

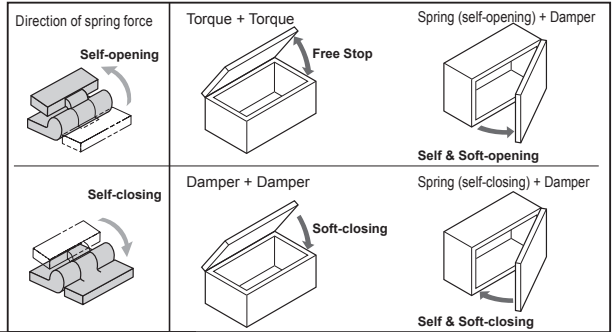
# LAMP® HG-VH8 Combination Hinge Installation Instructions

INstitution  
DesignTEC®

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 |                       |  |                             |

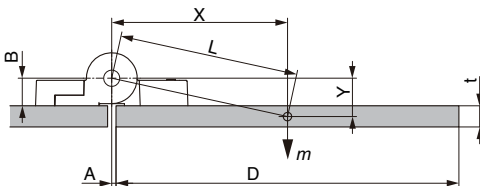
### Possible combinations

| 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)

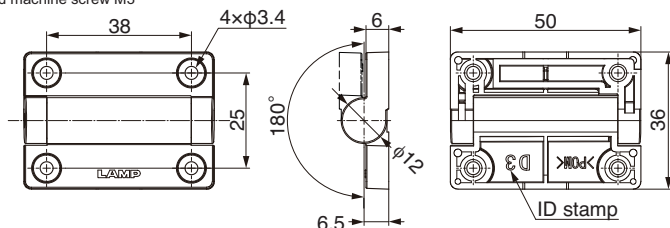
When D=12cm, A=0.1cm, B=0.65cm, t=0.5cm, m=0.08kg

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

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

## DIMENSION

Recommended screw : Bind head machine screw M3



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## Meaning of symbols



Warning  
Caution



Prohibited



Required

**⚠ 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 damage the hinges.

⊘ Align the shaft center of the hinges.

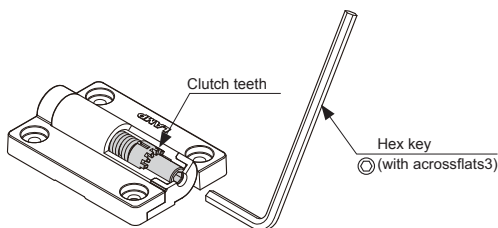
⊘ Use within the specified torque range. (Damper hinges and torque hinges)

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

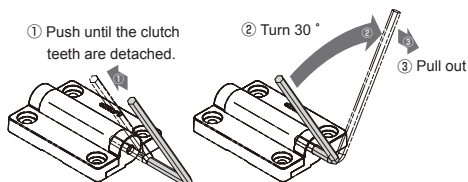
Note that the direction to increase the spring torque for Self-open is different from the direction for Self-closing type.



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



### Self-opening



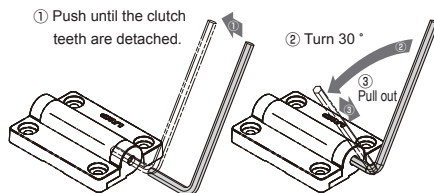
Check if the lid or door opens smoothly when it is released.

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.

SUGATSUNE KOGYO CO.,LTD

Tokyo, JAPAN

Phone: +81 (0)3 3866 2260 E-mail:export@sugatsune.co.jp

SUGATSUNE KOGYO (UK) LTD

Reading, UK

Phone: +44 118 9272 955 E-mail:sales@sugatsune.co.uk

SUGATSUNE EUROPE GmbH

Düsseldorf, GERMANY

Phone: +49 211 53812900 E-mail:sales@sugatsune.eu

ISO9001(Japan Offices and Sugatsune America) and ISO14001(Chiba Production division and Logistics center), certified.

SUGATSUNE SHANGHAI Co., LTD

Shanghai, CHINA

Phone: +86 21 3632 1858 E-mail:lamp@sugatsune.com.cn

Guangzhou, CHINA

Phone: +86 20 6639 3552 E-mail:lamp@sugatsune.com.cn

SUGATSUNE KOGYO INDIA PRIVATE LIMITED

Mumbai, INDIA

Phone: +91 22 28314490/91 E-mail:sales@sugatsune.in

SUGATSUNE AMERICA, INC

California, USA

Phone: +1 310 329 6373 E-mail:sales@sugatsune.com

Chicago, USA

Phone: +1 312 461 1081 E-mail:chicagoshowroom@sugatsune.com.

SUGATSUNE CANADA, INC.

Phone: +1 514 312 5267

E-mail:support@sugatsune.ca