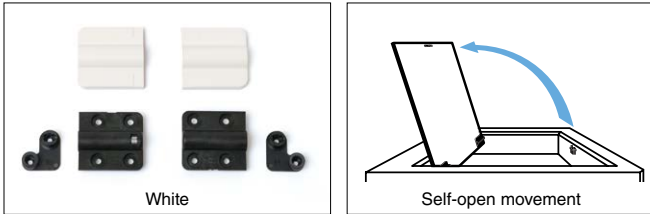


# SELF-OPEN DAMPER HINGE



**HG-JHS11**



### Features

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

### Specification

- Operation temperature: 0 – 40°C

### Application

- Small covers for machine or wire manager, etc.

### Remarks

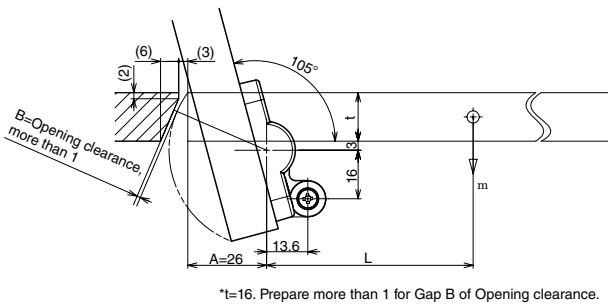
- Applicable moment of door: 0.25 – 0.4N·m. Use a pair/door.
- Install Spring unit on left side and damper unit for right side of the door.
- When installing, ensure that both hinge shafts are levelled and aligned.
- Please install with touch latch separately to keep the door closed.

### Sold Separately

- Bracket for HG-JHS11 Surface Mount UKZ11-BL

### Recommended Screws

- Countersunk tapping screw 3, bind tapping screw 4



### Calculation of maximum door moment

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

T:Max. door torque (N/mm)

m:Door weight (kg)

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

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

D:Door length (mm)

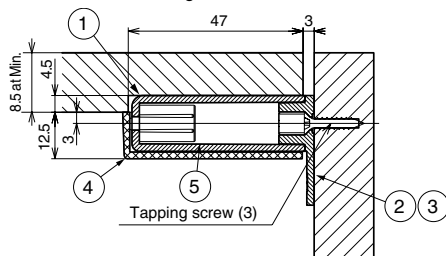
A:Bracket installation dimension (mm)

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

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

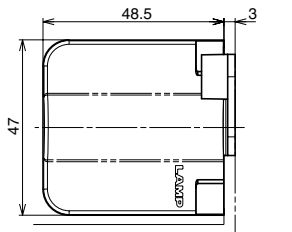
### Installation

Cross-section Drawing



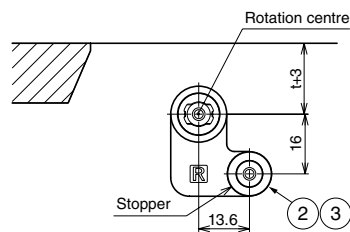
### Top View

When closed door

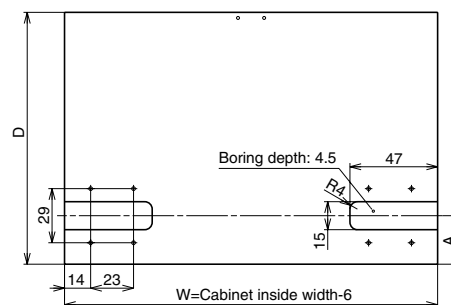


### Installation

Bracket

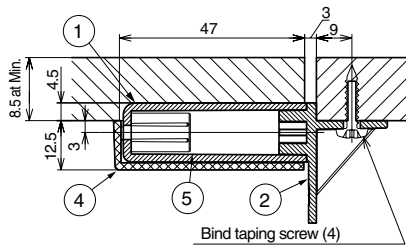


### Cut Out Dimensions

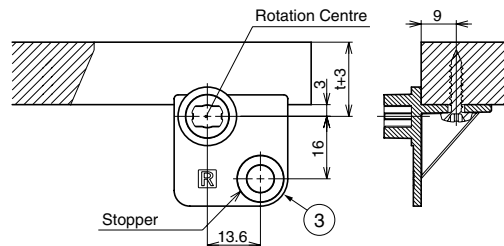


No.	Part Name	Material	Colour
①	Body	Polyacetal (POM)	Black
②	Bracket for side mount R	PBT	
③	Bracket for side mount L		
④	Cover	ABS	Black/White
⑤	Damper	-	-

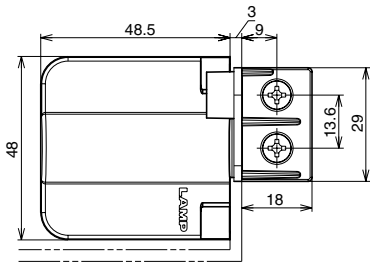
**Surface Mount Type**  
(Installed with Bracket for Surface Mount UKZ11-BL)  
Cross-section Drawing



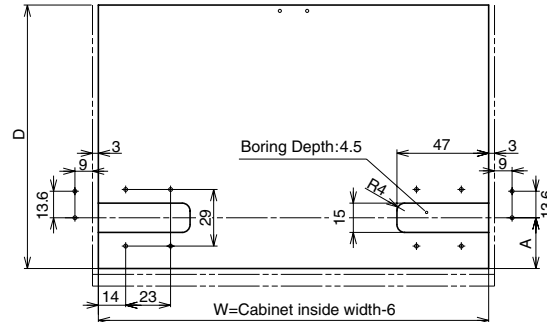
**Installation**  
Bracket



**Top View**



**Cut Out Dimensions**



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

**Adjustment of Lid Opening Speed**

**When increasing lid opening speed**

**1**

Insert a hex key (size 3) into the hole of spring unit (L side)

**2**

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

**3**

Close the lid, and check if the lid can be opened smoothly. Repeat steps 1-3 (maximum 5 times) if the lid opening speed is still slow.

**When decreasing lid opening speed (returning to the speed before adjustment)**  
Loosen the force following the hex key rotating clockwise.

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

**Body**

Sold by set.

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



**Bracket for Surface Mount**

Sold by set.

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

## HG-JHM Damper hinges series - Supported lid digest

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

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

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

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

### [How to calculate the maximum torque moment]

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

T = Maximum moment of the lid

m = Lid weight [kg]

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

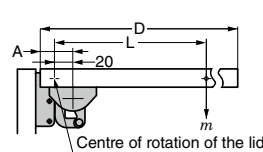
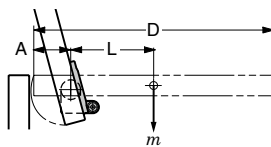
$$L = \frac{D}{2} - A \quad (\text{For HG-JHM20T, } L = \frac{D}{2} - A + 20)$$

D = Lid length [mm]

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

#### Calculation example (for HG-JHM14)

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



Material	Specific gravity
Acrylic	1.2
MDF	0.6
Mirror	2.5

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

Model	A
HG-JHM20T	36 ~ 38