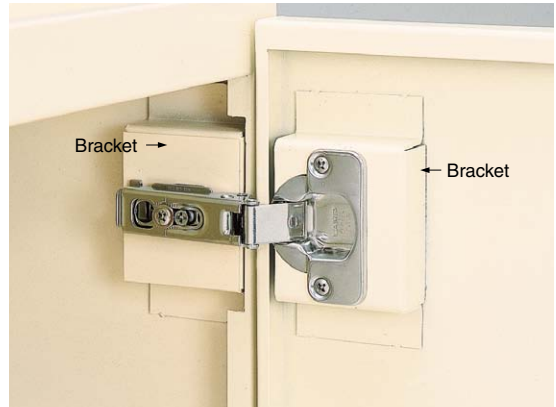
## Examples of installation to sheet metal (Brackets not included)

Concealed hinges can also be used for metal cabinets.

170 (19 mm Overlay)



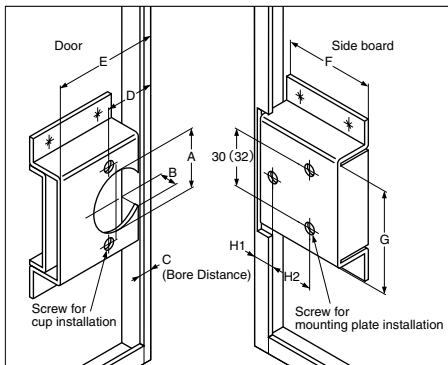
100 (19 mm Overlay)



### [Bracket Installation]

Refer to this example and install brackets to the inner side of door and cabinet side board.

Customer should provide brackets.



Size A: Cup diameter ( $\phi 26$ ,  $\phi 35$ , or  $\phi 40$ )

Size B: Bore depth (Be sure to support cup bottom)

Size C: Bore distance

Size D: Distance from door edge to cup mounting screw

Size E: More than distance from door edge to tip of cup flange.

● For details, refer to the content page of each hinge.

Size F: More than total length of mounting plate.

Size G: More than width of mounting plate.

Size H<sub>1</sub>, H<sub>2</sub>: Installation position size from edge of mounting plate.

● For details, refer to the content page of the mounting plate of hinge used.

Bracket for Mounting Plate Installation



Bracket for Cup Installation



TORQUE HINGES

DAMPER HINGES

LIFT ASSIST HINGES

DETENT HINGES

CONCEALED HINGES

BUTT HINGES

PIANO HINGES

STEP HINGES

LIFT-OFF HINGES

PIVOT HINGES

SPRING HINGES

CLEAN ROOM HINGES

HINGES FOR ALUMINIUM FRAME

DROP HINGES

GLASS DOOR HINGES

SPECIAL HINGES