



NEW

Linear Bushing Flange Type

LMJK / LMJK-L

Up to 25% weight reduction
Low cost



For details, visit THK at www.thk.com

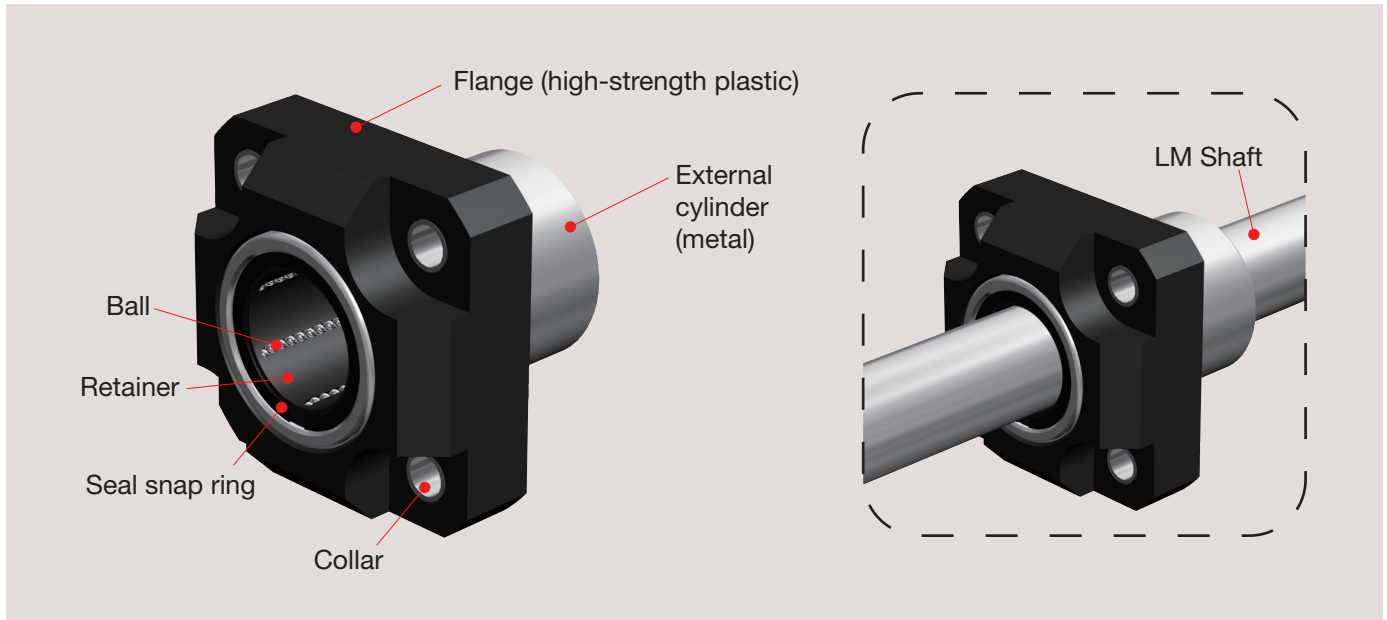
*Product information is updated regularly on the THK website.

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.

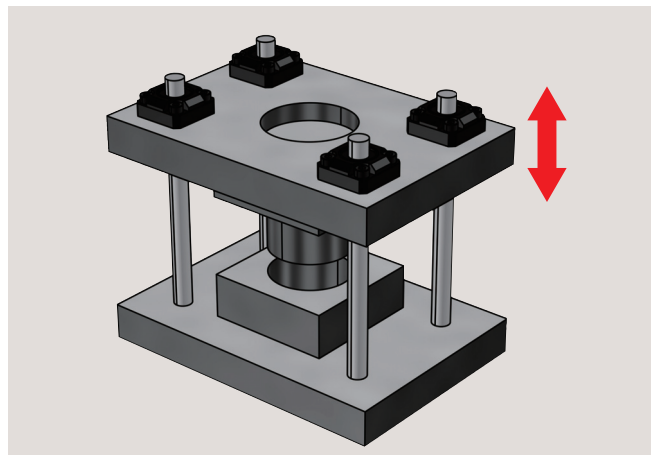
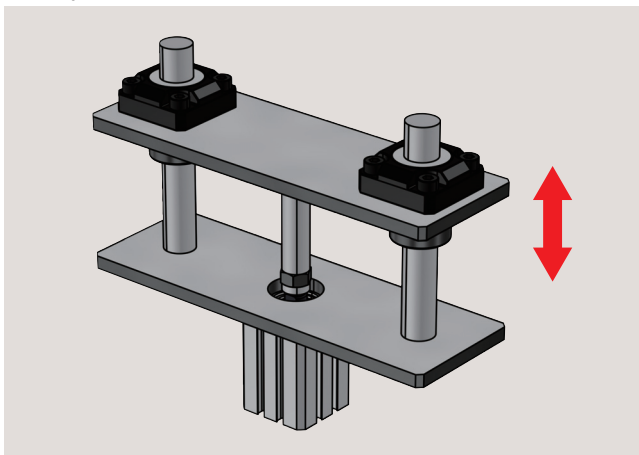
*THK manufactures a LM shaft dedicated to linear bushing.

■ 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.

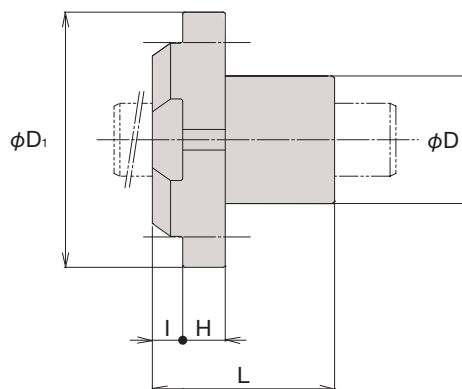
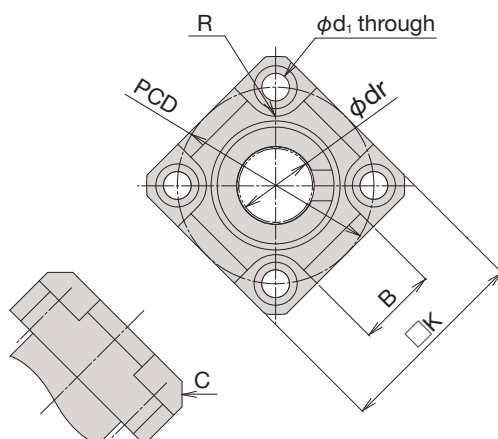
Example of Installation



■ Low cost

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

■ Specification Table



Unit: mm

Model No.	Rows of balls	Inscribed bore diameter		Outerdiameter		Overall length		Flange diameter		K	B	R	H	I	C	PCD	d ₁	Flange perpendicularity μm	Eccentricity (max) μm	Radial clearance tolerance μm	Basic Load Rating		Mass g		
		dr	Tolerance	D	Tolerance	L	Tolerance	D ₁	Tolerance												C	Co		N	
LMJK 8	4	8	0 -0.009	15	0 -0.011	24	0 -0.2	32	0 -0.2	25	10	R4	6	4	C3	24	3.4	12	12	-5	265	402	20		
LMJK 10		10		19	0 -0.013	29		39		30	12	R5	7	5		29	4.5				15	15	373	549	35
LMJK 12		12		21		30		42		32	13		10	6		32							412	598	38
LMJK 16	5	16	0 -0.010	28	0 -0.016	37	0 -0.3	48	0 -0.2	37	18	R6			10	6	C3	38	5.5	15	15	-7	775	1180	88
LMJK 20		20		32		42		54		42	21		50	26	R6	10		6					43	51	5.5
LMJK 25	6	25	40	59	62	50	26	R6	10	6	51	5.5					15		15	-9	980	1570	234		
LMJK 8L	4	8	0 -0.010	15	0 -0.013	45	0 -0.3	32	0 -0.2	25	10	R4	6	4	C3	24	3.4	15	15	-5	431	784	32		
LMJK 10L		10		19	0 -0.016	55		39		30	12	R5	7	5		29	4.5				20	20	588	1100	58
LMJK 12L		12		21		57		42		32	13		10	6		C3							32	412	598
LMJK 16L	5	16	0 -0.012	28	0 -0.019	70	0 -0.4	48	0 -0.2	37	18	R6			10		6	C3	38	5.5	20	20	-7	1230	2350
LMJK 20L		20		32		80		54		42	21		50	26	R6	10	6		43					51	5.5
LMJK 25L	6	25	40	112	62	50	26	R6	10	6	51	5.5						20	20	-9	1560	3140	421		

■ Model Number Coding

LMJK 8 L UU

Model No.

External cylinder length

No symbol: Standard Type
L: Long Type

Seal symbol

No symbol: Snap ring
UU: Seal attached on both ends
U: Single seal

■ Installation Procedure

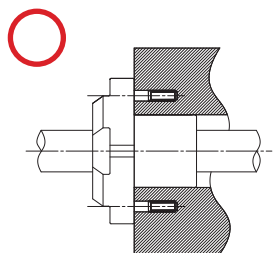


Figure 1 Installation of External Cylinder with Spigot Joint

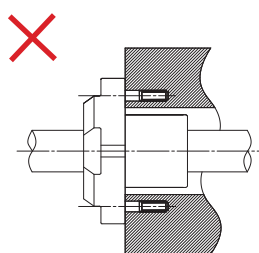


Figure 2 Installation Only with Flange

■ 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.

THK Linear Bushing Flange Type LMJK/LMJK-L

Precautions on use

● Handling

- Disassembling 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 to form 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 performance 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 specification/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.

● Although great care has been taken in the production of this catalog, THK will not take any responsibility for damage resulting from typographical errors or omissions.

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For export of THK products as single items, contact THK in advance.

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