

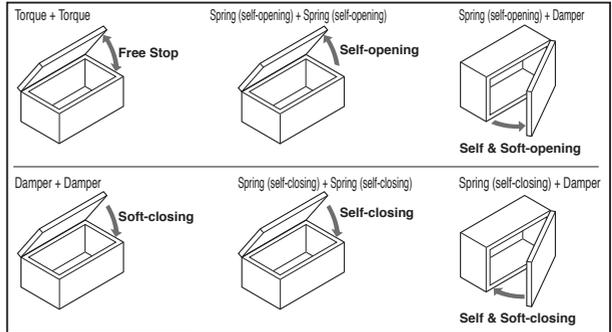
# LAMP® HG-VH8 Variety Hinge Installation Instructions



Thank you for selecting our product. Before starting installation, please read this manual thoroughly to ensure correct installation. Please keep this manual at hand for future reference.

## ABOUT THE PRODUCT

- Hinges for light weight lids, doors.
- Various motions in the same appearance
- Various combinations such as self-opening hinge + damper hinge (refer to "Possible combinations")



## SPECIFICATIONS

Order code	Part No.	ID stamp	Color	Part built in	Torque cNm / piece	Operating temperature range
170-032-616	HG-VH8-N-BL	N	Black	-	-	0 ~ 40°C
170-032-617	HG-VH8-N-WT		White			
170-032-618	HG-VH8-D3-BL	D3	Black	Damper	2.2 ~ 3.8	
170-032-619	HG-VH8-D3-WT		White			
170-032-620	HG-VH8-OP-BL	OP	Black	Spring (self-opening)	* increase 1.53 cNm by 30° of revolution	
170-032-621	HG-VH8-OP-WT		White			
170-032-622	HG-VH8-CL-BL	CL	Black	Spring (self-closing)	* increase 1.53 cNm by 30° of revolution	
170-032-623	HG-VH8-CL-WT		White			
170-032-624	HG-VH8-T15-BL	T1	Black	Torque	15±5	
170-032-625	HG-VH8-T15-WT		White			
170-032-626	HG-VH8-T35-BL	T3	Black	Torque	35±10	
170-032-627	HG-VH8-T35-WT		White			

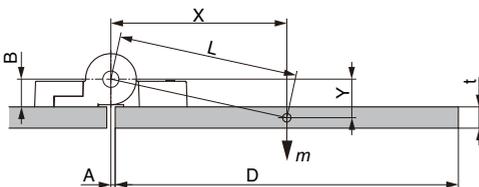
### Possible combinations

Type of hinges	ID stamp	N	D3	OP	CL	T1	T3
Normal	N	○	○	○	○	○	○
Damper	D3	○	○	○	○	—	—
Spring (self-opening)	OP	○	○	○	—	△	△
Spring (self-closing)	CL	○	○	—	○	△	△
Torque	T1	○	—	△	△	○	○
Torque	T3	○	—	△	△	○	○

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

\* See "How to adjust spring torque" on the right page.

## MAXIMUM LID TORQUE CALCULATION



$$T = mx9.8xL$$

T : Maximum lid torque (Nm)

m : Lid weight (kg)

D : Lid length (m)

$$X = D/2 + A$$

$$Y = t/2 + B$$

L : Distance between rotation center and gravity center of lid

$$L = \sqrt{X^2 + Y^2}$$

(Calculation example)

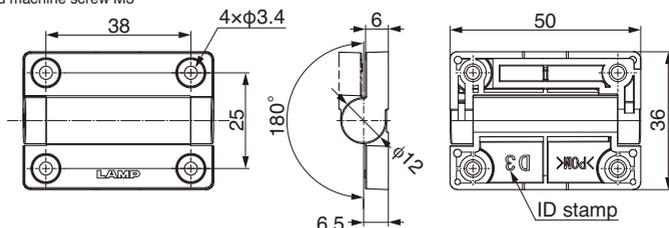
When D=12cm, A=0.1cm, B=0.65cm, t=0.5cm, m=0.08kg

$$L = \sqrt{(12/2 + 0.1)^2 + (0.5/2 + 0.65)^2} = 6.13 \text{ cm}$$

$$T = 0.08 \times 9.8 \times 6.13 = 4.8 \text{ cN} \cdot \text{m}$$

## DIMENSION

Recommended screw : Bind head machine screw M3



# FOR YOUR SAFETY WORK AND OPERATION

 This symbol denotes prohibited actions.

 This symbol denotes what must be done.

 **Cautions:** If these cautions are not followed, it may result in injury or damage.

 This product is for indoor use only. Do not use outside or anywhere where it will be exposed to water.

 Do not use lubricant on the hinges since it may damages the hinges.

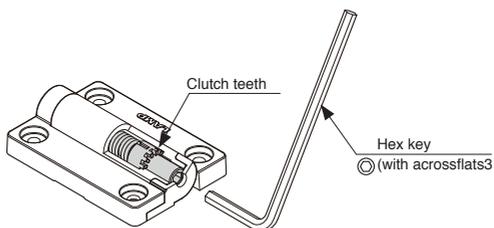
 Align the shaft center of the hinges.

 Use within the specified torque range. (Damper hinges and torque hinges)

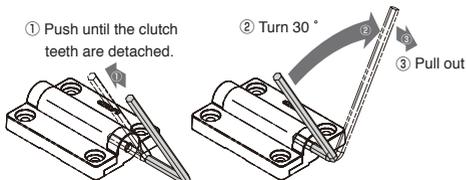
## How to adjust spring torque (Spring hinges only)

Note that the direction to increase the spring torque for Self-open is different from the direction for Self-closing type.

 Improper adjustment may cause abnormal sound or damage of the part.



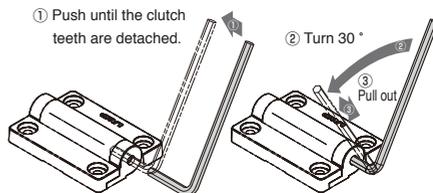
### Self-opening



Check if the lid or door opens smoothly when it is released.  
If opening force is not enough, repeat step ① to ③.

The torque increases 1.53cN m by every 30° of turn.  
The increasing limit is up to 4 turns (120°). If you like to decrease the torque, turn the hex key to the opposite direction.

### Self-closing



Check if the lid or door closes smoothly when it is released.  
If closing force is not enough, repeat step ① to ③.

The torque increases 1.53cN m by every 30° of turn.  
The increasing limit is up to 4 turns (120°). If you like to decrease the torque, turn the hex key to the opposite direction.

 Before turning the hex key, make sure to push it enough so that the clutch teeth is released.

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