

# Leveling Mounts

⚠ This leveling mount allows you to perform more precise leveling adjustment. Use it for leveling by mounting it where the device is installed.

| Type    | Main Body |                   | Adjusting Bolt |                           | Stabilizer |                           | Rubber                |           |
|---------|-----------|-------------------|----------------|---------------------------|------------|---------------------------|-----------------------|-----------|
|         | Material  | Surface Treatment | Material       | Surface Treatment         | Material   | Surface Treatment         | Material (Color)      | Hardness  |
| KHWM-C  | FCD       | Baked Finish      | S45C           | Electrolytic Zinc Plating | -          | -                         | Nitrile Rubber (Blue) | Shore A95 |
| KHWM-P  |           |                   |                |                           | -          | -                         |                       |           |
| KHWM-SC |           |                   |                |                           | -          | -                         |                       |           |
| KHWM-SP | -         | -                 | -              | -                         | SS400      | Electrolytic Zinc Plating | Nitrile Rubber (Blue) | Shore A95 |

**W/O Stabilizer**

**KHWM-C (W/O Pad)**

**With Stabilizer**

**KHWM-SC (W/O Pad)**

**W/O Pad**

**KHWM-P (With Pad)**

**With Pad**

**KHWM-SP (With Pad)**

RoHS10

|                 | Part Number Type | H       | A  | C   | H   | h1 | h2 | Y  | E  | F  | Adjusting Bolt Dimension |    | Stabilizer | Pad | Allowable Vertical Load (N) | Height Adjustment (mm) | Leveling Accuracy (mm/rev.) | Incline Adjustment Angle | Mass (kg) | Unit Price 1-4 pc (s), 5-10 pcs. |   |
|-----------------|------------------|---------|----|-----|-----|----|----|----|----|----|--------------------------|----|------------|-----|-----------------------------|------------------------|-----------------------------|--------------------------|-----------|----------------------------------|---|
|                 |                  |         |    |     |     |    |    |    |    |    | B                        | b  |            |     |                             |                        |                             |                          |           |                                  | D |
| W/O Stabilizer  | W/O Pad          | KHWM-C  | 47 | 110 | 115 | 47 | 41 | 53 | 20 | 64 | 51                       | 22 | 12         | -   | -                           | 50                     | ±6                          | 0.24                     | -         | 3.3                              |   |
|                 |                  |         | 51 | 130 | 140 | 51 | 45 | 57 |    | 74 | 66                       |    |            |     |                             |                        |                             |                          |           |                                  |   |
|                 | With Pad         | KHWM-P  | 52 | 110 | 115 | 52 | 46 | 58 | 20 | 64 | 51                       | 22 | 12         | -   | -                           | 50                     | ±6                          | 0.24                     | -         | 3.4                              |   |
|                 |                  |         | 56 | 130 | 140 | 56 | 50 | 62 |    | 74 | 66                       |    |            |     |                             |                        |                             |                          |           |                                  |   |
| With Stabilizer | W/O Pad          | KHWM-SC | 56 | 110 | 115 | 56 | 50 | 62 | 20 | 64 | 51                       | 22 | 12         | 108 | 78                          | 70                     | ±6                          | 0.24                     | ±3°       | 6.0                              |   |
|                 |                  |         | 62 | 130 | 140 | 62 | 56 | 68 |    | 74 | 66                       |    |            |     |                             |                        |                             |                          |           |                                  |   |
|                 | With Pad         | KHWM-SP | 61 | 110 | 115 | 61 | 55 | 67 | 20 | 64 | 51                       | 22 | 12         | -   | -                           | 50                     | ±6                          | 0.24                     | -         | 3.7                              |   |
|                 |                  |         | 67 | 130 | 140 | 67 | 61 | 73 |    | 74 | 66                       |    |            |     |                             |                        |                             |                          |           |                                  |   |

Ordering Example Part Number KHWM-SC56

## Features

- This leveling mount allows for installation of devices and apparatuses and adjust the heights by the effect of integrated special springs.
- Because the adjusting bolt head will not move back and forth during leveling adjustment, this will improve your work efficiency.
- Low particle generation fluorinated grease is applied to Standard Type, which is suitable for clean environments. (Clean Room Class is not guaranteed.)
- With Pad Type has an attenuation effect for self-induced vibration. Also excels in oil resistance and non-migration property (color transfer to the floor).
- With Stabilizer Type is applicable to the floor inclination (±3°) to keep the device horizontal, which ensures stable work environments.

## Grease Characteristics

| Name                        | Item                     | Contained Amount | Unit  | Measurement Method | Conditions |
|-----------------------------|--------------------------|------------------|-------|--------------------|------------|
| Fluorinated Resin Thickener | Per-Fluoro Polyether Oil | -                | -     | -                  | -          |
|                             | Base Oil                 | -                | -     | -                  | -          |
| Dropping Point              | Evaporation Amount       | None             | -     | JIS K-2220 5, 4    | -          |
|                             | Evaporation Amount       | ≤0.2             | mass% | Proprietary scheme | 200°C, 24h |
| Oil Separation              | Evaporation Amount       | ≤10              | mass% | Proprietary scheme |            |
|                             | Evaporation Amount       | ≤10              | mass% | Proprietary scheme |            |

Features: Achieves good lubricating performance in wide range of temperature from low to high.

## Bottom Pad



## Example of Stabilizer



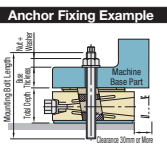
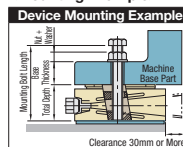
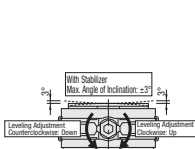
## Major Application

- FPD Manufacturing Processor
- Semiconductor Manufacturing Processor
- Precision Metal Processor
- Large Precision Measuring Instrument
- Other Devices and Apparatuses

## How to Mount

- The flange, frame and the floor of the device on which leveling mounts are to be mounted require adequate rigidity.
- Place a device gently onto the leveling mount.
- When mounting a leveling mount on the device with bolts, align the mounting holes of the device and the tap position of the leveling mounts. Next, insert a hex bolt, a hex nut and a plain washer into a mounting hole of the device and screw them in the tap. Tighten the hex nuts and plain washers after the leveling adjustment of step ⑤. Please note that if the support load is extremely light, the leveling mount may slant due to the over-tightening of nuts.
- Turn the hex head (hole) on the front side of the leveling mount by a tool and adjust the level of the device. Turn clockwise to increase the level and counterclockwise to decrease.
- Adjust each leveling mount gradually to avoid load concentration on the leveling mount.

## Mounting Example



## Bolt, Nut and Washer Selection Example

| Part Number | How to Mount    | Mounting Height H              |                |             | Selected Bolt |
|-------------|-----------------|--------------------------------|----------------|-------------|---------------|
|             |                 | Screw-In Depth (Overall Depth) | Base Thickness | Washer      |               |
| KHWM-P52    | Device Mounting | 53                             | Arbitrary      | LBNR16-P240 | RCB16-L P190  |
| KHWM-P56    |                 | 57                             |                |             |               |
| KHWM-SP61   |                 | 62                             |                |             |               |
| KHWM-SP67   |                 | 68                             |                |             |               |
| KHWM-C47    |                 | 53                             |                |             |               |
| KHWM-C51    |                 | 57                             |                |             |               |
| KHWM-SC56   |                 | 62                             |                |             |               |
| KHWM-SC62   |                 | 68                             |                |             |               |

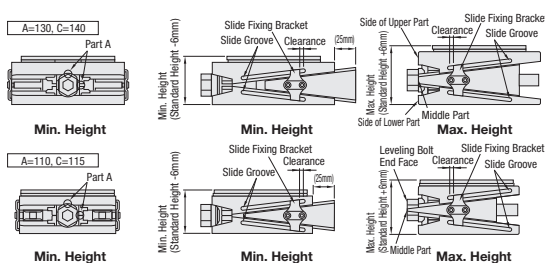
## About Anchor Bolts

- Anchor/Please prepare the size M16 (coarse) mounting bolts on your side.
- Length of anchor bolts ≥ device flange/frame thickness + depth of screwed-in leveling mount (total depth) + hex nut and plain washer thickness.
- Anchor bolt mounting holes can be ignored when not necessary.

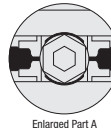
## Leveling Adjustment Range

Make sure to keep the leveling adjustment range within the operating range (±6mm) as shown in the above table. Verify that the approximately 1mm of clearance is provided at the part A shown below for the minimum height. This clearance is to avoid interference between the slide groove and the slide fixing bracket.

Note that if the level is lower, the casted main body will be in contact and the slide fixing bracket will come off from the slide groove, which will cause damage or breakage. For the maximum height, the top of the middle part slides to the side edge of the upper/lower part for A130 and C140, while it slides to the edge of the leveling bolt for A110 and C115. Do not increase the height further.



## Example



## Other Cautions

- ⚠ Jack up the device at a certain height previously, install the leveling mounts and make a final adjustment using the leveling mounts.
- ⚠ The middle part (wedge shape) moves back and forth during leveling adjustment. Keep the clearance of at least 30mm on the back of the leveling mounts.
- ⚠ Please pay close attention to safety measures.