

Linear Motion Ball Bearing

Structure and Features

- THZ线性轴承由外圈、钢球、保持架和端环组成，保持架能将钢球的球在循环轨道中，将保持架固定在外圈中。
- 这些零件组装在一起使轴承具有最佳的功能。
- 外圈经热处理后，具有足够的硬度，从而保证其足够的行走寿命和满意的承载能力。
- 保持架用钢或尼龙制作，用户可根据使用条件从中选择。
- The THZ linear motion bearing consists of an outer cylinder, ball retainer, balls and two end rings. The ball retainer which holds the balls in the recirculating tracks is held inside the outer cylinder by end rings.

- These parts are assembled to optimize their required functions.
- The outer cylinder is maintained sufficient hardness by heat treatment, therefore it ensures the bushings projected travel life and satisfactory durability.
- The ball retainer is made from steel or resin. The steel retainer has high rigidity obtained by heat treatment. The user can select the optimum type for meeting the users service conditions.

1. 高精度和刚性 High Precision and Rigidity

THZ线性轴承外圈是精制的坚固的外圆柱形，保持架为轧制钢板或具有工业强度的尼龙制成。

The THZ linear motion bearing is produced from a solid steel outer cylinder. Also the linear motion bearing incorporates either a precision all steel hardened stainless steel retainer or an industrial strength resin retainer.

2. 易于安装 Ease of Assembly

普通型的直线轴承可以作任何方向安装，仅使用轴为支撑便可精确地工作。安装表面易于加工，THZ还提供能安装各种类型直线轴承的各种各样的轴承座，给设计和安装提供了方便。

The standard type of THZ linear motion bearing can be loaded from any direction. Precision control is possible using only one shaft supporter, and the mounting surface can be machined easily. THZ also provides a variety of housings for all types of slide bushings offering convenience of design and assembly.

3. 易于更换 Ease of Replacement

由于直线轴承尺寸标准化和高加工精度，故每一套轴承都具有互换性。由于磨损和损坏而更换轴承是方便的。


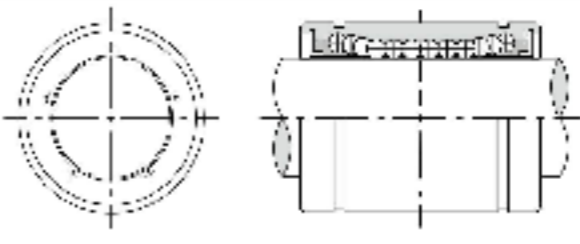

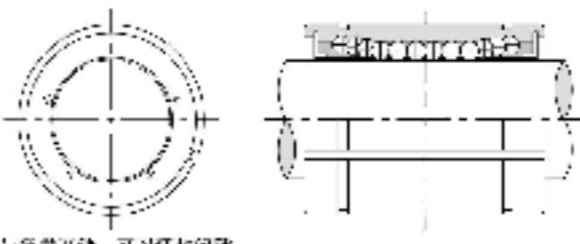

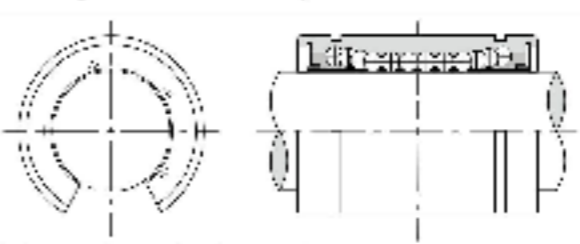

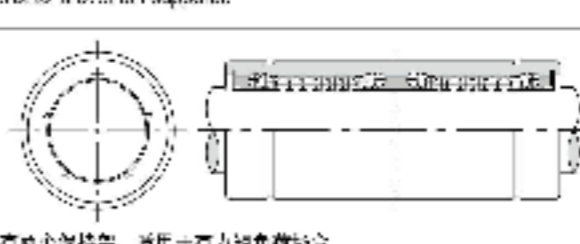

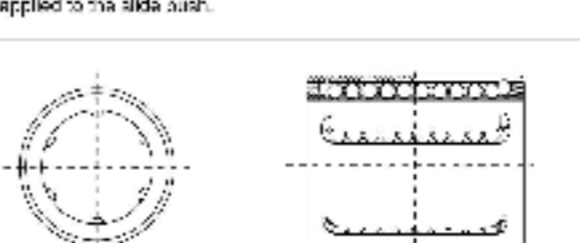
THZ Linear motion bearing of each type are completely interchangeable because of their standardized dimensions and strict precision control. Replacement because of wear or damage is therefore easy and accurate.

4. 品种齐全 Variety of Types

THZ直线轴承型号齐全，有普通型、闭锁调整型、开口型、加宽型和带法兰型。用户可以根据需要从中选择。

THZ offers a full line of linear motion bearing: the standard, integral single-retainer slotted type, the clearance adjustable type and the open, double-retainer, and flanged types. The user can choose from among these according to the application requirements to be met.

Type of Linear Motion Ball Bearings

| 类型 Type | 结构 Description | 材料 Material | | 所在页码 Dimension table page | | |
|---|--|----------------------|-----------------|------------------------------|------------|------------|
| | | 外圈 Outer cylinder | 保持架 Retainer | LM Series | LME Series | LMB Series |
| 标准型 Standard Type  |  封闭式外圈 Closed type outside cylinder. | 钢 Steel | 钢 Steel | | | |
| 闭锁调整型 Adjustable Type  |  外圈带开缝，可以调整间隙 This type has a slot in the outside cylinder. This design allows for clearance adjustment. | 钢 Steel | 钢 Steel | | | |
| 开口型 Open Type  |  去掉一球轨道，使导轨支撑可以通过 One ball circuit is removed to allow an opening slot to fit over all supports. | 钢 Steel | 钢 Steel | | | |
| 加宽型 Double-Wide Type  |  有两个保持架，适用于有方向负载场合 This type has two retainers in the outside cylinder. This structure is useful when moment loads are applied to the slide bush. | 钢 Steel | 钢 Steel | | | |
| 冲压外型 Pressing Outer Race Type  |  外圈是冲压的 Outer race is pressing | 钢 Steel | 钢 Steel | | | |

Type number format

| 类型 Type | LM | 25 | L | UU | AJ |
|--------------------------------|---|----|---|----|----|
| LM | 公制，亚洲应用广泛 Metric dimension series most widely used in Asia | | | | |
| LME | 公制，主要在欧洲使用 Metric dimension series generally used in Europe | | | | |
| LMB | 英制，主要在美洲使用 Inch dimension series used mainly in America | | | | |
| 公称特征 Nominal Shell Diameter | | | | | |
| 双列 Double type | | | | | |
| 符号 Symbol | 代表意义 Specification | | | | |
| 不标 No entry | 标准型 Standard type | | | | |
| L | 加长型 Double type | | | | |
| 符号 Symbol | 代表意义 Specification | | | | |
| 不标 No entry | 标准型 Standard type | | | | |
| U | 单密封 Seals on one side | | | | |
| UU | 双密封 Seals on both side | | | | |
| 符号 Symbol | 代表意义 Specification | | | | |
| 不标 No entry | 标准型 Standard type | | | | |
| AJ | 可调节型 Adjustable type | | | | |
| OP | 开口型 Open type | | | | |

Tolerance

●THZ直线轴承有普通型和精密型两种，在样本中有标注。需要注明的是对于间隙调整型（—AJ）和开口型（—OP）的轴承其沟槽磨削的公差是在切口之前测量的。

●The THZ linear motion ball bearing are divided in a high class and precision class, indicated in the dimension tables. Note that precision of inscribed circle diameters and outside diameters for the clearance adjustable type (—AJ) and the open type (—OP) indicates the value obtained before the corresponding type is subjected to cutting process.

Load Rating and Life Expectancy

●直线轴承的额定寿命可以根据轴承的额定动载荷和工作条件利用下式计算：

●The rated life (L) of a slide bush can be obtained from the following equation with the basic dynamic load rating and the load applied to the slide bush:

$$L = \left(\frac{F_N \cdot (1 - f_c) \cdot C}{F} \right)^3 \cdot 50 \quad (1)$$

L: 额定寿命 Rated life (hr)
C: 基本额定动载荷 Basic dynamic load rating (N)
F: 工作载荷 Working load (N)
f_c: 载荷系数 Load coefficient

●直线轴承的时间寿命可以根据每行程行程距离进行计算。
●如果行程长度、行程次数恒定，则时间寿命可用下式求出。
●The lifespan (L) of a slide bush in hours can be obtained by calculating the traveling distance per unit time.
●The lifespan can be obtained from the following equation if the stroke length and the number of strokes are constant:

$$L = \left(\frac{L \cdot 10^3}{2 \cdot f_s \cdot n \cdot 60} \right) \quad (2)$$

L: 行程长度 Stroke length (mm)
f_s: 行程次数 Number of strokes per minute (spm)
n: 额定动载荷 Basic dynamic load rating (N)

Relation between ball circuits and load rating

●THZ直线轴承的球组数在圆周上是均匀分布的，负荷在圆周上作用的位置不同则轴承的额定载荷也不同。产品样本上的额定载荷是负荷正对着一组球组的数值。如果负荷作用在两组球组正中时，则额定载荷会大一些。下表列出了不同球组数的额定载荷的各种情况：

●The THZ linear motion ball bearing include ball circuits that are spaced equally and circumferentially. The load rating varies according to the loaded position of the circumference. The value in the dimension table indicates the load rating when the load is placed on top of one ball circuit. If the THZ slide bush is used with two ball circuits loaded uniformly, the load rating will be greater. The following table shows the values by the number of ball circuits in each case:

表1 Table 1

| 球组数 Number of rows | 3 | 4 | 5 | 6 | 8 |
|-----------------------|-----------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| 作用位置 Row position | | | | | |
| 额定载荷 Load ratio | Q ₁ /Q ₁ =1 | Q ₁ /Q ₁ =1.414 | Q ₁ /Q ₁ =1.463 | Q ₁ /Q ₁ =1.280 | Q ₁ /Q ₁ =1.115 |

Sample Calculations

①根据下列条件计算轴承额定寿命：
Obtaining the rated life (and life span L) of the KENT slide bush used in the following conditions:

轴承型号 Side bush: LMPD
行程长度 Stroke length: 50mm
每分钟往复数 Number of strokes per minute: 50次/分 (spm)
每转轴承额定载荷 Load per bush: 490N

从产品样本中查得LM-20额定动载荷为882N。额定寿命用下式计算。
The basic dynamic load rating of the side bush is 882N from the dimension table. From equation (1), therefore, the rated life L is obtained as follows:

$$L = \left(\frac{F_N \cdot (1 - f_c) \cdot C}{F} \right)^3 \cdot 50 \quad f_c = f_r + f_a + f_w = 1.0$$

$$= \left(\frac{882}{490} \right)^3 \cdot 50 = 292 \text{ hr}$$

根据式(2)，时间寿命计算如下：
From equation (2), the lifespan L is obtained as follows:

$$L = \frac{L \cdot 10^3}{2 \cdot f_s \cdot n \cdot 60} = \frac{292 \times 10^3}{2 \times 0.05 \times 50 \times 60} = 670 \text{ hr}$$

②根据下列条件计算行程距离：
Obtaining the traveling distance L of the slide bush used in the following conditions:

行程长度 Stroke length: 150mm
行程速度 Traveling speed: 10米/分 (mm/min)
往复次数 Number of strokes per minute: 5次/分 (spm)
额定寿命 Lifespan: 10,000小时 (hr)
寿命系数 Life span factor: 0.81

根据式(1)，行程距离可以从额定寿命中求出。
From equation (1), the traveling distance with the lifespan is obtained as follows:

$$L = 2 \times f_s \cdot n \times 60 \times L_s = 6,300 \text{ cm}$$

根据式(2)，额定动载荷计算如下：
From equation (2), the basic dynamic load rating is obtained as follows:

$$C = \frac{F}{\left(\frac{L}{50} \right)^{\frac{1}{3}}} \cdot P = 1,402 \text{ N}$$

假设使用双排球，每排两球，即双列双排球。
Assume the following with a pair of shells each with two side bushes:

$$f_c = 0.81, \quad f_r = f_a = f_w = 1$$

结果从样本中查得VCO系列满足额定动载荷的要求。
As a result, LVCO is selected from the dimension table as the KENT slide bush type satisfying the value of C.

Clearance and Fit

●当一款标准型的直线轴承装配到轴上时，间隙不合适会导致轴承过早地磨损、失效或运行不平稳，调整型开口型直线轴承则可以控制外径尺寸的轴承运行，可以调整其间隙。然而过大的间隙调整会增加外圈的变形，影响精度和寿命。因此轴承与轴之间的间隙，外径与轴承套孔之间的间隙应根据使用条件来决定。表2为推荐的数值。

●When a standard-type THZ slide bush is used with a shaft, inadequate clearance adjustment may cause early bush failure and/or poor, rough travelling. The clearance adjustable slide bush and

open slide bush can be clearance adjusted when assembled in the housing which can control the outside cylinder diameter. However, too much clearance adjustment increases the deformation of the outside cylinder, to affect its precision and life. Therefore, the appropriate clearance between the bush and shaft, and clearance between the bush and housing are required according to the application. Table 2 shows recommended fit of the bush.

表2 Table 2

| 板型 Model | 类别 Division | 轴 Shaft | | 轴承座 Housing | |
|----------|-----------------|-----------------|----------------------|----------------|----------------|
| | | 一般配合 Normal fit | 紧配合 Transitional fit | 较松配合 Loose fit | 较紧配合 Tight fit |
| LM | High class | g6 | h6 | H7 | J7 |
| LMB | Precision class | g5 | h5 | H6 | J6 |
| LMF | High class | h6 | j6 | H7 | J7 |

注：间隙可以为零，也可以为负值，需注意运行情况。 Note: The clearance may be zero or negative, Please attention the movement.

Shaft and Housing

●为了使直线轴承发挥最佳的性能，必须使用高精度的轴和轴承座。
●To optimize performance of the THZ slide bush, high precision of the shaft and housing is required.

1. 轴 Shaft

THZ直线轴承的沟槽与轴的表面是点接触，因此轴的尺寸、公差、表面粗糙度和硬度极大的影响轴承运行性能，轴的生产应注意以下几点：

The rolling balls in the THZ slide bush are in point contact with the shaft surface. Therefore, the shaft dimensions, clearance, surface finish, and hardness greatly affect the travelling performance of the bush. The shaft should be manufactured with due attention to the following points:

1) 因为表面粗糙度极大的影响运行的平稳性，因此轴表面粗糙度应达到 Ra0.3的最好。

Since the surface finish critically affects smooth rolling of balls, grind the shaft at 1.5 S or better.

2) 轴硬度应达到HRc 60-64，硬度低于HRc 60会明显地降低寿命，故而降低了承载能力。另一方面，硬度超过HRc 64，会加速轴承钢球的磨损。

The case hardness of the shaft is HRC 60 to 64. Hardness less than HRC 60 decreases the life considerably, and hence reduces the permissible load. On the other hand, hardness over HRC 64 accelerates ball wear.

3) 对可调整型型和开口型直线轴承，其轴的外径应尽可能地接近产品样

本中规定的标准公差等级的下限，不得使轴的尺寸处于公差的上限。

The shaft diameter for the clearance adjustable slide bush and open slide bush should as much as possible be of the lower value of the inscribed circle diameter in the specification table. Do not set the shaft diameter to the upper value.

4) 零间隙和负间隙会使摩擦力显著增加。如果负间隙过大，加速了外圈的变形，从而降低轴承的寿命。

Zero clearance or negative clearance increases the frictional resistance slightly. If the negative clearance is too tight, the deformation of the outside cylinder will become larger to shorten the bush life.

5) THZ直线轴承在尺寸公差、表面粗糙度和硬度方面需严格控制，是与直线轴承相同的理想轴。详见本手册轴部分。

The THZ side bush is an ideal bush side bush, manufactured in due consideration of dimensional tolerance, surface finish, and hardness. For details, refer to the section on side shafts.

2. 轴承座 Housing

我们轴承座有不同材质，加工方法和安装方法可供用户选择。对于这些特殊配合和形状因素。

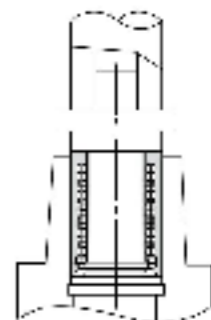
We provide a wide range of housings differing in design, machining and mounting. For the fitness and shape of housings, see Table 2 and the following section on mounting.

Mounting

●将直线轴承装入到轴承座孔中，不要推打两端的挡套(挡套圈)，而是先用手或工具将一端轻轻推入(见图1)。轴承安装到轴承座中之后再仔细地将另一端推入，注意不要碰击钢球。如果同时使用平板平行旋转，则轴的平行度对保证轴承的平稳运行是非常重要的，一定要仔细安装。

●When inserting the slide bush into the housing, do not hit the slide bush on the side ring holding the retainer but apply the cylinder circumference with a proper jig and push the slide bush into the housing by hand or lightly knock it in. (See Fig. 1). After mounting the bush, be careful not to shock the balls. Note that, if two shafts are used in parallel, the parallelism is the most important factor to assure the smooth linear movement. Take care in setting the shafts.

Fig. 1



Examples of Mounting

●通常的安装方法是将轴承推入套孔时用力要均匀，然而我们建议尽量采用过松的配合，否则轴承的寿命会下降。

●图2-图4介绍了几种安装结构和固定方法供参考。

●The popular way to mount a slide bush is to insert it with an

appropriate interference. It is recommended, however, to make a loose fit in principle because otherwise precision is not to be minimized. The following examples (Fig. 2 to 4) show assembling of the inserted bush in terms of designing and mounting for reference.

Fig. 2

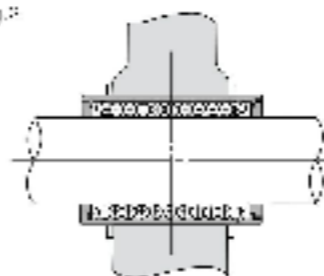


Fig. 3

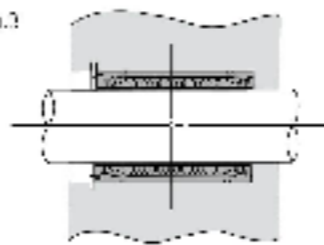


Fig. 4

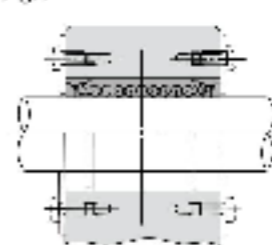


Fig. 5

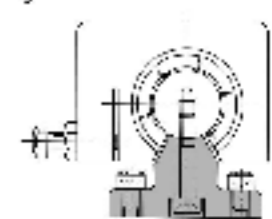
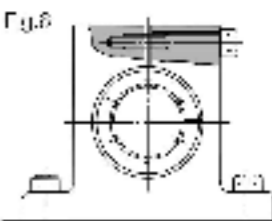
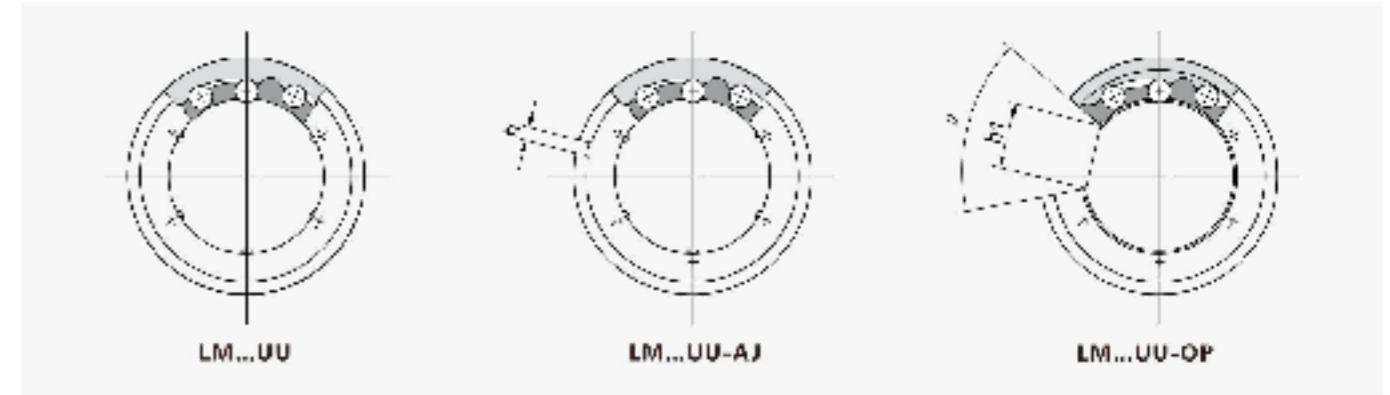


Fig. 6



Linear Motion Ball Bearing Series

LM...JU 尼龙保持架
该类型尺寸是公制的，广泛用于亚洲和其他国家。
LM...JU (Resin retainer)
This type is a metric dimension series
widely used in Asia and other countries.



| 公称轴径 Nominal shaft diameter mm | 标准号 LM...UU | 尼龙保持架 Resin retainer | | | | | | | | mm | 公差 Tolerance μm | |
|--------------------------------------|----------------|----------------------|-------------------|---------------------|----------------------|-------------------|-------------------|----------------------|-------------------|-----|----------------------------|------------|
| | | 钢球列数 Ball circuit | 重量 Weight (gf) | 保持架类型 LM...UU-AJ | 钢球列数 Ball circuit | 重量 Weight (gf) | 开口型 LM...UU-OP | 钢球列数 Ball circuit | 重量 Weight (gf) | | 精密 Precision | 普通 High |
| 2 | LM3UU | 4 | 1.35 | — | — | — | — | — | — | 3 | 0 | 8 |
| 4 | LM4UU | 4 | 1.9 | — | — | — | — | — | — | 4 | -5 | 8 |
| 5 | LM5UU | 4 | 2.7 | — | — | — | — | — | — | 5 | 0 | 8 |
| 6 | LM6UU | 4 | 3.8 | LM6UU-AJ | 4 | 7.5 | — | — | — | 6 | 0 | 8 |
| 8 | LM8UU | 4 | 10.4 | LM8UU-AJ | 4 | 13 | — | — | — | 8 | 0 | 8 |
| 8 | LM8UU | 4 | 15 | LM8UU-AJ | 4 | 14.7 | — | — | — | 8 | 0 | 8 |
| 10 | LM10UU | 4 | 29.5 | LM10JU-OP | 4 | 29 | LM10UU-OP | 3 | 23 | 10 | -6 | -9 |
| 12 | LM12UU | 4 | 31.5 | LM12JU-AJ | 4 | 31 | LM12UU-OP | 3 | 25 | 12 | 0 | 8 |
| 13 | LM13UU | 4 | 43 | LM13JU-AJ | 4 | 42 | LM13UU-OP | 3 | 34 | 13 | 0 | 8 |
| 16 | LM16UU | 5 | 69 | LM16JU-AJ | 5 | 68 | LM16UU-OP | 4 | 52 | 16 | 0 | 8 |
| 20 | LM20UU | 5 | 87 | LM20JU-AJ | 5 | 85 | LM20UU-OP | 4 | 69 | 20 | 0 | 8 |
| 25 | LM25UU | 6 | 220 | LM25JU-AJ | 6 | 216 | LM25UU-OP | 5 | 168 | 25 | 0 | 10 |
| 30 | LM30UU | 6 | 290 | LM30JU-AJ | 6 | 285 | LM30UU-OP | 5 | 213 | 30 | 0 | 10 |
| 35 | LM35UU | 6 | 390 | LM35JU-AJ | 6 | 384 | LM35UU-OP | 5 | 325 | 35 | 0 | 10 |
| 40 | LM40UU | 6 | 585 | LM40JU-AJ | 6 | 579 | LM40UU-OP | 5 | 500 | 40 | 0 | 12 |
| 50 | LM50UU | 6 | 1,580 | LM50JU-AJ | 6 | 1,550 | LM50UU-OP | 5 | 1,340 | 50 | 0 | 12 |
| 50 | LM60UU | 6 | 1,850 | LM60JU-AJ | 6 | 1,820 | LM60UU-OP | 5 | 1,610 | 60 | 0 | 12 |
| 60 | LM80UU | 6 | 4,420 | LM80JU-AJ | 6 | 4,300 | LM80UU-OP | 5 | 3,650 | 80 | -9 | -15 |
| 100 | LM100JU | 8 | 8,630 | LM100UU-AJ | 8 | 8,540 | LM100JU-OP | 6 | 7,200 | 100 | 0 | 0 |
| 120 | LM120JU | 8 | 15,000 | LM120UU-AJ | 8 | 14,900 | LM120JU-OP | 6 | 11,600 | 120 | -10 | -20 |
| 150 | LM150JU | 8 | 26,250 | LM150UU-AJ | 8 | 26,150 | LM150JU-OP | 6 | 19,700 | 150 | 0 | 0 |

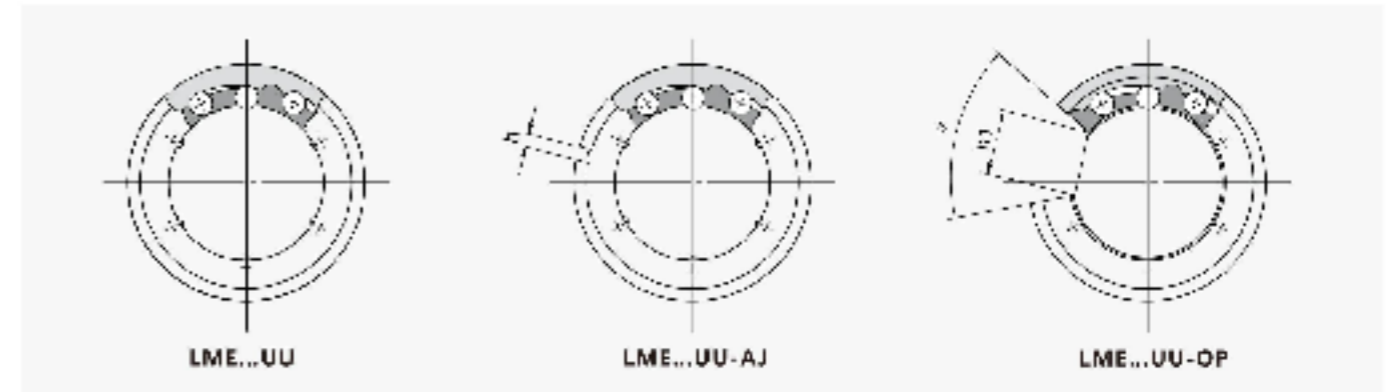
| 主要尺寸和公差 Major dimensions and tolerance | | | | | | | | | | | 偏心 Eccentricity μm | | 最大径向游隙 Radial clearance (Max) μm | | 额定负荷 Basic load rating | |
|--|------|-----|------|-------|------|---|----------------|----------------|----------------|----------|-------------------------------|---------|---|-------------------|------------------------|--|
| D | 公差 | L | 公差 | B | 公差 | W | D ₁ | h ₁ | h ₂ | θ | 精密 Precision | 普通 High | 最大径向游隙 (Max) μm | 动态负荷 Dynamic Co N | 静态负荷 Static Co N | |
| 7 | 0 | 10 | 0 | — | — | — | — | — | — | — | 4 | 8 | — | 69 | 105 | |
| 8 | 0 | 12 | 0 | — | — | — | — | — | — | — | 4 | 8 | — | 68 | 127 | |
| 10 | -2 | 15 | -120 | 10.2 | — | — | — | — | — | — | — | — | — | 107 | 206 | |
| 12 | 0 | 18 | — | 13.5 | — | — | — | — | — | — | — | — | — | 206 | 265 | |
| 15 | -1 | 27 | — | 11.5 | — | — | — | — | — | — | — | — | — | 176 | 216 | |
| 16 | 0 | 24 | — | 17.5 | — | — | — | — | — | — | — | — | — | 274 | 352 | |
| 19 | 0 | 29 | 0 | 27 | — | — | — | — | — | — | 0 | 12 | — | 372 | 540 | |
| 21 | 0 | 30 | -200 | 23 | — | — | — | — | — | — | 0 | 12 | — | 510 | 764 | |
| 22 | 0 | 32 | — | 23 | — | — | — | — | — | — | — | — | — | 510 | 784 | |
| 26 | 0 | 37 | — | 26.5 | — | — | — | — | — | — | — | — | — | 774 | 1,130 | |
| 32 | 0 | 42 | — | 30.5 | — | — | — | — | — | — | — | — | — | 882 | 1,470 | |
| 40 | -1.5 | 59 | — | 41 | — | — | — | — | — | — | 10 | 15 | — | 980 | 1,570 | |
| 45 | 0 | 64 | — | 44.5 | — | — | — | — | — | — | — | — | — | 1,570 | 2,740 | |
| 52 | 0 | 70 | 0 | 49.5 | — | — | — | — | — | — | — | — | — | 1,670 | 3,140 | |
| 60 | -2.9 | 80 | 300 | 60.5 | — | — | — | — | — | — | 12 | 20 | — | 2,150 | 4,020 | |
| 80 | 0 | 100 | — | 74 | — | — | — | — | — | — | — | — | — | 3,920 | 7,940 | |
| 90 | 0 | 110 | — | 85 | — | — | — | — | — | — | — | — | — | 4,700 | 10,000 | |
| 120 | 2.2 | 140 | — | 105.5 | — | — | — | — | — | — | 17 | 25 | — | 7,350 | 16,000 | |
| 150 | 0 | 175 | 0 | 125.5 | — | — | — | — | — | — | — | — | — | 14,100 | 34,000 | |
| 180 | -2.5 | 200 | -400 | 158.6 | — | — | — | — | — | — | 20 | 30 | — | 15,400 | 40,000 | |
| 210 | -2.5 | 240 | — | 170.6 | -400 | — | — | — | — | — | 25 | 40 | -25 | 21,100 | 54,000 | |

| 密封型 Seal type: | None | No entry | Viscous |
|----------------|------|----------|--------------------|
| LM20UU | — | — | Seal on one side |
| — | — | — | Seal on both sides |

国际单位: 1N=0.102kgf
SI UNIT: 1N=0.102kgf

Linear Motion Ball Bearing Series

LME...UU 树脂保持架
 该类尺寸是公制的，广泛用于欧洲。
 LME...UU (Resin retainer)
 This type is a metric dimension series
 generally used in Europe.



| 公称轴径 Nominal shaft diameter mm | 树脂保持架 Resin retainer | | | | | | | | | 公差 Tolerance μm | | |
|--------------------------------------|----------------------|----------------------|-------------------|----------------------|----------------------|-------------------|--------------------|----------------------|-------------------|----------------------------|-----------------|------------|
| | 标准型 LME...UU | 钢球列数 Ball circuit | 重量 Weight (gf) | 保持架类型 LME...UU-AJ | 钢球列数 Ball circuit | 重量 Weight (gf) | 开口型 LME...UU-OP | 钢球列数 Ball circuit | 重量 Weight (gf) | mm | 精度 Precision | 公差 High |
| 3 | LME3LU | 4 | 1.25 | — | — | — | — | — | — | 3 | — | — |
| 4 | LME4LU | 4 | 1.3 | — | — | — | — | — | — | 4 | — | — |
| 5 | LME5LU | 4 | 1.1 | LME5LU-AJ | 4 | 10 | — | — | — | 5 | — | +8 0 |
| 8 | LME8LU | 4 | 20 | LME8LU-AJ | 4 | 18.5 | — | — | — | 8 | — | — |
| 10 | LME10LU | 4 | 29.5 | LME10LU-AJ | 4 | 29 | LME10LU-OP | 3 | 73 | 10 | — | — |
| 12 | LME12LU | 4 | 41 | LME12LU-AJ | 4 | 40 | LME12LU-OP | 3 | 32 | 12 | — | — |
| 16 | LME16LU | 5 | 57 | LME16LU-AJ | 5 | 56 | LME16LU-OP | 4 | 44 | 16 | — | 15 |
| 20 | LME20LU | 5 | 81 | LME20LU-AJ | 5 | 80 | LME20LU-OP | 4 | 75 | 20 | — | -1 |
| 25 | LME25LU | 6 | 215 | LME25LU-AJ | 6 | 212 | LME25LU-OP | 5 | 181 | 25 | — | +11 -1 |
| 30 | LME30LU | 6 | 325 | LME30LU-AJ | 6 | 320 | LME30LU-OP | 5 | 272 | 30 | — | — |
| 40 | LME40LU | 6 | 705 | LME40LU-AJ | 6 | 594 | LME40LU-OP | 5 | 600 | 40 | — | — |
| 50 | LME50LU | 6 | 1,130 | LME50LU-AJ | 6 | 1,113 | LME50LU-OP | 5 | 970 | 50 | — | +12 -2 |
| 60 | LME60LU | 6 | 2,030 | LME60LU-AJ | 6 | 2,030 | LME60LU-OP | 5 | 1,590 | 60 | — | — |

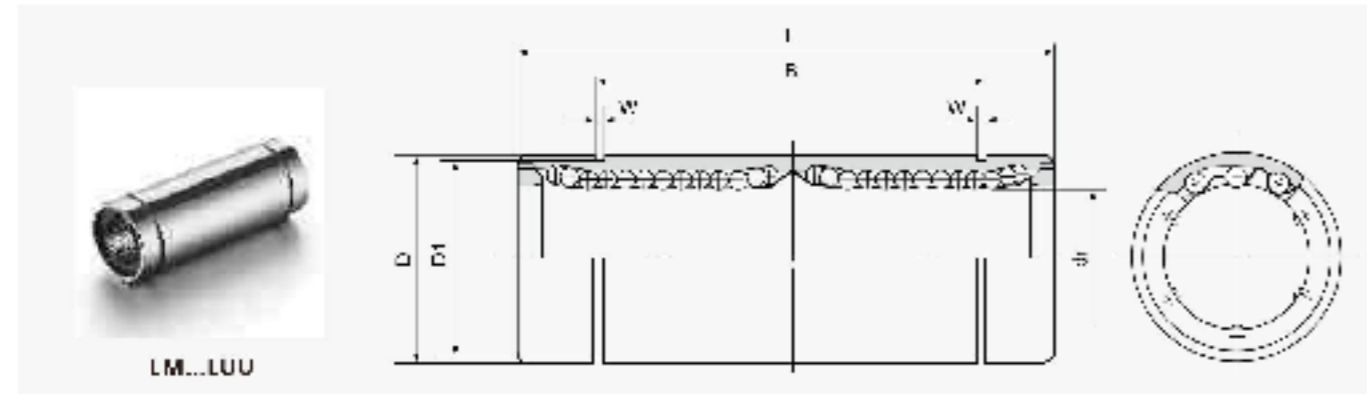
| 密封型 Seal type | 无密封 U | 单侧密封 UU | 双侧密封 UU |
|---------------|----------|------------|------------|
| LME20LU | — | — | — |

| 主要尺寸和公差 Major dimensions and tolerance | | | | | | | | | | | 最大径向间隙 Radial clearance (Max) μm | 额定负荷 Basic load rating | |
|--|----------------------------------|---------|----------------------------------|---------|----------------------------------|---------|----------------------|---------|---------|---------|---|-------------------------------------|-------------------------|
| D mm | 公差 Tolerance μm | L mm | 公差 Tolerance μm | B mm | 公差 Tolerance μm | w mm | D ₁ mm | h mm | h mm | e mm | | 偏心 Eccentricity μm | 动态负荷 Dynamic Co N |
| 7 | — | 10 | 0 | — | — | — | — | — | — | — | 10 | 69 | 105 |
| 8 | 0 | 12 | -120 | — | — | — | — | — | — | — | — | 88 | 127 |
| 12 | -8 | 22 | — | 14.5 | — | 1.1 | 11.5 | 1 | — | — | — | 206 | 265 |
| 16 | — | 25 | — | 16.5 | — | 1.1 | 15.2 | 1 | — | — | — | 265 | 402 |
| 19 | — | 29 | 0 | 22 | 0 | 1.3 | 18 | 1 | 6.8 | 60° | 17 | 172 | 549 |
| 22 | 0 | 32 | -200 | 22.9 | 200 | 1.3 | 21 | 1.5 | 7.5 | 78° | — | 510 | 784 |
| 26 | -9 | 36 | — | 24.9 | — | 1.3 | 24.9 | 1.5 | 10 | 78° | — | 578 | 892 |
| 32 | — | 45 | — | 31.5 | — | 1.6 | 30.3 | 2 | 10 | 60° | — | 862 | 1370 |
| 40 | 0 | 58 | — | 44.1 | — | 1.85 | 37.5 | 2 | 12.5 | 60° | 15 | 980 | 1570 |
| 47 | -11 | 68 | — | 52.1 | 0 | 1.85 | 44.5 | 2 | 12.5 | 50° | — | 1570 | 2740 |
| 62 | 0 | 80 | -300 | 60.6 | 300 | 2.15 | 59 | 3 | 16.8 | 50° | — | 2160 | 4020 |
| 75 | 13 | 100 | — | 77.6 | — | 2.65 | 72 | 3 | 21 | 50° | 17 | 3820 | 7940 |
| 90 | 0 | 125 | 0 | 101.7 | 0 | 3.15 | 86.5 | 3 | 27.2 | 54° | 20 | 4700 | 9800 |

国际单位: 1N=0.102kgf
 SIUNIT: 1N=0.102kgf

Linear Motion Ball Bearing Series

LM...LUU 尼龙保持架
 该类型尺寸是公制的，广泛用于亚洲和其它国家。
 LM...LUU (Resin retainer)
 This type is a metric dimension series
 widely used in Asia and
 other countries.



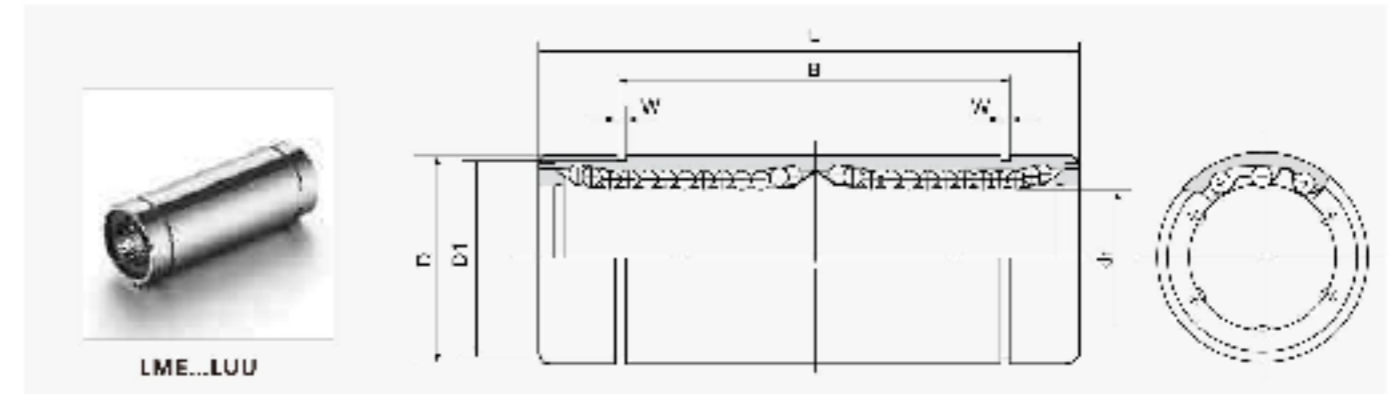
| 公称轴径 Nominal shaft diameter mm | 标准型 LM...LUU | 钢球 列数 Ball circuit | 主要尺寸和公差 Major dimensions and tolerance | | | | | | | 额定负荷 Basic load rating | | 重量 Weight (gf) | | |
|--------------------------------------|-----------------|--------------------------|--|----------------------------------|----------------------------------|----------------------------------|---------|----------------------|--------------------------|------------------------|-----------------------|----------------------|--------|-------|
| | | | dr mm 公差 Tolerance μm | D mm 公差 Tolerance μm | L mm 公差 Tolerance μm | B mm 公差 Tolerance μm | W mm | D ₂ mm | 偏心 Eccentricity μm | 动负荷 Dynamic Co-N | 静负荷 Static Co-N | | | |
| 6 | LM6LUU | 4 | 5 | 12 | C | 35 | 27 | 0 | 1.1 | 11.5 | 1% | 324 | 540 | 15 |
| 8 | LM8LUU | 4 | 8 | 15 | -13 | 45 | 35 | 0 | 1.1 | 14.5 | 1% | 491 | 787 | 31 |
| 10 | LM10LUU | 4 | 10 | 16 | C | 55 | 44 | 0 | 1.3 | 18 | 1% | 588 | 1,100 | 62 |
| 12 | LM12LUU | 4 | 12 | 16 | C | 67 | 45 | 0 | 1.3 | 20 | 1% | 813 | 1,570 | 80 |
| 13 | LM13LUU | 4 | 13 | 23 | -15 | 81 | 55 | 0 | 1.3 | 22 | 1% | 813 | 1,570 | 90 |
| 16 | LM16LUU | 5 | 16 | 28 | C | 70 | 55 | 0 | 1.6 | 27 | 1% | 1,250 | 2,350 | 145 |
| 20 | LM20LUU | 5 | 20 | 32 | C | 80 | 61 | 0 | 1.6 | 30.5 | 1% | 1,400 | 2,740 | 180 |
| 25 | LM25LUU | 6 | 25 | 40 | C | 112 | 82 | 0 | 1.85 | 35 | 2% | 1,560 | 3,140 | 210 |
| 30 | LM30LUU | 6 | 30 | 43 | C | 128 | 89 | 0 | 1.85 | 45 | 2% | 2,190 | 3,190 | 480 |
| 35 | LM35LUU | 6 | 35 | 47 | C | 135 | 92 | 0 | 2.1 | 49 | 2% | 2,650 | 6,270 | 790 |
| 40 | LM40LUU | 6 | 40 | 50 | C | 151 | 101 | -100 | 2.1 | 57 | 2% | 3,330 | 8,810 | 1,120 |
| 50 | LM50LUU | 6 | 50 | 55 | C | 192 | 145 | -100 | 2.6 | 76.5 | 2% | 6,080 | 13,800 | 3,100 |
| 60 | LM60LUU | 6 | 60 | 65 | C | 234 | 170 | -100 | 3.1 | 86.5 | 3% | 7,550 | 20,000 | 3,500 |

密封型 Seal type:
 LU/20LUU

| | | | |
|----|------|---------|--------------------|
| 不标 | 不特密封 | No seal | No seal |
| UU | 双密封 | UU | Seal on both sides |

国际单位: 1N=0.102kgf
 SIUNIT: 1N=0.102kgf

LME...LUU 尼龙保持架
 该类型尺寸是公制的，广泛用于欧洲。
 LME...LUU (Resin retainer)
 This type is a metric dimension series
 generally used in Europe.



| 公称轴径 Nominal shaft diameter mm | 标准型 LME...LUU | 钢球 列数 Ball circuit | 主要尺寸和公差 Major dimensions and tolerance | | | | | | | 额定负荷 Basic load rating | | 重量 Weight (gf) | | |
|--------------------------------------|------------------|--------------------------|--|----------------------------------|----------------------------------|----------------------------------|---------|----------------------|--------------------------|------------------------|-----------------------|----------------------|--------|-------|
| | | | dr mm 公差 Tolerance μm | D mm 公差 Tolerance μm | L mm 公差 Tolerance μm | B mm 公差 Tolerance μm | W mm | D ₂ mm | 偏心 Eccentricity μm | 动负荷 Dynamic Co-N | 静负荷 Static Co-N | | | |
| 8 | LME8LUU | 4 | 8 | +9 | 16 | 3 | 46 | 0 | 1.1 | 15.2 | 1% | 421 | 804 | 40 |
| 12 | LVE12LUU | 4 | 12 | -1 | 22 | 0 | 61 | 0 | 1.3 | 21 | 1% | 813 | 1,570 | 80 |
| 16 | LVE16LUU | 5 | 16 | +11 | 26 | -12 | 88 | 300 | 1.3 | 24.9 | 1% | 921 | 1,790 | 115 |
| 20 | LVE20LUU | 5 | 20 | -1 | 32 | 0 | 80 | 0 | 1.6 | 30.5 | 1% | 1,470 | 2,740 | 180 |
| 25 | LVE25LUU | 5 | 25 | +12 | 40 | -13 | 112 | 0 | 1.85 | 38 | 1% | 1,570 | 3,140 | 430 |
| 30 | LVE30LUU | 5 | 30 | -2 | 47 | 0 | 104.2 | 0 | 1.85 | 44.5 | 1% | 2,500 | 5,490 | 815 |
| 40 | LVE40LUU | 5 | 40 | 0 | 62 | 0 | 151 | -400 | 2.15 | 58 | 2% | 3,430 | 8,640 | 1,400 |
| 50 | LVE50LUU | 5 | 50 | +16 -4 | 75 | -15 | 192 | 0 | 2.6 | 72 | 2% | 6,080 | 15,000 | 2,320 |
| 60 | LVE60LUU | 5 | 60 | 0 | 90 | 0 | 269 | 0 | 3.15 | 86.5 | 3% | 7,550 | 20,000 | 3,520 |

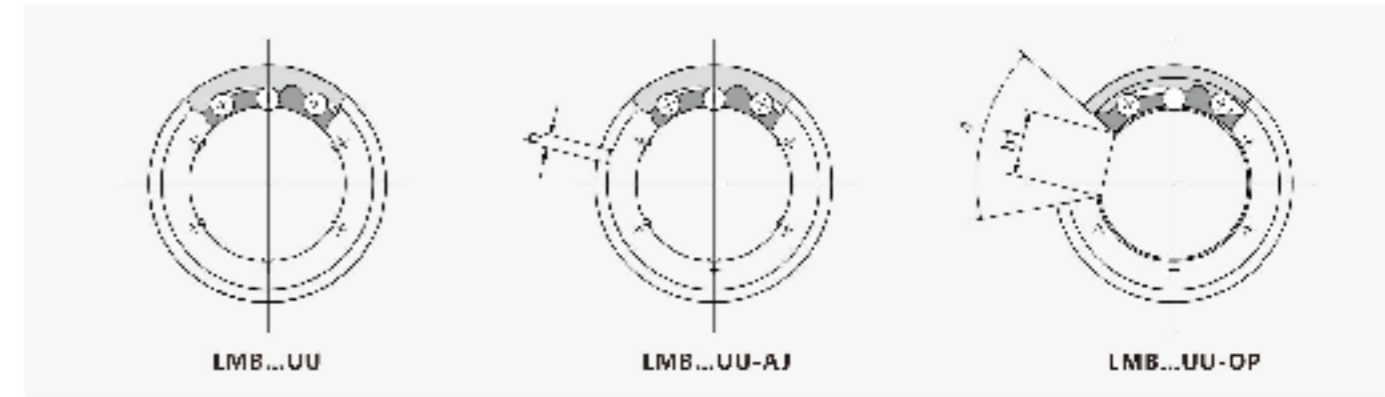
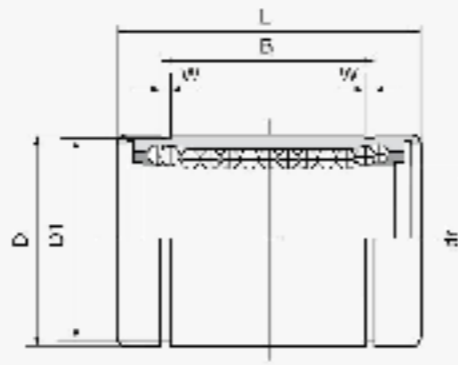
国际单位: 1N=0.102kgf
 SIUNIT: 1N=0.102kgf

密封型 Seal type:
 LME20LUU

| | | | |
|----|------|---------|--------------------|
| 不标 | 不特密封 | No seal | No seal |
| UU | 双密封 | UU | Seal on both sides |

Linear Motion Ball Bearing Series

LMB...UU 尼龙保持架
该类型尺寸是英制的，主要是美国采用。
LMB...UU (Resin retainer)
This type is an inch dimension series
mainly used in the America.



| 公称轴径 Nominal shaft diameter Inch/mm | 尼龙保持架 Resin retainer | | | | | | | | | 公差 Tolerance Inch/mm | | |
|---|----------------------|----------------------|-------------------|----------------------|----------------------|-------------------|--------------------|----------------------|-------------------|----------------------|----------------------|------------|
| | 标准型 LMB...UU | 钢球列数 Ball circuit | 重量 Weight (gf) | 尼龙保持架 LMB...UU-AJ | 钢球列数 Ball circuit | 重量 Weight (gf) | 开口型 LMB...UU-OP | 钢球列数 Ball circuit | 重量 Weight (gf) | Inch mm | 公差 Tolerance Inch/mm | |
| | | | | | | | | | | | 精度 Precision | 公差 High |
| 1/4 6.350 | LMB4 | 4 | 8.0 | LMB4-AJ | 4 | 7.5 | — | — | — | .2500 6.350 | 0 | 0 |
| 3/8 9.525 | LMB8UU | 4 | 14 | LMB8UU-AJ | 4 | 13.5 | — | — | — | .3750 9.525 | -0.0025 | 0 |
| 1/2 12.700 | LMB16UU | 4 | 37 | LMB16UU-AJ | 4 | 36.5 | LMB16UU-OP | 3 | 28 | .5000 12.700 | 0 | 0 |
| 5/8 15.875 | LMB10LU | 4 | 76 | LMB10LU-AJ | 4 | 74 | LMB10LU-OP | 3 | 57 | .8250 15.875 | 0 | 0 |
| 3/4 19.050 | LMB12LU | 5 | 85 | LMB12LU-AJ | 5 | 83 | LMB12LU-OP | 4 | 78 | .7500 19.050 | -0.0030 | 0 |
| 1 25.400 | LMB16LU | 6 | 200 | LMB16LU-AJ | 6 | 193 | LMB16LU-OP | 5 | 170 | 1.0000 25.400 | 0 | 0 |
| 1-1/4 31.750 | LMB20LU | 6 | 440 | LMB20LU-AJ | 6 | 433 | LMB20LU-OP | 5 | 370 | 1.2500 31.750 | 0 | 0 |
| 1-1/2 38.100 | LMB24LU | 6 | 670 | LMB24LU-AJ | 6 | 663 | LMB24LU-OP | 5 | 570 | 1.5000 38.100 | -0.0030 | 0 |
| 2 50.800 | LMB32LU | 6 | 1,140 | LMB32LU-AJ | 6 | 1,120 | LMB32LU-OP | 5 | 900 | 2.0000 50.800 | 0 | 0 |

| 主要尺寸和公差 Major dimensions and tolerance | | | | | | | | | | | 偏心 Eccentricity Inch/mm | | 最大径向间隙 Radial clearance (Max) Inch/mm | | 额定负荷 Basic load rating | | |
|--|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|------------------|----------------|----------------|----------------|-------------------------------|-----------------|---|-----------------|---------------------------|--------------------|-------------------|
| Inch mm | D | | L | | B | | W | D ₁ | h | h ₁ | e | 公差 Precision | 公差 High | 公差 Precision | 公差 High | 动态 Dynamic Co N | 静态 Static Co N |
| | 公差 Tolerance Inch/mm | 公差 Tolerance Inch/mm | 公差 Tolerance Inch/mm | 公差 Tolerance Inch/mm | 公差 Tolerance Inch/mm | 公差 Tolerance Inch/mm | | | | | | | | | | | |
| .5000 12.700 | ±.0015 | .7500 19.050 | 0 | .5110 12.98 | 0 | .0300 0.992 | .4637 11.905 | .04 1 | — | — | — | — | — | — | — | 205 | 265 |
| .6250 15.875 | 0 | .8750 22.225 | -0.008 | .6368 16.15 | 0 | .0340 0.962 | .5680 14.435 | .04 1 | — | — | .0002 | .0005 | — | — | — | 225 | 314 |
| .8750 22.225 | 0 | 1.2500 31.750 | 0 | .9825 24.48 | 0 | .0450 1.168 | .8200 20.825 | .06 1.5 | .04 7.8375 | 30° | 0 | 12 | — | — | — | 510 | 794 |
| 1.1250 28.575 | 0 | 1.5000 38.100 | -0.002 | 1.1039 28.04 | 0 | .0550 1.422 | 1.0590 26.899 | .08 1.5 | .08 9.525 | 30° | 0 | 12 | — | — | — | 774 | 1180 |
| 1.2500 31.750 | 0 | 1.6250 41.275 | 0 | 1.1857 29.61 | 0 | .0550 1.422 | 1.1780 29.670 | .08 1.5 | .08 11.1125 | 60° | .0004 | .0008 | — | — | — | 882 | 1370 |
| 1.5625 39.688 | 0 | 2.2500 57.150 | 0 | 1.7517 44.57 | 0 | .0670 1.727 | 1.6637 42.306 | .06 1.5 | .06 14.2675 | 50° | 10 | 15 | — | — | — | 980 | 1570 |
| 2.0000 50.800 | 0 | 2.6250 66.675 | -0.012 | 2.0047 50.92 | 0 | .0670 1.727 | 1.8650 47.004 | .10 2.5 | .08 15.875 | 50° | .0005 | .0008 | — | — | — | 1,570 | 2,740 |
| 2.3750 60.325 | 0 | 3.0000 76.200 | 0 | 2.4118 61.26 | 0 | .0670 1.727 | 2.2580 56.970 | .12 3 | .08 19.05 | 30° | 12 | 20 | — | — | — | 2,180 | 4,020 |
| 3.0000 76.200 | 0 | 4.0000 101.600 | -0.010 | 3.1917 81.07 | 0 | .1020 2.616 | 2.8570 72.685 | .12 3 | .10 25.40 | 50° | 17 | 25 | — | — | — | 3,620 | 7,940 |

密封 Seal type:
LMB20LU

| 公称轴径 Nominal shaft diameter | 密封 Seal type | 无密封 No entry | 有密封 No seals |
|--------------------------------|-----------------|-----------------|--------------------|
| U | 密封 | U | Seal on one side |
| UU | 密封 | UU | Seal on both sides |

单位单位: 1N=0.225lbs
1kg=2.205 lbs
SI UNIT: 1N=0.225lbs
1kg=2.205 lbs

Linear Motion Ball Bearing Series

LMB...LUU 尼龙保持架

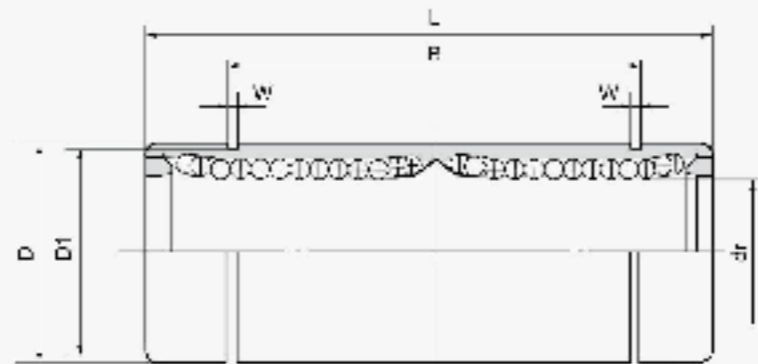
该类型尺寸是英制的，主要是美国采用。

LMB...LUU (Resin retainer)

This type is an inch dimension series mainly used in the America.



LMB...LUU



LMB...LUU

| 公称轴径 Nominal shaft diameter Inch/mm | 轴长 LMB...LUU | 重量 Weight (gf) | 钢球列数 Ball circuit | 主要尺寸和公差 Major dimensions and tolerance | |
|---|-----------------|----------------------|----------------------|--|----------------------------------|
| | | | | Inch/mm | 公差 Tolerance Inch/ μ m |
| 1/4 6.350 | LMB4L | 17.5 | 3' | .2500 6.350 | 0 |
| 3/8 9.525 | LMB6LUU | 23 | 4 | .3750 9.525 | .00040 |
| 1/2 12.700 | LMB8LUU | 83 | 4 | .5000 12.700 | 0 -10 |
| 5/8 15.875 | LMB10LUU | 180 | 4 | .6250 15.875 | 0 |
| 3/4 19.050 | LMB12LUU | 195 | 5 | .7500 19.050 | -.00050 |
| 1 25.400 | LMB16LUU | 410 | 6 | 1.0000 25.400 | 0 -12 |
| 1 1/4 31.750 | LMB20LUU | 820 | 6 | 1.2500 31.750 | 0 |
| 1 1/2 38.100 | LMB24LUU | 1250 | 6 | 1.5000 38.100 | -.00060 0 |
| 2 50.800 | LMB32LUU | 1350 | 6 | 2.0000 50.800 | 0 -15 |

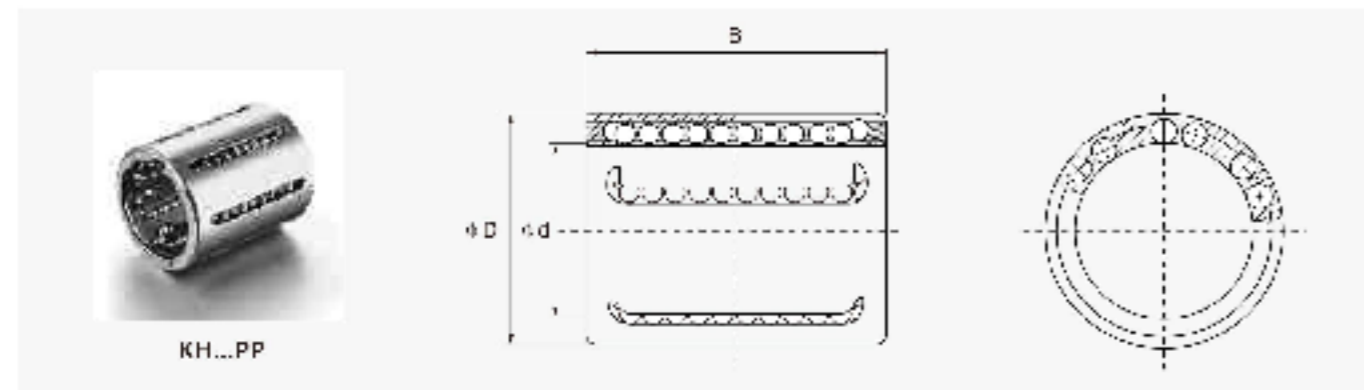
| 主要尺寸和公差 Major dimensions and tolerance | | | | | | | | 额定负荷 Basic load rating | | | |
|--|----------------------------------|-------------------|----------------------------------|-------------------|----------------------------------|----------------|------------------|---------------------------|-------------------------------------|-------------------------|------------------------|
| Inch/mm | D | | L | | B | | W | D ₁ | 偏心 Eccentricity Inch/ μ m | 动态负荷 Dynamic Co N | 静态负荷 Static Co N |
| | 公差 Tolerance Inch/ μ m | Inch/mm | 公差 Tolerance Inch/ μ m | Inch/mm | 公差 Tolerance Inch/ μ m | Inch/mm | | | | | |
| .5000 12.700 | 公差 Tolerance Inch/ μ m | .3750 9.525 | 公差 Tolerance Inch/ μ m | 1.0220 25.955 | 公差 Tolerance Inch/ μ m | .0360 0.912 | .1687 4.280 | .0008 15 | 523 | 533 | |
| .6250 15.875 | 0 | .5000 12.700 | 0 | 1.2716 32.298 | -.012 | .0360 0.912 | .5687 14.435 | | | | |
| .8750 22.225 | -.00050 | 2.3750 60.325 | -.012 | 1.9250 48.885 | -.012 | .0450 1.168 | .9208 23.553 | .0008 15 | 613 | 1,570 | |
| 1.1250 28.575 | 0 | 2.8750 71.434 | 0 | 2.2079 56.080 | 0 | .0550 1.422 | 1.2540 31.888 | | | | |
| 1.2500 31.750 | 0 | 3.0625 78.561 | -.016 | 2.3014 58.216 | -.016 | .0550 1.422 | 1.1760 29.870 | .0008 20 | 1,370 | 2,740 | |
| 1.5625 39.625 | 0 | 4.2625 108.744 | 0 | 3.5049 89.129 | 0 | .0879 1.727 | 1.4687 37.308 | | | | |
| 2.0000 50.800 | 0 | 5.0000 127.000 | -.016 | 4.0034 101.839 | -.016 | .0879 1.727 | 1.8655 47.604 | .0010 25 | 2,520 | 5,040 | |
| 2.3750 60.325 | 0 | 5.6875 144.163 | 0 | 4.6236 122.519 | 0 | .0879 2.181 | 2.2583 58.670 | | | | |
| 3.0000 76.200 | 公差 Tolerance Inch/ μ m | 7.7500 196.850 | -.100 | 6.3834 162.138 | -.100 | .1029 2.616 | 2.9375 72.085 | .0012 30 | 6,090 | 15,300 | |

密封型 Seal type
LMB30LUU

| 密封型 | Non-seal | Non-seal | Seal on one side | Seal on both sides |
|-----|----------|----------|------------------|--------------------|
| U | U | U | U | U |
| III | III | III | III | III |

国际单位: 1N=0.225lbs
1kg=2.205 lbs
SI单位: 1N=0.225lbs
1kg=2.205 lbs

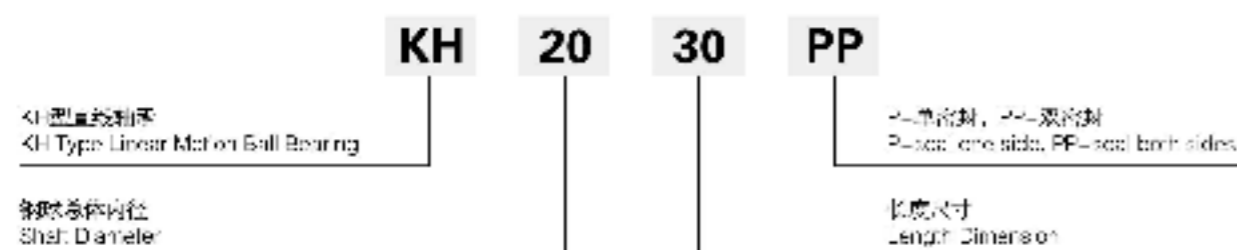
Linear Motion Ball Bearing Series



KH...PP

| 型号 Designation | 主要尺寸 Major dimensions (mm) | | | 额定负荷 Basic load rating | | 重量 Weight (g) |
|-------------------|----------------------------|----------|----|------------------------|---------------------|------------------|
| | ϕd | ϕD | B | 动态负荷 Dynamic Co N | 静态负荷 Static Co N | |
| KH0622PP | 6 | 12 | 22 | 400 | 239 | 7 |
| KH0824PP | 8 | 15 | 24 | 430 | 280 | 12 |
| KH1028PP | 10 | 17 | 28 | 500 | 370 | 14.5 |
| KH1228PP | 12 | 19 | 28 | 620 | 510 | 18.5 |
| KH1428PP | 14 | 21 | 28 | 620 | 520 | 20.5 |
| KH1630PP | 16 | 24 | 30 | 800 | 620 | 27.5 |
| KH2030PP | 20 | 28 | 30 | 890 | 790 | 32.6 |
| KH2540PP | 25 | 35 | 40 | 1,580 | 1,670 | 66 |
| KH3050PP | 30 | 43 | 50 | 2,600 | 2,700 | 85 |
| KH4060PP | 40 | 52 | 60 | 4,400 | 4,450 | 162 |
| KH5070PP | 50 | 62 | 70 | 5,600 | 6,300 | 252 |

Type number format



Flanged Linear Motion Ball Bearing

- T1Z 法兰型直线轴承的外圈上有一个垂直的安装平台，故安装时不需轴套，从而大大地降低了成本。
- 法兰型直线轴承具有足够的刚性，它能承受标准型直线轴承所能承受的同等负荷。法兰经过精密加工，与轴承外圈的配合精度很高，具有良好的互换性，维修更换十分方便。
- The T1Z flanged linear motion ball bearing is equipped with a perpendicular mounting surface as part of the outer casing. Therefore, it does not require a housing thus providing high cost efficiency.

- Flanged linear motion ball bearings have sufficient rigidity to support equivalent loads of standard ball bearings. Incorporated in this design is a finely machined flange and outer diameter with exact perpendicularity and excellent flange interchangeability to simplify replacement.

Structure and Features

- 这种结构提供了一种不同的安装方法，它不需要轴套安装，也不需要把轴承压入到轴套中。
- T1Z 法兰型直线轴承有标准型的，也有加长型的，有法兰放在端部的，也有法兰放在中间的，法兰放在中间的可以更好地承受外加负荷。
- 不需要单独的轴承座
- 结构紧凑
- 足够的刚性
- 更换时仍能保持高精度

- This design enables various mounting methods other than conventional allow blocks and press fit ball bushings.
- T1Z flanged linear motion ball bearings include single retainer and rounded flange as well as double retainer and round end to be ten mounted flange type with excellent moment load capacity.
- No housing required
- Compact design
- Excellent rigidity
- High accuracy upon replacement

Flanged Linear Motion Ball Bearings Type Number Format

| 类型 Type | 说明 |
|------------|---|
| LM | 公制，亚洲应用广泛 Metric dimension series most widely used in Asia |
| LME | 公制，主要是欧洲使用 Metric dimension series generally used in Europe |
| LMB | 英制，主要是美洲使用 Inch dimension series used mainly in America |

| 法兰类型 Flange shape | 代号 Symbol | 代表意义 Specification |
|----------------------|--------------|-------------------------------------|
| 圆形法兰 | F | 圆法兰 Round flange |
| 方形法兰 | K | 方法兰 Square flange |
| 中间圆法兰 | FM | 中间圆法兰 Centered round flange |
| 中间方法兰 | KM | 中间方法兰 Centered square flange |
| 两面法兰 | H | 两面法兰 Two side out flange |
| 中间两面法兰 | HM | 中间两面法兰 Two side out centered flange |
| 导向型法兰 | FP | 导向型法兰 Pilot type |
| 导向方法兰 | KP | 导向方法兰 Pilot square flange |
| 导向两面法兰 | HP | 导向两面法兰 Pilot two side out flange |

| 密封 Seal | 符号 Symbol | 代表意义 Specification |
|------------|--------------|-------------------------|
| 无密封 | △ | 不带密封 No seal |
| 密封 | UU | 双密封 Seals on both sides |

加长型 Double type

公称轴径 Nominal Shaft Diameter

Classifications of Flanged Linear Motion Ball Bearing No.(1)

| 结构 Design | 安装实例 Mounting example | 法兰类型 Flange type | 长度 Length | 所在页码 Dimension table page | | |
|-------------------------------|--------------------------|---------------------|--------------|------------------------------|------------|------------|
| | | | | LM series | LME series | LMB series |
| 标准法兰型 Blended Flanged type | | LMF LMCF LMBF | Single | | | |
| | | LMK LMEK LMBK | Single | | | |
| | | LMI | Single | | | |

| 结构 Structure | 安装实例 Mounting example | 法兰类型 Flange type | 长度 Length | 所在页码 Dimension table page | | | | |
|--|--------------------------|---|--------------|------------------------------|------------|------------|--|--|
| | | | | LM series | LME series | LMB series | | |
| 导向法兰型 Pilot Flanged type | | LMFP | Single | | | | | |
| | | LMKP | Single | | | | | |
| | | LMI P | Single | | | | | |
| 加长法兰型 Double-Wide Flanged type | | LMF--L LMEF--L LMBF--L | Double | | | | | |
| | | LMK--L LMEK--L LMBK--L | Double | | | | | |
| | | LMH--L LMEH--L | Double | | | | | |
| | | 加长导向法兰型 Double-Wide-Position--Pilot Flanged type | | LMFP--L | Double | | | |
| | | | | LMKP--L | Double | | | |
| | | | | LMHP--L | Double | | | |
| 加长中间法兰型 Double-Wide-Middle Flanged type | | LMFM--L LMEFM--L LMBFM--L | Double | | | | | |
| | | LMKM--L LMEKM--L LMBKM--L | Double | | | | | |
| | | LMHM--L | Double | | | | | |

Flanged Linear Motion Ball Bearing Series

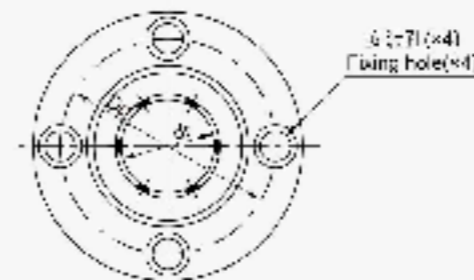
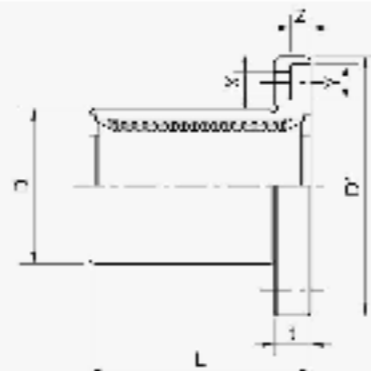
LMF(K)...UU 尼龙保持架
 该类尺寸是公司最广泛应用于亚洲和其他国家。
 LMF(K)...UU (Resin retainer)
 This type is a metric dimension series widely used in Asia and other countries.



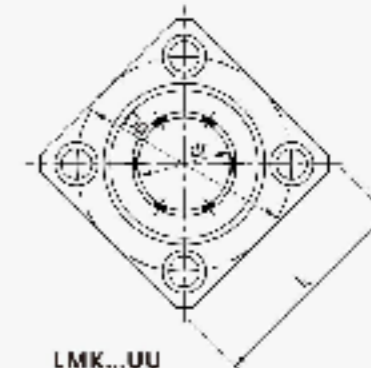
LMF...UU



LMK...UU



LMF...UU



LMK...UU

| 公称轴径 Nominal shaft diameter mm | 尼龙保持架 Resin retainer | | | | 主要尺寸和公差 Major dimensions and tolerance | | | | | |
|--------------------------------------|----------------------|---------------------|-----------------|---------------------|--|-----------------------|-----------------------|-----------------------|-----------------------|--|
| | 圆法兰 LMF...UU | 重量 Weight g/1 | 方法兰 LMK...UU | 重量 Weight g/1 | mm | D | | L | | |
| | | | | | | 公差 Tolerance μm | 公差 Tolerance μm | 公差 Tolerance μm | 公差 Tolerance μm | |
| 6 | LMF6UU | 24 | LMK6UU | 18 | 6 | 12 | 0 | 19 | ±300 | |
| 8 | LMF8UU | 32 | LMK8UU | 21 | 8 | 15 | 0 | 17 | | |
| 8 | LMF8UU | 37 | LMK8UU | 29 | 8 | 15 | -11 | 24 | | |
| 10 | LMF10UU | 72 | LMK10UU | 52 | 10 | 13 | 0 | 29 | 0 | |
| 12 | LMF12UU | 76 | LMK12UU | 57 | 12 | 21 | 0 | 30 | | |
| 13 | LMF13UU | 88 | LMK13UU | 72 | 13 | 23 | -13 | 32 | | |
| 15 | LMF15UU | 120 | LMK15UU | 104 | 15 | 29 | 0 | 37 | -200 | |
| 20 | LMF20UU | 180 | LMK20UU | 145 | 20 | 32 | 0 | 42 | | |
| 25 | LMF25UU | 340 | LMK25UU | 300 | 25 | 43 | -16 | 59 | | |
| 30 | LMF30UU | 470 | LMK30UU | 375 | 30 | 45 | 0 | 64 | 0 | |
| 35 | LMF35UU | 650 | LMK35UU | 580 | 35 | 52 | 0 | 70 | | |
| 40 | LMF40UU | 1,060 | LMK40UU | 890 | 40 | 63 | -12 | 80 | | |
| 50 | LMF50UU | 2,200 | LMK50UU | 2,000 | 50 | 83 | -10 | 100 | -300 | |
| 60 | LMF60UU | 3,000 | LMK60UU | 2,560 | 60 | 93 | 0 | 113 | | |
| 80 | LMF80UU | 5,800 | LMK80UU | 5,300 | 80 | 120 | -22 | 140 | | |
| 100 | LMF100UU | 10,600 | LMK100UU | 9,600 | 100 | 150 | 0 | 175 | -400 | |

| 主要尺寸和公差 Major dimensions and tolerance | | | | | | | 偏心 Eccentricity μm | 垂直度 Squareness μm | 额定负荷 Basic load rating | |
|--|---------|---------|----------|---------|---------|---------|--------------------------|-------------------------|---------------------------|------------------------|
| 法兰 Flange | | | | | | | | | 动态负荷 Dynamic C/N | 静态负荷 Static Co/N |
| Df mm | K mm | t mm | Dp mm | X mm | Y mm | Z mm | | | | |
| 26 | 22 | 5 | 20 | 3.5 | 5 | 3.1 | 12 | 12 | 206 | 255 |
| 32 | 25 | 5 | 24 | 3.5 | 5 | 3.1 | | | 178 | 216 |
| 37 | 26 | 5 | 24 | 3.5 | 5 | 3.1 | | | 274 | 332 |
| 40 | 30 | 6 | 29 | 4.5 | 7.5 | 4.1 | | | 372 | 549 |
| 42 | 32 | 6 | 32 | 4.5 | 7.5 | 4.1 | | | 510 | 794 |
| 43 | 34 | 6 | 33 | 4.5 | 7.5 | 4.1 | | | 510 | 781 |
| 46 | 37 | 6 | 38 | 4.5 | 7.5 | 4.1 | 15 | 15 | 774 | 1,160 |
| 54 | 42 | 8 | 43 | 5.5 | 9 | 5.1 | | | 882 | 1,370 |
| 62 | 50 | 8 | 51 | 5.5 | 9 | 5.1 | | | 980 | 1,570 |
| 74 | 58 | 10 | 60 | 6.5 | 11 | 6.1 | | | 1,570 | 2,740 |
| 82 | 64 | 10 | 67 | 6.5 | 11 | 6.1 | 20 | 20 | 1,670 | 3,140 |
| 96 | 75 | 13 | 78 | 9 | 14 | 8.1 | | | 2,130 | 4,320 |
| 116 | 92 | 13 | 98 | 9 | 14 | 8.1 | | | 3,820 | 7,340 |
| 134 | 108 | 18 | 112 | 11 | 17 | 11.1 | 25 | 25 | 4,700 | 10,000 |
| 164 | 138 | 18 | 142 | 11 | 17 | 11.1 | | | 7,350 | 18,000 |
| 200 | 170 | 20 | 175 | 14 | 20 | 12.1 | 30 | 30 | 14,100 | 34,800 |

| | | | |
|-----------|----------------|--------------|------------------------|
| 密封 Sealed | 不密封 Non-sealed | 无密封 No entry | 两侧密封 Sealed both sides |
| LMF20UU | LMF20UU | LMF20UU | LMF20UU |

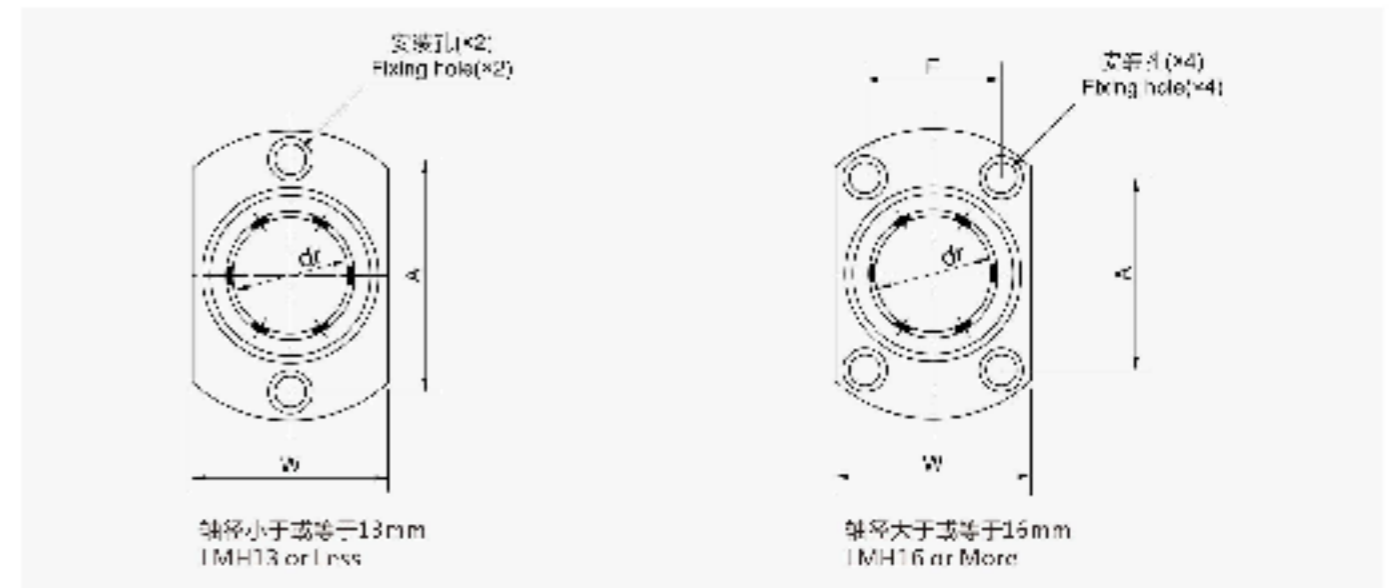
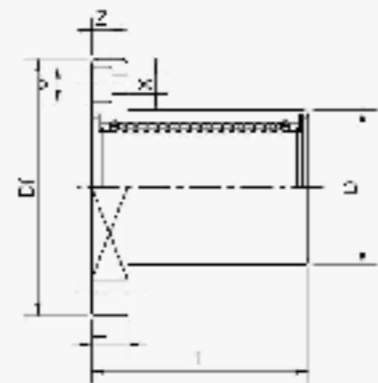
图例单位: 1N=0.102kgf
 SI UNIT: 1N=0.102kgf

Flanged Linear Motion Ball Bearing Series

LMH...UU 尼龙保持架
 该类尺寸是公制的，广泛应用于亚洲和其他国家。
 LMH...UU (Resin retainer)
 This type is a metric dimension series widely used in Asia and other countries.



LMH...UU



| 公称轴径 Nominal shaft diameter mm | 带法兰 LMH...UU | 重量 Weight (g) | 主要尺寸和公差 Major dimensions and tolerance | | | | | |
|--------------------------------------|-----------------|---------------------|--|-----------------------|-----|-----------------------|----|-----------------------|
| | | | dr | | D | | L | |
| | | | mm | 公差 Tolerance μm | mm | 公差 Tolerance μm | mm | 公差 Tolerance μm |
| 6 | LMH6UU | 21 | 6 | 0 | -2 | 0 | 19 | |
| 8 | LMH8UU | 25 | 8 | | -5 | -11 | 24 | -300 |
| 10 | LMH10UU | 64 | 10 | 0 | -9 | -13 | 29 | |
| 12 | LMH12UU | 60 | 12 | 9 | -11 | -13 | 30 | |
| 13 | LMH13UU | 81 | 13 | | -11 | -13 | 32 | 0 |
| 16 | LMH16UU | 112 | 16 | | -11 | -13 | 37 | -200 |
| 20 | LMH20UU | 167 | 20 | | -11 | -13 | 42 | |
| 25 | LMH25UU | 325 | 25 | 0 | -11 | -13 | 59 | 0 |
| 30 | LMH30UU | 369 | 30 | -10 | -11 | -13 | 64 | -300 |

注：所有LMH均为双密封。
 Note: All sizes of LMH type are sealed on both sides.

| 主要尺寸和公差 Major dimensions and tolerance | | | | | | | | 偏心 Eccentricity μm | 圆角度 Squariness μm | 额定负荷 Basic load rating | |
|--|---------|---------|---------|---------|---------|---------|---------|--------------------------|-------------------------|---------------------------|------------------------|
| 法兰 Flange | | | | | | | | | | 动态负荷 Dynamic C/N | 静态负荷 Static Co/N |
| Df mm | W mm | t mm | A mm | F mm | X mm | Y mm | Z mm | | | | |
| 28 | 18 | 5 | 20 | - | 3.5 | 6 | 3.1 | 12 | 12 | 205 | 265 |
| 32 | 21 | 5 | 24 | - | 3.5 | 6 | 3.1 | | | 274 | 300 |
| 40 | 25 | 6 | 28 | - | 4.5 | 7.5 | 4.1 | | | 372 | 513 |
| 42 | 27 | 6 | 32 | - | 4.5 | 7.5 | 4.1 | | | 510 | 704 |
| 43 | 29 | 6 | 33 | - | 4.5 | 7.5 | 4.1 | | | 510 | 784 |
| 48 | 34 | 8 | 37 | 22 | 4.5 | 7.5 | 4.1 | 15 | 15 | 774 | 1,180 |
| 54 | 38 | 8 | 38 | 24 | 5.5 | 9 | 5.1 | | | 882 | 1,370 |
| 52 | 46 | 8 | 40 | 32 | 5.5 | 9 | 5.1 | | | 580 | 1,570 |
| 52 | 46 | 8 | 40 | 32 | 5.5 | 9 | 5.1 | | | 580 | 1,570 |
| 74 | 51 | 10 | 48 | 35 | 6.6 | 11 | 6.1 | | | 1,570 | 2,740 |

国际单位: 1N=0.102kgf
 SI UNIT: 1N=0.102kgf

Flanged Linear Motion Ball Bearing Series

LMF(K)P...UU 尼龙保持架

该类型尺寸是公制的，广泛应用于亚洲和其他国家。

LMF(K)P...UU (Resin retainer)

This type is a metric dimension series

widely used in Asia and other

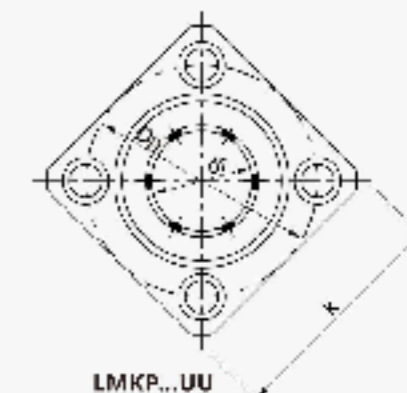
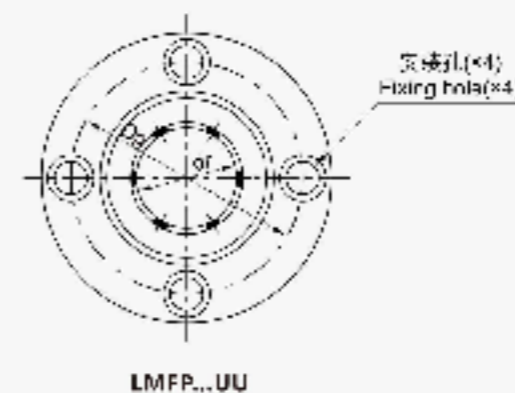
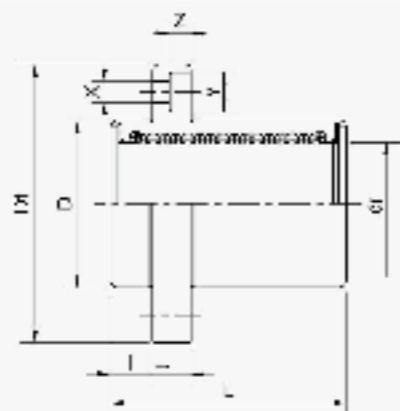
countries.



LMFP...UU



LMKP...UU



| 公称球径 Nominal shaft diameter mm | 导向固定盖 LMFP...UU | 重量 Weight [gf] | 导向方法盖 LMKP...UU | 重量 Weight [gf] | 主要尺寸和公差 Major dimensions and tolerance | | | | | |
|--------------------------------------|--------------------|----------------------|--------------------|----------------------|--|-----------------------|----|-----------------------|-----|----------------------------|
| | | | | | mm | dr | | D | | L 公差 Tolerance μm |
| | | | | | | 公差 Tolerance μm | mm | 公差 Tolerance μm | mm | |
| 6 | LMFP6UU | 24 | LMKP6UU | 18 | 6 | | 12 | 0 | 19 | ±300 |
| 8 | LMFP8UU | 37 | LMKP8UU | 28 | 8 | | 15 | -13 | 21 | |
| 10 | LMFP10UU | 72 | LMKP10UU | 52 | 10 | 0 | 19 | 0 | 29 | 0 |
| 12 | LMFP12UU | 76 | LMKP12UU | 57 | 12 | -8 | 21 | | 30 | |
| 13 | LMFP13UU | 88 | LMKP13UU | 72 | 13 | | 23 | -16 | 32 | -200 |
| 16 | LMFP16UU | 120 | LMKP16UU | 104 | 16 | | 28 | | 37 | |
| 20 | LMFP20UU | 180 | LMKP20UU | 145 | 20 | 0 | 32 | 0 | 42 | 0 |
| 25 | LMFP25UU | 340 | LMKP25UU | 300 | 25 | -10 | 40 | -19 | 59 | |
| 30 | LMFP30UU | 470 | LMKP30UU | 375 | 30 | | 45 | | 61 | 0 |
| 35 | LMFP35UU | 650 | LMKP35UU | 520 | 35 | 0 | 52 | 0 | 70 | |
| 40 | LMFP40UU | 1,080 | LMKP40UU | 890 | 40 | 12 | 60 | 22 | 80 | -300 |
| 50 | LMFP50UU | 2,200 | LMKP50UU | 2,000 | 50 | | 80 | | 100 | |
| 60 | LMFP60UU | 3,000 | LMKP60UU | 2,560 | 60 | 0 -5 | 90 | 0 -25 | 110 | |

注：所有LMFP/LMKP型均为双密封。

Note: All sizes of LMFP/LMKP type are sealed on both sides.

| 主要尺寸和公差 Major dimensions and tolerance | | | | | | | | 偏心 Eccentricity μm | 垂直度 Squareness μm | 额定负荷 Basic load rating | |
|--|----------|---------|---------|----------|---------|---------|---------|--------------------------|-------------------------|---------------------------|------------------------|
| 法兰 Flange | | | | | | | | | | 动态额定 Dynamic Co N | 静态额定 Static Co N |
| l mm | Df mm | K mm | t mm | Dp mm | X mm | Y mm | Z mm | | | | |
| 5 | 28 | 22 | 5 | 20 | 3.5 | 6 | 3.1 | 12 | 12 | 200 | 265 |
| 5 | 32 | 25 | 5 | 21 | 3.5 | 6 | 3.1 | | | 271 | 352 |
| 6 | 40 | 30 | 6 | 29 | 4.5 | 7.5 | 4.1 | | | 372 | 549 |
| 6 | 42 | 32 | 6 | 32 | 4.5 | 7.5 | 4.1 | | | 510 | 784 |
| 6 | 43 | 34 | 6 | 33 | 4.5 | 7.5 | 4.1 | | | 510 | 784 |
| 6 | 48 | 37 | 6 | 36 | 4.5 | 7.5 | 4.1 | | | 774 | 1,180 |
| 8 | 54 | 42 | 8 | 43 | 5.5 | 9 | 5.1 | 15 | 15 | 882 | 1,570 |
| 8 | 62 | 50 | 8 | 51 | 5.5 | 9 | 5.1 | | | 990 | 1,570 |
| 10 | 71 | 58 | 10 | 60 | 6.6 | 11 | 6.1 | | | 1,570 | 2,710 |
| 10 | 82 | 64 | 10 | 67 | 6.6 | 11 | 6.1 | | | 1,670 | 3,140 |
| 13 | 95 | 75 | 13 | 76 | 9 | 14 | 8.1 | 20 | 20 | 2,160 | 4,020 |
| 13 | 116 | 92 | 13 | 96 | 9 | 14 | 8.1 | | | 3,620 | 7,940 |
| 18 | 134 | 106 | 18 | 112 | 11 | 17 | 11.1 | 25 | 25 | 4,700 | 10,000 |

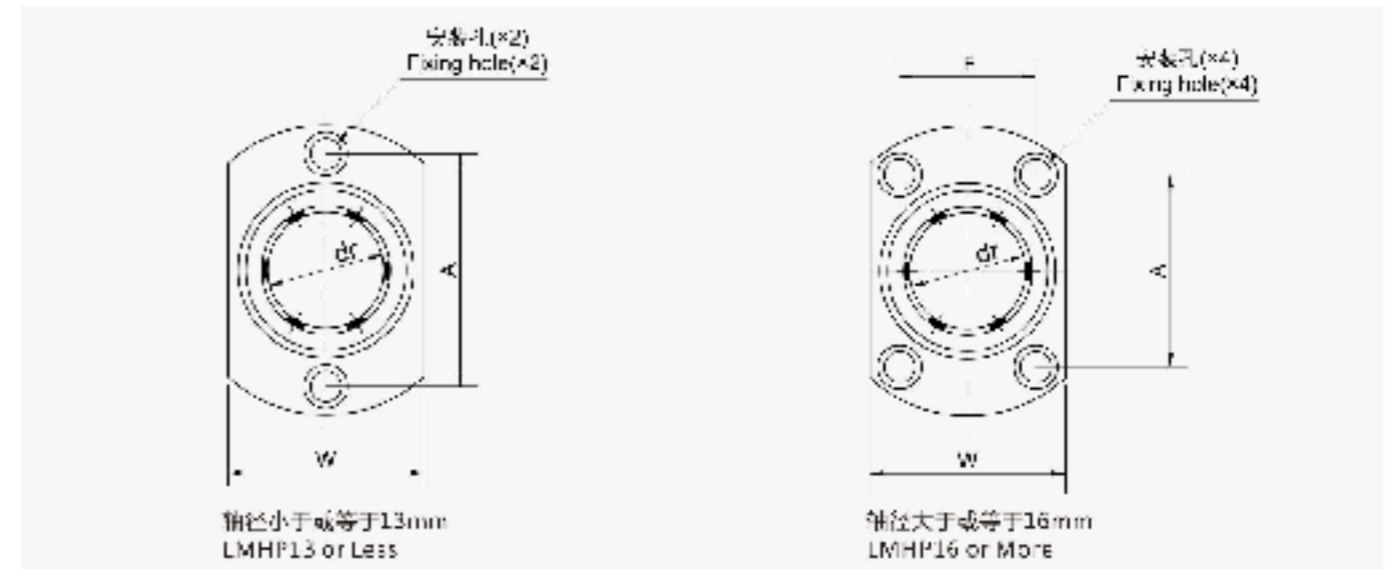
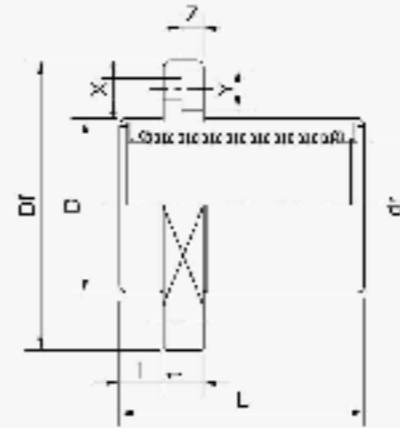
国际单位: 1N=0.102kgf
SI UNIT: 1N=0.102kgf

Flanged Linear Motion Ball Bearing Series

LMHP...UU 尼龙保持架
 该类尺寸是公制制，广泛应用于亚洲和其他国家。
 LMHP...UU (Resin retainer)
 This type is a metric dimension series
 widely used in Asia and other
 countries.



LMHP...UU



| 公称轴径 Nominal shaft diameter mm | 导向槽圆法兰 LMHP...UU | 重量 Weight (g) | 主要尺寸和公差 Major dimensions and tolerance | | | | | |
|--|---------------------|---------------------|--|-----------------------|----|-----------------------|----|-----------------------|
| | | | dr | | D | | L | |
| | | | mm | 公差 Tolerance μm | mm | 公差 Tolerance μm | mm | 公差 Tolerance μm |
| 6 | LMHP6UU | 21 | 6 | 0 | 12 | 0 | 19 | ±300 |
| 8 | LMHP8UU | 33 | 8 | 0 | 15 | -13 | 24 | |
| 10 | LMHP10UU | 64 | 10 | 0 | 19 | 0 | 29 | |
| 12 | LMHP12UU | 66 | 12 | -9 | 21 | 0 | 30 | 0 |
| 13 | LMHP13UU | 81 | 13 | 0 | 23 | -13 | 32 | |
| 16 | LMHP16UU | 112 | 16 | 0 | 26 | 0 | 37 | |
| 20 | LMHP20UU | 167 | 20 | 0 | 32 | 0 | 42 | ±200 |
| 25 | LMHP25UU | 325 | 25 | 0 | 40 | 0 | 59 | |
| 30 | LMHP30UU | 368 | 30 | -10 | 45 | -13 | 64 | |

| 主要尺寸和公差 Major dimensions and tolerance | | | | | | | | | | 偏心 Eccentricity μm | 垂直度 Squareness μm | 额定负载 Basic load rating | |
|--|----------|---------|---------|---------|---------|---------|---------|---------|-----------------------------------|--------------------------|-------------------------|-----------------------------------|--|
| 法兰 Flange | | | | | | | | | 动态负载 Dynamic C _N | | | 静态负载 Static Co _N | |
| l mm | Df mm | W mm | t mm | A mm | F mm | X mm | Y mm | Z mm | | | | | |
| 5 | 28 | 18 | 5 | 20 | - | 3.5 | 8 | 3.1 | 12 | 12 | 200 | 285 | |
| 5 | 32 | 21 | 5 | 24 | - | 3.5 | 8 | 3.1 | | | 274 | 332 | |
| 6 | 40 | 26 | 6 | 29 | - | 4.5 | 7.5 | 4.1 | | | 372 | 549 | |
| 6 | 42 | 27 | 6 | 32 | - | 4.5 | 7.5 | 4.1 | 15 | 15 | 510 | 794 | |
| 6 | 43 | 29 | 6 | 33 | - | 4.5 | 7.5 | 4.1 | | | 510 | 794 | |
| 6 | 48 | 34 | 6 | 31 | 22 | 4.5 | 7.5 | 4.1 | | | 774 | 1,160 | |
| 8 | 54 | 38 | 8 | 36 | 24 | 5.5 | 8 | 5.1 | 15 | 15 | 882 | 1,370 | |
| 8 | 62 | 46 | 8 | 40 | 32 | 5.5 | 8 | 5.1 | | | 990 | 1,570 | |
| 10 | 74 | 51 | 10 | 49 | 35 | 6.5 | 11 | 6.1 | | | 1,570 | 2,740 | |

注：所有LMHP型均为双密封。
 Note: All sizes of LMHP type are sealed on both sides.

国际单位: 1N=0.102kgf
 SJJNT: 1N≠0.102kgf

Flanged Linear Motion Ball Bearing Series

LMF(K)...LUU 尼龙保持架

该类型尺寸是公司的，广泛地用于亚洲和其他国家。

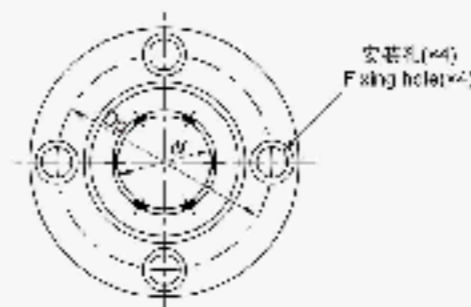
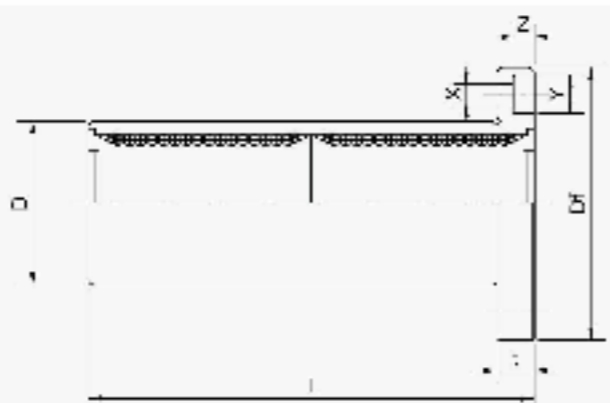
LMF(K)...LUU (Resin retainer)

This type is a metric dimension series widely used in Asia and other countries.

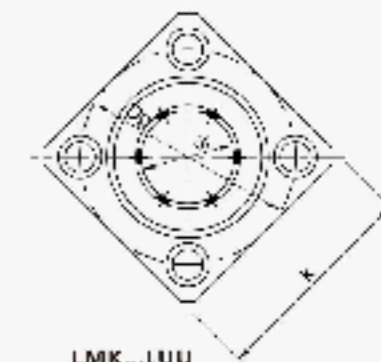


LMF...LUU

LMK...LUU



LMF...LUU



LMK...LUU

| 公称轴径 Nominal shaft diameter mm | 加长圆法兰 LMF...LUU | 重量 Weight (gf) | 加长方法兰 LMK...LUU | 重量 Weight (gf) | 主要尺寸和公差 Major dimensions and tolerance | | | | | |
|--------------------------------------|--------------------|----------------------|--------------------|----------------------|--|-----------------------|----|-----------------------|-----|-----------------------|
| | | | | | df | | D | | L | |
| | | | | | mm | 公差 Tolerance μm | mm | 公差 Tolerance μm | mm | 公差 Tolerance μm |
| 6 | LMF6LUU | 31 | LMK6LUU | 25 | 6 | | 12 | 0 | 35 | |
| 8 | LMF8LUU | 51 | LMK8LUU | 43 | 8 | | 15 | -13 | 45 | +300 |
| 12 | LMF12LUU | 98 | LMK12LUU | 78 | 12 | 0 | 19 | | 55 | |
| 12 | LMF12LUL | 110 | LMK12LUU | 90 | 12 | -10 | 21 | 0 | 57 | |
| 13 | LMF13LUU | 130 | LMK13LUU | 108 | 13 | | 23 | -16 | 61 | 0 |
| 18 | LMF18LUU | 190 | LMK18LUU | 165 | 18 | | 28 | | 70 | -300 |
| 23 | LMF23LUU | 260 | LMK23LUU | 225 | 23 | 0 | 32 | 0 | 80 | |
| 25 | LMF25LUU | 340 | LMK25LUU | 300 | 25 | -12 | 40 | -19 | 112 | |
| 33 | LMF33LUU | 680 | LMK33LUU | 580 | 33 | | 45 | | 123 | |
| 35 | LMF35LUU | 1,020 | LMK35LUU | 930 | 35 | 0 | 52 | 0 | 135 | 0 |
| 43 | LMF43LUU | 1,570 | LMK43LUU | 1,380 | 43 | 0 | 60 | 0 | 151 | -400 |
| 53 | LMF53LUU | 3,600 | LMK53LUU | 3,400 | 53 | -15 | 80 | -22 | 192 | |
| 63 | LMF63LUU | 4,500 | LMK63LUU | 4,000 | 63 | 0 -20 | 90 | 0 -25 | 209 | |

| 主要尺寸和公差 Major dimensions and tolerance | | | | | | | 偏心 Eccentricity μm | 平整度 Squareness μm | 额定负荷 Basic load rating | |
|--|---------|---------|----------|---------|---------|---------|--------------------------|-------------------------|---------------------------|------------------------|
| 法兰 Flange | | | | | | | | | 动态负荷 Dynamic C/N | 静态负荷 Static Co/N |
| Df mm | K mm | t mm | Dp mm | X mm | Y mm | Z mm | | | | |
| 26 | 22 | 5 | 20 | 3.5 | 6 | 3.1 | 15 | 15 | 323 | 529 |
| 32 | 26 | 6 | 24 | 3.5 | 6 | 3.1 | | | 431 | 784 |
| 40 | 30 | 6 | 29 | 4.5 | 7.5 | 4.1 | | | 583 | 1,100 |
| 42 | 32 | 6 | 32 | 4.5 | 7.5 | 4.1 | | | 613 | 1,570 |
| 43 | 34 | 6 | 33 | 4.5 | 7.5 | 4.1 | | | 613 | 1,570 |
| 46 | 37 | 6 | 36 | 4.5 | 7.5 | 4.1 | 20 | 20 | 1,220 | 2,350 |
| 54 | 47 | 8 | 43 | 5.5 | 9 | 5.1 | | | 1,420 | 2,740 |
| 62 | 50 | 6 | 51 | 5.5 | 9 | 5.1 | | | 1,580 | 3,140 |
| 74 | 58 | 10 | 60 | 6.6 | 11 | 6.1 | 25 | 25 | 2,430 | 5,490 |
| 82 | 64 | 10 | 67 | 6.6 | 11 | 6.1 | | | 2,650 | 6,270 |
| 96 | 75 | 13 | 78 | 9 | 14 | 8.1 | | | 3,420 | 8,240 |
| 116 | 92 | 13 | 98 | 9 | 14 | 8.1 | 30 | 30 | 6,090 | 16,900 |
| 134 | 108 | 18 | 112 | 11 | 17 | 11.1 | | | 7,550 | 20,000 |

密封型 Seal type
LMF20(L)U

无密封 不带密封 No entry
UU 密封型 Seal on both side

国际单位: 1N=0.102kgf
SI UNIT: 1N=0.102kgf

Flanged Linear Motion Ball Bearing Series

LMH...LUU尼龙保持架

该类型尺寸是公制的，广泛应用于亚洲和其他国家。

LMH...LUU (Resin retainer)

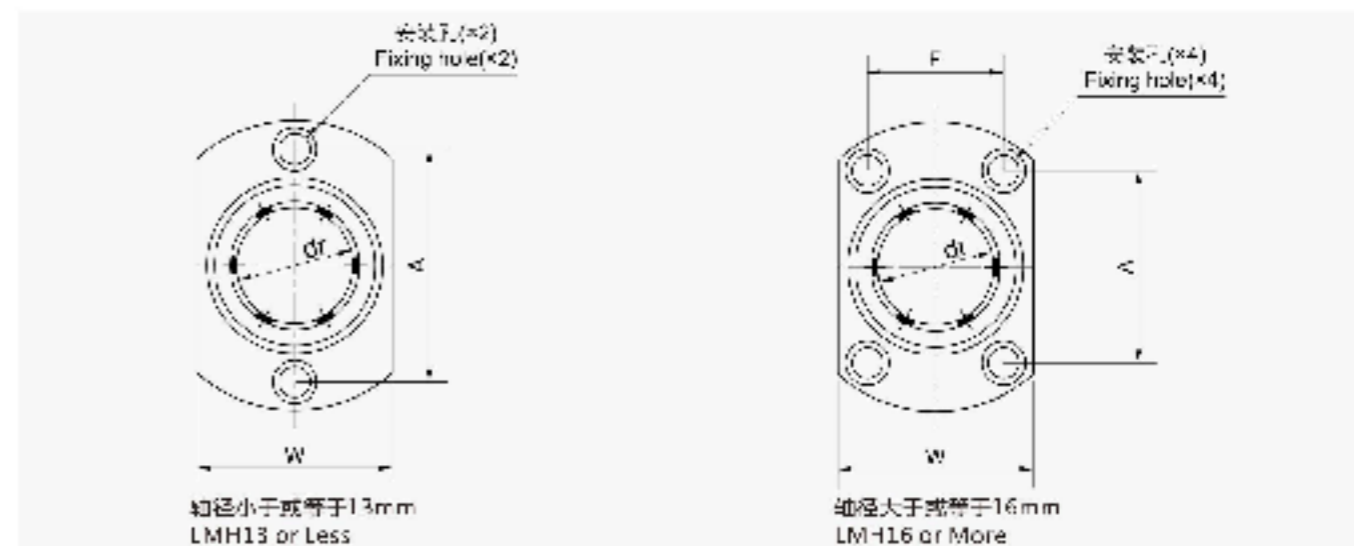
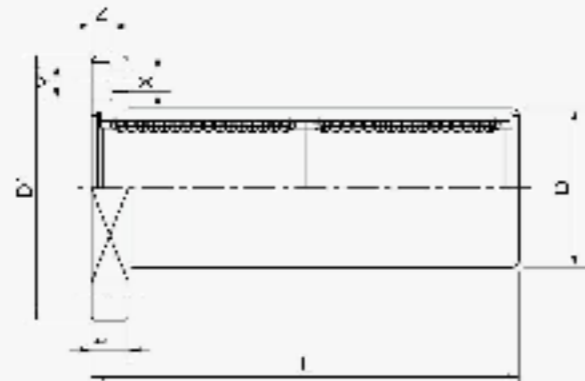
This type is a metric dimension series

widely used in Asia and other

countries.



LMH...LUU



| 公称轴径 Nominal shaft diameter mm | 加长轴径法兰 LMH...LUU | 重量 Weight (g) | 主要尺寸和公差 Major dimensions and tolerance | | | | | |
|--------------------------------------|---------------------|---------------------|--|-----------------------|----|-----------------------|-----|-----------------------|
| | | | dr | | D | | L | |
| | | | mm | 公差 Tolerance μm | mm | 公差 Tolerance μm | mm | 公差 Tolerance μm |
| 6 | LMH6LUU | 26 | 6 | 0 | 12 | 0 | 35 | -300 |
| 8 | LMH8LUU | 47 | 8 | 0 | 15 | -13 | 45 | |
| 10 | LMH10LUU | 80 | 10 | 0 | 19 | 0 | 55 | |
| 12 | LMH12LUU | 102 | 12 | -10 | 21 | 0 | 57 | 0 |
| 13 | LMH13LUU | 123 | 13 | -10 | 23 | -16 | 61 | |
| 16 | LMH16LUU | 162 | 16 | 0 | 28 | 0 | 70 | -300 |
| 20 | LMH20LUU | 247 | 20 | 0 | 32 | 0 | 80 | 0 |
| 25 | LMH25LUU | 525 | 25 | -12 | 40 | 0 | 112 | |
| 30 | LMH30LUU | 845 | 30 | -12 | 45 | -19 | 123 | |

| 主要尺寸和公差 Major dimensions and tolerance | | | | | | | | 偏心 Eccentricity μm | 垂直度 Squareness μm | 额定负荷 Basic load rating | |
|--|---------|---------|---------|---------|---------|---------|---------|--------------------------|-------------------------|-------------------------------------|--------------------------------------|
| 法兰 Flange | | | | | | | | | | 动态额定负荷 Dynamic C _N | 静态额定负荷 Static C ₀ N |
| D1 mm | W mm | t mm | A mm | F mm | X mm | Y mm | Z mm | | | | |
| 28 | 18 | 5 | 20 | - | 3.5 | 8 | 3.1 | 10 | 10 | 323 | 523 |
| 32 | 21 | 5 | 24 | - | 3.5 | 8 | 3.1 | | | 431 | 704 |
| 40 | 25 | 6 | 28 | - | 4.5 | 7.5 | 4.1 | | | 588 | 1,100 |
| 42 | 27 | 6 | 32 | - | 4.5 | 7.5 | 4.1 | | | 813 | 1,570 |
| 43 | 29 | 6 | 33 | - | 4.5 | 7.5 | 4.1 | | | 813 | 1,570 |
| 48 | 34 | 6 | 37 | 22 | 4.5 | 7.5 | 4.1 | | | 1,230 | 2,350 |
| 54 | 38 | 8 | 38 | 24 | 5.5 | 9 | 5.1 | 20 | 20 | 1,400 | 2,740 |
| 52 | 46 | 8 | 40 | 32 | 5.5 | 9 | 5.1 | | | 1,560 | 3,140 |
| 74 | 57 | 10 | 48 | 35 | 6.8 | 11 | 6.1 | | | 2,490 | 5,450 |

注：所有LMH...LUU均为双密封。
Note: All sizes of LMH...LUU type are sealed on both sides.

国际单位: 1N=0.102kgf
SIUNIT: 1N=0.102kgf

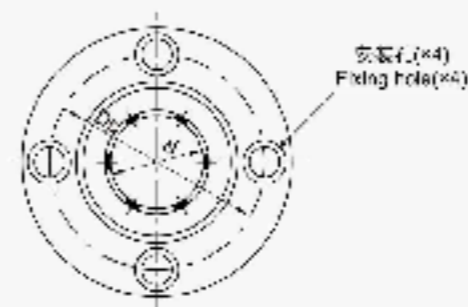
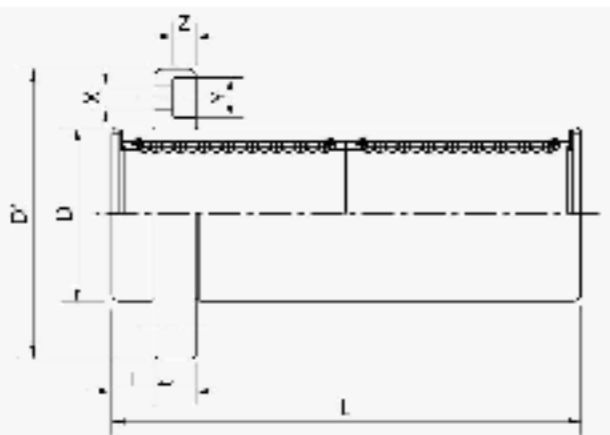
Flanged Linear Motion Ball Bearing Series

LMF(K)P...LUU 尼龙保持架
 该类尺寸是公制的，广泛应用于亚洲和其他国家。
 LMF(K)P...LUU (Resin retainer)
 This type is a metric dimension series
 widely used in Asia and other
 countries.

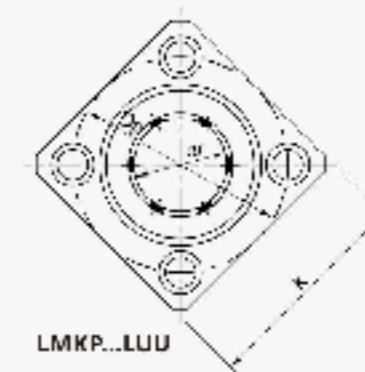


LMFP...LUU

LMKP...LUU



LMFP...LUU



LMKP...LUU

| 公称轴径 Nominal shaft diameter mm | 加长导向轴径 LMFP...LUU | 重量 Weight (gf) | 加长导向轴径 LMKP...LUU | 重量 Weight (gf) | 主要尺寸和公差 Major dimensions and tolerance | | | | | |
|--------------------------------------|----------------------|----------------------|----------------------|----------------------|--|-----------------------|----|-----------------------|-----|-----------------------|
| | | | | | dr | | D | | L | |
| | | | | | mm | 公差 Tolerance μm | mm | 公差 Tolerance μm | mm | 公差 Tolerance μm |
| 6 | LMFP6LUU | 31 | LMKP6LUU | 25 | 6 | 0 | 12 | 0 | 35 | ±500 |
| 8 | LMFP8LUU | 51 | LMKP8LUU | 43 | 8 | 0 | 15 | -13 | 45 | |
| 10 | LMFP10LUU | 68 | LMKP10LUU | 79 | 10 | 0 | 19 | 0 | 55 | |
| 12 | LMFP12LUU | 110 | LMKP12LUU | 90 | 12 | -10 | 21 | 0 | 57 | 0 |
| 13 | LMFP13LUU | 130 | LMKP13LUU | 108 | 13 | 0 | 23 | -1 | 61 | |
| 15 | LMFP15LUU | 190 | LMKP15LUU | 165 | 15 | 0 | 28 | -16 | 70 | |
| 20 | LMFP20LUU | 260 | LMKP20LUU | 225 | 20 | 0 | 32 | 0 | 80 | -300 |
| 25 | LMFP25LUU | 540 | LMKP25LUU | 500 | 25 | -2 | 40 | -19 | 112 | |
| 30 | LMFP30LUU | 680 | LMKP30LUU | 590 | 30 | 0 | 45 | 0 | 123 | |
| 35 | LMFP35LUU | 1,020 | LMKP35LUU | 930 | 35 | 0 | 52 | 0 | 135 | 0 |
| 40 | LMFP40LUU | 1,570 | LMKP40LUU | 1,380 | 40 | -15 | 50 | -22 | 151 | |
| 50 | LMFP50LUU | 3,600 | LMKP50LUU | 3,400 | 50 | 0 | 80 | 0 | 192 | |
| 60 | LMFP60LUU | 4,500 | LMKP60LUU | 4,060 | 60 | -20 | 90 | -25 | 209 | -100 |

注：所有LMFP...LUU/LMKP...LUU型均为双密封。
 Note: All sizes of LMFP...LUU/LMKP...LUU type are sealed on both sides.

| 主要尺寸和公差 Major dimensions and tolerance | | | | | | | | 偏心度 Eccentricity μm | 方正度 Squariness μm | 额定载荷 Basic load rating | |
|--|----------|---------|---------|----------|---------|---------|---------|---------------------------|-------------------------|---------------------------|----------------------|
| 法兰 Flange | | | | | | | | | | 动态 Dynamic C/N | 静态 Static Co/N |
| I mm | Df mm | K mm | t mm | Dp mm | X mm | Y mm | Z mm | | | | |
| 4 | 24 | 22 | 4 | 20 | 3.5 | 6 | 3.1 | 15 | 15 | 323 | 529 |
| 5 | 32 | 25 | 5 | 24 | 3.5 | 8 | 3.1 | | | 431 | 784 |
| 6 | 40 | 30 | 6 | 29 | 4.5 | 7.5 | 4.1 | | | 588 | 1,100 |
| 6 | 42 | 32 | 6 | 32 | 4.5 | 7.5 | 4.1 | | | 813 | 1,570 |
| 6 | 43 | 34 | 6 | 33 | 4.5 | 7.5 | 4.1 | | | 813 | 1,570 |
| 6 | 43 | 37 | 6 | 36 | 4.5 | 7.5 | 4.1 | 1,233 | 2,350 | 20 | 20 |
| 8 | 54 | 42 | 8 | 43 | 5.5 | 9 | 5.1 | 1,400 | 2,740 | | |
| 8 | 62 | 50 | 8 | 51 | 5.5 | 9 | 5.1 | 1,563 | 3,140 | | |
| 10 | 74 | 58 | 10 | 60 | 6.6 | 11 | 6.1 | 2,490 | 5,430 | | |
| 10 | 82 | 64 | 10 | 67 | 6.6 | 11 | 6.1 | 2,810 | 6,270 | | |
| 13 | 95 | 75 | 13 | 76 | 9 | 14 | 8.1 | 25 | 25 | 3,430 | 8,040 |
| 13 | 116 | 92 | 13 | 86 | 9 | 14 | 8.1 | | | 6,080 | 15,900 |
| 18 | 134 | 106 | 18 | 112 | 11 | 17 | 11.1 | 20 | 30 | 7,560 | 20,300 |

国际单位: 1N=0.102kgf
 SJ/JNT: 1N=0.102kgf

Flanged Linear Motion Ball Bearing Series

LMHP...LUU 尼龙保持架

该类尺寸是公制的，广泛应用于亚洲和其他国家。

LMHP...LUU (Resin retainer)

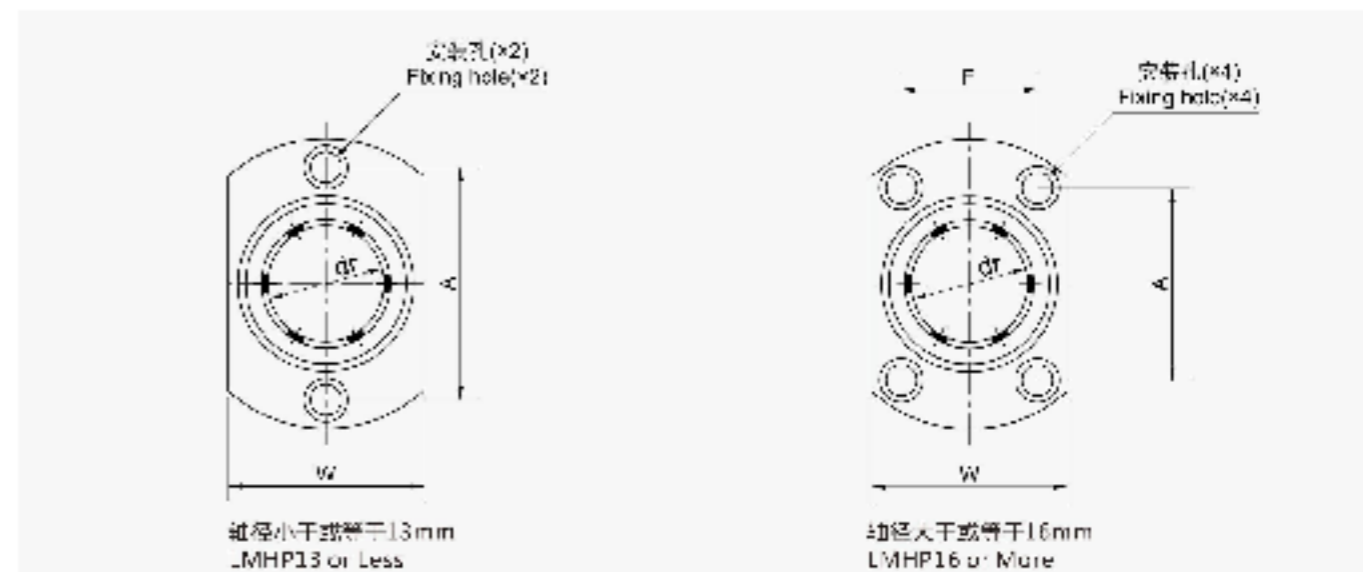
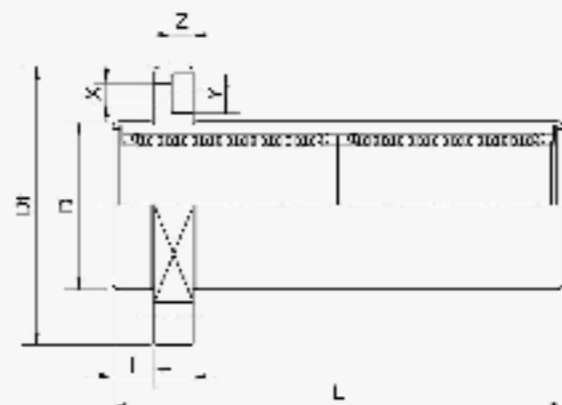
This type is a metric dimension series

widely used in Asia and other

countries.



LMHP...LUU



直径小于或等于13mm
LMHP13 or Less

直径大于或等于16mm
LMHP16 or More

| 公称轴径 Nominal shaft diameter mm | 加长导向轴用法兰 LMHP...LUU | 重量 Weight (g) | 主要尺寸和公差 Major dimensions and tolerance | | | | | |
|--------------------------------------|------------------------|---------------------|--|----------------------------------|----|----------------------------------|-----|----------------------------------|
| | | | dr | | D | | L | |
| | | | mm | 公差 Tolerance μm | mm | 公差 Tolerance μm | mm | 公差 Tolerance μm |
| 6 | LM/HP6LUU | 26 | 6 | | 12 | 0 | 35 | |
| 8 | LM/HP8LUU | 47 | 8 | | 15 | -13 | 45 | ± 300 |
| 10 | LM/HP10LUU | 80 | 10 | 0 | 18 | | 55 | |
| 12 | LM/HP12LUU | 110 | 12 | -10 | 21 | 0 | 57 | |
| 13 | LM/HP13LUU | 123 | 13 | | 23 | -15 | 61 | 0 |
| 16 | LM/HP16LUU | 162 | 16 | | 28 | | 70 | ± 300 |
| 20 | LM/HP20LUU | 247 | 20 | 0 | 32 | 0 | 80 | |
| 25 | LM/HP25LUU | 525 | 25 | -12 | 40 | | 112 | 0 |
| 30 | LM/HP30LUU | 845 | 30 | | 45 | -19 | 123 | -100 |

注：所有LMHP...LUU均为双密封。
Note: All sizes of LMHP...LUU type are sealed on both sides.

| 主要尺寸和公差 Major dimensions and tolerance | | | | | | | | | | 偏心 Eccentricity μm | 全高圆 Squareness μm | 额定载荷 Basic load rating | |
|--|----------|---------|---------|---------|---------|---------|---------|---------|------------------------|-------------------------------------|------------------------------------|---------------------------|--|
| 法兰 Flange | | | | | | | | | 动态荷 Dynamic Co N | | | 静态荷 Static Co N | |
| l mm | Dr mm | W mm | t mm | A mm | F mm | X mm | Y mm | Z mm | | | | | |
| 5 | 20 | 16 | 5 | 20 | - | 3.5 | 8 | 3.1 | 15 | 15 | 325 | 529 | |
| 5 | 32 | 21 | 5 | 24 | - | 3.5 | 8 | 3.1 | | | 431 | 794 | |
| 8 | 40 | 25 | 6 | 29 | - | 4.5 | 7.5 | 4.1 | | | 586 | 1,100 | |
| 8 | 42 | 27 | 6 | 32 | - | 4.5 | 7.5 | 4.1 | | | 813 | 1,570 | |
| 8 | 43 | 29 | 6 | 33 | - | 4.5 | 7.5 | 4.1 | 20 | 20 | 813 | 1,570 | |
| 8 | 48 | 34 | 6 | 31 | 22 | 4.5 | 7.5 | 4.1 | | | 1,230 | 2,360 | |
| 8 | 54 | 38 | 8 | 36 | 24 | 5.5 | 8 | 5.1 | | | 1,400 | 2,740 | |
| 8 | 62 | 46 | 8 | 40 | 32 | 5.5 | 8 | 5.1 | | | 1,580 | 3,140 | |
| 10 | 74 | 51 | 10 | 49 | 35 | 6.8 | 11 | 6.1 | | | 2,490 | 5,490 | |

国际单位: 1N=0.102kgf
SIUNIT: 1N=0.102kgf

Flanged Linear Motion Ball Bearing Series

LMF(K)M...LUU 尼龙保持架

该类型尺寸是公制的，广泛应用于亚洲和其他国家。

LMF(K)M...LUU (Resin retainer)

This type is a metric dimension series

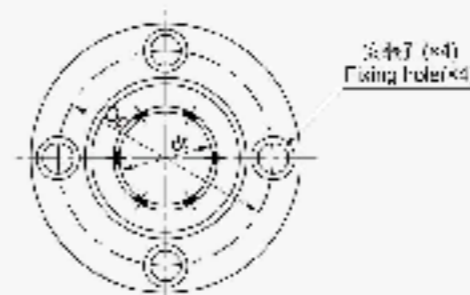
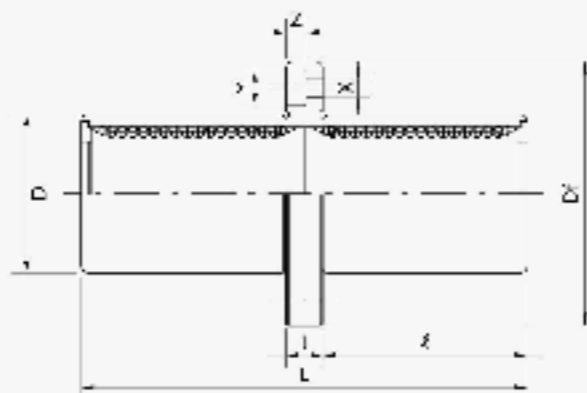
widely used in Asia and other

countries.

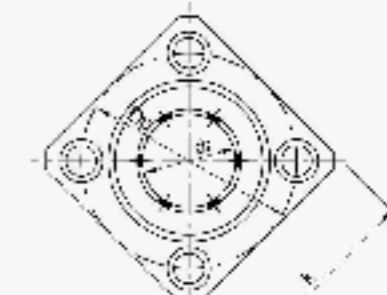


LMFM...LUU

LMKM...LUU



LMFM...LUU



LMKM...LUU

| 公称球径 Nominal shaft diameter mm | 加长中间法兰 LMFM...LUU | 重量 Weight g/gf | 加高中间法兰 LMKM...LUU | 重量 Weight g/gf | 主要尺寸和公差 Major dimensions and tolerance | | | | | |
|--------------------------------------|----------------------|----------------------|----------------------|----------------------|--|-----------------------|-----------------------|-----|-----|-----------------------|
| | | | | | mm | dr | | mm | L | |
| | | | | | | 公差 Tolerance μm | 公差 Tolerance μm | | | 公差 Tolerance μm |
| 6 | LMFM6LUU | 31 | LMKM6LUU | 25 | 6 | 0 | 12 | 0 | 35 | ±300 |
| 8 | LMFM8LUU | 51 | LMKM8LUU | 43 | 8 | 0 | 15 | -13 | 45 | |
| 10 | LMFM10LUU | 68 | LMKM10LUU | 78 | 10 | 0 | 18 | -13 | 55 | |
| 12 | LMFM12LUU | 110 | LMKM12LUU | 90 | 12 | -10 | 21 | 0 | 57 | 0 |
| 13 | LMFM13LUU | 130 | LMKM13LUU | 108 | 13 | 0 | 23 | -16 | 61 | |
| 16 | LMFM16LUU | 190 | LMKM16LUU | 165 | 16 | 0 | 28 | -16 | 70 | |
| 20 | LMFM20LUU | 260 | LMKM20LUU | 225 | 20 | 0 | 32 | 0 | 80 | -300 |
| 25 | LMFM25LUU | 540 | LMKM25LUU | 520 | 25 | -12 | 40 | 0 | 112 | |
| 30 | LMFM30LUU | 680 | LMKM30LUU | 590 | 30 | -12 | 45 | -19 | 123 | |
| 35 | LMFM35LUU | 1,020 | LMKM35LUU | 920 | 35 | 0 | 52 | 0 | 135 | 0 |
| 40 | LMFM40LUU | 1,370 | LMKM40LUU | 1,380 | 40 | -15 | 60 | 0 | 151 | |
| 50 | LMFM50LUU | 3,800 | LMKM50LUU | 3,400 | 50 | -15 | 80 | -22 | 182 | |
| 60 | LMFM60LUU | 4,500 | LMKM60LUU | 4,000 | 60 | 0 | 90 | 0 | 200 | -400 |
| | | | | | | -20 | 90 | -23 | 200 | |

| 主要尺寸和公差 Major dimensions and tolerance | | | | | | | | 偏心 Eccentricity μm | 圆角度 Squariness μm | 额定负载 Basic load rating | |
|--|----------|---------|---------|----------|---------|---------|---------|--------------------------|-------------------------|---------------------------|------------------------|
| 法兰 Flange | | | | | | | | | | 动态额定 Dynamic C/N | 静态额定 Static Co/N |
| l mm | Df mm | R mm | t mm | Dp mm | X mm | Y mm | Z mm | | | | |
| 15 | 29 | 22 | 5 | 20 | 3.5 | 8 | 3.1 | 15 | 15 | 323 | 529 |
| 20 | 32 | 25 | 5 | 24 | 3.5 | 8 | 3.1 | | | 431 | 764 |
| 24.5 | 40 | 30 | 8 | 28 | 4.5 | 7.5 | 4.1 | | | 586 | 1,130 |
| 25.5 | 42 | 32 | 8 | 32 | 4.5 | 7.5 | 4.1 | | | 813 | 1,570 |
| 27.5 | 43 | 34 | 8 | 35 | 4.5 | 7.5 | 4.1 | | | 813 | 1,570 |
| 30 | 48 | 37 | 8 | 36 | 4.5 | 7.5 | 4.1 | 20 | 20 | 1,230 | 2,350 |
| 35 | 54 | 42 | 8 | 45 | 5.5 | 9 | 5.1 | | | 1,400 | 2,740 |
| 52 | 62 | 50 | 8 | 51 | 5.5 | 9 | 5.1 | | | 1,560 | 3,140 |
| 55.5 | 74 | 58 | 10 | 60 | 6.6 | 11 | 6.1 | | | 2,490 | 5,430 |
| 62.5 | 82 | 64 | 10 | 67 | 6.6 | 11 | 6.1 | | | 2,650 | 6,270 |
| 69 | 95 | 75 | 13 | 76 | 9 | 14 | 8.1 | 25 | 25 | 3,430 | 8,040 |
| 89.5 | 118 | 92 | 13 | 96 | 9 | 11 | 8.1 | | | 6,060 | 15,300 |
| 95.5 | 134 | 106 | 18 | 112 | 11 | 17 | 11.1 | | | 7,560 | 20,300 |

密封型 Seal type:

LMFM20LUU

| 密封 | 本侧密封 | No entry | No seals |
|-----|------|----------|---------------------|
| III | 双密封 | III | Seals on both sides |

国际单位: 1N=0.102kgf
SJ/NJI: 1N=0.102kgf

Flanged Linear Motion Ball Bearing Series

LMHM...LUU 尼龙保持架

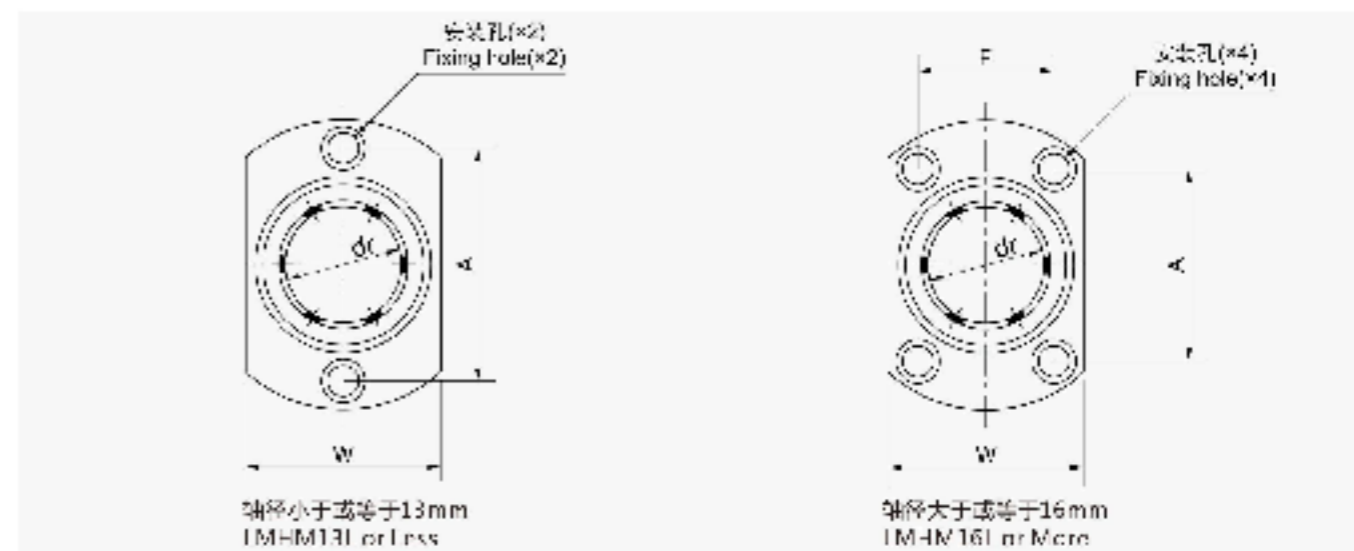
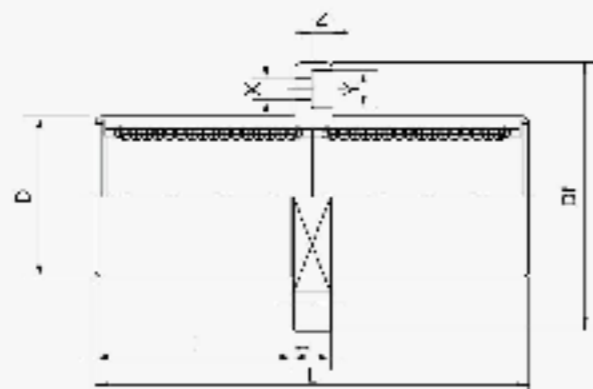
该类型尺寸是公制的，广泛应用于亚洲和其他国家。

LMHM...LUU (Resin retainer)

This type is a metric dimension series widely used in Asia and other countries.



LMHM...LUU



轴径小于或等于13mm
LMHM13L or Less

轴径大于或等于16mm
LM4M16L or More

| 公称轴径 Nominal shaft diameter mm | 轴长中间轴固定法 LMHM...LUU | 重量 Weight (g) | 主要尺寸和公差 Major dimensions and tolerance | | | | | |
|--------------------------------------|------------------------|---------------------|--|-----------------------|----|-----------------------|-----|-----------------------|
| | | | dr | | D | | L | |
| | | | mm | 公差 Tolerance μm | mm | 公差 Tolerance μm | mm | 公差 Tolerance μm |
| 6 | LMHM6LUU | 26 | 6 | | 12 | 0 | 35 | |
| 8 | LMHM8LUU | 47 | 8 | | 15 | -13 | 45 | -300 |
| 10 | LMHM10LUU | 80 | 10 | 0 | 19 | | 55 | |
| 12 | LMHM12LUU | 102 | 12 | -10 | 21 | 0 | 57 | |
| 13 | LMHM13LUU | 123 | 13 | | 23 | -16 | 61 | 0 |
| 16 | LMHM16LUU | 162 | 16 | | 28 | | 70 | 300 |
| 20 | LMHM20LUU | 247 | 20 | 0 | 32 | 0 | 80 | |
| 25 | LMHM25LUU | 525 | 25 | | 40 | 0 | 112 | 0 |
| 30 | LMHM30LUU | 845 | 30 | -12 | 45 | -13 | 123 | -400 |

| 主要尺寸和公差 Major dimensions and tolerance | | | | | | | | | | 偏心 Eccentricity μm | 垂直度 Squarness μm | 额定负荷 Basic load rating | |
|--|----------|---------|---------|---------|---------|---------|---------|---------|----------------------|--------------------------|------------------------|---------------------------|--|
| 法兰 Flange | | | | | | | | | 动态 Dynamic C/N | | | 静态 Static Co/N | |
| l mm | Df mm | W mm | t mm | A mm | F mm | X mm | Y mm | Z mm | | | | | |
| 15 | 28 | 16 | 5 | 20 | - | 3.5 | 8 | 3.1 | 15 | 15 | 325 | 529 | |
| 20 | 32 | 21 | 5 | 24 | - | 3.5 | 8 | 3.1 | | | 431 | 794 | |
| 24.5 | 40 | 25 | 6 | 29 | - | 4.5 | 7.5 | 4.1 | | | 588 | 1,100 | |
| 25.5 | 42 | 27 | 6 | 32 | - | 4.5 | 7.5 | 4.1 | | | 813 | 1,570 | |
| 27.5 | 43 | 29 | 6 | 33 | - | 4.5 | 7.5 | 4.1 | 20 | 20 | 813 | 1,570 | |
| 32 | 48 | 34 | 6 | 31 | 22 | 4.5 | 7.5 | 4.1 | | | 1,230 | 2,350 | |
| 36 | 54 | 38 | 8 | 36 | 24 | 5.5 | 8 | 5.1 | | | 1,400 | 2,740 | |
| 52 | 62 | 46 | 8 | 40 | 32 | 5.5 | 8 | 5.1 | 20 | 20 | 1,560 | 3,140 | |
| 56.5 | 74 | 51 | 10 | 49 | 35 | 6.8 | 11 | 6.1 | | | 2,490 | 5,490 | |

注：所有LMHM...L型均为双密封。
Note: All sizes of LMHM...L type are sealed on both sides.

图1, 单位: 1N=0.102kgf
SIJNIT: 1N=0.102gft

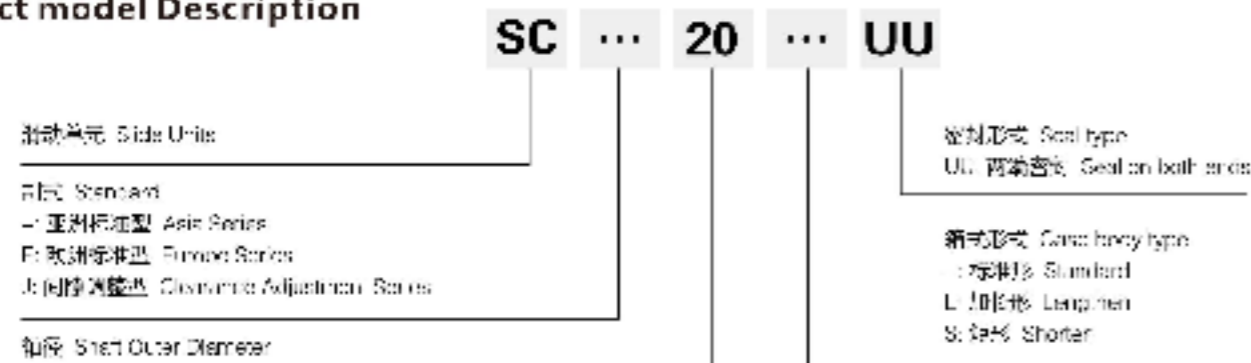
Linear Motion Ball Bearing Slide Units

- THZ 公司提供各种球轴承滑动单元，供设计直线运动产品时采用。精密加工的滑动单元，采用标准化的设计，具有可互换性、成本低、设计高效等优点。
- THZ Co., Ltd. can supply all types of Linear Motion Ball Bearing

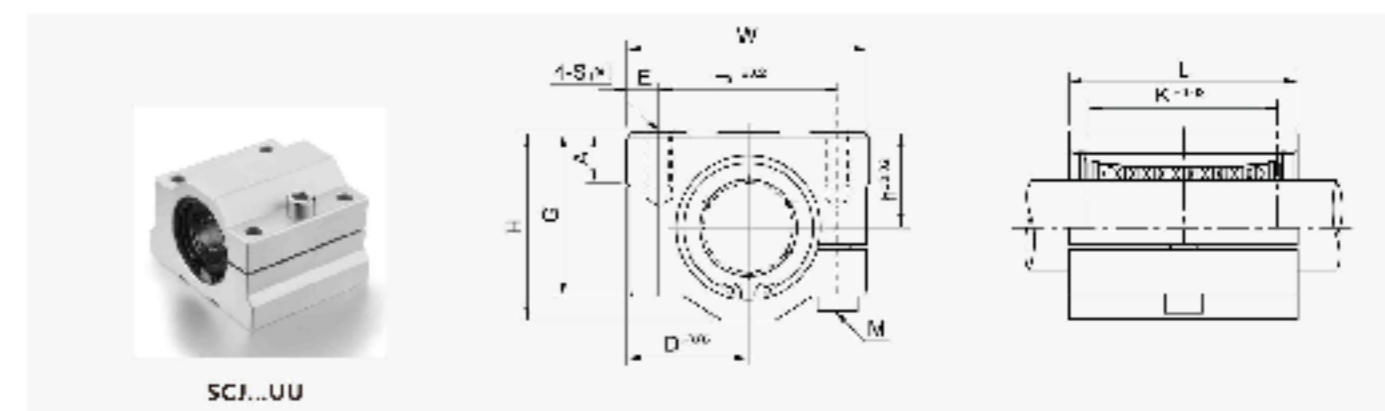
Slide Units are used for the linear motion product. Precise machining aluminium Slide Units, follows stands design bearing, cost low, design high efficiency and so on.

| | |
|---------------------------|---|
| <p>SCJ</p> | <p>间隙可调型铝制式单元（带有沿轴孔槽） SCJ型铝制间隙可调式球轴承与新球精密配合。 SCJ clearance adjustment aluminium Slide Unit (include along shaft groove) SCJ can case clearance adjustment accomplish easily with case body cooperation.</p> |
| <p>SC SC(E)</p> | <p>标准型铝制式单元 通过轴孔实现简单安装。 SC(E) Standard aluminium Slide Unit Pass away accomplish simple installation.</p> |
| <p>SC-E-L SC(E)-L</p> | <p>长型铝制式单元（带有两个标准型直线轴承） SC(E)-L lengthen aluminium Slide Unit (include two standard linear motion ball bearings)</p> |
| <p>SC-E-S SC(E)-S</p> | <p>短型铝制式单元（带个标准型直线轴承） 比SC(E)型更紧凑。 SC(E)-S shorter aluminium Slide Unit (include one standard linear motion ball bearing) Thier SC(E) much compact.</p> |

Product model Description

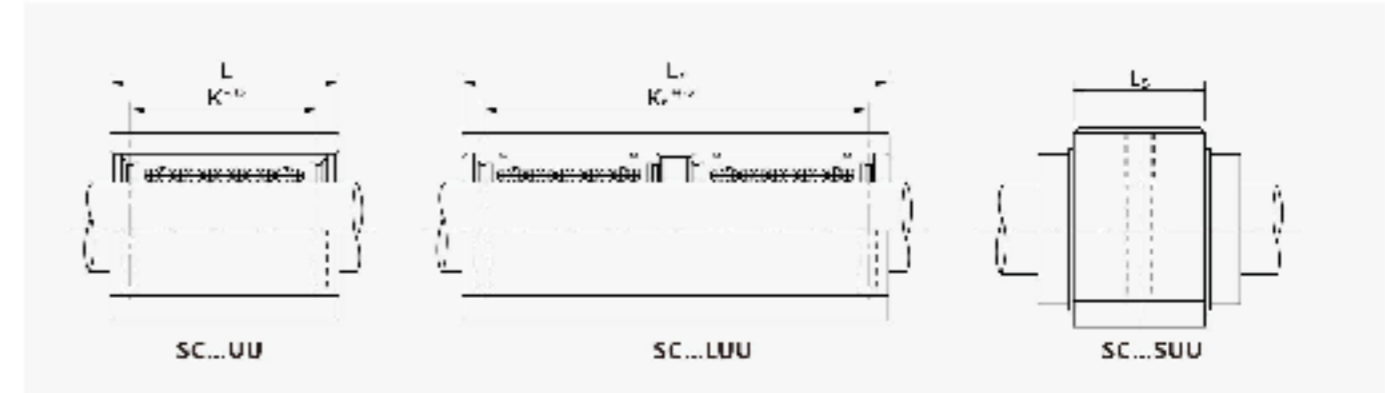


Linear Motion Ball Bearing Slide Units SCJ Series



| 型号 Designation | 内装轴承 Linear Bearing | 额定负荷 Basic load rating | | 轴径 Shaft Diameter | 尺寸 Dimensions [mm] | | | | | | | | | | | 重量 Weight [g] | |
|-------------------|---------------------------|---------------------------|-----------------------|-------------------------|--------------------|----|-----|------|------|-----|------|------|--------|----|-----|---------------------|-------|
| | | 动负荷 Dynamic Co N | 静负荷 Static Co N | | h | D | W | H | G | A | J | E | S1+l | K | L | | M |
| SCJ10UU | LM10UUAJ | 372 | 649 | 10 | 13 | 20 | 40 | 26 | 21 | 8.0 | 28 | 6.0 | M5 12 | 21 | 35 | M5 | 30 |
| SCJ12UU | LM12UUAJ | 510 | 784 | 12 | 15 | 21 | 42 | 28 | 24 | 8.0 | 30.5 | 5.75 | M5 12 | 26 | 38 | M5 | 112 |
| SCJ15UU | LM15UUAJ | 510 | 784 | 13 | 15 | 22 | 44 | 30 | 24.5 | 8.0 | 33 | 5.5 | M5 12 | 26 | 38 | M5 | 123 |
| SCJ16UU | LM16UUAJ | 774 | 1,180 | 16 | 19 | 25 | 50 | 36.5 | 32.5 | 9.0 | 38 | 7.0 | M5 12 | 34 | 44 | M5 | 169 |
| SCJ20UU | LM20UUAJ | 882 | 1,370 | 20 | 21 | 27 | 64 | 41 | 35 | 11 | 40 | 7.0 | M6 12 | 40 | 50 | M5 | 237 |
| SCJ25UU | LM25UUAJ | 980 | 1,570 | 25 | 26 | 38 | 76 | 51.5 | 42 | 12 | 54 | 11 | M8 18 | 50 | 57 | M6 | 555 |
| SCJ30UU | LM30UUAJ | 1,570 | 2,740 | 30 | 30 | 38 | 78 | 56.5 | 49 | 15 | 58 | 10 | M8 18 | 58 | 72 | M6 | 885 |
| SCJ35UU | LM35UUAJ | 1,670 | 3,140 | 35 | 34 | 45 | 90 | 68 | 54 | 18 | 70 | 10 | M8 18 | 60 | 80 | M6 | 1,100 |
| SCJ40UU | LM40UUAJ | 2,180 | 4,020 | 40 | 40 | 51 | 102 | 78 | 62 | 20 | 80 | 11 | M10 25 | 60 | 80 | M8 | 1,600 |
| SCJ50UU | LM50UUAJ | 3,820 | 7,940 | 50 | 52 | 61 | 122 | 102 | 80 | 25 | 100 | 11 | M10 25 | 80 | 110 | M8 | 3,350 |

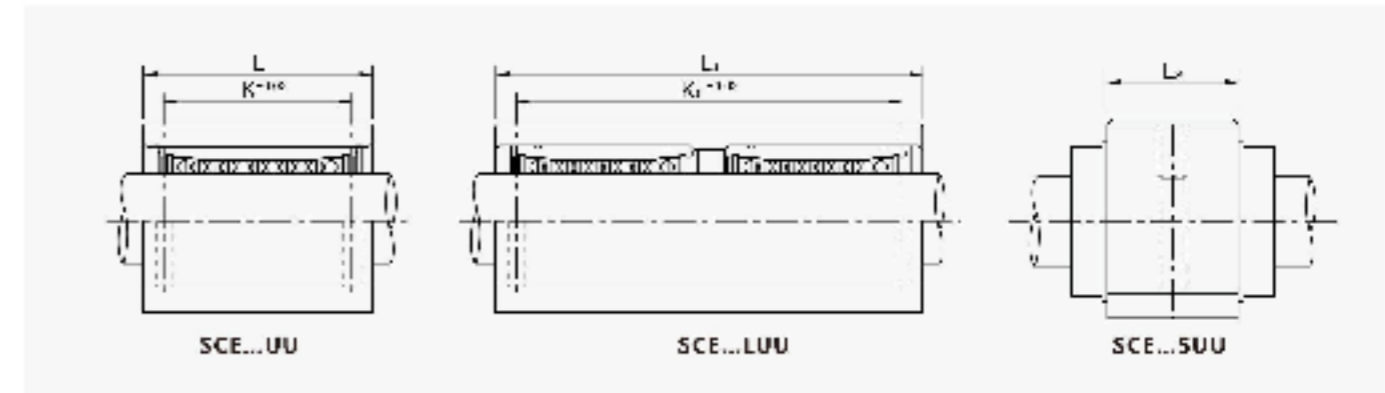
Linear Motion Ball Bearing Slide Units SC Series



| 标准型 Standard | | 高负载型 Basic load rating | | 重量 Weight (gf) | 加长型 Length Type | | 额定负载 Basic load rating | | 重量 Weight (gf) | 短型 Shorten Type | |
|-------------------|------------------------|---------------------------|----------------------|----------------------|--------------------|------------------------|---------------------------|----------------------|----------------------|--------------------|------------------------|
| 型号 Designation | 内球轴承 Linear Bearing | 动态 Dynamic C/N | 静态 Static Co/N | | 型号 Designation | 内球轴承 Linear Bearing | 动态 Dynamic C/N | 静态 Static Co/N | | 型号 Designation | 内球轴承 Linear Bearing |
| SC8UU | LM8UU | 274 | 362 | 58 | SC8LUU | 2 LM8UU | 431 | 764 | 84 | SC8SUU | LM8UU |
| SC10UU | LM10UU | 372 | 549 | 93 | SC10LUU | 2 LM10UU | 588 | 1,100 | 147 | SC10SUU | LM10UU |
| SC12UU | LM12UU | 510 | 764 | 112 | SC12LUU | 2 LM12UU | 813 | 1,570 | 220 | SC12SUU | LM12UU |
| SC13UU | LM13UU | 510 | 764 | 123 | SC13LUU | 2 LM13UU | 813 | 1,570 | 245 | SC13SUU | LM13UU |
| SC16UU | LM16UU | 771 | 1,180 | 189 | SC16LUU | 2 LM16UU | 1,250 | 2,350 | 376 | SC16SUU | LM16UU |
| SC20UU | LM20UU | 862 | 1,370 | 237 | SC20LUU | 2 LM20UU | 1,410 | 2,740 | 476 | SC20SUU | LM20UU |
| SC25UU | LM25UU | 980 | 1,570 | 355 | SC25LUU | 2 LM25UU | 1,810 | 3,140 | 1,115 | SC25SUU | LM25UU |
| SC30UU | LM30UU | 1,570 | 2,740 | 685 | SC30LUU | 2 LM30UU | 2,450 | 5,480 | 1,375 | SC30SUU | LM30UU |
| SC35UU | LM35UU | 1,670 | 3,140 | 1,100 | SC35LUU | 2 LM35UU | 2,850 | 6,270 | 2,200 | SC35SUU | LM35UU |
| SC40UU | LM40UU | 2,180 | 4,020 | 1,600 | SC40LUU | 2 LM40UU | 3,450 | 8,040 | 3,200 | SC40SUU | LM40UU |
| SC50UU | LM50UU | 3,820 | 7,940 | 3,250 | SC50LUU | 2 LM50UU | 6,050 | 15,800 | 8,720 | SC50SUU | LM50UU |

| 额定负载 Basic load rating | | 重量 Weight (gf) | Dimensions (mm) | | | | | | | | | | | | | | | |
|---------------------------|----------------------|----------------------|---------------------------------|-----|-----|-----|------|------|----|------|------|--------|---------|----|-----|----------|------|----------|
| 动态 Dynamic C/N | 静态 Static Co/N | | 通用尺寸 Nominal Dimensions (mm) | | | | | | | | | | SC...UU | | | SC...LUU | | SC...SUU |
| 动态 Dynamic C/N | 静态 Static Co/N | 重量 Weight (gf) | 轴径 Shaft Diameter | h | D | W | H | G | A | J | E | S1 x I | S2 | K | L | K1 | L1 | Lc |
| | | | | 200 | 420 | 36 | φ8 | 11 | 17 | 34 | 22 | 18 | 6 | 24 | 5 | M4 8 | φ3.4 | 18 |
| 370 | 540 | 63 | φ10 | 13 | 20 | 40 | 28 | 21 | 8 | 26 | 6 | M5 12 | φ4.3 | 21 | 35 | 46 | 60 | 19.5 |
| 410 | 530 | 74 | φ12 | 15 | 21 | 42 | 28 | 24 | 8 | 30.5 | 5.75 | M5 12 | φ4.3 | 26 | 36 | 50 | 70 | 20.5 |
| 500 | 770 | 85 | φ13 | 15 | 22 | 44 | 30 | 24.5 | 6 | 33 | 5.5 | M5 12 | φ4.3 | 28 | 39 | 50 | 75 | 20.5 |
| 770 | 1,170 | 132 | φ16 | 19 | 25 | 50 | 38.5 | 32.5 | 9 | 36 | 7 | M6 12 | φ4.3 | 34 | 44 | 60 | 85 | 25.5 |
| 860 | 1,370 | 170 | φ20 | 21 | 27 | 54 | 41 | 35 | 11 | 40 | 7 | M6 12 | φ5.2 | 40 | 50 | 70 | 96 | 27.4 |
| 380 | 1,560 | 405 | φ25 | 26 | 30 | 78 | 51.5 | 42 | 12 | 54 | 11 | M8 18 | φ7.0 | 50 | 67 | 100 | 130 | 37.4 |
| 1,580 | 2,740 | 455 | φ30 | 30 | 39 | 78 | 58.5 | 49 | 15 | 58 | 10 | M8 18 | φ7.0 | 58 | 72 | 110 | 140 | 40.9 |
| 1,680 | 3,130 | 790 | φ35 | 34 | 45 | 90 | 68 | 54 | 18 | 70 | 10 | M8 18 | φ7.0 | 60 | 80 | 120 | 155 | 45.4 |
| 2,150 | 4,010 | 1,220 | φ40 | 40 | 51 | 102 | 78 | 62 | 20 | 80 | 11 | M10 25 | φ8.7 | 60 | 90 | 140 | 175 | 56.4 |
| 3,820 | 7,930 | 2,300 | φ50 | 52 | 51 | 122 | 102 | 80 | 25 | 100 | 11 | M10 25 | φ8.7 | 80 | 110 | 160 | 215 | 66.9 |

Linear Motion Ball Bearing Slide Units SCE Series



| 标准型 Standard | | 额定负载 Basic load rating | | 重量 Weight (gf) | 加长型 Length Type | | 额定负载 Basic load rating | | 重量 Weight (gf) | 短型 Shorten Type | |
|-------------------|--------------------------|---------------------------|-----------------------|----------------------|--------------------|--------------------------|---------------------------|-----------------------|----------------------|--------------------|--------------------------|
| 型号 Designation | 内装轴承 Liner Bearing | 动负载 Dynamic Co N | 静负载 Static Co N | | 型号 Designation | 内装轴承 Liner Bearing | 动负载 Dynamic Co N | 静负载 Static Co N | | 型号 Designation | 内装轴承 Liner Bearing |
| SCE3UU | LME3UU | 260 | 400 | 80 | SCE3LUU | 2 LME3UU | 410 | 600 | 96 | SCE3SUU | LME3UU |
| SCE12UU | 1 MF12UU | 410 | 590 | 118 | SCE12LUU | 2 1 MF12UU | 650 | 1,190 | 232 | SCE12SUU | 1 MF12UU |
| SCE16UU | LME16UU | 770 | 1,170 | 190 | SCE16LUU | 2 LME16UU | 1,230 | 2,310 | 360 | SCE16SUU | LME16UU |
| SCE20UU | LME20UU | 960 | 1,370 | 245 | SCE20LUU | 2 LME20UU | 1,370 | 2,740 | 490 | SCE20SUU | LME20UU |
| SCE25UU | LME25UU | 980 | 1,560 | 250 | SCE25LUU | 2 LME25UU | 1,560 | 3,120 | 1,130 | SCE25SUU | LME25UU |
| SCE30UU | LME30UU | 1,580 | 2,740 | 780 | SCE30LUU | 2 LME30UU | 2,490 | 5,480 | 1,525 | SCE30SUU | LME30UU |
| SCE40UU | 1 MF40UU | 2,150 | 4,010 | 1,700 | SCE40LUU | 2 1 MF40UU | 3,440 | 8,020 | 3,430 | SCE40SUU | 1 MF40UU |
| SCE50UU | LME50UU | 3,820 | 7,930 | 2,650 | SCE50LUU | 2 LME50UU | 6,110 | 15,860 | 5,920 | SCE50SUU | LME50UU |

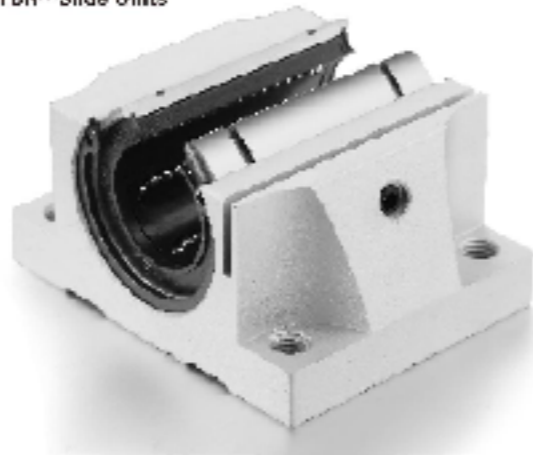
| 额定负载 Basic load rating | | 重量 Weight (gf) | 尺寸 Dimensions (mm) | | | | | | | | | | | | | SC...UU | | | SC...LUU | | | SC...SUU | | |
|---------------------------|-----------------------|----------------------|------------------------------|----|----|-----|------|------|----|-----|-----|----------|------|----|-----|---------|-----|------|----------|----|--|----------|--|--|
| 动负载 Dynamic Co N | 静负载 Static Co N | | 通用尺寸 Nominal Dimensions (mm) | | | | | | | | | | | | | K | L | Kc | Lc | Ls | | | | |
| 动负载 Dynamic Co N | 静负载 Static Co N | 重量 Weight (gf) | 轴径 Shaft Diameter | h | D | W | H | G | A | J | E | S1 x I | S | K | L | Kc | Lc | Ls | | | | | | |
| 260 | 400 | 40 | φ8 | 11 | 17 | 34 | 22 | 18 | 8 | 24 | 5 | M4 x 8 | φ3.4 | 18 | 30 | 42 | 58 | 14.4 | | | | | | |
| 410 | 590 | 82 | φ12 | 15 | 22 | 44 | 30 | 24 | 8 | 33 | 5.5 | M5 x 10 | φ4.5 | 26 | 39 | 64 | 77 | 20.3 | | | | | | |
| 770 | 1,170 | 122 | φ16 | 19 | 26 | 50 | 38.5 | 32.5 | 8 | 36 | 7 | M5 x 12 | φ4.3 | 34 | 44 | 70 | 83 | 22.3 | | | | | | |
| 960 | 1,370 | 178 | φ20 | 21 | 27 | 51 | 41 | 35 | 11 | 40 | 7 | M6 x 12 | φ5.2 | 40 | 53 | 80 | 106 | 26.3 | | | | | | |
| 980 | 1,560 | 400 | φ25 | 26 | 30 | 78 | 51.5 | 41 | 12 | 54 | 11 | M8 x 18 | φ7.0 | 50 | 67 | 119 | 136 | 40.4 | | | | | | |
| 1,580 | 2,740 | 570 | φ30 | 30 | 39 | 78 | 58.5 | 49 | 15 | 58 | 10 | M8 x 18 | φ7.0 | 58 | 76 | 132 | 154 | 46.4 | | | | | | |
| 2,150 | 4,010 | 1,320 | φ40 | 40 | 51 | 122 | 78 | 82 | 20 | 80 | 11 | M10 x 25 | φ8.7 | 80 | 90 | 150 | 180 | 56.5 | | | | | | |
| 3,820 | 7,930 | 1,500 | φ50 | 52 | 81 | 122 | 102 | 90 | 25 | 100 | 11 | M10 x 25 | φ8.7 | 80 | 110 | 200 | 230 | 72.3 | | | | | | |

Support Rail Units

SBR...Slide Units



TBR...Slide Units



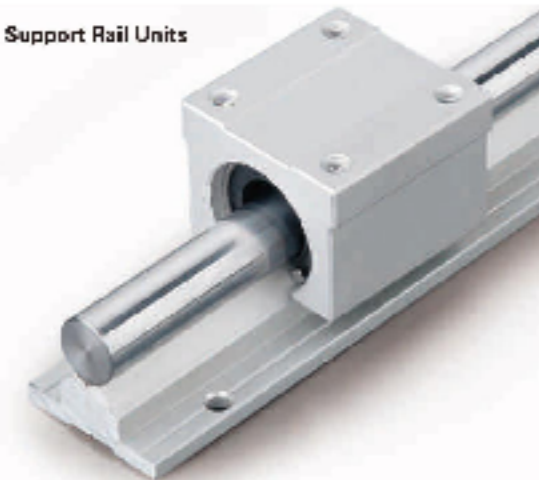
SBS...Support Rail



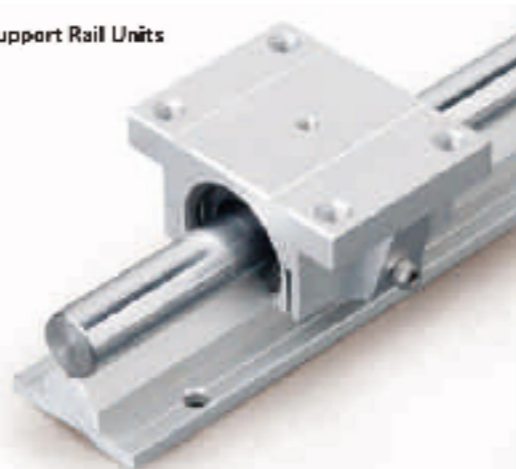
TBS...Support Rail



SBR...S Support Rail Units



TBR...S Support Rail Units



Support Rail SBS Series

SB S ...A -1000L

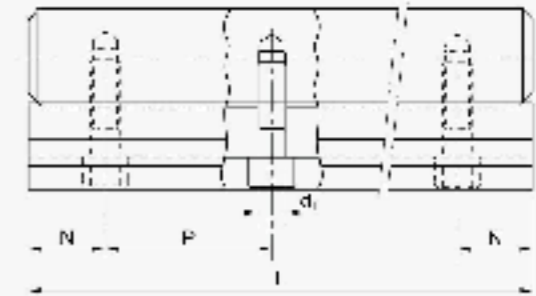
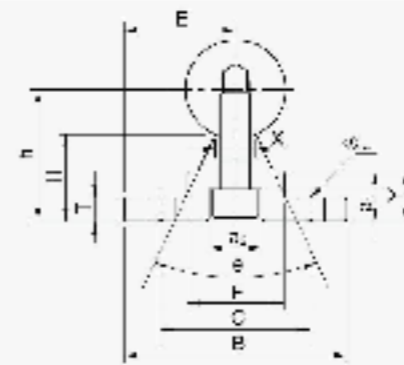
SB 支持导轨
SB Support Rail

S: 带轴 With shaft
- 不带轴 No shaft

支持轨长度 Length of Rail

轴径 Shaft Diameter

* 下表中的长度尺寸为标准的值,用户可根据需要提供定制。
We could manufacture according to customer's requirements.

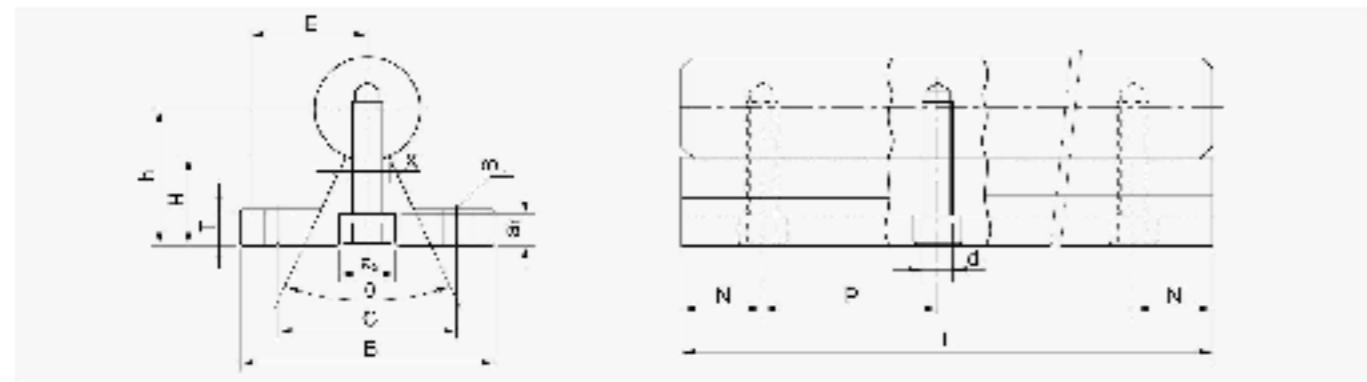


| 型号 Designation | 轴径 Shaft Diameter | 尺寸 Nominal Dimensions (mm) | | | | | | | | | | | | | | 重量 Weight (kgf/m) |
|-------------------|----------------------|-------------------------------|----|----|------|----|------|------|------|----|----|----------------|----------------|----------------|-----|-------------------------|
| | | E | h | B | H | T | F | X | Y | C | S | a ₁ | a ₂ | d ₁ | | |
| SBS16A | φ16 | 20 | 25 | 40 | 17.8 | 5 | 8.5 | 8 | 11.7 | 30 | 62 | φ5.5 | 6 | 8.5 | 5.5 | 2.96 |
| SBS20A | φ20 | 22.5 | 27 | 45 | 17.7 | 5 | 9 | 8 | 12 | 30 | 52 | φ5.5 | 6.5 | 11 | 3.6 | 3.50 |
| SBS25A | φ25 | 27.5 | 33 | 55 | 21 | 6 | 21.5 | 6 | 12 | 35 | 52 | φ6.8 | 6.5 | 11 | 3.6 | 5.30 |
| SBS30A | φ30 | 30 | 37 | 60 | 22.8 | 7 | 20.5 | 10.3 | 13 | 40 | 52 | φ6.8 | 6.5 | 14 | 3 | 7.58 |
| SBS35A | φ35 | 32.5 | 43 | 65 | 26.5 | 8 | 28 | 13 | 15.0 | 45 | 52 | φ9.0 | 6.5 | 14 | 3 | 9.68 |
| SBS40A | φ40 | 37.5 | 46 | 75 | 29.4 | 9 | 38 | 16 | 17 | 55 | 52 | φ9.0 | 6.5 | 14 | 3 | 12.68 |
| SBS50A | φ50 | 47.5 | 62 | 95 | 38.8 | 11 | 45 | 20 | 21 | 70 | 52 | φ11 | 12.5 | 19 | 11 | 20.48 |

支持轨标准长度和尺寸
Support Rail Standard Length and Dimensions

| 型号 Designation | SBS16A | SBS20A | SBS25A | SBS30A | SBS35A | SBS40A | SBS50A |
|-------------------|--------|--------|--------|--------|--------|--------|--------|
| Standard Length | 190 | 340 | 250 | 450 | 460 | 460 | 470 |
| Length L | 340 | 640 | 450 | 650 | 660 | 660 | 670 |
| | 640 | 940 | 650 | 1,250 | 660 | 860 | 870 |
| | 640 | 1,240 | 1,250 | 1,450 | 1,060 | 1,060 | 1,070 |
| N | 20 | 22 | 25 | 25 | 30 | 30 | 35 |
| P | 150 | 150 | 200 | 200 | 200 | 200 | 200 |
| Max Length | 1,380 | 1,380 | 1,850 | 1,650 | 1,860 | 1,660 | 2,370 |

Support Rail TBS Series

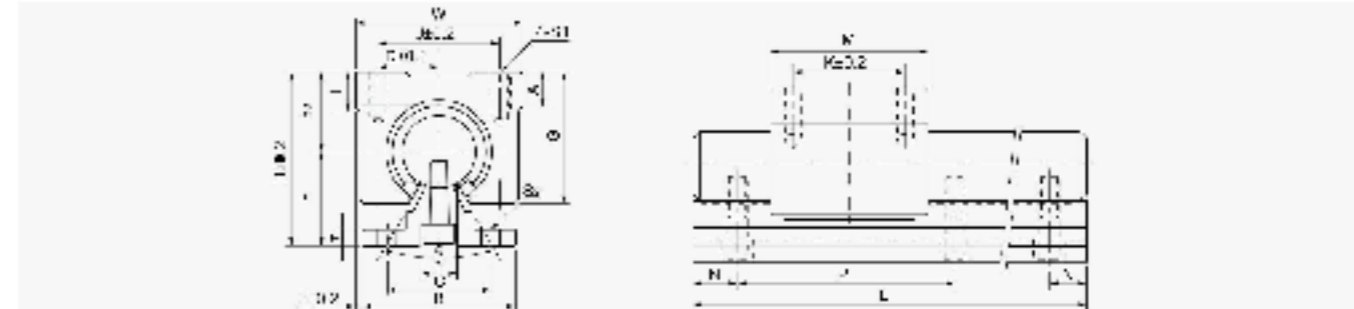
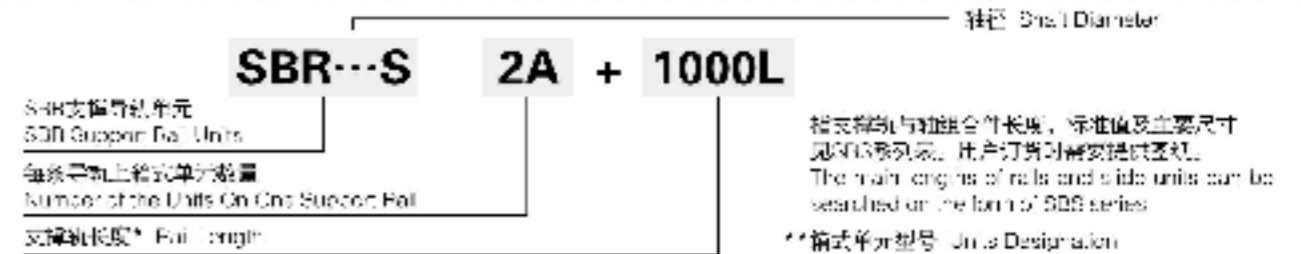


| 型号 Designation | 轴径 Shaft Diameter | 尺寸 Nominal Dimensions (mm) | | | | | | | | | | | 重量 Weight (kg/m) | |
|-------------------|----------------------|----------------------------|------|----|-------|----|------|----|----------------|----------------|----------------|----------------|---------------------|------|
| | | E | h | B | H | T | X | C | S ₁ | a ₁ | a ₂ | d ₁ | | |
| TBS16A | 16 | 25 | 22 | 50 | 11.81 | 6 | 3 | 37 | 60 | 5.5 | 6 | 5.5 | 5.5 | 2.45 |
| TBS20A | 20 | 27.5 | 29 | 55 | 19.64 | 8 | 3 | 40 | 50 | 5.5 | 6.5 | 11 | 6.6 | 3.60 |
| TBS25A | 25 | 32.5 | 32 | 65 | 20 | 10 | 3 | 45 | 50 | 8.6 | 6.5 | 11 | 6.6 | 5.60 |
| TBS30A | 30 | 37.5 | 38.5 | 75 | 22.28 | 12 | 10.3 | 55 | 50 | 8.6 | 6.5 | 14 | 9 | 8.10 |

支持轨标准长度和主要尺寸
Support Rail Standard Length and Dimensions

| Designation | SBS16A | SBS20A | SBS25A | SBS30A |
|-----------------|--------|--------|--------|--------|
| Standard Length | 100 | 340 | 290 | 450 |
| L | 240 | 340 | 460 | 850 |
| N | 640 | 940 | 650 | 1,250 |
| P | 510 | 1,240 | 1,250 | 1,450 |
| Max.Length | 20 | 20 | 25 | 25 |
| | 150 | 150 | 200 | 200 |
| | 1,380 | 1,390 | 1,950 | 1,650 |

Support Rail Units SBR...S Series



| 型号 Designation | 轴径 Shaft Diameter | 额定负载 Basic load rating | | 重量 Weight (kg) | 尺寸 Dimensions (mm) | | | | | |
|-------------------|----------------------|---------------------------|-------------------|-------------------|---------------------------|----------------------|----|-----|------|----|
| | | 动态 Dynamic Co N | 静态 Static Co N | | 侧单元 Slide Units (kg/l) | 导轨 Rails (kg/l/m) | D | h | H | E |
| SBR16SA | 16 | 770 | 1,170 | 0.15 | 2.58 | 22.5 | 25 | 45 | 2.5 | 90 |
| SBR20SA | 20 | 860 | 1,370 | 0.20 | 3.50 | 24 | 27 | 50 | 1.5 | 90 |
| SBR25SA | 25 | 860 | 1,580 | 0.45 | 5.30 | 30 | 35 | 60 | 2.5 | 50 |
| SBR30SA | 30 | 1,580 | 2,740 | 0.63 | 7.38 | 35 | 37 | 70 | 6 | 50 |
| SBR35SA | 35 | 1,680 | 3,130 | 0.92 | 9.68 | 40 | 43 | 80 | 7.5 | 50 |
| SBR40SA | 40 | 2,150 | 4,010 | 1.33 | 12.88 | 45 | 46 | 90 | 7.5 | 50 |
| SBR50SA | 50 | 3,020 | 7,900 | 3.00 | 20.48 | 60 | 62 | 115 | 12.5 | 50 |

| 型号 Designation | 尺寸 Dimensions (mm) | | | | | | | | | | | | |
|-------------------|-----------------------|----|----|----|----|-----|--------------------|----|----|----------------|----|----|-----|
| | W | G | A | B | I | M | S ₁ x 1 | J | K | S ₂ | C | N | P |
| SBR16SA | 45 | 30 | 9 | 40 | 5 | 45 | M5 12 | 22 | 20 | φ5.5 | 30 | 20 | 150 |
| SBR20SA | 48 | 39 | 11 | 45 | 5 | 50 | M6 12 | 25 | 25 | φ5.5 | 30 | 20 | 150 |
| SBR25SA | 60 | 47 | 14 | 50 | 6 | 60 | M6 12 | 40 | 40 | φ6.6 | 35 | 25 | 200 |
| SBR30SA | 70 | 56 | 15 | 60 | 7 | 70 | M8 18 | 50 | 50 | φ6.6 | 40 | 25 | 200 |
| SBR35SA | 80 | 63 | 18 | 65 | 8 | 80 | M8 18 | 55 | 55 | φ9.0 | 45 | 30 | 200 |
| SBR40SA | 90 | 72 | 20 | 75 | 9 | 90 | M10 20 | 65 | 65 | φ9.0 | 55 | 30 | 200 |
| SBR50SA | 120 | 91 | 25 | 95 | 11 | 110 | M10 25 | 84 | 80 | φ11 | 70 | 35 | 200 |

| 型号 Designation | 尺寸 Dimensions (mm) | | | | | | | | | | 额定负载 Basic load rating | | | | |
|-------------------|-----------------------|------|----|-----|----|----------------|----|-----|----------------|----|---------------------------|-------------------|--------------------|-------------------|-------------------|
| | h ₂ | D | W | M | G | h ₁ | ε | K | S ₁ | I | A | 型号 Designation | 动态 Dynamic Co N | 静态 Static Co N | 重量 Weight (kg) |
| SBR16 LUU | 20 | 22.5 | 45 | 85 | 35 | 10 | 90 | 60 | M5 | 12 | 9 | 21 M16LUUCP | 1,548 | 2,380 | 320 |
| SBR20 LUU | 25 | 24 | 48 | 96 | 35 | 10 | 80 | 70 | M6 | 12 | 11 | 21 M20LUUCP | 1,764 | 2,740 | 400 |
| SBR25 LUU | 27 | 30 | 60 | 130 | 47 | 11.5 | 50 | 100 | M6 | 12 | 14 | 21 M25LUUCP | 1,950 | 3,140 | 900 |
| SBR30 LUU | 35 | 35 | 70 | 140 | 56 | 14 | 50 | 110 | M8 | 18 | 15 | 21 M30LUUCP | 3,140 | 5,460 | 1,260 |
| SBR40 LUU | 42 | 45 | 90 | 175 | 72 | 19 | 50 | 140 | M10 | 20 | 20 | 21 M40LUUCP | 4,320 | 8,040 | 2,550 |

Support Rail Units TBR...S Series

TBR...S 2 + 1000L

轴径 Shaft Diameter

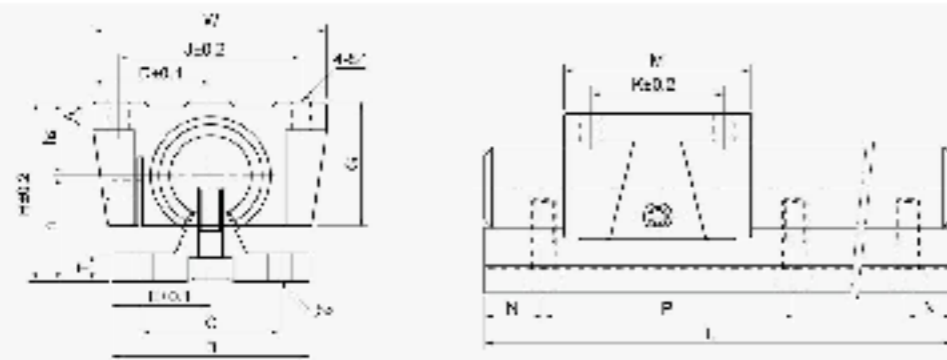
TBR支撑导轨单元
TBR Support Rail Units

每套导轨上轴式单元数量
Number of the Units On One Support Rail Units

支撑轨长度 Rail Length

*指定支撑与轴配合精度、标准值及主要尺寸
见TBS系列表。用户订购时需要提供图纸。
The main lengths of rails and slide units can be searched on the form of TBS series

**轴式单元型号 Units Designation



| Designation | | 轴径 Shaft Diameter | 额定负荷 Basic load rating | | 重量 Weight (g) | | Dimensions (mm) | | | |
|-------------|-----------------------|-------------------------|---------------------------|-----------------------|----------------------|------------------------|-----------------|------|----|------|
| Rail Units | 轴式单元** Slide Units | | 动负荷 Dynamic C·N | 静负荷 Static Co·N | Slide Units (kgf) | 导轨 Rails (kgf/m) | D | h | H | E |
| TBR1BS | TBR1GUU | 16 | 392 | 480 | 0.18 | 2.45 | 31 | 22 | 40 | 25 |
| TBR2BS | TBR2GUU | 20 | 794 | 1178 | 0.30 | 3.80 | 34 | 29 | 50 | 27.5 |
| TBR2SS | TBR2SUU | 25 | 1566 | 2352 | 0.60 | 6.90 | 41 | 32 | 60 | 32.5 |
| TBR3BS | TBR3GUU | 30 | 1764 | 2940 | 0.90 | 8.30 | 45.5 | 36.5 | 70 | 37.5 |

| Designation | 尺寸 Dimensions (mm) | | | | | | | | | | | | |
|-------------|--------------------|----|----|----|----|----|----------------|----|----|----------------|----|----|-----|
| | W | G | A | B | T | M | S ₁ | J | K | S ₂ | C | N | P |
| TBR1BS | 82 | 26 | 8 | 50 | 6 | 42 | M5 | 30 | 31 | ±5.5 | 37 | 20 | 153 |
| TBR2BS | 86 | 31 | 10 | 55 | 6 | 51 | M6 | 34 | 37 | ±5.5 | 40 | 20 | 153 |
| TBR2SS | 92 | 41 | 12 | 65 | 10 | 65 | M6 | 35 | 50 | ±5.6 | 45 | 25 | 200 |
| TBR3BS | 91 | 46 | 12 | 75 | 12 | 75 | M6 | 35 | 60 | ±5.6 | 55 | 25 | 200 |

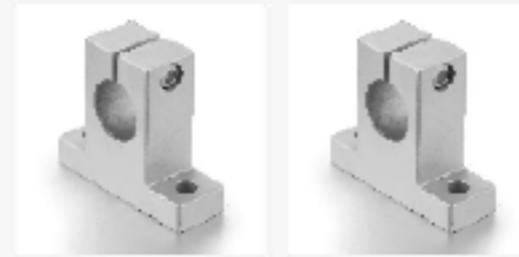
| Designation | Shaft Diameter | 额定负荷 Basic load rating | | 尺寸 Dimensions (mm) | | | | | | | | 配合直齿锥滚轴承 Basic load rating | | | |
|-------------|----------------|---------------------------|-----------------------|--------------------|----|----|-----|----------------|----|----|------|-------------------------------|-------------------|-----------------------|-----------------------|
| | | 动负荷 Dynamic C·N | 静负荷 Static Co·N | W | G | A | M | S ₁ | J | K | E | h ₀ | 型号 Designation | 动负荷 Dynamic C·N | 静负荷 Static Co·N |
| TBR16LUU | 16 | 790 | 990 | 82 | 26 | 6 | 55 | M5 | 30 | 30 | 31 | 10 | 2 LM16LUOP | 352 | 480 |
| TBR20LUU | 20 | 1,568 | 2,352 | 86 | 31 | 10 | 98 | M6 | 34 | 34 | 37 | 21 | 2 LM20LUOP | 784 | 1,178 |
| TBR25LUU | 25 | 3,136 | 4,704 | 92 | 41 | 12 | 130 | M6 | 35 | 50 | 41 | 28 | 2 LM25LUOP | 1,568 | 2,352 |
| TBR30LUU | 30 | 3,528 | 5,894 | 91 | 46 | 12 | 140 | M6 | 35 | 60 | 45.5 | 33.5 | 2 LM30LUOP | 1,764 | 2,940 |

Slide Support

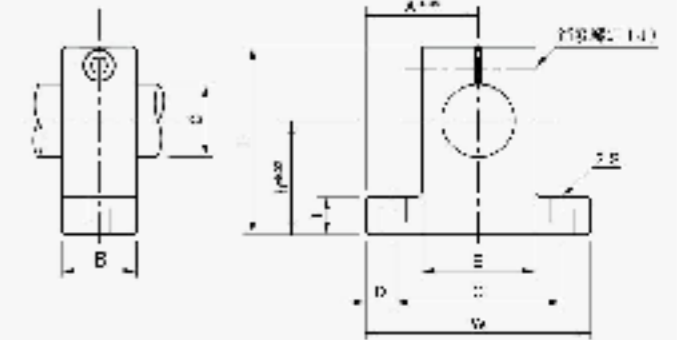
SH ...

轴径 Shaft Diameter

轴径 Shaft Diameter

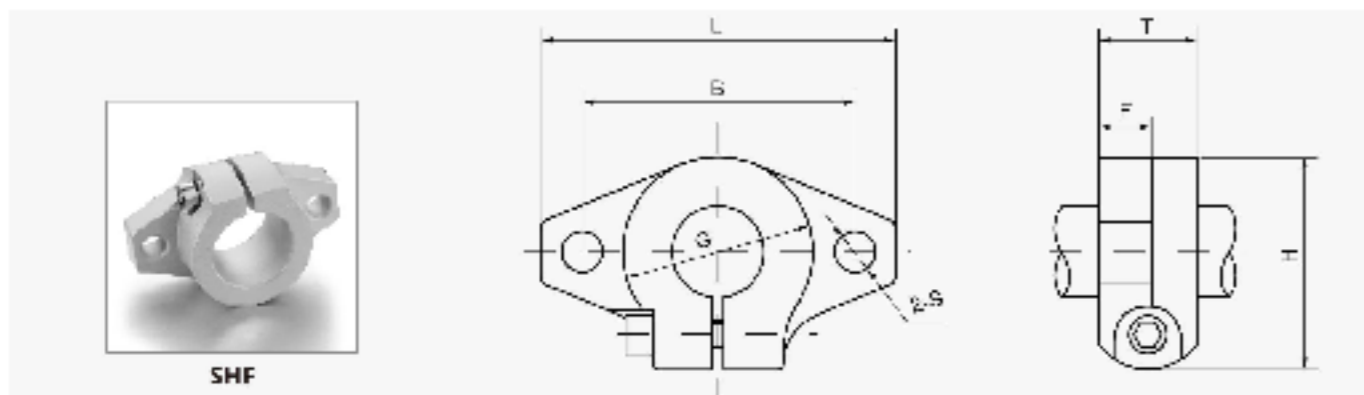


SH



| 型号 Designation | 轴径 Shaft Diameter | Dimensions (mm) | | | | | | | | | | 重量 Weight (g) | |
|-------------------|-------------------------|-----------------|----|-----|------|----|----|-----|-----|----|------|---------------------|------|
| | | h | A | W | H | T | E | D | C | B | S | | J |
| SH8 | φ8 | 20 | 21 | 42 | 32.8 | 6 | 18 | 5 | 32 | 14 | ±5.5 | M4 | 24 |
| SH10 | φ10 | 20 | 21 | 42 | 32.8 | 6 | 18 | 5 | 32 | 14 | ±5.5 | M4 | 24 |
| SH12 | φ12 | 23 | 21 | 42 | 37.5 | 6 | 20 | 5 | 32 | 14 | ±5.5 | M4 | 30 |
| SH13 | φ13 | 23 | 21 | 42 | 37.5 | 6 | 20 | 5 | 32 | 14 | ±5.5 | M4 | 30 |
| SH16 | φ16 | 27 | 24 | 48 | 44 | 8 | 25 | 5 | 38 | 16 | ±5.5 | M4 | 40 |
| SH20 | φ20 | 31 | 30 | 60 | 51 | 10 | 30 | 7.5 | 45 | 20 | ±6.6 | M5 | 70 |
| SH25 | φ25 | 35 | 35 | 70 | 60 | 12 | 38 | 7 | 56 | 24 | ±6.6 | M5 | 130 |
| SH30 | φ30 | 42 | 42 | 84 | 70 | 12 | 44 | 10 | 64 | 28 | ±9 | M6 | 180 |
| SH35 | φ35 | 50 | 48 | 98 | 82 | 15 | 50 | 12 | 74 | 32 | ±11 | M6 | 270 |
| SH40 | φ40 | 60 | 57 | 114 | 96 | 15 | 60 | 12 | 90 | 36 | ±11 | M6 | 420 |
| SH50 | φ50 | 70 | 63 | 126 | 121 | 18 | 74 | 13 | 100 | 40 | ±14 | M7 | 750 |
| SH60 | φ60 | 80 | 74 | 148 | 135 | 18 | 90 | 14 | 120 | 45 | ±14 | M7 | 1100 |

Slide Support SHF Series



| 型号 Designation | 轴径 Shaft Diameter | 尺寸 Dimensions (mm) | | | | | | | 安装螺栓规格 Mounting bolt designation | 夹板螺栓规格 Clamping bolt designation | 重量 Weight (g) |
|-------------------|----------------------|--------------------|----|----|-----|----|----|-----|-------------------------------------|-------------------------------------|------------------|
| | | L | T | F | B | G | H | S | | | |
| SHF10 | φ10 | 43 | 12 | 5 | 32 | 20 | 24 | 5.5 | M5 | M4 | 13 |
| SHF12 | φ12 | 47 | 13 | 7 | 36 | 25 | 28 | 5.5 | M5 | M4 | 20 |
| SHF13 | φ13 | 47 | 13 | 7 | 36 | 25 | 28 | 5.5 | M5 | M4 | 20 |
| SHF16 | φ16 | 53 | 18 | 8 | 40 | 28 | 31 | 5.5 | M5 | M4 | 27 |
| SHF20 | φ20 | 63 | 20 | 8 | 48 | 34 | 37 | 7 | M6 | M5 | 40 |
| SHF25 | φ25 | 73 | 25 | 10 | 58 | 40 | 42 | 7 | M6 | M5 | 80 |
| SHF30 | φ30 | 83 | 30 | 12 | 64 | 46 | 50 | 9 | M8 | M6 | 110 |
| SHF35 | φ35 | 92 | 35 | 14 | 72 | 50 | 58 | 12 | M10 | M6 | 380 |
| SHF40 | φ40 | 102 | 40 | 16 | 80 | 58 | 67 | 12 | M10 | M10 | 510 |
| SHF50 | φ50 | 122 | 50 | 18 | 96 | 70 | 83 | 14 | M12 | M12 | 880 |
| SHF60 | φ60 | 140 | 60 | 25 | 112 | 82 | 95 | 14 | M12 | M12 | 1,500 |

Slide Shafts



径向螺紋孔
Radial Holes Drilled and Tapped



轴向螺紋孔
Coaxial Holes Drilled and Tapped



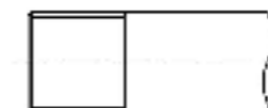
缩径轴
Reduced Shaft Diameter



切槽
Serp Ring Grooves



滚花
Threading



平面
Flats



键槽
Key way

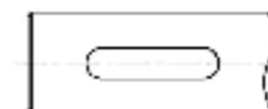


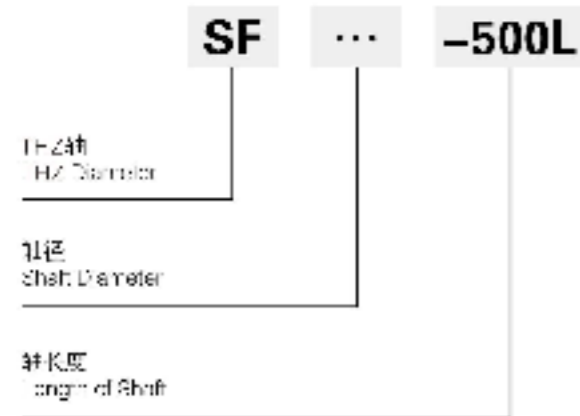
图5 (Fig) 轴销示例
Examples for Shafts

THZ轴销轴是经过处理、磨削和抛光的高精度产品。为轴销轴配备适当的螺紋孔、切直纹齿、粗纹磨、圆纹磨、表面质量和硬度是其重要的。THZ轴销轴在制造时考虑以上几点使其在任何工作条件下都能良好的工作。这些轴销轴能支持旋转运动、直线运动和混合运动以及单纯的直线运动。

THZ slide shaft is hardened, ground and polished and features high precision quality. Straightness, roughness, cylindricity, surface finish and hardness are very important when used with linear motion slide bearings. THZ slide shafts are manufactured with these points in mind to maintain precision performance under any operating conditions. These slide shafts will effectively support rotary, linear, linear-rotary complex, as well as simple linear motion applications.

材质 Material: GCR15 高碳铬钢 High carbon chromium steel
硬度 Hardness: HRC2.2-2.7
表面硬化处理 Surface Hardening: Double-Flume
表面粗糙度 Roughness: Ra0.4
直线度 Straightness: 0.01 mm/50mm

Slide Shaft SF Series



| | |
|------|-----------------------------------|
| SF | 直线轴 LINEAR SHAFT |
| SI C | 电镀硬轴 HARD CHROM. COATING SHAFT |
| SSF | 不锈钢直线轴 SUS SHAFT |
| PSF | 空心轴 LM PIPE SHAFT |



| 型号 Designation | 轴径 Shaft Diameter (g6) | | 尺寸 Dimensions (mm) | | | | | | | | | | | | |
|-------------------|---------------------------|----------------------|--------------------|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|
| | d (mm) | 公差 Tolerance (μm) | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 1000 | 1200 | 1300 | 1500 | 2000 |
| SF6 | φ6 | -0.011 -0.017 | ○ | ○ | ○ | ○ | ○ | - | - | - | - | - | - | - | - |
| SF8 | φ8 | -0.011 | ○ | ○ | ○ | ○ | ○ | - | - | - | - | - | - | - | - |
| SF10 | φ10 | -0.011 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | - |
| SF12 | φ12 | -0.011 | - | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | - |
| SF13 | φ13 | -0.011 | - | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | - |
| SF15 | φ15 | -0.011 | - | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | - |
| SF20 | φ20 | -0.011 | - | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| SF25 | φ25 | -0.011 | - | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| SF30 | φ30 | -0.011 | - | - | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| SF35 | φ35 | -0.011 | - | - | - | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| SF40 | φ40 | -0.011 | - | - | - | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| SF50 | φ50 | -0.011 | - | - | - | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| SF60 | φ60 | -0.011 | - | - | - | - | - | - | - | ○ | ○ | ○ | ○ | ○ | ○ |
| SF80 | φ80 | -0.011 | - | - | - | - | - | - | - | ○ | ○ | ○ | ○ | ○ | ○ |

○ 标准长度品 Standard Length
○ 标准长度外品 The Length to order

Various Countries Bearing Item Numer

亚洲公制 (Used in Asia)

| 轴承代号 Bearing Code | 生产公司 Manufacturer | | | | | | |
|----------------------|-------------------|----|---------|------------|----------|------------------|--------|
| | 中国 (CHINA) | | | 日本 (JAPAN) | | 韩国 (SOUTH KOREA) | |
| LM | THZ | 太敦 | IB (伊达) | THK | HEPHA ST | IKO | SAM/CK |
| SM | | | | NACHI | NB | 意大利 (ITALY) | |
| LD | | | | NSK | | | |
| SDM | | | | EASE | | | |
| KLM | | | | NTN | | | |

欧洲公制 (Used in Europe)

| 轴承代号 Bearing Code | 中国 (CHINA) | | 日本 (JAPAN) | | | 韩国 (SOUTH KOREA) |
|----------------------|--------------|----|------------|----------|-----|------------------|
| | THZ | 太敦 | THK | HEPHA ST | IKO | SAM/CK |
| KB | 德国 (GERMANY) | | NACHI | | NB | 意大利 (ITALY) |
| | INA | | | | | |
| SDM | | | EASE | | | |

美洲公制 (Used in US)

| 轴承代号 Bearing Code | 中国 (CHINA) | | 日本 (JAPAN) | | | 韩国 (SOUTH KOREA) |
|----------------------|------------|----|------------|----------|-----|------------------|
| | THZ | 太敦 | THK | HEPHA ST | IKO | SAM/CK |
| SW | | | NACHI | | NB | 意大利 (ITALY) |
| SDH | | | EASE | | | |

公制系列: 日本标准 JIS B 1501; 英寸系列: 美国标准 ANSI B 119.1
基本代号: LB