#### **COMBINATION HINGE HG-VH8**







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



- Hinges with built-in damper, spring or torque unit, etc.
- Various motions by using hinges with different built-in parts in combination.
- For hinges with built-in springs, the spring tension can be adjusted with a hex key.

#### [Specifications]

Operating temperature: 0°C~40°C

#### [Applications]

Lightweight lids of small equipment, etc.

#### [Remarks]

- Be sure to read the "Cautions"
- When installing, ensure that both hinge shafts are aligned.



Used for Product Selection & Simulation. Available on Web!

% The applicable products are only limited to hinges with built-in "damper" or

"torque unit" .



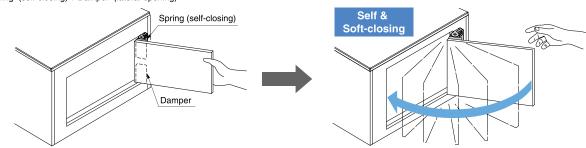
#### [Hinge Motions] For top-opening lid

	Part Built-in	Without Part Built-in	Damper	Spring (self-opening)	Spring (self-closing)	Torque	
	Motions		Soft-close Soft-close	Self-opening Self-opening	Self-closing	Free stop	
		Freely opens and closes as normal hinges.	Slowly closes.	Always tries to open.	Always tries to close.	Stops at any position.	
suc	Without Part Built-in	Yes	Yes	Yes	Yes	Yes	
oinatio nit)	Damper	Yes	Yes	Yes	Yes	No	
Comk It-in u	Spring (self-opening)	Yes	Yes	Yes	No	It depends	
Possible Combinations (built-in unit)	Spring (self-closing) Yes		Yes	No	Yes	It depends	
Pos	Torque	Yes	No	It depends	It depends	Yes	

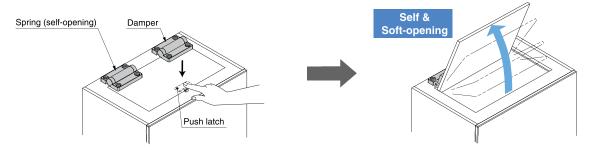
(It depends) Please carry out thorough tests before using since performance with these combinations might vary depending on door size and weight.

#### [Combination Example]

Spring (self-closing) + Damper (lateral-opening)

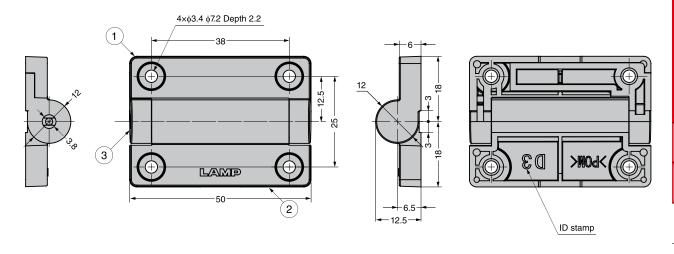


Spring (self-opening) + Damper (using top-opening lid with a push latch)



Refer to 1 : P.15





Colour No. **Part Name** Material 1 Bracket A 2 POM Black, White Bracket B 3 Bracket C POM, etc. Damper URD8-3 Spring Unit URS8 Torque Unit URT8

3 Pull out

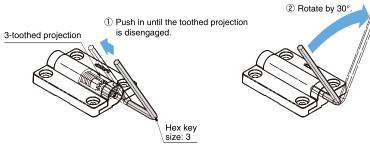
Lateral-opening door weight: Max. 810g
Reference door size: W300×H450×t 5 mm
Acrylic plate, Density 1.2 g/cm³

RoHS	CAD	Item Code	Item Name	Part Built-in	ID Stamp	Colour	Torque N·m/pc	Torque kgf·cm/pc	Opening Angle	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	170-032-616	HG-VH8-N-BL		N	Black				11	40	640
G	3D	170-032-617	HG-VH8-N-WT	_	IN	White	_	-		11	40	640
G	BD	170-032-618	HG-VH8-D3-BL	Domnor	D3	Black	0.022~0.038	0.22~0.39		14	40	640
G	BD	170-032-619	HG-VH8-D3-WT	Damper	מם	White	0.022~0.036	0.22~0.39			40	640
G"	BD	170-032-620	HG-VH8-OP-BL	Spring	OP	Black	*	*			40	640
G"	BD	170-032-621	HG-VH8-OP-WT	(self-opening)	5	White	**	**	270°	18	40	640
G'	ЗD	170-032-622	HG-VH8-CL-BL	Spring	CL	Black	*	**			40	640
G"	ЗD	170-032-623	HG-VH8-CL-WT	(self-closing)	CL	White	**	*			40	640
G'	ЗD	170-032-624	HG-VH8-T15-BL		T1	Black	0.15±0.05	1.53±0.51		40	40	640
G'	ЗD	170-032-625	HG-VH8-T15-WT	Torque	11 ,	White	0.15±0.05	1.55 ± 0.51			40	640
G'	ЗD	170-032-626	HG-VH8-T35-BL	Torque	Т3	Black	0.25 ± 0.1	2.57 ± 1.02		19	40	640
G	3D	170-032-627	HG-VH8-T35-WT		2	White	$0.35 \pm 0.1$ $3.57 \pm 1.02$			40	640	

 $\frac{1}{2}$  Increased by 0.0153N·m (0.16kgf·cm) by adjusting the spring tension. The initial value of the spring tension is 0N·m.

#### [How to Adjust Spring Tension]

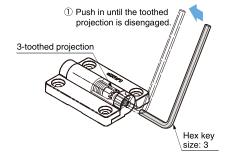
Spring (self-opening)

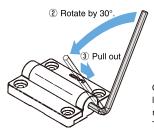


Close the lid, and check if the lid can be opened smoothly after loosing your hand(s). If the spring tension is not enough, repeated steps 1 ~ 3.

The torque will be increased by  $0.0153N \cdot m$  at each  $30^{\circ}$  of rotation. Generally no more than 4 times ( $120^{\circ}$ ) are required. To restore to the initial state, rotate in the direction opposite to above.

Spring (Self-closing)





Open the lid and check if the lid can be closed smoothly after loosing your hand(s). If the spring tension is not enough, repeated steps 1 ~ 3.

The torque will be increased by 0.0153N·m at each 30° of rotation. Generally no more than 4 times (120°) are required. To restore to the initial state, rotate in the direction opposite to above.

SUGATSUNE

Updated 2017.10.27

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

#### DAMPER HINGE HG-JHW16S













Surface mount type with built-in damper UDH-16S 1.

Covers various torque ranges by using "with damper" and "without damper" as a pair.

#### [Specifications]

Operating temperature: 0°C ~40°C

#### [Applications]

Top-opening lids and upper covers of various cabinets

#### [Remarks]

- Be sure to read the "Cautions"
  2
- ■Torque range is the value when using one hinge (when two hinges with identical torque is used for one lid, the value is doubled).
- Install a stopper such as a stay at the lid opening/ closing position (0~120 degree or less) for not exceeding the specified swivelling range.
- When installing, ensure that both hinge shafts are levelled and aligned.
- Do not disassemble or modify the product.

#### [Recommended Screws]

- M5 hexagon socket head cap screws (4 pcs)
- Washers 5 (4 pcs)

#### Video Link



Used for Product Selection &

Available on Web!

Simulation.

HINGES LIFT ASSIST

DAMPER

TORQUE HINGES

S election Tool Sasuga-kun HINGES Applicable Products

DETENT HINGES

CONCEALED

HINGES

BUTT HINGES

PIANO HINGES

STEP HINGES

LIFT-HINGES

PIVOT HINGES

SPRING

HINGES **CLEAN** 

ROOM HINGES

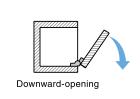
HINGES FOR ALUMINIUM FRAME

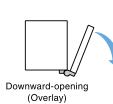
DROP HINGES

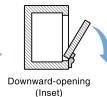
GLASS DOOR HINGES

**SPECIAL** HINGES

### HG-JHW16SG

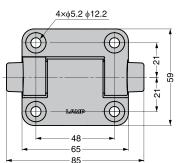










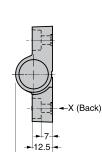


[Damper Working Direction]

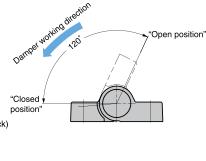
HG-JHW16S

Top-opening

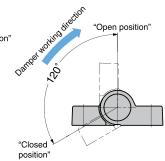
(Overlay)



-22.7-►

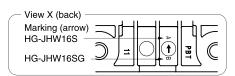


HG-JHW16S



HG-JHW16SG

\*"Opening" and "Closing" directions shown above are for the case of external installation.



Top-opening

(Inset)

Material	Finish / Colour
PBT	Emboss/Dark Grey

RoHS	CAD	Item Code	Item Name	Damper Working Direction (When External Installation)	Torque N·m/pc	Torque kgf·cm/pc	Weight (g)	Box (pcs)
G'	3D	170-027-420	HG-JHW16S-34	For Clasina	2.0~3.4	20.4~34.7	83	30
G'	3D	170-027-421	HG-JHW16S-50	For Closing	3.4~5.0	34.7~51.0		30
G	3D	170-027-422	HG-JHW16S-34G	For Opening	2.0~3.4	20.4~34.7		30
G"	3D	170-027-423	HG-JHW16S-50G	For Opening	3.4~5.0	34.7~51.0		30
G'	3D	170-027-419	HG-JHW16S-00	Without Damper	_	_	52	30

Refer to 1 : P.67, 2 : P.15



### DAMPER HINGE HG-JHW, HG-JHWG











TORQUE HINGES

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

## Hinge with built-in dampers UDH

AS parts set for installing to aluminium frame also available.

#### [Applications]

Top-opening lids and upper covers of various cabinets.

#### [Remarks]

Be sure to read the "Cautions"
3.

●Install a stopper such as a stay at the lid opening/closing position (0~115 degree or less) for not exceeding the specified swivelling range.

When installing, ensure that both hinge shafts are levelled and aligned.

#### [Damper Working Direction]

HG-JHW







Video Link

Top-opening (Overlay)

Top-opening Downward-opening (Inset)

(S) election Tool Sasuga-kun Applicable Products Used for Product Selection &

Simulation. Available on Web!

**HG-JHWG** 







Top-opening

"Closed

position"

33

်ပ (Angular allowance)

HG-JHWG

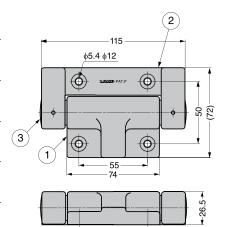
·5°(Angular

allowance)

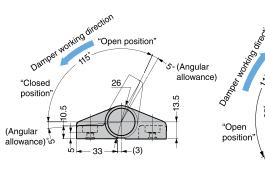
Emboss/Dark Grey



Downward-opening (Inset)



**HG-JHWG** 



No.	Part Name	Material	Finish / Colour
1	Bracket	DDT	
•	_	† PBT	

PP

RoHS	CAD	Item Code	Item Name	Damper Working Direction	Torque N·m/pc	Torque kgf·cm/pc	Marking Colour	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	170-092-212	HG-JHW50	Fan Olasian	3~5	30.6~51	White	184	4	64
G	3D	170-092-211	HG-JHW70	For Closing	5~7	51~71.4	w/o	182	4	64
G	3D	170-092-215	HG-JHW50G	Fau Oaanian	3~5	30.6~51	White, Red	216	4	64
G"	30	170-092-216	HG-JHW70G	For Opening	5~7	51~71.4	Red	180	4	64

2

3

Damper

Cover

HG-JHW

Refer to 1 : P.66, 2 : P.51, 3 : P.15

TORQUE HINGES

HINGES

LIFT ASSIST HINGES

DETENT HINGES

CONCEALED HINGES

BUTT HINGES

PIANO HINGES

STEP HINGES LIFT-HINGES PIVOT HINGES

SPRING HINGES

CLEAN ROOM HINGES HINGES FOR ALUMINIUM FRAME

DROP HINGES

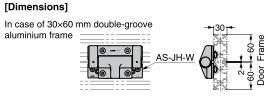
GLASS DOOR

HINGES

SPECIAL HINGES

## Parts Set for Installing to Aluminium Frame Please refer to the series introduction page 1 for details about AS series.



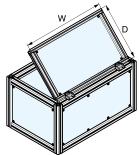


In case of 40×40 mm aluminium frame





[Criterion of Door Weight]



W	D	Door Weight kg
600	500	3.4
1000	500	5
	600	600 500

 $\ensuremath{\ensuremath{\%}}$  In case of using two hinges for one door.

[Installation]

[AS Parts Set] Parts set of brackets, screws and AS nuts used for installing to aluminium frame.

RoHS	CAD	Item Code	Item Name	Aluminium Frame	Parts	Weight (g)
<u>G</u>	ı	170-041-554	AS-HG-JHW50-30-8	Groove Width 8 mm	Damper Hinge HG-JHW50 : 1pc Bracket AS-JH-W : 2pcs AS Nut AS-8M5 : 4pcs Hexagon Socket Head Cap Screw M5 × 8 : 4pcs Hexagon Socket Countersunk Head Screw M5 × 12 : 4pcs	-
G	_	170-041-555	AS-HG-JHW70-30-8	Groove width 8 mm	Damper Hinge HG-JHW70 : 1pc Bracket AS-JH-W : 2pcs AS Nut AS-8M5 : 4pcs Hexagon Socket Head Cap Screw M5×8 : 4pcs Hexagon Socket Countersunk Head Screw M5×12 : 4pcs	-
G	-	170-041-556	AS-HG-JHW50-40-10-30-8	Groove Width 8 mm	Damper Hinge HG-JHW50: 1pc Bracket AS-JH-W: 2pcs AS Nut AS-8M5: 2pcs AS Nut AS-10M5: 2pcs Hexagon Socket Head Cap Screw M5×8: 4pcs Hexagon Socket Head Cap Screw M5×12: 4pcs	-
G	_	170-041-557	AS-HG-JHW70-40-10-30-8	Groove Width 10 mm	Damper Hinge HG-JHW70 : 1pc Bracket AS-JH-W : 2pcs AS Nut AS-8M5 : 2pcs AS Nut AS-10M5 : 2pcs Hexagon Socket Head Cap Screw M5 × 8 : 4pcs Hexagon Socket Head Cap Screw M5 × 12 : 4pcs	-
Refe	r to	1 : FRONT P.20,	2 : P.50, 3 : P.706, 4 : P.	51		•

#### AS BRACKET FOR HG-JHW AS-JH-W



$\frac{2\times M5}{4\times \phi 5.5 \phi 11}$		
SUGAIS SUGAIS AND SUGA	+10- +14- +19- -32-	4

-120-

- Used for installing damper hinge HG-JHW to aluminium frame.
- Use AS nuts for installation.

RoHS	CAD	AD Item Code Item Name Material		Finish	Weight (g)	Box (pcs)	Carton (pcs)	
G	3D	170-090-692	AS-JH-W	Stainless Steel (SUS304)	Barrel Polished	105	25	250

TORQUE

HINGES

HINGES

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

LIFT ASSIST

#### DAMPER HINGE HG-JH









Hinge with built-in dampers hinge UDH 1.

Smooth movement in the opening direction.

■ Left-handed...Damper works when rotating counterclockwise. Right-handed...Damper works when rotating clockwise.

AS parts set for installing to aluminium frame also available.

#### [Applications]

Top-opening lids and upper covers of various cabinets.

#### [Remarks]

Be sure to read the "Cautions"
3.

■Torque range is the value when using two hinges for

one door. Install a stopper such as a stay at the lid opening/closing position (0~115 degree or less) for not exceeding the specified rotation range.

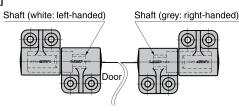
#### (S) election Tool Sasuga-kun Applicable Products

Used for Product Selection & Simulation. Available on Web!

When installing, ensure that both hinge shafts are levelled and aligned.

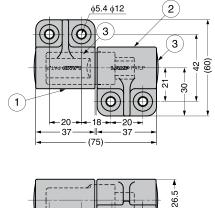
Sold in pairs.

#### [Installation]

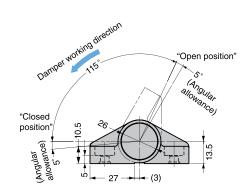


Shaft (white: left-handed) Shaft (grey: right-handed) ➅ (0)

When viewing door from lower side as shown above, install the left-handed type damper (white) on the left side and the right-handed type (grey) on the right side.



Left-handed type shown.



No.	Part Name	Material	Finish / Colour
1	Bracket	PBT	
2	Damper	PDI	Emboss/Dark Grey
3	Cap	PP	

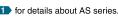
RoHS	CAD	Item Code	Item Name	Torque N·m/pair	Torque kgf·cm/pair	Marking Colour (Base Side)	Weight (g)	Box (pairs)	Carton (pairs)
G	30	170-092-209	HG-JH25	3~5	30.6~51	Blue	200	4	64
G'	30	170-092-210	HG-JH35	5~7	51~71.4	Red	193	4	64

Refer to 1 : P.66, 2 : P.53, 3 : P.15



### Parts Set for Installing to Aluminium Frame Please refer to the series introduction page 1 for details about AS series.

[Dimensions]



AS nut



## [Installation]

## In case of 30×30 mm aluminium frame AS-JH-A In case of 40×40 mm aluminium frame

37

TORQUE

LIFT ASSIST

DETENT HINGES

CONCEALED HINGES

HINGES

LIFT-

HINGES FOR

DROP

GLASS DOOR

HINGES

DAMPER HINGES

HINGES

PIANO

STEP HINGES

PIVOT HINGES

HINGES

ROOM HINGES

HINGES

BUTT HINGES

HINGES

SPRING

CLEAN

ALUMINIUM FRAME

HINGES

SPECIAL HINGES

AS sus

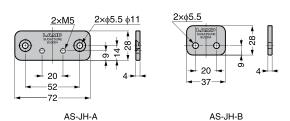
#### [Criterion of Door Weights]

Item Name	W	D	Door Weight kg
HG-JH25	400	400	2.3
HG-JH35	700	400	3.2

 $\ensuremath{\ensuremath{\%}}$  In case of using two hinges for one door.

S CAD	Item Code	Item Name	Aluminium Frame	Parts	Weight (g
_	170-041-550	AS-HG-JH25-30-8	Cura va Wishla O care	Damper Hinge HG-JH25: 1set Bracket AS-JH-A: 4pcs AS Nut AS-8M5: 8pcs M5 × 10 Hexagon Socket Head Cap Screw: 8pcs M5 × 12 Hexagon Socket Countersunk Head Screw: 8pcs M5 Washers (size 5): 8pcs	ı
_	170-041-551	AS-HG-JH35-30-8	Groove Width 8 mm	Damper Hinge HG-JH35: 1set Bracket AS-JH-A: 4pcs AS Nut AS-8M5: 8pcs M5 × 10 Hexagon Socket Head Cap Screw: 8pcs M5 × 12 Hexagon Socket Countersunk Head Screw: 8pcs M5 Washers (size 5): 8pcs	-
_	170-041-552	AS-HG-JH25-40-10-30-8	Groove Width 8 mm	Damper Hinge HG-JH25: 1set Bracket AS-JH-A: 2pcs Bracket AS-JH-B: 2pcs AS Nut AS-8M5: 8pcs AS Nut AS-10M5: 8pcs M5 × 10 Hexagon Socket Head Cap Screw: 4pcs M5 × 20 Hexagon Socket Head Cap Screw: 4pcs M5 × 12 Hexagon Socket Countersunk Head Screw: 4pcs M5 Washers (size 5): 8pcs	-
_	170-041-553	AS-HG-JH35-40-10-30-8	Groove Width 10 mm	Damper Hinge HG-JH35: 1set Bracket AS-JH-A: 2pcs Bracket AS-JH-B: 2pcs AS Nut AS-8M5: 8pcs AS Nut AS-10M5: 8pcs M5×10 Hexagon Socket Head Cap Screw: 4pcs M5×20 Hexagon Socket Head Cap Screw: 4pcs M5×12 Hexagon Socket Countersunk Head Screw: 4pcs M5 Washers (size 5): 8pcs	-

## AS BRACKET FOR HG-JH AS-JH



- •Used for installing damper hinge HG-JH to aluminium frame.
- Use AS nuts for installation.

RoHS CAD	Item Code	Item Name	Material	Finish	Weight (g)	Box (pcs)	Carton (pcs)
G 3D	170-090-690	AS-JH-A	Stainless Staal (SUSSO4)	Parral Polished	60	50	500
G 3D	170-090-691	AS-JH-B	Stainless Steel (SUS304)	Barrel Polished	30	100	1000

#### **DAMPER HINGE HG-JHM20T** Surface Mount Type









TORQUE HINGES

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

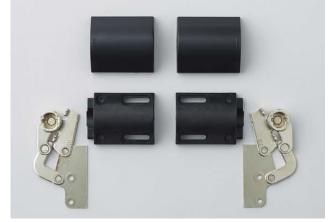
DROP **HINGES** 

GLASS DOOR HINGES

**SPECIAL** HINGES







W/ black cover

Sold in pairs.



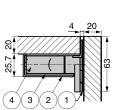


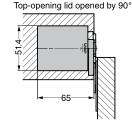
W/ white cover

Assembly example

#### [Front View]

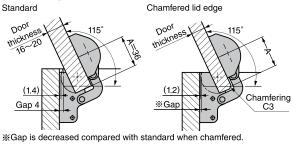
Top-opening lid closed



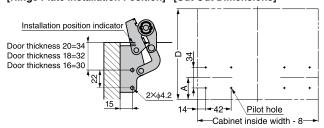


%Right-handed type shown. Left-handed type is symmetrical.

#### [Installation]



#### [Hinge Plate Installation Position] [Cut Out Dimensions]



Newly-added surface mount type: Easy to install without the need of

- Hinge with built-in damper UDH 1.
- Soft-close and smooth-open features.
- For Inset Lid.
- Cover hides mounting screws.

#### [Remarks]

- Sold in pairs.
- Below torque range is the value when using a pair of hinges (left and right)
- Be sure to read the "Cautions"
- When installing, ensure that both hinge shafts are levelled and aligned.
- Damper mechanism works when opening the top-opening lid by about 60° or more. Otherwise, the damper may not work.

#### [Parts Included]

- ■Hinge plate mounting screws: binding head tapping screw 3.5 x 14 (nickel) 4 pcs
- Bracket mounting screws: binding head tapping screw 3.5 x 20 (nickel) 8 pcs





Chrome finished cover

No.	Part Name	Material	Finish/Colour
1	Hinge Plate	Steel (SPCC)/Zinc Alloy (ZDC)	Nickel
2	Bracket	POM	Black
3	Cover	ABS	Black/White/Chrome
4	Damper	=	Bearing Right-handed: Grey, Left-handed: Natural

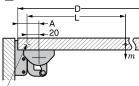
Door	Stan	dard	Chamfered Lid Edg			
thickness	Size A	Gap	Size A	Gap		
16	36		38	2		
18		4	37	3		
20			_	-		

[Door Weight Selection]							
Door Length (D)	Door Weight (m)						
250	5.61~7.48 kg						
300	4.57~6.09 kg						
350	3.85~5.13 kg						
400	3.33~4.43 kg						
450	2.93~3.90 kg						





Calculation of maximum door moment (for homogeneous material)



Rotation centre of door

※For heterogeneous door (e.g., attached with a mirror), please refer to our website > Selection Tool Sasuga-kun > "What is the centre of gravity? What is moment?" page.

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

 $T \ : Max. \ door \ torque \ (N \cdot m)$ 

m: Door weight (kg) : Distance from rotation centre to door centre of gravity (mm)

 $L = \frac{D}{2} - A + 20 \%$ 

D : Door length (mm)

A : Bracket installation dimension (mm) (The range of A is about 36mm ~38mm)

※(Formula for assuming that the centre of gravity is in the centre

RoHS	CAD	Item Code	Item Name	Finish/Colour	Torque N·m/pair	Torque kgf·cm/pair	Marking Colour (Base Side)	Weight (g)	Box (pairs)	Carton (pairs)
G	3D	170-036-328	HG-JHM20T-80BL	Black				-	-	-
G'	3D	170-036-329	HG-JHM20T-80WT	White	6~8	61.2~81.6	Yellow	_	-	_
G	3D	170-036-839	HG-JHM20T-80CR	Chrome				_	_	_

Refer to 1 : P.66, 2 : P.15

#### **DAMPER HINGE HG-JHM20**



S election Tool

Sasuga-kun

Applicable Products Used for Product Selection &

Available on Web

Simulation.









W/ black cover

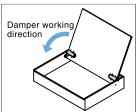
- Hinge with built-in dampers UDH
- Smooth movement in the opening direction.
- Mortise mount type.
- Easy to cut out with a router.
- Cover hides mounting screws for clean appearance.

#### [Remarks]

- Be sure to read the "Cautions"
  2.
- Sold in pairs.
- When installing, ensure that both hinge shafts are levelled and aligned.
- Damper mechanism works when opening the lid by about 60° or more.

#### [Parts Included]

Countersunk head tapping screw  $4 \times 20$  (For wooden door)



Video Link





TORQUE

HINGES



CONCEALED HINGES

BUTT HINGES

PIANO HINGES

STEP

HINGES LIFT-

HINGES PIVOT HINGES

SPRING HINGES

CLEAN ROOM HINGES

HINGES FOR ALUMINIUM FRAME

DROP HINGES

GLASS DOOR HINGES

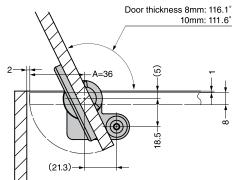
SPECIAL HINGES

# Sold in pairs

W/ white cover

[Top View]

#### [Installation]

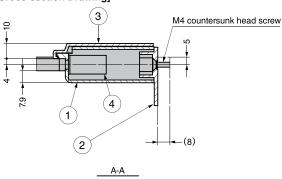


If the distance from the screw hole to the edge is 5mm, a level difference of 1mm is generated.

\*Min. door thickness 8mm

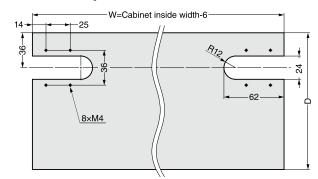
#### [Cross-section Drawing]

66



No.	Part Name	Material	Finish / Colour		
1	Body	POM	Black		
2	Bracket	Aluminium Alloy (ADC)	Black Enamel Finish		
3	Cover	ABS	Black/White		
4	Damper	_	_		

#### [Cut Out Dimensions]



RoHS	CAD	Item Code	Item Name	Colour	Torque N·m/pair	Torque kgf·cm/pair	Marking Colour (Base Side)	Weight (g)	Box (pairs)	Carton (pairs)
G'	3D	170-012-854	HG-JHM20-80BL	Black	6.0	61.2~81.6	Yellow	206	1	-
G'	3D	170-012-855	HG-JHM20-80WT	White	6~8			206	1	-

Refer to 1 : P.66, 2 : P.15



TORQUE

HINGES

HINGES

ASSIST

HINGES

DETENT HINGES

CONCEALED HINGES

BUTT

PIANO HINGES

HINGES

SPRING

HINGES

**CLEAN** 

ROOM HINGES HINGES FOR

ALUMINIUM FRAME

DROP **HINGES** 

GLASS DOOR

HINGES

SPECIAL HINGES

LIFT-OFF HINGES PIVOT HINGES

HINGES

LIFT

#### **DAMPER HINGE HG-JHM16**







Hinge with built-in damper UDH-16

Smooth movement in the opening direction. Mortise mount type.

Easy to cut out with a router.

Cover hides mounting screws for clean appearance.

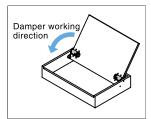
#### [Remarks]

Passed 13,000 open/ close private cycle test

- Be sure to read the "Cautions"
  2.
- Sold in pairs.
- When installing, ensure that both hinge shafts are levelled and aligned.
- Damper mechanism works when opening the lid by about 60° or more.

#### [Parts Included]

4×20 (For wooden door)









Countersunk head tapping screw

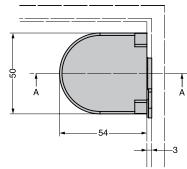
## Sold in pairs.

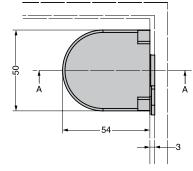
W/ white cover

Sold in pairs.

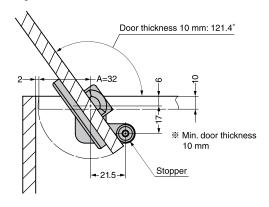
W/ black cover

#### [Top View] STEP

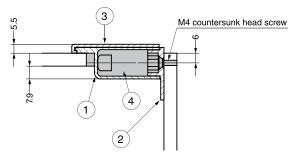




#### [Installation]

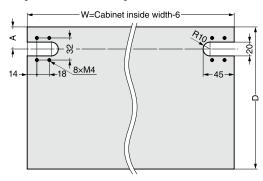


#### [Cross-section Drawing]



		A-A	
No.	Part Name	Material	Finish / Colour
1	Body	POM	Black
2	Bracket	Aluminium Alloy (ADC)	Black Enamel Finish
3	Cover	ABS	Black/White
<b>(4</b> )	Damper	_	_

#### [Cut Out Dimensions]



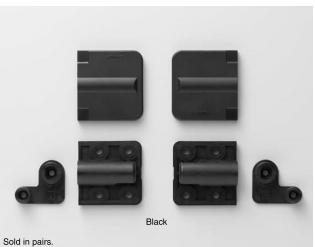
RoHS	CAD	Item Code	Item Name	Colour	Torque N·m/pair	Torque kgf·cm/pair	Marking Colour (Base Side)	Weight (g)	Box (pairs)	Carton (pairs)
G	ЗD	170-092-221	HG-JHM16-34BL	Black	2~3.4	20.4~34.7	Croon	126	-	_
G	ЗD	170-092-222	HG-JHM16-34WT	White	2~3.4	20.4~34.7	Green	126	-	_
G	30	170-092-223	HG-JHM16-50BL	Black	0.4.5	04.7.51	Black	126	-	_
G	3D	170-092-224	HG-JHM16-50WT	White	3.4~5	34.7~51	ыаск	126	_	_

Refer to 1 : P.67, 2 : P.15

#### **DAMPER HINGE HG-JHM14**







• Hinge with built-in damper UDH-14 Smooth movement in the opening direction. Cover hides mounting screws for clean appearance. Easy to cut out with a router.

[Specification]

Operating temperature: 0°C ~40°C

#### [Remarks]

- Be sure to read the "Cautions"
- The installation example in the Manual Instruction is for wooden lid.
- Damper mechanism works when opening the lid by about 60° or more.

#### [Sold Separately]

Bracket for under mount (UKZ14) also available 3.



Used for Product Selection & Simulation. Available on Web! TORQUE HINGES

DAMPER HINGES

LIFT ASSIST HINGES

DETENT HINGES

CONCEALED HINGES

BUTT HINGES

PIANO HINGES

STEP HINGES

LIFT-HINGES

PIVOT HINGES

SPRING HINGES

CLEAN ROOM HINGES

HINGES FOR ALUMINIUM FRAME

DROP HINGES

GLASS DOOR HINGES

**SPECIAL** HINGES

Sold in pairs.

When installing, ensure that both hinge shafts are levelled and aligned.

[Installation]

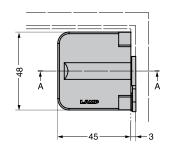


■Side Mount Type

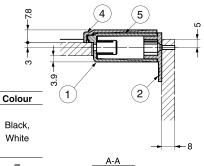
Sold in pairs.

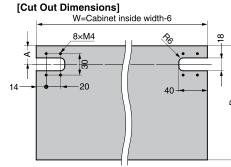
White





[Cross-section Drawing]





※A level difference of 2mm will be generated.

※Min. lid thickness 8mm

RoHS	CAD	Item Code	Item Name	Colour	Torque N∙m/pair	Torque kgf∙cm/pair	Marking Colour	Opening Angle	Weight (g)	Box (pairs)	Carton (pairs)
G	3D	170-031-930	HG-JHM14-S-8BL	Black	0.5~0.8	5.1~8.2	Purple	105°	51.4	20	220
G	3D	170-031-931	HG-JHM14-S-8WT	White		5.1~6.2			51.4	20	220
G	3D	170-031-932	HG-JHM14-S-15BL	Black	0.8~1.5	8.2~15.3	Blue		51.4	20	220
G	3D	170-031-933	HG-JHM14-S-15WT	White	0.6~1.5				51.4	20	220
G	3D	170-031-934	HG-JHM14-S-20BL	Black	1 5 0	15 2 20 4	Green		51.4	20	220
G	3D	170-031-935	HG-JHM14-S-20WT	White	1.5~2	15.3~20.4			51.4	20	220

Refer to 1 : P.68, 2 : P.15, 3 : P.58

Part Name

Body

Bracket for side mount R

Bracket for side mount L

Cover

Damper

Material

POM

Reinforced

PBT

ABS



No.

1

2

3

4

(5)

TORQUE HINGES

HINGES

LIFT ASSIST HINGES

DETENT HINGES

CONCEALED

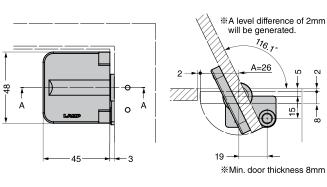
HINGES

BUTT HINGES

PIANO HINGES

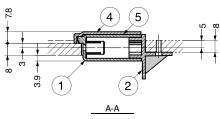
#### ■ Under Mount Type (optional bracket for under mount is required)

#### [Top View]

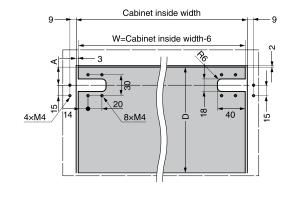


[Installation]

#### [Cross-section Drawing]



#### [Cut Out Dimensions]



#### Levere economic Tr

STEP HINGES

LIFT-OFF

PIVOT HINGES

SPRING HINGES

CLEAN ROOM HINGES

HINGES FOR ALUMINIUM FRAME

DROP HINGES

GLASS DOOR HINGES

SPECIAL HINGES

#### No. Part Name Material Colour Body POM 2 Bracket for Side Mount R Reinforced Black, 3 Bracket for Side Mount L PBT White 4 ABS Cover (5) Damper

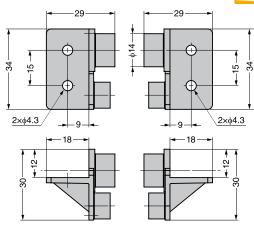
Refer to 1 : P.58

## **BRACKET FOR HG-JHM14 UNDER MOUNT UKZ14**

INSTRUCTION







Bracket for under mount L Bracket for under mount R

#### [Bracket for Under Mount]

RoHS (	CAD	Item Code	Item Name	Material	Colour	Weight (g)	Box (pairs)	Carton (pairs)
G'	3D	170-031-936	UKZ14-BL	Reinforced PBT	Black	13	40	440
G'	3D	170-031-937	UKZ14-WT	Reinlorced PB1	White	14	40	440

#### DAMPER HINGE HG-JH14-50 Stainless Steel Bracket









(S) election Tool

Sasuga-kun

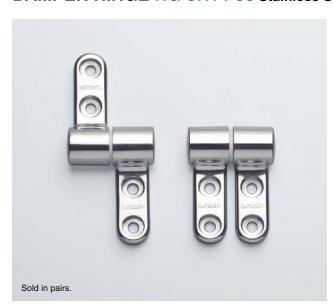
Applicable Products

Used for Product

Available on Web!

Selection &

Simulation.



- Hinge with damper UDH-14 with stainless steel bracket.
- Light and smooth opening and soft closing.
- ■Left-handed...Damper works when rotating counterclockwise. Right-handed...Damper works when rotating clockwise.
- ■Low torque type (1.6~3.0N·m) also available by made to order.

#### [Applications]

Top-opening lids of various cabinets for soft closing. [Remarks]

Be sure to read the "Cautions"

Left-handed (shaft: white)

Right-handed (shaft: grey)

Door

 $\oplus$ 

Install a stopper such as a stay at the lid opening/closing position (0~115 degree or less) for not exceeding the specified rotation range. Damper may be damaged if exceeding the rotation range.

When installing, ensure that both hinge shafts are levelled and aligned.

Sold in pairs.

#### TORQUE HINGES

DAMPER HINGES

LIFT ASSIST

HINGES

DETENT HINGES

CONCEALED HINGES

BUTT

HINGES

PIANO HINGES

STEP HINGES

LIFT-

HINGES PIVOT

HINGES SPRING

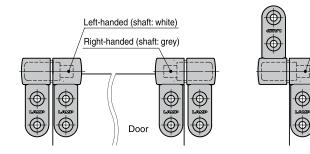
HINGES **CLEAN** ROOM HINGES

HINGES FOR ALUMINIUM FRAME

DROP HINGES

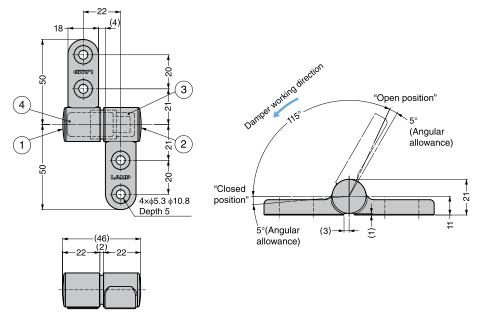
GLASS DOOR HINGES

**SPECIAL** HINGES



Left-handed type shown.

When viewing door from lower side as shown above, install the left-handed type damper (white) on the left side and the right-handed type (grey) on the right side.



	No.	Part Name	Material	Finish / Colour	
1		Bracket (L)	Chairless Charl (CCC10)	Mirror	
	2	Bracket (R)	Stainless Steel (SCS13)	TOTTINI	
3		Bush	POM	White	
	4	Damper	Stainless Steel/PBT	-	

RoHS	CAD	Item Code	Item Name	Torque N·m/pair	Torque kgf·cm/pair	Weight (g/pair)	Box (pairs)	Carton (pairs)
G	3D	170-021-173	HG-JH14-50	3~5	30.6~51	254	8	48

Refer to 1 : P.68, 2 : P.15



[Installation]

#### MINI DAMPER HINGE HG-JHM9-S Side Mount







TORQUE HINGES

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

#### Hinge with built-in damper.

- Can be used for top-opening, upward-opening, downward-opening and bottom-opening.
- Under mount type also available.

#### [Specifications]

■Operating temperature: 0°C~40°C

#### [Applications]

Small lid for conference table, small cover of mechanical equipment, etc.

#### [Remarks]

- Be sure to read the "Cautions"
  2.
- Sold in pairs. When installing, ensure that both hinge shafts are levelled and aligned.

#### [Recommended Screws]

Countersunk head screw M3, Binding head screw M3, Countersunk head tapping screw 3, Binding head tapping



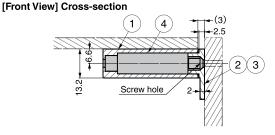


screw 3, etc.

Upward-opening

[Damper Working Direction]

[Application Example]

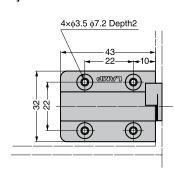


Downward-opening

Bottom-opening

#### [Bottom View]

Top-opening

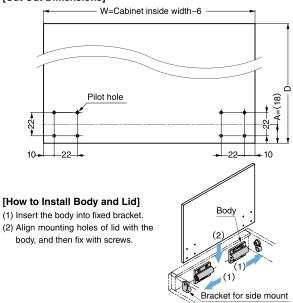


No.	Part Name	Material	Colour	
1	Body	POM		
2	Bracket R	DDT	Black, White	
3	Bracket L	PBT		
4	Damper	POM	_	

[Installation] Bracket	ω
Rotation centre	knes
Screw hole	2.11 Stopper **5

- X¹ Dimension when side board is flush with top surface of lid.
- $\ensuremath{\%^2}$  To increase the opening angle of lid, rotate the stopper then fix it.

#### [Cut Out Dimensions]



RoH	S CAD	Item Code	Item Name	Colour	Torque N·m/pair	Torque kgf cm/pair	Opening Angle	Weight (g)	Box (pairs)	Carton (pairs)
G	3D	170-025-895	HG-JHM9-S-BL	Black	0.054.0.000	0.55~0.88	105°	29	40	440
G	3D	170-025-896	HG-JHM9-S-WT	White	0.054~0.086			28	40	440
G	3D	170-037-326	HG-JHM9-S4-BL	Black	0.007.0040	0.275~0.44		26	40	440
G	30	170-037-327	HG-JHM9-S4-WT	White	0.027~0.043			26	40	440

Refer to 1 : P.61, 2 : P.15

#### MINI DAMPER HINGE HG-JHM9-U Under Mount







[Application Example] Shown below is HG-JHM9-S



## [Damper Working Direction]







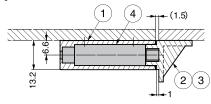


Top-opening

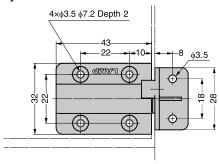
Upward-opening

Downward-opening Bottom-opening

#### [Front View] Cross-section



#### [Bottom View]



No.	Part Name	Material	Colour	
1	Body	POM		
2	Bracket R	DDT	Black, White	
3	Bracket L	PBT		
4	Damper	POM	_	

#### Hinge with built-in damper.

- Can be used for top-opening, upward-opening, downward-opening and bottom-opening.
- Side mount type also available.

#### [Specifications]

■Operating temperature: 0°C~40°C

#### [Applications]

■ Small lid for conference table, small cover of mechanical equipment, etc.

#### [Remarks]

- Be sure to read the "Cautions"
  2.
- Sold in pairs.
- When installing, ensure that both hinge shafts are levelled and aligned.

#### [Recommended Screws]

[Installation] Bracket

Rotation centre

Binding head screw M3, Binding head tapping screw 3, etc.





Available on Web!

TORQUE HINGES

DAMPER HINGES

LIFT ASSIST

HINGES

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

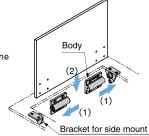
SPECIAL HINGES

[Cut Out Dime	ensions] —— W=Cabinet inside w	vidth–3 ────
8-10-22-	Pilot hole  A=(18)  D	(1.5)

Stopper

#### [How to Install Body and Lid]

- (1) Insert the body into fixed bracket.
- (2) Align mounting holes of lid with the body, and then fix with screws.



RoHS	CAD	Item Code	Item Name	Colour	Torque N·m/pair	Torque kgf·cm/pair	Opening Angle	Weight (g)	Box (pairs)	Carton (pairs)
G	3D	170-025-897	HG-JHM9-U-BL	Black	0.054.0.006	0.55~0.88	105°	31	35	385
G'	3D	170-025-898	HG-JHM9-U-WT	White	0.054~0.086			31	35	385
G	3D	170-037-328	HG-JHM9-U4-BL	Black	0.007.0040	0.075.0.44	105°	28	35	385
G'	3D	170-037-329	HG-JHM9-U4-WT	White	0.027~0.043	0.275~0.44		28	35	385

Refer to 1 : P.60, 2 : P.15



#### SELF-OPEN MINI DAMPER HINGE HG-JHS9-S Side Mount





Video Link



TORQUE HINGES

HINGES

LIFT ASSIST HINGES

DETENT HINGES

CONCEALED HINGES

BUTT HINGES

PIANO **HINGES** 

STEP **HINGES** 

UFT-OFF **HINGES** 

PIVOT HINGES

SPRING HINGES

**CLEAN** ROOM HINGES

HINGES FOR ALUMINIUM FRAME

DROP **HINGES** 

GLASS DOOR HINGES

**SPECIAL** HINGES

#### Small damper hinge with self-opening function for top-opening lids. Using with a push latch enables pop-up function of the lid. Inset type.

- Opening speed is adjustable with a hex key.
- Under mount type 2 also available.

#### [Specifications]

Operating temperature: 0°C ~40°C

#### [Applications]

Small lid for conference table, small cover of mechanical equipment, etc.

#### [Remarks]

- Be sure to read the "Cautions"
- Sold in pairs.
- ■Make sure to mount spring unit at L side of the body. Check if damper is
- When installing, ensure that both hinge shafts are levelled and aligned.
- Install a push latch (sold separately) to keep the lid at closed position.

#### [Recommended Screws]

Countersunk head screw M3, Binding head screw M3, Countersunk head tapping screw 3, Binding head tapping screw 3, etc.

thickness

Stopper\*\*2

Dimension when side board is

flush with top surface of lid.

32 To increase the opening angle of

lid, rotate the stopper then fix it.

**%** 

. p. . 9 + 19

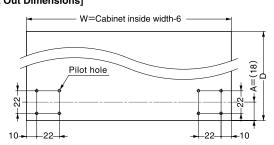


[Installation] Bracket

Rotation centre

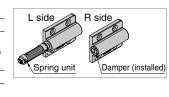
Screw hole

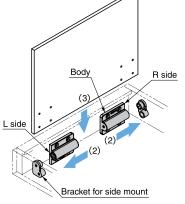
### [Cut Out Dimensions]



#### [How to Install Body and Lid]

- (1) Mount spring unit at L side of the body. Check if damper is mounted at R side.
- (2) Insert the body into fixed bracket.
- (3) Align mounting holes of lid with the body, and then fix with screws.





	No. Part Name		Material	Colour	
	1	Body	POM	Black, White	
	2	Bracket R	PBT		
	3	Bracket L	РВІ		
	Damper (R side)		POM	-	
5		Spring Unit (L side)	Zinc Alloy (ZDC)/Stainless Steel	Chromate/-	

HG-JHS9-S-WT

#### [Adjustment of Lid Opening Speed]

[Front View] Cross-section

Screw hole

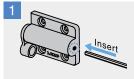
5 (2)

4×φ3.5 φ7.2 Depth 2

(0)

[Bottom View]

#### When increasing lid opening speed



Insert a hex key (size 2.5) into the hole of spring unit (L side)

Toothed projection Slow Partial cut view Fast

Push in the hex key until toothed projection is disengaged, while rotating counterclockwise by 30°, and then pull it out.

\*Make sure to rotate counterclockwise following pushing in the bex key and disengaging the projection. Forced rotation may cause damage

0.027~0.043

Close the lid, and check if the lid can be opened smoothly. Repeat steps 11~3 (maximum 1~2 times) if lid opening speed is still slow.

105°

38

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

Loosen the force following the hex key rotating clockwise.

40

440

26/19/1	whate sure to rotate counterclockwise following pushing in the nex key and disengaging the projection. Forced rotation may easise damage.									
RoHS (	CAD	Item Code	Item Name	Colour	Torque N⋅m/pair	Torque kgf·cm/pair	Opening Angle	Weight (g/pair)	Box (pairs)	Carton (pairs)
G	3D	170-028-293	HG-JHS9-S-BL	Black	0.007.0.040	0.00 0.44	105°	20	40	440

0.28~0.44

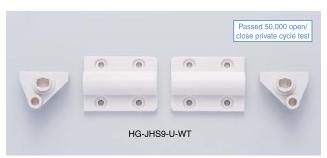
170-028-294 Refer to 1 : P.652, 2 : P.63, 3 : P.15



#### SELF-OPEN MINI DAMPER HINGE HG-JHS9-U Under Mount

INSTRUCTION





Side mount type 2 also available.

Inset type.

## Opening speed is adjustable with a hex key.

#### [Specifications]

Operating temperature: 0°C ~40°C

#### [Applications]

Small lid for conference table, small cover of mechanical equipment, etc.

## Video Link

#### [Remarks]

- Be sure to read the "Cautions"
- Sold in pairs.
- ■Make sure to mount spring unit at L side of the body. Check if damper is

Small damper hinge with self-opening function for top-opening lids.

Using with a push latch enables pop-up function of the lid.

- When installing, ensure that both hinge shafts are levelled and aligned.

#### [Recommended Screws]

Binding head screw M3, Binding head tapping screw 3, etc.

## HINGES DAMPER HINGES

LIFT ASSIST HINGES

TORQUE

DETENT HINGES

CONCEALED HINGES

BUTT HINGES

PIANO HINGES

STEP HINGES

LIFT-HINGES

PIVOT HINGES

SPRING

HINGES **CLEAN** 

ROOM HINGES HINGES FOR

ALUMINIUM FRAME

DROP HINGES

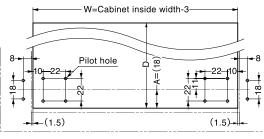
GLASS DOOR HINGES

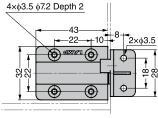
**SPECIAL** HINGES

- Install a push latch (sold separately) to keep the lid at closed position.

## [Front View] Cross-section [Installation] Bracket Rotation centre 2 4 ( 5 [3] Stopper [Bottom View]

## [Cut Out Dimensions]



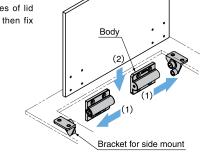


: Optional push latch ESN-195/BLK

No.	Part Name	Material	Colour	
1	Body	РОМ		
2	Bracket R	PBT	Black, White	
3	Bracket L	РВІ		
4	Damper (R side)	РОМ	Ī	
(5)	Spring Unit (L side)	Zinc Alloy (ZDC) /Stainless Steel	Chromate/-	

#### [How to Install Body and Lid] (1) Insert the body into fixed bracket.

(2) Alian mounting holes of lid with the body, and then fix with screws.



When decreasing lid opening speed (returning to the speed

the hex key rotating

before adjustment) Loosen the force following

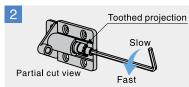
clockwise.

#### [Adjustment of Lid Opening Speed]

#### When increasing lid opening speed



Insert a hex key (size 2.5) into the hole of spring unit (L side)



Push in the hex key until toothed projection is disengaged, while rotating counterclockwise by 30°, and then pull it out.



Close the lid, and check if the lid can 11~3 (maximum 1~2 times) if lid

be opened smoothly. Repeat steps

opening speed is still slow.

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

RoHS	CAD	Item Code	Item Name	Colour	Torque N·m/pair	Torque kgf·cm/pair	Opening Angle	Weight (g/pair)	Box (pairs)	Carton (pairs)
G'	3D	170-028-295	HG-JHS9-U-BL	Black	0.007.0040	0.28~0.44	105°	38	35	385
G'	3D	170-028-296	HG-JHS9-U-WT	White	0.027~0.043				35	385

Refer to 1 : P.652, 2 : P.62, 3 : P.15



#### **DETENT HINGE HG-CSH63** With 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



Be sure to read the "Cautions"

Detent at both 0° and 100°. Also available without damper type.

When installing, ensure that both hinge shafts are levelled and aligned.

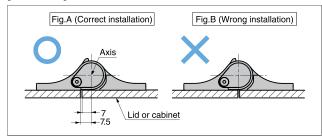
#### [Applications] Carrying box of motorcycle courier, etc.

[Remarks]

Damper works clockwise or counterclockwise.

Torque not adjustable.

#### [Installation]

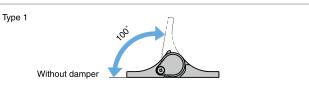


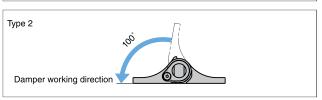
As shown in Fig. A, shift the axis of hinge and the edge of lid or cabinet.

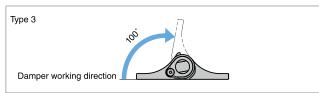


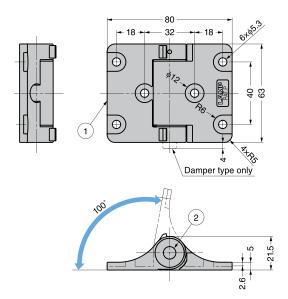


[Installation]









No.	Part Name	Material	Finish / Colour
1	Body	Aluminium Alloy	Silver Enamel Finish
(2)	Shaft • Spring	Stainless Steel (SLIS304)	_

RoHS	CAD	Item Code	Item Name	Туре	Torque N·m/pc	Torque kgf·cm/pc	Retaining Torque N·m/pc	Retaining Torque kgf·cm/pc	Opening Angle	Weight (g)	Box (pcs)	Carton (pcs)
_	3D	170-090-044	HG-CSH63	1 (Without Damper)	-	-				98.7	10	120
G'	3D	170-090-109	HG-CSH63AM	0	1~1.7	10.2~17.3	0.98	10	100°		10	120
G'	3D	170-090-108	HG-CSH63AH	2	1.7~2.5	17.3~25.5				114.3	10	120
G'	3D	170-090-111	HG-CSH63BM	0	1~1.7	10.2~17.3				114.3	10	120
G"	ЗD	170-090-110	HG-CSH63BH	3	1.7~2.5	17.3~25.5					10	120

Refer to 1 : P.15



TORQUE HINGES

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

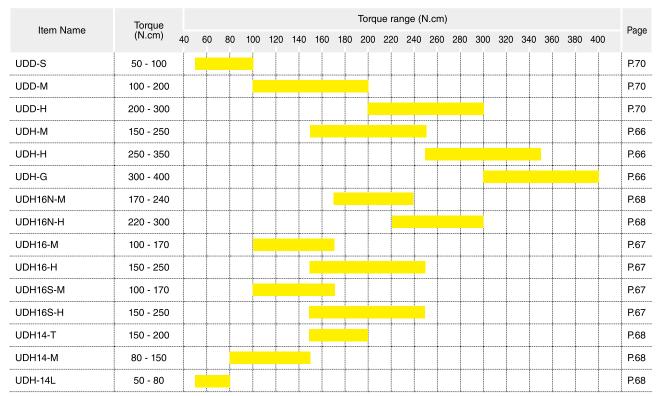
HINGES

SPECIAL HINGES

#### **TORQUE DAMPER UDH SERIES**

Picture	Item Name	Diameter	Length	Damping direction	Torque	Page
	UDH-A	20mm	55mm		150 - 400N•cm	P.66
	UDH-B	20mm	55mm	~	150 - 400N·cm	P.66
	UDH16N-A	16mm	51mm		170 - 300N <b>·</b> cm	P.68
	UDH16N-B	16mm	51mm	~	170 - 300N <b>·</b> cm	P.68
	UDH16-A	16mm	37mm		100 - 250N-cm	P.67
	UDH16-B	16mm	37mm		100 - 250N•cm	P.67
	UDH16S-A	16mm	37mm		100 - 250N-cm	P.67
	UDH16S-B	16mm	37mm	~	100 - 250N·cm	P.67
	UDH14-A	14mm	37mm		50 - 200•cm	P.68
	UDH14-B	14mm	37mm	~	50 - 200•cm	P.68

## **TORQUE DAMPERS**



SUGATSUNE

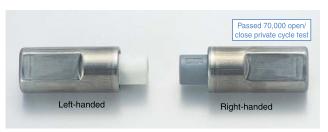
#### TORQUE DAMPER UDH











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

#### Patented technology allows compact design.

- Can be used as a single unit.
- Keeps lids / doors from slamming shut.
- With marking colour at the body to recognise the torque moment. Refer to the following for details.
- Ideal for applications requiring flap slow down. Helps prevent noise and impact.
- Standard and progressive models available.





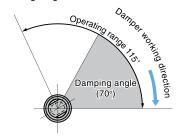
■Toilet seat / lid, cover for maintenance, etc.

#### [Remarks]

- When mounting on sheet metal, ensure the edge of the plate is rounded to prevent damage to the damper.
- Do not apply and vertical load on the shaft.

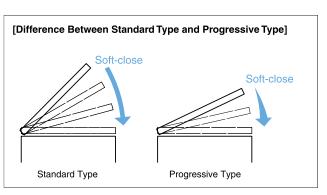


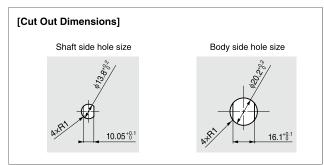
#### **Damper Operating Angle**



Right-handed: damper works when the shaft is turned clockwise (this figure) Left-handed: damper works when the shaft is turned counterclockwise (symmetrical to this figure)

## 4×R2 /R0.8 2 Right-handed type shown.





No.	Part Name	Material	Colour
1	Body	Stainless Steel	<del>-</del>
2	Shaft	PBT	Left-handed: Natural, Right-handed: Grey
3	Cover Ring	Black	_

[Sta	ndard	d Type]

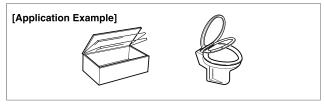
RoHS	CAD	Item Code	Item Name	Type	<b>Damper Working Direction</b>	<b>Marking Colour</b>	Torque N·m/pc	Torque kgf·cm/pc	Weight (g)	Carton (pcs)
G'	3D	170-090-820	UDH-AMS-G	Left-handed	Counterclockwise	Blue	1.5~2.5	15.3~25.5		200
G'	3D	170-090-822	UDH-BMS-G	Right-handed	Clockwise	blue	1.5~2.5	15.5~25.5	]	200
G'	3D	170-090-821	UDH-AHS-G	Left-handed	Counterclockwise	Red	0.5.0.5	25.5~35.7	20	200
G'	3D	170-090-823	UDH-BHS-G	Right-handed	Clockwise	neu	2.5~3.5	25.5~35.7	38	200
G'	ЗD	170-090-824	UDH-AGS-G	Left-handed	Counterclockwise	Yellow	3.0~4.0	30.6~40.8		200
G"	ЗD	170-097-955	UDH-BGS-G	Right-handed	Clockwise	rellow	3.0~4.0	30.6~40.8		200

#### [Progressive Type]

F	r regressive ryper										
RoH	SCAD	Item Code	Item Name	Туре	<b>Damper Working Direction</b>	Marking Colour	Torque N⋅m/pc	Torque kgf·cm/pc	Weight (g)	Carton (pcs)	
G	3D	170-090-825	UDH-AMP-G	Left-handed	Counterclockwise	Croon	1.5~1.8	15.3~18.4		200	
G	30	170-090-827	UDH-BMP-G	Right-handed	Clockwise	Green	1.5~1.8	15.5~16.4	20	200	
G	30	170-090-826	UDH-AHP-G	Left-handed	Counterclockwise	Black	1005	18.4~35.7	38	200	
G	3D	170-090-828	UDH-BHP-G	Right-handed	Clockwise	DIACK	1.8~3.5	16.4~35.7		200	

#### TORQUE DAMPER UDH-16

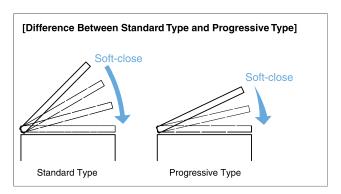




#### **Damper Operating Angle**



Right-handed: damper works when the shaft is turned clockwise (this figure) Left-handed: damper works when the shaft is turned counterclockwise (symmetrical to this figure)



#### Patented technology allows compact design.

- Can be used as a single unit.
- Keeps lids / doors from slamming shut.
- Left-handed and right-handed can be distinguished according to the colour of shaft. In addition, slow rotation type changed the shape of shaft.
- With marking colour at the body to recognise the torque moment. Refer to the following for details.
- Ideal for applications requiring flap slow down. Helps prevent noise and impact.
- Standard and progressive models available.

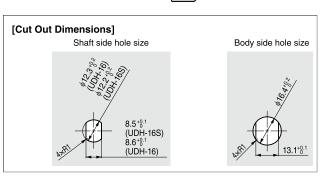
#### [Applications]

Toilet seat / lid, cover for maintenance, etc.

#### [Remarks]

- When mounting on sheet metal, ensure the edge of the plate is rounded to prevent damage to the damper.
- Do not apply any vertical load on the shaft.

2 Marking colour UDH-16 UDH-16S (Right-handed)



No.	Part Name	Material	Finish / Colour
1	Body	Stainless Steel	1
2	Shaft	PBT	Left-handed: Natural, Right-handed: Grey
3	Cover Ring	PDI	Black
4	Screw	Stainless Steel	-

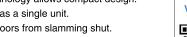
#### [Standard Type]

F										
RoHS	CAD	Item Code	Item Name	Туре	Damper Working Direction	Marking Colour	Torque N⋅m/pc	Torque kgf·cm/pc	Weight (g)	Carton (pcs)
G	3D	170-011-717	UDH-16SAMS	Left-handed	Counterclockwise	Blue	1 1 7	10.2~17.3		200
G	3D	170-011-719	UDH-16SBMS	Right-handed	Clockwise	blue	1~1.7	10.2~17.3	16	200
G	3D	170-011-718	UDH-16SAHS	Left-handed	Counterclockwise	Dod	1705	170 055	16	200
G'	ЗD	170-011-720	UDH-16SBHS	Right-handed	Clockwise	Red	1.7~2.5	17.3~25.5		200

#### [Progressive Type]

RoHS C	CAD	Item Code	Item Name	Туре	Damper Working Direction	Marking Colour	Torque N⋅m/pc	Torque kgf·cm/pc	Weight (g)	Carton (pcs)
G'	3D	170-090-829	UDH-16AMS-G	Left-handed	Counterclockwise	Green	1~1.7	10.2~17.3	16	200
G'	3D	170-090-831	UDH-16BMS-G	Right-handed	Clockwise	Green				200
G'	3D	170-090-830	UDH-16AHS-G	Left-handed	Counterclockwise	Black	1705	170 055	10	200
G'	3D	170-090-832	UDH-16BHS-G	Right-handed	Clockwise	ыаск	1.7~2.5	17.3~25.5		200





**Video Link** 

VIDEO

TORQUE HINGES

> DAMPER HINGES

LIFT ASSIST HINGES

DETENT HINGES

CONCEALED HINGES

BUTT HINGES

PIANO HINGES

STEP HINGES

LIFT-HINGES

PIVOT HINGES

SPRING HINGES

CLEAN ROOM HINGES

HINGES FOR ALUMINIUM FRAME

DROP HINGES

GLASS DOOR HINGES

SPECIAL HINGES

HINGES

LIFT

ASSIST HINGES

DETENT HINGES

CONCEALED HINGES

BUTT

PIANO

STEP HINGES LIFT-OFF HINGES

**PIVOT** HINGES

**SPRING** 

HINGES

CLEAN ROOM

**HINGES** 

HINGES FOR

ALUMINIUM

FRAME

DROP

HINGES

GLASS

DOOR

HINGES

SPECIAL

HINGES

HINGES

HINGES

#### **TORQUE DAMPER UDH-16N**

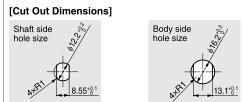








Left-handed TORQUE [Cut Out Dimensions] HINGES



Patented technology allows compact design.

Can be used as a single unit.

Keeps lids / doors from slamming shut.

- Left-handed and right-handed can be distinguished according to the colour and shape of shaft.
- With marking colour at shaft to recognise the torque moment.
- Ideal for applications requiring flap slow down. Helps prevent noise and impact.



#### [Applications]

Toilet seat / lid, cover for maintenance, etc.

#### [Remarks]

- When mounting on sheet metal, ensure the edge of the plate is rounded to prevent damage to the damper.
- Do not apply any vertical load on the shaft.

	8.55+8.1	13.1+8.1
Damper Operat	ing Angle	-51 <del></del>
Damper Working Carding	8.5 12 2 4 2 3	3.5

Right-handed: damper works when the shaft is turned clockwise (this figure) Left-handed: damper works when the shaft is turned counterclockwise (symmetrical to this figure)

Marking Colour

No.	. Part Name Material		Finish / Colour
1	Body	Stainless Steel	İ
2	Shaft	PBT	Left-handed: Natural, Right-handed: Grey
3	Cover Ring	PPS	Black
4	Screw	Stainless Steel	Ī

RoHS	CAD	Item Code	Item Name	Туре	Damper Working Direction	Marking Colour	Torque N·m/pc	Torque kgf cm/pc	Weight (g)	Carton (pcs)
G"	3D	170-090-833	UDH-16NAMS	Left-handed	Counterclockwise	Dlue 47.04		17.04		200
G"	3D	170-090-834	UDH-16NBMS	Right-handed	Clockwise	Blue	1.7~2.4	17.3~24.5	0.5	200
G"	30	170-090-835	UDH-16NAHS	Left-handed	Counterclockwise	D. J	0.0.0	00.4.00.0	25	200
G'	3D	170-090-836	UDH-16NBHS	Right-handed	Clockwise	Red	2.2~3	22.4~30.6		200

Right-handed type shown.

#### TORQUE DAMPER UDH-14

Left-handed

Shaft side

hole size

[Cut Out Dimensions]









Right-handed

Body side

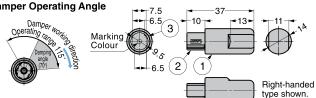
according to the colour and shape of shaft. With marking colour at shaft to recognise the



- torque moment.
- Excellent in corrosion resistance and rigidity due to stainless steel
- Ideal for applications requiring flap slow down. Helps prevent noise and impact.



#### **Damper Operating Angle**



Right-handed: damper works when the shaft is turned clockwise (this figure) Left-handed: damper works when the shaft is turned counterclockwise (symmetrical to this figure)

#### [Applications]

Toilet seat / lid, cover for maintenance, etc.

#### [Remarks]

- When mounting on sheet metal, ensure the edge of the plate is rounded to prevent damage to the damper.
- Do not apply any vertical load on the shaft.

t	No.	Part Name	Material	Finish / Colour
	1	Body	Stainless Steel	-
	2	Shaft	PBT	Left-handed: Natural, Right-handed: Grey
	3	Cover Ring	РОМ	Black

		\	3 ,							
RoHS	CAD	Item Code	Item Name	Туре	Damper Working Direction	Marking Colour	Torque N·m/pc	Torque kgf·cm/pc	Weight (g)	Box (pcs)
G'	3D	170-028-472	UDH-14ALS	Left-handed	Counterclockwise	Dl.	0.5.00	54.00		400
G	3D	170-028-473	UDH-14BLS	Right-handed	Clockwise	Purple 0.5~0.8		5.1~8.2		400
G	3D	170-017-538	UDH-14AMS	Left-handed	Counterclockwise	Dive	0.0.45	0.0.45.0	10	400
G	3D	170-017-539	UDH-14BMS	Right-handed	Clockwise	Blue	0.8~1.5	8.2~15.3	10	400
G	3D	170-024-697	UDH-14ATS	Left-handed	Counterclockwise	Croon	15.00	15.0.00.4		400
G'	ЗD	170-025-678	UDH-14BTS	Right-handed	Clockwise	Green	1.5~2.0	15.3~20.4		400



TORQUE

HINGES

HINGES

LIFT ASSIST

HINGES

DETENT HINGES

CONCEALED HINGES

BUTT

PIANO HINGES

HINGES

#### **ROTARY DAMPER URD8-3**





- Insert type rotary damper.
- Unlimited rotation angle and rotation direction, suitable for various opening modes. In addition, combining with springs further expands application.
- Small outer diameter realises space-saving and downsizing of equipment.

#### [Specifications]

Operating temperature: 0°C ~50°C

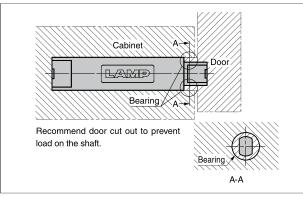
#### [Applications]

- Switch cover of equipment
- Wire hole cover of table

#### [Remarks]

- Be sure to read the "Cautions"
- Measurement conditions of torque value: ambient temperature 23°C, rotation speed 20rpm.
- For use beyond the operating temperature range above, please contact local representatives.

#### [Installation]





PIVOT

HINGES

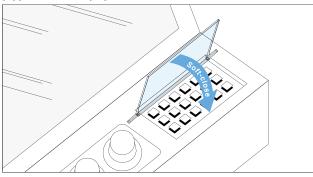
SPRING HINGES **CLEAN** ROOM HINGES HINGES FOR ALUMINIUM

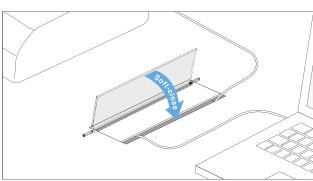
FRAME DROP HINGES

GLASS DOOR HINGES **SPECIAL** HINGES

STEP

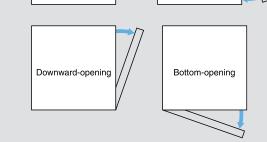
#### [Application Example]

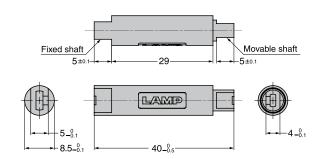




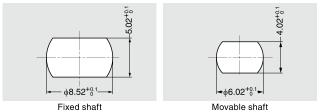
## Top-opening Upward-opening

Suitable for various opening modes





#### [Cut Out Dimensions]





Refer to 1 : P.15.



Updated 2017.10.27

#### **DISK DAMPER UDD®**









TORQUE HINGES

HINGES

LIFT 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

#### Keeps lids/doors from slamming shut.

- Simple design does not affect cabinet appearance.
- Choose from 3 torques according to door size.
- Ideal for food showcase, etc.

#### [Specifications]

Operating temperature: 5°C ~35°C

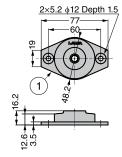
#### [Remarks]

- Spacer or L-shaped bracket may be required depending on the shape of
- Customer should provide spacer according to board thickness in the application below.
- Use types (S, M, H) with identical torque on the left and right sides.
- Do not use impact screwdriver for mounting.
- Do not use in water splash environment.
- Use 2 pcs in one set.



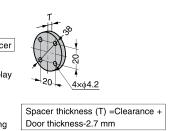


#### [Assembled State] [Damper Body] [Mounting Plate] [Spacer] (Body+Cover+Mounting plate)



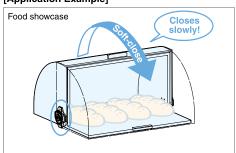
4×φ4.1 φ7	
4 5 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3	

φ4.1 φ7	Cover
20	Damper Body Spac
	Mounting plate Displ
1.6	Door thickness -
	Cross-section drawing



No.	Part Name	Material	Finish / Colour	
1	Damper Body	_	_	
2	Cover	ABS	Emboss/Light Grey	
3	Screw		Nickel	
4	Mounting Plate	Steel	Nickei	
5	Shaft		Zinc Chromate	

#### [Application Example]



#### [Cut Out Dimensions]



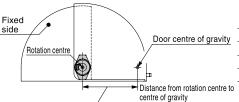




Door side Fixed side [Selection of Damper]

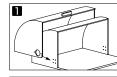
Choose from 3 types according to door moment.

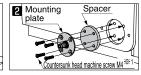
Max. door moment = Door weight kg  $\times$  9.80665  $\times$  Distance from rotation centre to centre of gravity (m)

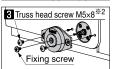


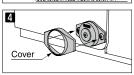
,	Door Moment	Туре	Qty
_	1.0~2.0 N·m	S	2 pcs
	2.0~4.0 N·m	М	2 pcs
	4.0~6.0 N·m	Н	2 pcs

#### [How to Install]









%1, %2 screws not included

In case of wooden display, please prepare countersunk head tapping screw 3.5 for 3.5 for 3.5 and truss head tapping screw 5x12for 3:2.

RoHS CAD	Item Code	Item Name	<b>Damper Working Direction</b>	Torque N·m/pc	Torque kgf·cm/pc	Weight (g)	Box (pcs)	Carton (pcs)
G 3D	180-022-306	UDD-S-L	Counterclockwise	0.5~1.0	5.1~10.2	90	20	20
G 3D	180-022-307	UDD-S-R	Clockwise	0.5~1.0			20	20
G 3D	180-022-308	UDD-M-L	Counterclockwise	1.0~2.0	10.2~20.4		20	20
G" 3D	180-022-309	UDD-M-R	Clockwise	1.0~2.0			20	20
G" 3D	180-022-310	UDD-H-L	Counterclockwise	2.0~3.0	20.4~30.6		20	20
G 3D	180-022-311	UDD-H-R	Clockwise	2.0~3.0			20	20

#### BRACKET FOR DISK DAMPER UDD-BKT



Gap G

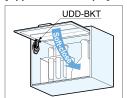
4

5





#### [Application Example]



Bracket of disk damper UDD for upward-opening doors.

#### [Remarks]

- Chamfer edge of top board to reduce the gap between the door and top board by referring to Fig.2 and Table 2 (recommended).
- Install a stopper on the cabinet (Fig.3).
- Catch is needed for holding door in opened position.
- ■Face plate SDS for glass door and spacer SDS-50G 2 available for glass/acrylic doors.

TORQUE HINGES



HINGES

LIFT ASSIST HINGES

DETENT HINGES

CONCEALED HINGES

BUTT HINGES

PIANO HINGES

STEP HINGES

LIFT-HINGES

PIVOT

HINGES SPRING HINGES

**CLEAN** ROOM HINGES

HINGES FOR ALUMINIUM FRAME

DROP HINGES

GLASS DOOR HINGES

**SPECIAL** HINGES

#### [Installation]

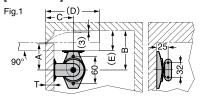


Fig.2 Top board 45°

Table 2

Chamfering Allowance F

2

3



Table 1

No.	Door Thickness T	Α	В	С	D	Е
1	5	46	70	49	( 95)	(26)
2	15	54	82	57	(111)	(40)
3	18	57	86	60	(117)	(44)

\*① is the value when using acrylic or glass door with a door thickness

of 5 mm, a face plate SDS for glass door, and spacer SDS-50G. 23 are the values when using wooden doors with door thicknesses given in the above table.

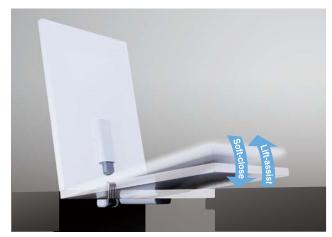
RoHS CAD	Item Code	Item Name	Material	Finish	Weight (g)	Carton (pcs)
G 3D	180-026-764	UDD-BKT	Stainless Steel (SUS304)	Plain	33	60

Refer to 1 : P.70, 2 : P.267

1.5+ **-**15.8**-**

- 99

### LIFT-ASSIST DAMPER LAD, LAD, ST DIGEST



- Ideal for the top board of counter entrance.
- Supplied with LAPCON mechanism, damper works during closing and top board slowly closes. Damper works even at a slight opening angle.
- Lift-assist function allows opening the top board easily.
- Can be retrofitted to existing counters without machining.
- Installation position can be easily determined with the supplied









LAD 1

Refer to 1 : P.232, 2 : P.230



LAD-ST (with stopper) 2 Stops at 95° opening.

