NEW
Linear Bushing Flange Type
LMJK / LMJK-L

Up to 25% weight reduction
Low cost

For details, visit THK at www.thk.com

Product information is updated regularly on the THK website.

THK CO., LTD.
TOKYO, JAPAN
CATALOG No.387E
Linear bushing light-weight flange type
LMJK/LMJK-L

Reduce the total weight of movable parts

Linear Bushing model LMJK is a linear motion system used in combination with a cylindrical LM shaft to perform infinite straight motion.
*THK manufactures a LM shaft dedicated to linear bushing.

Features

Weight reduction: Up to 25%

Weight reduction of the housing is achieved by adopting a high-strength plastic instead of the conventional metal for the flange. Best utilized in a moving portion of an application.

Example of Installation

Low cost

Material cost is reduced by changing the material of the flange from metal to high-strength plastic.
**Specification Table**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Rows of balls</th>
<th>Flange diameter</th>
<th>Overall length</th>
<th>Flanged perpendicularly</th>
<th>Eccentricity (max)</th>
<th>Radial clearance</th>
<th>Basic Load Rating</th>
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<tbody>
<tr>
<td>LMJK 8</td>
<td>4</td>
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</table>

**Model Number Coding**

LMJK 8  L  UU

<table>
<thead>
<tr>
<th>Model No.</th>
<th>External cylinder length</th>
<th>Seal symbol</th>
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<tbody>
<tr>
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<td>L: Long Type</td>
<td>No symbol: Snap ring</td>
</tr>
<tr>
<td>LMJK 10</td>
<td>L: Long Type</td>
<td>No symbol: Snap ring</td>
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<tr>
<td>LMJK 12</td>
<td>L: Long Type</td>
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<td>No symbol: Snap ring</td>
</tr>
</tbody>
</table>

**Installation Procedure**

**Inner Diameter of the Housing**
For the housing inner-diameter tolerance, class H7 is recommended.

**Notes on Installation of External Cylinder**
As shown in Figure 1, install the external cylinder with its spigot joint. Do not install it with the flange alone.
Precautions on use

Handling
- Disassemble each part may cause dust to enter the system or degrade mounting accuracy of parts. Do not disassemble the product.
- Take care not to drop or strike the Linear Bushing. Doing so may cause injury or damage. Giving an impact to it could also cause damage to its function even if the product looks intact.
- When handling the product, wear protective gloves, safety shoes, etc., as necessary to ensure safety.

Precautions on Use
- Prevent foreign material, such as cutting chips or coolant, from entering the product. Failure to do so may cause damage.
- If the product is used in an environment where cutting chips, coolant, corrosive solvents, water, etc., may enter the product, use bellows, covers, etc., to prevent them from entering the product.
- Do not use the product at temperature of 80°C or higher. Exposure to higher temperatures may cause the resin/rubber parts to deform/be damaged.
- If foreign material such as cutting chips adheres to the product, replenish the lubricant after cleaning the product.
- Micro-strokes tend to obstruct oil film formation on the raceway in contact with the rolling element, and may lead to fretting corrosion. Take consideration using grease offering excellent fretting prevention. It is also recommended that a stroke movement corresponding to the length of the outer cylinder be made on a regular basis to make sure oil film is formed between the raceway and rolling element.
- Do not use undue force when fitting parts (pin, key, etc.) to the product. This may generate permanent deformation on the raceway, leading to loss of functionality.
- Insert the shaft straight through the opening. Inserting the shaft at an angle can introduce foreign matter, damage internal components, or cause balls to fall out.
- Using this product with any balls removed may result in premature damage.
- Please contact THK if any balls fall out; do not use the product if any balls are missing.
- If an attached component is insufficiently rigid or mounted incorrectly, the bearing load will be concentrated at one location and perforation will decline significantly. Make sure the housing and base are sufficiently rigid, the anchoring bolts are strong enough, and the component is mounted correctly.

Lubrication
- Thoroughly wipe off anti-rust oil and feed lubricant before using the product.
- Do not mix different lubricants. Mixing greases using the same type of thickening agent may still cause adverse interaction between the two greases if they use different additives, etc.
- When using the product in locations exposed to constant vibrations or in special environments such as clean rooms, vacuum and low/high temperature, use the grease appropriate for the specific situation/environment.
- To lubricate the product, apply lubricant directly to the raceway surface and execute a few preliminary strokes to ensure that the interior is fully lubricated.
- The consistency of grease changes according to the temperature. Take note that the slide resistance of the Linear Bushing also changes as the consistency of grease changes.
- After lubrication, the slide resistance of the Linear Bushing may increase due to the agitation resistance of grease. Be sure to perform a break-in to let the grease spread fully, before operating the machine.
- Excess grease may scatter immediately after lubrication, so wipe off scattered grease as necessary.
- The properties of grease deteriorate and its lubrication performance drops over time, so grease must be checked and added properly according to the use frequency of the machine.
- The greasing interval varies depending on the use condition and service environment. Set the final lubrication interval/amount based on the actual machine.
- When using linear bushing, it is necessary to keep high lubricating performance. If it is used without lubrication, the wear of the rolling part will increase, which may shorten the life.

Storage
- When storing the Linear Bushing, enclose it in a package designated by THK and store it in a room while avoiding high temperature, low temperature and high humidity.

Disposal
- Dispose of the product properly as industrial waste.

The photo may differ slightly in appearance from the actual product.

The appearance and specifications of the product are subject to change without notice. Contact THK before placing an order.

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