

# 直线轴承

## Linear Motion Ball Bearing

### 结构和优点

#### Structure and Features

- SNB 直线轴承由外圈、钢球、保持架和挡圈组成。保持架能将钢球约束在循环轨道中，挡圈将保持架固定在外圈中。
- 这些零件组装在一起便使轴承具有最佳的功能。
- 外圈经热处理后，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 SNB 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 in held inside the outer cylinder by end rings.

#### 1. 高精度和刚性 High Precision and Rigidity

SNB 直线轴承外圈是钢制的坚固的外圆柱型，保持架为轧制钢板或具有工业强度的尼龙制成。

The SNB linear motion bearing is produced from a solid steel outer cylinder. Also the linear motion bearing incorporates either a patented all steel hardend seamless ball retainer or an industrial strength resin ratainen.

#### 2. 易于安装 Ease of Assembly

普通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。安装表面也易于加工。SNB 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 SNB linear motion bearing can be loaded from any direction. Precision control is possible using only the shaft supporter, and the mounting surface can be machined easily. SNB also provides a variety of housings for all types of slide bushings, offering convenience of design and assembly.

- Those 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.

#### 3. 易于更换 Ease of Replacement

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

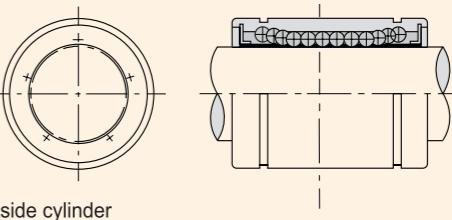
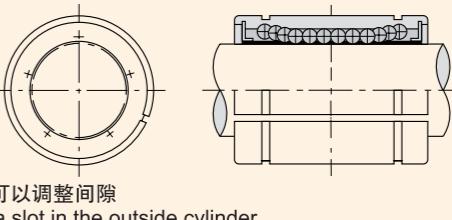
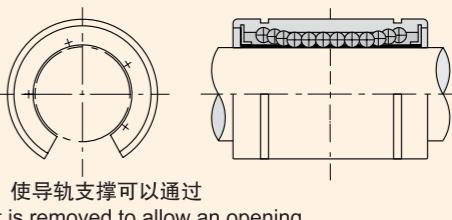
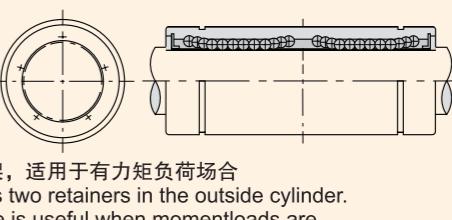
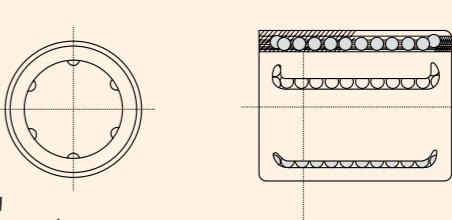
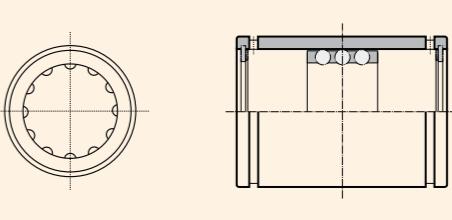
SNB linear motion bearing of each type are completely interchangeable because of their standardized dimensions and strict precision control. Replacement because of wear or damage is therefore easy and accurate.

#### 4. 品种齐全 Variety of Types

SNB 直线轴承型号齐全，有普通型、间隙调整型、开口型、加长型和带法兰型，用户可以根据需要从中选择。

SNB offers a full line of linear motion bearing: the standard, integral single-retainer closed 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.

## 直线轴承的类型 Type of Linear Motion Ball Bearings

| 类型<br>Type                        | 结构<br>Description   | 材料<br>Material  |                             |
|-----------------------------------|---|---|-----------------------------|
|                                   |   | 外圈<br>Outer cylinder  | 保持架<br>Retainer             |
| 标准型<br>Standard Type              |    |    | 钢<br>Steel<br>钢<br>Steel    |
| 间隙调整型<br>Adjustable Type          |    |    | 钢<br>Steel<br>尼龙<br>Resin   |
| 开口型<br>Open Type                  |  |  | 钢<br>Steel<br>钢<br>Steel    |
| 加长型<br>Double-Wide Type           |  |  | 钢<br>Steel<br>尼龙<br>Resin   |
| 冲压外圈型<br>Pressing Outer Race Type |  |  | 钢<br>Steel<br>钢<br>Steel    |
| 行程轴承<br>Stroke Bearing            |  |  | 钢<br>Steel<br>铝<br>Aluminum |

## 直线轴承的代号 Type Number Format

|                             |   |           |          |          |           |           |
|-----------------------------|---|-----------|----------|----------|-----------|-----------|
|                             | <b>LM</b>   | <b>25</b> | <b>L</b> | <b>M</b> | <b>UU</b> | <b>AJ</b> |
| 类型 Type                     |   |           |          |          |           |           |
| 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     |           |          |          |           |           |
| 公称轴径 Nominal Shaft Diameter |   |           |          |          |           |           |
| 加长 Double type              |   |           |          |          |           |           |
| 符号 Symbol                   | 代表意义 Specification  |           |          |          |           |           |
| 不标 No entry                 | 标准型 Standard type   |           |          |          |           |           |
| AJ                          | 间隙调整型 Adjustable type                                       |           |          |          |           |           |
| OP                          | 开口型 Open type   |           |          |          |           |           |
| 密封 Seal                     |   |           |          |          |           |           |
| 符号 Symbol                   | 代表意义 Specification  |           |          |          |           |           |
| 不标 No entry                 | 不带密封 No seal  |           |          |          |           |           |
| U                           | 单密封 Seals on one side                                       |           |          |          |           |           |
| UU                          | 双密封 Seals on both sides                                     |           |          |          |           |           |
| M 镀镍 Nickel plated          |   |           |          |          |           |           |

## 公差 Tolerance

●SNB直线轴承有普通型和精密型两种，在样本中有标明。需要说明的是对于间隙调整型（…AJ）和开口型（…OP）的钢球总体内径和外径的公差是在切口之前测量的。

## 额度负荷和寿命估算 Load Rating and Life Expectancy

●直线轴承的额定寿命可以根据轴承的额定动负荷和工作负荷利用下式计算出：  
●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:

$$L = \left( \frac{f_H \cdot f_T \cdot f_C}{f_W} \cdot \frac{C}{P} \right)^3 \cdot 50 \quad (1)$$

L: 额定寿命 Rated life (km)  
fH: 硬度系数 Hardness factor  
fT: 温度系数 Temperature coefficient  
fC: 接触系数 Contact coefficient  
Basic dynamic load rating (N)  
P: 工作负荷 Working load (N)  
fW: 负荷系数 Load coefficient

- 直线轴承的时间寿命可以根据每分钟行走距离进行计算。
- 如果行程长度、往复次数恒定，则时间寿命可用下式计算出。
- The lifespan ( $L_h$ ) 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:

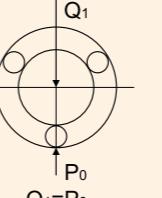
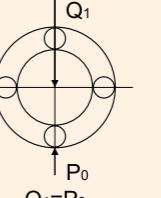
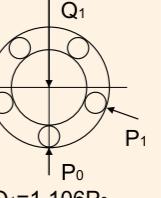
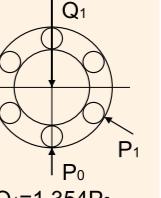
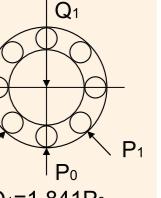
$$L_h = \left( \frac{L \cdot 10^3}{2 \cdot \ell_s \cdot n_1 \cdot 60} \right) \quad (2)$$

$\ell_s$ : 行程长度 Stroke length(m)  
 $n_1$ : 每分钟往复数 Number of strokes per minute(CPM)

## 钢球列数与额定负荷的关系 Relation between ball circuits and load rating

● The SNB linear motion ball bearing includes ball Circuits that are spaced equally and circumferentially. The load rating varies according to the loaded position on 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 MYT 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 such cases:

表1 Table 1

| 作用位置<br>Row position | 钢球列数<br>Number of rows | 3   | 4   | 5   | 6   | 8   |
|----------------------|------------------------|---|---|---|---|---|
| 作用位置<br>Row position | 3                      |  |  |  |  |  |
| 额定负荷<br>Load ratio   | $Q_0/Q_1=1$            | $Q_0=Q_1$   | $Q_0/Q_1=1.414$   | $Q_0/Q_1=1.463$   | $Q_0/Q_1=1.280$   | $Q_0/Q_1=1.115$   |

## 计算实例 Sample Calculations

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

轴承型号 Slide bush: LM20

行程长度 Stroke length: 50mm

每分钟往复数 Number of strokes per minute: 50次/分(cpm)

每套轴承承受负荷 Load per bush: 490N

从产品样本中查得LM-20额定动负荷为882N，额定寿命用下式算出：

The basic dynamic load rating of the slide bush is 882N from the dimension table. From equation (1), therefore, the rated life  $L$  is obtained as follows:

$$L = \left( \frac{f_H \cdot f_T \cdot f_C}{f_W} \cdot \frac{C}{P} \right) \cdot 50 \quad f_H = f_T = f_C = f_W = 1.0 \\ = \left( \frac{882}{490} \right)^3 \times 50 = 292\text{km}$$

根据式(2)，时间寿命计算如下：

From equation(2), the lifespan  $L_h$  is obtained as follows

$$L_h = \frac{L \times 10^3}{2 \times \ell_s \times n_1 \times 60} = \frac{292 \times 10^3}{2 \times 0.05 \times 50 \times 60} = 973\text{hr}$$

②根据下列使用条件选择轴承：  
Selecting the slide bush type satisfying the following conditions:  
设备安装的直线轴承数量 Number of slide bushes used: 4套  
行程长度 Stroke length: 1米 (m)  
行走速度 Traveling speed: 10米/分钟 (m/min)  
往复次数 Number of strokes per minute: 5次/分钟 (cpm)  
时间寿命 Lifespan: 10,00小时, (hr)  
总负荷 Total load: 980N  
根据式(2)，行走寿命可以从时间寿命中换算出：  
From equation(2), the traveling distance within the lifespan is obtained as follows:

$$L = 2 \times \ell_s \times n_1 \times 60 \times L_h = 6,000\text{km}$$

根据式(1)，额定动负荷计算如下：

From equation(1), the basic dynamic load rating is obtained as follows:

$$C = \sqrt[3]{\frac{L}{50}} \cdot \left( \frac{f_W}{f_H f_T f_C} \right) \cdot P = 1492\text{N}$$

假设使用二根轴，每根轴装二套直线轴承：  
Assume the following with a pair of shafts each with two slide bushes:  
 $f_C = 0.81, f_W = f_T = f_H = 1$   
结果从样本中选LM30便可满足额定动负荷的要求。  
As a result, LM30 is selected from the dimension table as the KENT slide bush type satisfying the value of C.

## 间隙和配合

### Clearance and Fit

- 当一套标准型的直线轴承装到轴上时，间隙不合适会使轴承过早地破坏、失效或运行不平衡。调整型和开口型直线轴承装到可以控制外径尺寸的轴承座中，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，外径与轴承座孔之间的间隙应根据使用条件来决定。表2为推荐的配合。
- When a standard-type SNB slide bush is used with a shaft, inadequate clearance adjustment may cause early bush failure and/or poor, rough traveling. 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

| 模型<br>Model | 类别<br>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             |
| LME         | High class      | h6              | j6                   | H7             | J7             |

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

## 轴和轴承座

### 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 SNB slide bush, high precision of the shaft and housing is required.

#### 1. 轴 Shaft

SNB直线轴承的钢球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作性能，轴的生产应注意以下几点：The rolling balls in the SNB slide bush are in point contact with the shaft surface. Therefore, the shaft dimensions, tolerance, surface finish, and harness greatly affect the traveling performance of the bush. The shaft should be manufactured with due attention to the following points:

- 因为表面粗糙度极大的影响运作的平稳性，因此轴表面粗糙度应达到Ra0.4或更好。Since the surface finish critically affects smooth rolling of balls, grind the shaft at 0.4 S or better.
- 最佳硬度是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 best 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, harness over HRc 64 accelerates ball wear.
- 对间隙调整型和开口型直线轴承，其轴的直径应尽可能地低于产品样

本中规定的钢球总体内径公差的下限，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 mush as possible be of the lower value of the inscribed circle diameter in the specification bable. Do not set the shaft diameter to the upper value.

4)零间隙和负间隙会使摩擦阻力有所增加。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.

SNB直线轴承在尺寸公差、表面粗糙度和硬度方面都严格的控制，是直线轴承配套的理想轴。详见样本钢轴部分。

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

#### 2. 轴承座Housing

我们轴承座有不同的结构，加工方法和安装方法可供用户选择。对于这些轴承座的配合和形状见表2。

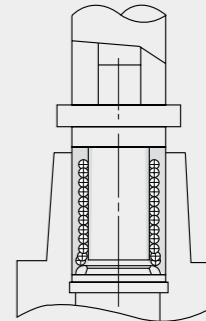
We provide a wide range of housings differing in design, machining and mounting. For the fitness and shapes of housings, see Table 2 and the following section on mounting.

## 安装

### Mounting

- 将直线轴承安装到轴承座孔中，不要敲打两端的挡圈(密封圈)，而是用手将其推入或轻轻地敲打(见图1)。轴承安装到轴承座中之后再仔细地将光轴插入，注意不要碰撞钢球。如果同时使用二根平行的轴，则轴的平行度对保证轴承的平稳运行是非常重要的，一定要仔细地安装。
- 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) In inserting the shaft 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



## 安装实例

### Examples of Mounting

- 通常的安装方法是将轴承推入座孔时阻力要适宜，然而我们建议尽量采用较松的配合，否则轴承的精度会下降。
- 图2~图6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 operate it with an

appropriate interference. It is recommended, however, to make a loose fit in principle because otherwise precision is apt to be minimized. The following examples (Fig. 2 to 6) show assembling of the inserted bush in terms of designing and mounting, for reference.

Fig.2

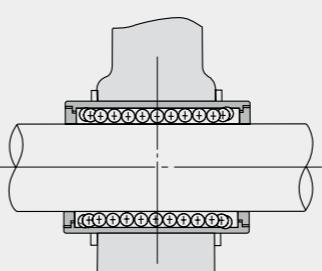


Fig.3

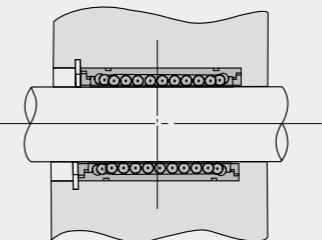


Fig.5

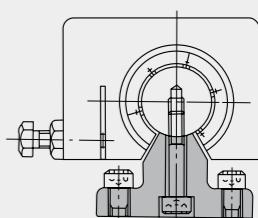
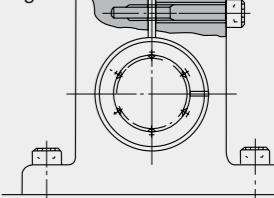


Fig.6



### LM...UU 尼龙保持架

该类型尺寸是公制的，广泛应用于亚洲和其它国家。

所有型号均可根据客户要求做镀镍处理，有防锈作用。

#### LM...UU (Resin retainer)

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

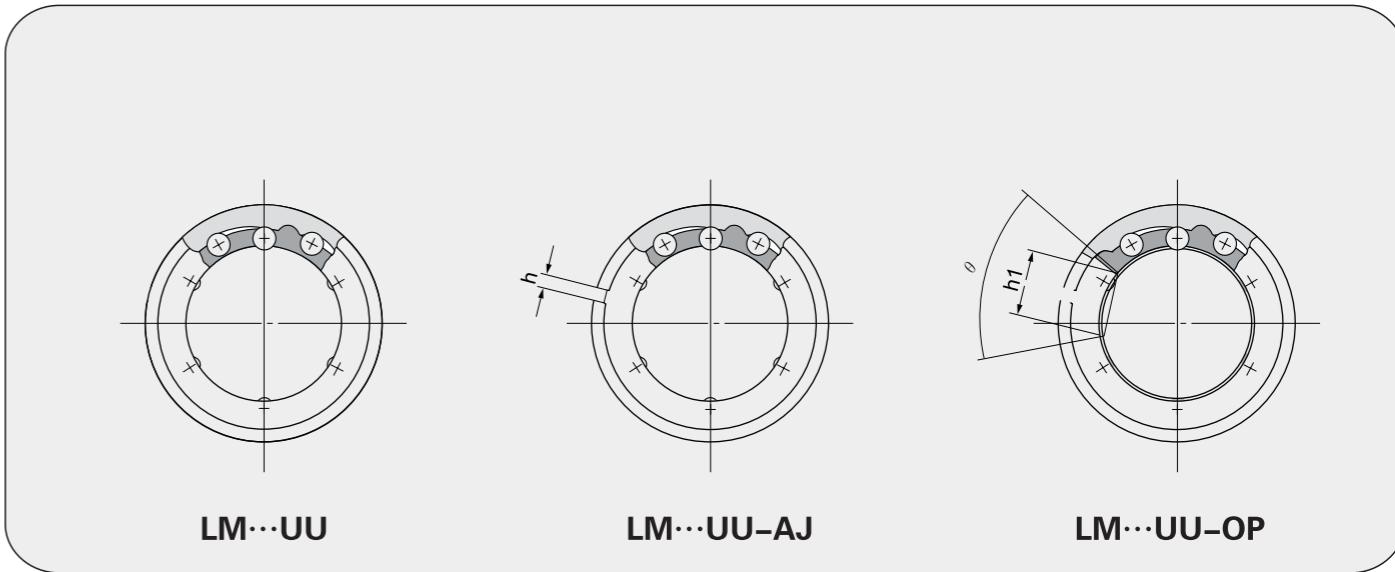
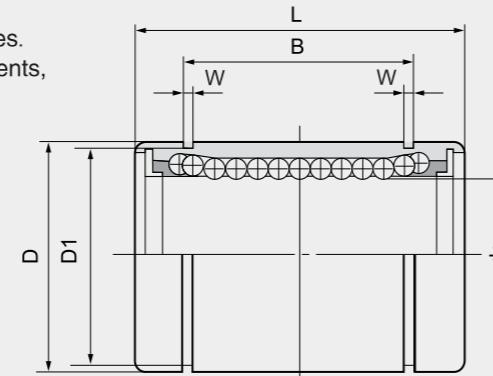
All models can be done with nickel plated according to customers' requirements, with function of rust-proof.



**LM...UU**

**LM...UU-AJ**

**LM...UU-OP**



**LM...UU**

**LM...UU-AJ**

**LM...UU-OP**

| 公称轴径<br>Nominal<br>shaft<br>diameter<br>mm | 尼龙保持架 Resin retainer |                         |                     |                     |                         |                     |                   |                         | dr                  |                 |                         |          |
|--|----------------------|-------------------------|---------------------|---------------------|-------------------------|---------------------|-------------------|-------------------------|---------------------|-----------------|-------------------------|----------|
|  | 标准型<br>LM...UU       | 钢球列数<br>Ball<br>circuit | 重量<br>Weight<br>(g) | 间隙调整型<br>LM...UU-AJ | 钢球列数<br>Ball<br>circuit | 重量<br>Weight<br>(g) | 开口型<br>LM...UU-OP | 钢球列数<br>Ball<br>circuit | 重量<br>Weight<br>(g) | mm              | 公差<br>Tolerance $\mu m$ |          |
|  |                      |                         |                     |                     |                         |                     |                   |                         |                     | 精密<br>Precision | 普通<br>High              |          |
| 3  | LM3                  | 4                       | 1.35                | —                   | —                       | —                   | —                 | —                       | —                   | 3               | 0<br>-5                 | 0<br>-8  |
| 4  | LM4                  | 4                       | 1.9                 | —                   | —                       | —                   | —                 | —                       | —                   | 4               | —                       | —        |
| 5  | LM5UU                | 4                       | 4                   | —                   | —                       | —                   | —                 | —                       | —                   | 5               | —                       | —        |
| 6  | LM6UU                | 4                       | 7.6                 | LM6UU-AJ            | 4                       | 7.5                 | —                 | —                       | —                   | 6               | —                       | —        |
| 8  | LM8SUU               | 4                       | 10.4                | LM8SUU-AJ           | 4                       | 10                  | —                 | —                       | —                   | 8               | —                       | —        |
| 8  | LM8UU                | 4                       | 15                  | LM8UU-AJ            | 4                       | 14.7                | —                 | —                       | —                   | 8               | —                       | —        |
| 10   | LM10UU               | 4                       | 29.5                | LM10UU-AJ           | 4                       | 29                  | LM10UU-OP         | 3                       | 23                  | 10              | 0<br>-6                 | 0<br>-9  |
| 12   | LM12UU               | 4                       | 31.5                | LM12UU-AJ           | 4                       | 31                  | LM12UU-OP         | 3                       | 25                  | 12              | —                       | —        |
| 13   | LM13UU               | 4                       | 43                  | LM13UU-AJ           | 4                       | 42                  | LM13UU-OP         | 3                       | 34                  | 13              | —                       | —        |
| 16   | LM16UU               | 5                       | 69                  | LM16UU-AJ           | 5                       | 68                  | LM16UU-OP         | 4                       | 52                  | 16              | —                       | —        |
| 20   | LM20UU               | 5                       | 87                  | LM20UU-AJ           | 5                       | 85                  | LM20UU-OP         | 4                       | 69                  | 20              | —                       | —        |
| 25   | LM25UU               | 6                       | 220                 | LM25UU-AJ           | 6                       | 216                 | LM25UU-OP         | 5                       | 188                 | 25              | 0<br>-7                 | 0<br>-10 |
| 30   | LM30UU               | 6                       | 250                 | LM30UU-AJ           | 6                       | 245                 | LM30UU-OP         | 5                       | 210                 | 30              | —                       | —        |
| 35   | LM35UU               | 6                       | 390                 | LM35UU-AJ           | 6                       | 384                 | LM35UU-OP         | 5                       | 335                 | 35              | —                       | —        |
| 40   | LM40UU               | 6                       | 585                 | LM40UU-AJ           | 6                       | 579                 | LM40UU-OP         | 5                       | 500                 | 40              | 0<br>-8                 | 0<br>-12 |
| 50   | LM50UU               | 6                       | 1,580               | LM50UU-AJ           | 6                       | 1,560               | LM50UU-OP         | 5                       | 1,340               | 50              | —                       | —        |
| 60   | LM60UU               | 6                       | 1,860               | LM60UU-AJ           | 6                       | 1,820               | LM60UU-OP         | 5                       | 1,610               | 60              | 0<br>-0                 | 0<br>-15 |
| 80   | LM80UU               | 6                       | 4,420               | LM80UU-AJ           | 6                       | 4,300               | LM80UU-OP         | 5                       | 3,650               | 80              | —9                      | —15      |
| 100  | LM100UU              | 6                       | 8,600               | LM100UU-AJ          | 6                       | 8,540               | LM100UU-OP        | 5                       | 7,200               | 100             | 0<br>-10                | 0<br>-20 |
| 120  | LM120UU              | 8                       | 15,000              | LM120UU-AJ          | 8                       | 14,900              | LM120UU-OP        | 6                       | 11,600              | 120             | —                       | —        |
| 150  | LM150UU              | 8                       | 20,250              | LM150UU-AJ          | 8                       | 20,150              | LM150UU-OP        | 6                       | 15,700              | 150             | 0<br>-13                | 0<br>-25 |
| 180  | LM180UU              | 8                       | 33,945              | LM180UU-AJ          | 8                       | 33,795              | LM180UU-OP        | 6                       | 29,702              | 180             | 0<br>-19                | 0<br>-30 |
| 200  | LM200UU              | 8                       | 42,360              | LM200UU-AJ          | 8                       | 42,180              | LM200UU-OP        | 6                       | 37,065              | 200             | 0<br>-19                | 0<br>-30 |

密封型 Seal type:

|         |    |      |          |                    |
|---------|----|------|----------|--------------------|
| LM20MUU | 不标 | 不带密封 | No entry | No seals           |
|         | U  | 单密封  | U        | Seal on one side   |
|         | UU | 双密封  | UU       | Seal on both sides |

|   |    |   |               |
|---|----|---|---------------|
| M | 镀镍 | M | Nickle plated |
|---|----|---|---------------|

注: 小尺寸 (3和4mm内径) 无密封。

Note: Smaller sizes (3 and 4mm I.D.) are non-seal type only.

| D<br>mm | 主要尺寸和公差 Major dimensions and tolerance |         |           |                      |         |                      |          |           | 偏心<br>Eccentricity<br>$\mu m$ |    | 最大<br>径向间隙<br>Radial<br>clearance<br>(Max)<br>$\mu m$ | 额定负荷<br>Basic load rating |        |
|---------|--|---------|-----------|----------------------|---------|----------------------|----------|-----------|-------------------------------|----|---|---------------------------|--------|
|         | L<br>mm                                | B<br>mm | W<br>mm   | D <sub>1</sub><br>mm | h<br>mm | h <sub>1</sub><br>mm | $\Theta$ | Precision | 普通<br>High                    |    |   |                           |        |
| 7       | 10                                     | —       | —         | —                    | —       | —                    | —        | —         | —                             | —  | —   | 69                        | 105    |
| 8       | 12                                     | —       | —         | —                    | —       | —                    | —        | —         | —                             | —  | —   | 88                        | 127    |
| 10      | 15                                     | 10.2    | —         | —                    | 1.1     | 9.6                  | —        | —         | —                             | —  | —   | 167                       | 206    |
| 12      | 19                                     | 13.5    | —         | —                    | 1.1     | 11.5                 | 1        | —         | —                             | —  | —   | 206                       | 265    |
| 15      | 17                                     | 11.5    | —         | —                    | 1.1     | 14.3                 | 1        | —         | —                             | —  | —   | 176                       | 216    |
| 15      | 24                                     | 17.5    | —         | —                    | 1.1     | 14.3                 | 1        | —         | —                             | —  | —   | 274                       | 392    |
| 19      | 29                                     | 22      | 0<br>-200 | 1.3                  | 18      | 1                    | 6.8      | 80°       | 8                             | 12 | —   | 372                       | 549    |
| 21      | 30                                     | 23      | —         | 1.3                  | 20      | 1.5                  | 8        | 80°       | —                             | —  | —   | 510                       | 784    |
| 23      | 32                                     | 23      | —         | 1.3                  | 22      | 1.5                  | 9        | 80°       | —                             | —  | —   | 510                       | 784    |
| 28      | 37                                     | 26.5    | —         | 1.6                  | 27      | 1.5                  | 11       | 80°       | —                             | —  | —   | 774                       | 1,180  |
| 32      | 42                                     | 30.5    | —         | 1.6                  | 30.5    | 1.5                  | 11       | 60°       | —                             | —  | —   | 882                       | 1,370  |
| 40      | 59                                     | 41      | —         | 1.85                 | 38      | 2                    | 12       | 50°       | 10                            | 15 | —   | 980                       | 1,570  |
| 45      | 64                                     | 44.5    | —         | 1.85                 | 43      | 2.5                  | 15       | 50°       | —                             | —  | —   | 1,570                     | 2,740  |
| 52      | 70                                     | 49.5    | 0<br>-300 | 2.1                  | 49      | 2.5                  | 17       | 50°       | —                             | —  | —   | 1,670                     | 3,140  |
| 60      | 80                                     | 60.5    | 0<br>-300 | 2.1                  | 57      | 3                    | 20       | 50°       | 12                            | 20 | —   | 2,160                     | 4,020  |
| 80      | 100                                    | 74      | —         | 2.6                  | 76.5    | 3                    | 25       | 50°       | —                             | —  | —   | 3,820                     | 7,940  |
| 90      | 110                                    | 85      | —         | 3.15                 | 86.5    | 3                    | 30       | 50°       | 17                            | 25 | —   | 4,700                     | 10,000 |
| 120     | 140                                    | 105.5   | —         | 4.15                 | 116     | 3                    | 40       | 50°       | —                             | —  | —   | 7,350                     | 16,000 |
| 150     | 175                                    | 125.5   | —         | 4.15                 | 145     | 3                    | 50       | 50°       | —                             | —  | —   | 14,100                    | 34,800 |
| 180     | 200                                    | 158.6   | 0<br>-400 | 4.15                 | 175     | 3                    | 85       | 80°       | 20                            | 30 | —   | 16,400                    | 40,000 |
| 210     | 240                                    | 170.6   | —         | 5.15                 | 204     | 3                    | 105      | 80°       | 25                            | —  | —   | 21,100                    | 54,300 |
| 260     | 2                                      |         |           |                      |         |                      |          |           |                               |    |   |                           |        |

### LM...GA 锌合金保持架

该类型尺寸是公制的，广泛应用于亚洲和其它国家。  
所有型号均可根据客户要求做镀镍处理，有防锈作用。

#### LM...GA (Zinc alloy retainer)

This type is a metric dimension series widely used in Asia and other countries.  
All models can be done with nickel plated according to customers'requirements,  
with function of rust-proof.



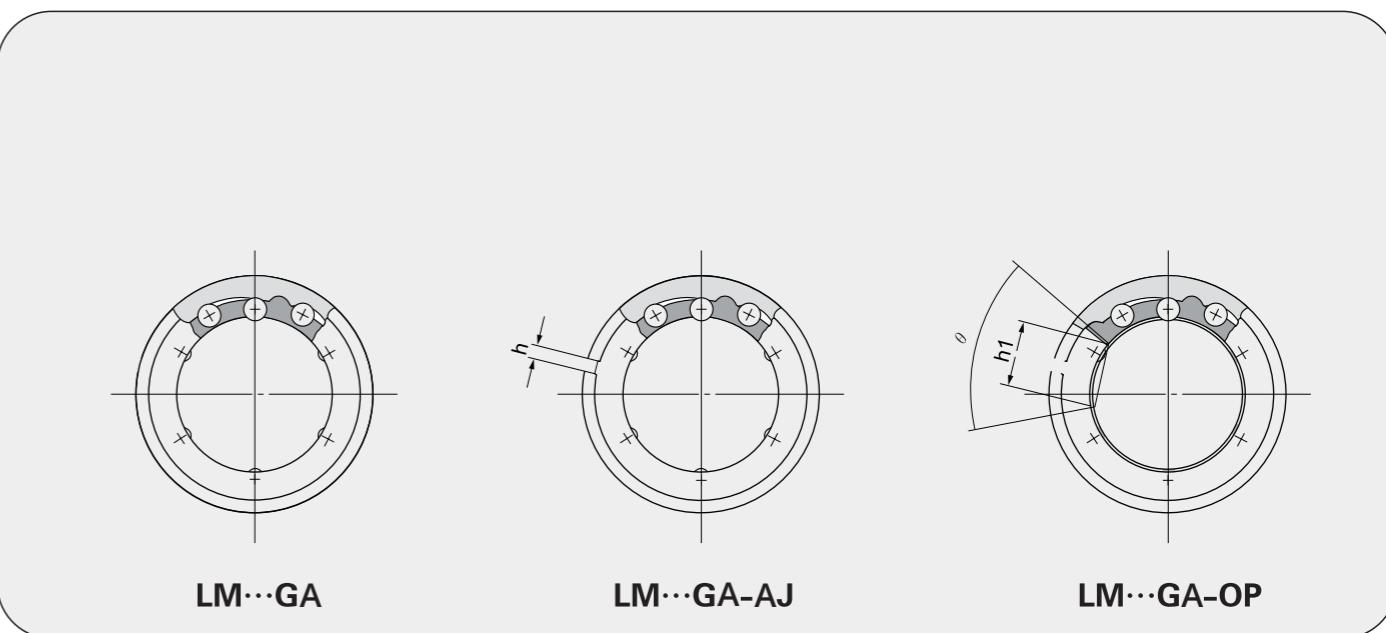
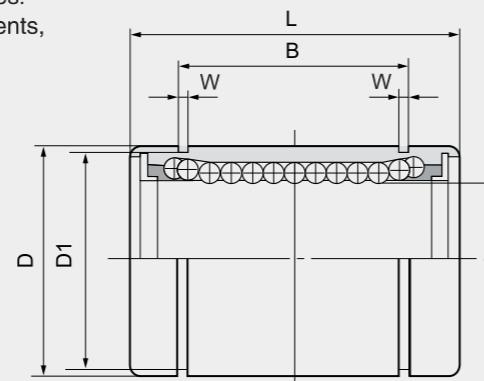
LM...GA



LM...GA-AJ



LM...GA-OP



LM...GA

LM...GA-AJ

LM...GA-OP

| 公称轴径<br>Nominal<br>shaft<br>diameter<br>mm | 尼龙保持架 Resin retainer |                         |                     |                     |                         |                     |                   |                         | dr                  |    |                               |          |
|--|----------------------|-------------------------|---------------------|---------------------|-------------------------|---------------------|-------------------|-------------------------|---------------------|----|-------------------------------|----------|
|  | 标准型<br>LM...GA       | 钢球列数<br>Ball<br>circuit | 重量<br>Weight<br>(g) | 间隙调整型<br>LM...GA-AJ | 钢球列数<br>Ball<br>circuit | 重量<br>Weight<br>(g) | 开口型<br>LM...GA-OP | 钢球列数<br>Ball<br>circuit | 重量<br>Weight<br>(g) | mm | 公差<br>Tolerance $\mu\text{m}$ |          |
|  |                      |                         |                     |                     |                         |                     |                   |                         |                     |    | Precision                     | High     |
| 6  | LM6GA                | 4                       | 8.9                 | LM6GA-AJ            | 4                       | 8.8                 | —                 | —                       | —                   | 6  | 0<br>-6                       | 0<br>-9  |
| 8  | LM8GA                | 4                       | 17.3                | LM8GA-AJ            | 4                       | 17                  | —                 | —                       | —                   | 8  |                               |          |
| 10   | LM10GA               | 4                       | 32                  | LM10GA-AJ           | 4                       | 31.5                | LM10GA-OP         | 3                       | 24                  | 10 | 0<br>-6                       | 0<br>-9  |
| 12   | LM12GA               | 4                       | 36.7                | LM12GA-AJ           | 4                       | 36.2                | LM12GA-OP         | 3                       | 27.5                | 12 |                               |          |
| 13   | LM13GA               | 4                       | 50                  | LM13GA-AJ           | 4                       | 49                  | LM13GA-OP         | 3                       | 37.5                | 13 | 0<br>-13                      | 0<br>-10 |
| 16   | LM16GA               | 5                       | 86                  | LM16GA-AJ           | 5                       | 85                  | LM16GA-OP         | 4                       | 68.8                | 16 |                               |          |
| 20   | LM20GA               | 5                       | 112                 | LM20GA-AJ           | 5                       | 110                 | LM20GA-OP         | 4                       | 89.6                | 20 | 0<br>-7                       | 0<br>-10 |
| 25   | LM25GA               | 6                       | 282                 | LM25GA-AJ           | 6                       | 278                 | LM25GA-OP         | 5                       | 235                 | 25 |                               |          |
| 30   | LM30GA               | 6                       | 326                 | LM30GA-AJ           | 6                       | 321                 | LM30GA-OP         | 5                       | 271.7               | 30 | 0<br>-8                       | 0<br>-12 |
| 35   | LM35GA               | 6                       | 489                 | LM35GA-AJ           | 6                       | 483                 | LM35GA-OP         | 5                       | 407.5               | 35 |                               |          |
| 40   | LM40GA               | 6                       | 730                 | LM40GA-AJ           | 6                       | 724                 | LM40GA-OP         | 5                       | 608.3               | 40 | 0<br>-19                      | 0<br>-12 |

LM20 M GA  
M 镀镍

M 尼克尔镀层

注：小尺寸（3和4mm内径）无密封。  
Note: Smaller sizes (3 and 4mm I.D.) are non-seal type only.

| D<br>mm | 公差<br>$\mu\text{m}$ | L<br>mm | 公差<br>$\mu\text{m}$ | B<br>mm | 公差<br>$\mu\text{m}$ | W<br>mm | D <sub>1</sub><br>mm | h<br>mm | h <sub>1</sub><br>mm | $\Theta$ | 主要尺寸和公差 Major dimensions and tolerance |            | 偏心<br>Eccentricity<br>$\mu\text{m}$ | 最大<br>径向间隙<br>Radial<br>clearance<br>(Max)<br>$\mu\text{m}$ | 额定负荷<br>Basic load rating |         |
|---------|---------------------|---------|---------------------|---------|---------------------|---------|----------------------|---------|----------------------|----------|--|------------|-------------------------------------|---|---------------------------|---------|
|         |                     |         |                     |         |                     |         |                      |         |                      |          | 精密<br>Precision                        | 普通<br>High | 精密<br>Precision                     | 普通<br>High  |                           |         |
| 12      | 0<br>-11            | 19      |                     | 13.5    |                     | 1.1     | 11.5                 | 1       | —                    | —        |  |            |                                     |   | -3                        | 206 265 |
| 15      |                     | 24      |                     | 17.5    |                     | 1.1     | 14.3                 | 1       | —                    | —        |  |            |                                     |   | 274 392                   |         |
| 19      |                     | 29      |                     | 22      |                     | 1.3     | 18                   | 1       | 6.8                  | 80°      | 8                                      | 12         |                                     |   | 372 549                   |         |
| 21      | 0<br>-13            | 30      | 0<br>-200           | 23      |                     | 1.3     | 20                   | 1.5     | 8                    | 80°      |  |            | -4                                  | 510 784   |                           |         |
| 23      |                     | 32      |                     | 23      |                     | 1.3     | 22                   | 1.5     | 9                    | 80°      |  |            |                                     |   | 510 784                   |         |
| 28      |                     | 37      |                     | 26.5    |                     | 1.6     | 27                   | 1.5     | 11                   | 80°      |  |            |                                     |   | 774 1,180                 |         |
| 32      |                     | 42      |                     | 30.5    |                     | 1.6     | 30.5                 | 1.5     | 11                   | 60°      |  |            | -6                                  | 882 1,370   |                           |         |
| 40      | 0<br>-16            | 59      |                     | 41      |                     | 1.85    | 38                   | 2       | 12                   | 50°      | 10                                     | 15         |                                     |   | 980 1,570                 |         |
| 45      |                     | 64      | 0<br>-44.5          | 44.5    |                     | 1.85    | 43                   | 2.5     | 15                   | 50°      |  |            |                                     |   | 1,570 2,740               |         |
| 52      | 0<br>-19            | 70      | 0<br>-300           | 49.5    |                     | 2.1     | 49                   | 2.5     | 17                   | 50°      |  |            | -8                                  | 1,670 3,140   |                           |         |
| 60      |                     | 80      |                     | 60.5    |                     | 2.1     | 57                   | 3       | 20                   | 50°      | 12                                     | 20         |                                     |   | -10 2,160 4,020           |         |

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

### LME...UU 尼龙保持架

该类型尺寸是公制的，广泛应用于欧洲。

所有型号均可根据客户要求做镀镍处理，有防锈作用。

#### LME...UU (Resin retainer)

This type is a metric dimension series generally used in Europe.

All models can be done with nickel plated according to customers' requirements, with function of rust-proof.



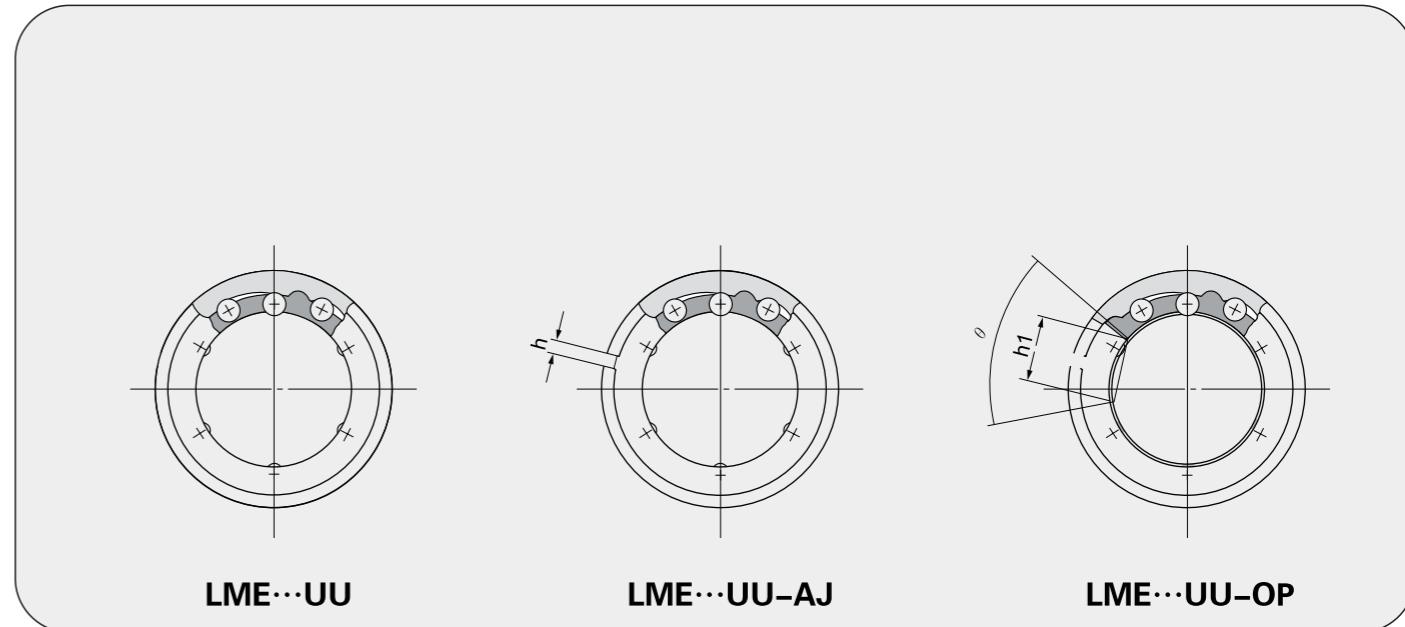
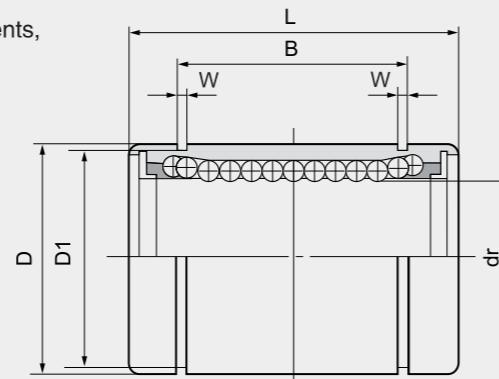
**LME...UU**



**LME...UU-AJ**



**LME...UU-OP**



**LME...UU**

**LME...UU-AJ**

**LME...UU-OP**

| 公称轴径<br>Nominal<br>shaft<br>diameter<br>mm | 尼龙保持架 Resin retainer |                         |                     |                      |                         |                     |                    |                         | dr                  |    |                         |                 |            |
|--|----------------------|-------------------------|---------------------|----------------------|-------------------------|---------------------|--------------------|-------------------------|---------------------|----|-------------------------|-----------------|------------|
|  | 标准型<br>LME...UU      | 钢球列数<br>Ball<br>circuit | 重量<br>Weight<br>(g) | 间隙调整型<br>LME...UU-AJ | 钢球列数<br>Ball<br>circuit | 重量<br>Weight<br>(g) | 开口型<br>LME...UU-OP | 钢球列数<br>Ball<br>circuit | 重量<br>Weight<br>(g) | mm | 公差<br>Tolerance $\mu m$ | 精密<br>Precision | 普通<br>High |
| 3  | LME3                 | 4                       | 1.35                |                      | —                       |                     | —                  |                         | —                   | 3  |                         |                 |            |
| 4  | LME4                 | 4                       | 1.9                 |                      | —                       |                     | —                  |                         | —                   | 4  |                         |                 |            |
| 5  | LME5UU               | 4                       | 11                  | LME5UU-AJ            | 4                       | 10                  | —                  |                         | —                   | 5  |                         |                 |            |
| 8  | LME8UU               | 4                       | 20                  | LME8UU-AJ            | 4                       | 19.5                | —                  |                         | —                   | 8  |                         |                 |            |
| 10   | LME10UU              | 4                       | 29.5                | LME10UU-AJ           | 4                       | 29                  | LME10UU-OP         | 3                       | 23                  | 10 |                         |                 |            |
| 12   | LME12UU              | 4                       | 41                  | LME12UU-AJ           | 4                       | 40                  | LME12UU-OP         | 3                       | 32                  | 12 |                         |                 |            |
| 16   | LME16UU              | 5                       | 57                  | LME16UU-AJ           | 5                       | 56                  | LME16UU-OP         | 4                       | 44                  | 16 |                         |                 |            |
| 20   | LME20UU              | 5                       | 91                  | LME20UU-AJ           | 5                       | 90                  | LME20UU-OP         | 4                       | 75                  | 20 |                         |                 |            |
| 25   | LME25UU              | 6                       | 215                 | LME25UU-AJ           | 6                       | 212                 | LME25UU-OP         | 5                       | 181                 | 25 |                         |                 |            |
| 30   | LME30UU              | 6                       | 325                 | LME30UU-AJ           | 6                       | 320                 | LME30UU-OP         | 5                       | 272                 | 30 |                         |                 |            |
| 40   | LME40UU              | 6                       | 705                 | LME40UU-AJ           | 6                       | 694                 | LME40UU-OP         | 5                       | 600                 | 40 |                         |                 |            |
| 50   | LME50UU              | 6                       | 1,130               | LME50UU-AJ           | 6                       | 1,110               | LME50UU-OP         | 5                       | 970                 | 50 |                         |                 |            |
| 60   | LME60UU              | 6                       | 2,050               | LME60UU-AJ           | 6                       | 2,000               | LME60UU-OP         | 5                       | 1,580               | 60 |                         |                 |            |
| 80   | LME80UU              | 6                       | 5,140               | LME80UU-AJ           | 6                       | 5,000               | LME80UU-OP         | 5                       | 4,380               | 60 |                         |                 |            |

|                              |    |      |               |                    |
|------------------------------|----|------|---------------|--------------------|
| 密封型 Seal type:<br>LME20 M UU | 不标 | 不带密封 | No entry      | No seals           |
|                              | U  | 单密封  | U             | Seal on one side   |
|                              | UU | 双密封  | UU            | Seal on both sides |
| M 镀镍                         |    | M    | Nickel plated |                    |

注：小尺寸（3和4mm内径）无密封。  
Note: Smaller sizes (3 and 4mm I.D.) are non-seal type only.

| 主要尺寸和公差 Major dimensions and tolerance |                      |     |                      |       |                      |      |                |     |                | 偏心 Eccentricity $\mu m$ | 最大径向间隙 Radial clearance (Max) $\mu m$ | 额定负荷 Basic load rating |        |
|--|----------------------|-----|----------------------|-------|----------------------|------|----------------|-----|----------------|-------------------------|---------------------------------------|------------------------|--------|
| D                                      |                      | L   |                      | B     |                      | W    | D <sub>1</sub> | h   | h <sub>1</sub> | $\Theta$                |                                       |                        |        |
| mm                                     | 公差 Tolerance $\mu m$ | mm  | 公差 Tolerance $\mu m$ | mm    | 公差 Tolerance $\mu m$ | mm   | mm             | mm  | mm             | mm                      | mm                                    | mm                     | mm     |
| 7                                      |                      | 10  | 0                    | —     | —                    | —    | —              | —   | —              | —                       | 10                                    | 69                     | 105    |
| 8                                      | 0                    | 12  | -120                 | —     | —                    | —    | —              | —   | —              | —                       | -3                                    | 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    |                      | 1.3  | 18             | 1   | 6.8            | 80°                     | 12                                    | 372                    | 549    |
| 22                                     | -9                   | 32  | -200                 | 22.9  |                      | 1.3  | 21             | 1.5 | 7.5            | 78°                     | -4                                    | 510                    | 784    |
| 26                                     |                      | 36  |                      | 24.9  |                      | 1.3  | 24.9           | 1.5 | 10             | 78°                     |                                       | 578                    | 892    |
| 32                                     |                      | 45  |                      | 31.5  |                      | 1.6  | 30.3           | 2   | 10             | 60°                     | -6                                    | 862                    | 1,370  |
| 40                                     | 0                    | 58  | -11                  | 44.1  |                      | 1.85 | 37.5           | 2   | 12.5           | 60°                     | 15                                    | 980                    | 1,570  |
| 47                                     |                      | 68  | 0                    | 52.1  |                      | 1.85 | 44.5           | 2   | 12.5           | 50°                     |                                       | 1,570                  | 2,740  |
| 62                                     | 0                    | 80  | -300                 | 60.6  |                      | 2.15 | 59             | 3   | 16.8           | 50°                     | 17                                    | 2,160                  | 4,020  |
| 75                                     | -13                  | 100 |                      | 77.6  |                      | 2.65 | 72             | 3   | 21             | 50°                     |                                       | 3,820                  | 7,940  |
| 90                                     | 0                    | 125 | -15                  | 101.7 |                      | 3.15 | 86.5           | 3   | 27.2           | 54°                     | 20                                    | 4,700                  | 9,800  |
| 120                                    | 0                    | 165 | -19                  | 133.7 |                      | 4.15 | 116            | 3   | 36.3           | 54°                     | 25                                    | 7,350                  | 16,000 |

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

### LME…GA 锌合金保持架

该类型尺寸是公制的，广泛应用于欧洲。

所有型号均可根据客户要求做镀镍处理，有防锈作用。

#### LME…GA (Zinc alloy retainer)

This type is a metric dimension series generally used in Europe.

All models can be done with nickel plated according to customers' requirements, with function of rust-proof.



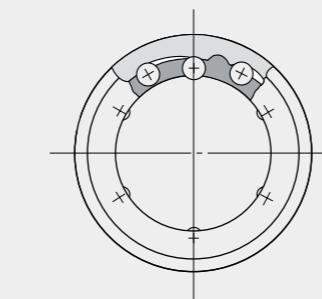
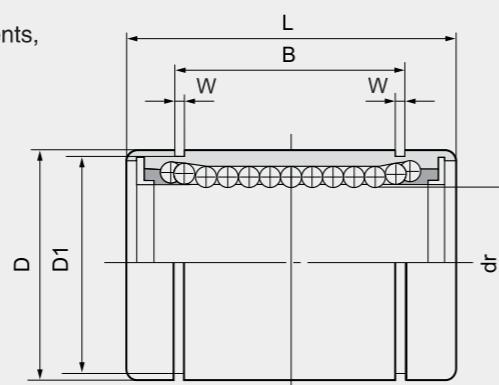
**LME…GA**



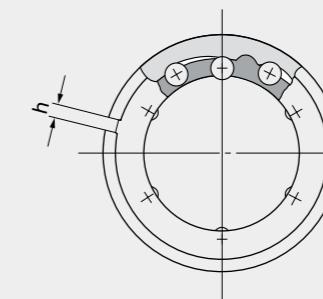
**LME…GA-AJ**



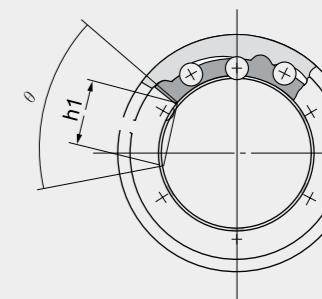
**LME…GA-OP**



**LME…GA**



**LME…GA-AJ**



**LME…GA-OP**

| 公称轴径<br>Nominal<br>shaft<br>diameter<br>mm | 尼龙保持架 Resin retainer |                         |                     |                    |                         |                     |                  |                         | dr                  |    |                       |
|--|----------------------|-------------------------|---------------------|--------------------|-------------------------|---------------------|------------------|-------------------------|---------------------|----|-----------------------|
|  | 标准型<br>LME…UU        | 钢球列数<br>Ball<br>circuit | 重量<br>Weight<br>(g) | 间隙调整型<br>LME…UU-AJ | 钢球列数<br>Ball<br>circuit | 重量<br>Weight<br>(g) | 开口型<br>LME…UU-OP | 钢球列数<br>Ball<br>circuit | 重量<br>Weight<br>(g) | mm | 公差<br>Tolerance<br>μm |
| 8  | LME8GA               | 4                       | 25.2                | LME8GA-AJ          | 4                       | 24.7                | —                | —                       | —                   | 8  | +8<br>0               |
| 10   | LME10GA              | 4                       | 32                  | LME10GA-AJ         | 4                       | 31.5                | LME10GA-OP       | 3                       | 26.7                | 10 | —                     |
| 12   | LME12GA              | 4                       | 52.9                | LME12GA-AJ         | 4                       | 51.9                | LME12GA-OP       | 3                       | 39.7                | 12 | —                     |
| 16   | LME16GA              | 5                       | 73.5                | LME16GA-AJ         | 5                       | 72.5                | LME16GA-OP       | 4                       | 58.8                | 16 | +9<br>-1              |
| 20   | LME20GA              | 5                       | 120.3               | LME20GA-AJ         | 5                       | 119.3               | LME20GA-OP       | 4                       | 96.2                | 20 | —                     |
| 25   | LME25GA              | 6                       | 271.9               | LME25GA-AJ         | 6                       | 268.9               | LME25GA-OP       | 5                       | 226.6               | 25 | +11<br>-1             |
| 30   | LME30GA              | 6                       | 417.3               | LME30GA-AJ         | 6                       | 412.3               | LME30GA-OP       | 5                       | 347.8               | 30 | —                     |
| 40   | LME40GA              | 6                       | 894.1               | LME40GA-AJ         | 6                       | 883.1               | LME40GA-OP       | 5                       | 745.1               | 40 | +13<br>-2             |

LME20 M GA  
M 镀镍  
M Nickel plated

注：小尺寸（3和4mm内径）无密封。  
Note: Smaller sizes (3 and 4mm I.D.) are non-seal type only.

| 主要尺寸和公差 Major dimensions and tolerance |                       |    |                       |      |                       |      |                |      |                | 偏心<br>Eccentricity<br>μm | 最大<br>径向间隙<br>Radial<br>clearance<br>(Max)<br>μm | 额定负荷<br>Basic load rating |                        |
|--|-----------------------|----|-----------------------|------|-----------------------|------|----------------|------|----------------|--------------------------|--|---------------------------|------------------------|
| D                                      |                       | L  |                       | B    |                       | W    | D <sub>1</sub> | h    | h <sub>1</sub> | θ                        |  |                           |                        |
| mm                                     | 公差<br>Tolerance<br>μm | mm | 公差<br>Tolerance<br>μm | mm   | 公差<br>Tolerance<br>μm | mm   | mm             | mm   | mm             | °                        |  | 动负荷<br>Dynamic<br>C N     | 静负荷<br>Static<br>C o N |
| 16                                     | 0<br>-8               | 25 |                       | 16.5 |                       |      | 1.1            | 15.2 | 1              | —                        | —  | 12                        | -3                     |
| 19                                     | 0                     | 29 |                       | 22   |                       |      | 1.3            | 18   | 1              | 6.8                      | 80°  |                           | 372                    |
| 22                                     | 0<br>-9               | 32 | 0<br>-200             | 22.9 | 0<br>-200             | 1.3  | 21             | 1.5  | 7.5            | 78°                      | -4   | 510                       |                        |
| 26                                     |                       | 36 |                       | 24.9 |                       | 1.3  | 24.9           | 1.5  | 10             | 78°                      | 578  | 892                       |                        |
| 32                                     |                       | 45 |                       | 31.5 |                       | 1.6  | 30.3           | 2    | 10             | 60°                      | -6   | 862                       |                        |
| 40                                     | 0<br>-11              | 58 |                       | 44.1 |                       | 1.85 | 37.5           | 2    | 12.5           | 60°                      | 980  | 1,570                     |                        |
| 47                                     |                       | 68 | 0<br>-300             | 52.1 | 0<br>-300             | 1.85 | 44.5           | 2    | 12.5           | 50°                      | -8   | 1,570                     |                        |
| 62                                     | 0<br>-13              | 80 |                       | 60.6 |                       | 2.15 | 59             | 3    | 16.8           | 50°                      | 17   | 2,160                     |                        |

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

### LM…LUU 尼龙保持架

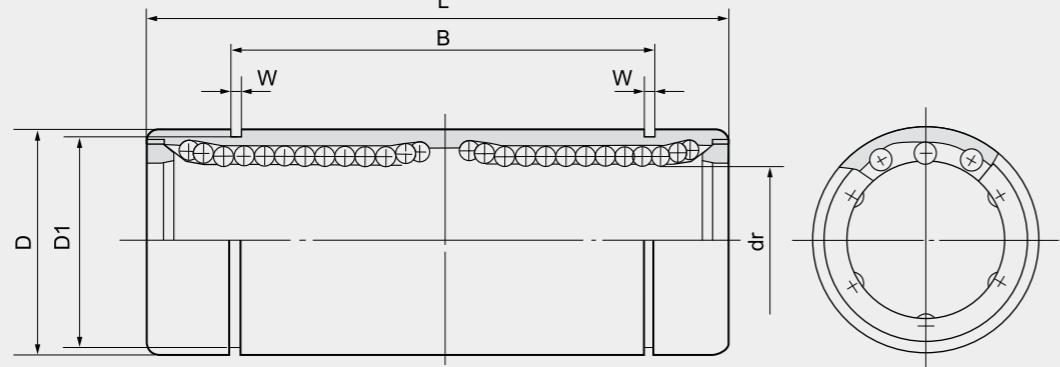
该类型尺寸是公制的，广泛应用于亚洲和其它国家。  
所有型号均可根据客户要求做镀镍处理，有防锈作用。

#### LM…LUU (Resin retainer)

This type is a metric dimension series widely used in Asia and other countries.  
All models can be done with nickle plated according to customers'requirements,  
with function of rust-proof.



**LM…LUU**



### LME…LUU尼龙保持架

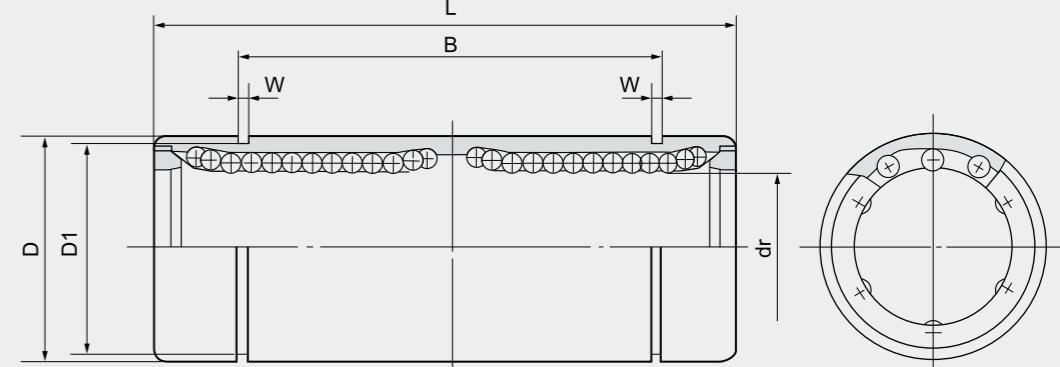
该类型尺寸是公制的，广泛应用于欧洲。  
所有型号均可根据客户要求做镀镍处理，有防锈作用。

#### LME…LUU(Resin retainer)

This type is a metric dimension series generally used in Europe.  
All models can be done with nickle plated according to customers'requirements,  
with function of rust-proof.



**LME…LUU**



| 公称轴径<br>Nominal<br>shaft<br>diameter<br>mm | 标准型<br>LM…LUU | 钢球<br>列数<br>Ball<br>circuit | 主要尺寸和公差 Major dimensions and tolerance |                       |     |                       |     |                       |      |           | 偏心<br>Eccentricity<br>μm | 额定负荷<br>Basic load rating |                       | 重量<br>Weight<br>(g) |        |       |
|--|---------------|-----------------------------|--|-----------------------|-----|-----------------------|-----|-----------------------|------|-----------|--------------------------|---------------------------|-----------------------|---------------------|--------|-------|
|  |               |                             | dr                                     |                       | D   |                       | L   |                       | B    | W         | D <sub>1</sub>           | 动负荷<br>Dynamic<br>C N     | 静负荷<br>Static<br>Co N |                     |        |       |
|  |               |                             | mm                                     | 公差<br>Tolerance<br>μm | mm  | 公差<br>Tolerance<br>μm | mm  | 公差<br>Tolerance<br>μm |      |           |                          | mm                        | 公差<br>Tolerance<br>μm |                     |        |       |
| 4  | LM4LUU        | 4                           | 4                                      | 0                     | 8   | 0                     | 23  | 0                     | —    | —         | —                        | 106                       | 254                   | 4                   |        |       |
| 5  | LM5LUU        | 4                           | 5                                      | -9                    | 10  | -11                   | 28  | -200                  | 20.4 | 0<br>-200 | 1.1                      | 9.6                       | 261                   | 412                 | 8.4    |       |
| 6  | LM6LUU        | 4                           | 6                                      |                       | 12  | 0                     | 35  |                       | 27   |           | 1.1                      | 11.5                      | 323                   | 530                 | 16     |       |
| 8  | LM8LUU        | 4                           | 8                                      |                       | 15  | -13                   | 45  |                       | 35   |           | 1.1                      | 14.3                      | 431                   | 784                 | 31     |       |
| 10   | LM10LUU       | 4                           | 10                                     | 0                     | 19  |                       | 55  |                       | 44   | 0         | 1.3                      | 18                        | 588                   | 1,100               | 62     |       |
| 12   | LM12LUU       | 4                           | 12                                     | -10                   | 21  | 0                     | 57  | -300                  | 46   | -300      | 1.3                      | 20                        | 813                   | 1,570               | 80     |       |
| 13   | LM13LUU       | 4                           | 13                                     |                       | 23  | -16                   | 61  |                       | 46   |           | 1.3                      | 22                        | 813                   | 1,570               | 90     |       |
| 16   | LM16LUU       | 5                           | 16                                     |                       | 28  |                       | 70  |                       | 53   |           | 1.6                      | 27                        | 1,230                 | 2,350               | 145    |       |
| 20   | LM20LUU       | 5                           | 20                                     |                       | 32  |                       | 80  |                       | 61   |           | 1.6                      | 30.5                      | 1,400                 | 2,740               | 180    |       |
| 25   | LM25LUU       | 6                           | 25                                     | 0<br>-12              | 40  | 0<br>-19              | 112 |                       | 82   |           | 1.85                     | 38                        | 20                    | 1,560               | 3,140  | 440   |
| 30   | LM30LUU       | 6                           | 30                                     |                       | 45  |                       | 123 |                       | 89   |           | 1.85                     | 43                        |                       | 2,490               | 5,490  | 480   |
| 35   | LM35LUU       | 6                           | 35                                     |                       | 52  |                       | 135 | 0                     | 99   | 0         | 2.1                      | 49                        |                       | 2,650               | 6,270  | 795   |
| 40   | LM40LUU       | 6                           | 40                                     | 0<br>-15              | 60  | 0<br>-22              | 151 | -400                  | 121  | -400      | 2.1                      | 57                        | 25                    | 3,430               | 8,040  | 1,170 |
| 50   | LM50LUU       | 6                           | 50                                     |                       | 80  |                       | 192 |                       | 148  |           | 2.6                      | 76.5                      |                       | 6,080               | 15,900 | 3,100 |
| 60   | LM60LUU       | 6                           | 60                                     | 0                     | 90  | 0<br>-25              | 209 |                       | 170  |           | 3.15                     | 86.5                      | 30                    | 7,550               | 20,000 | 3,500 |
| 80   | LM80LUU       | 6                           | 80                                     | -20                   | 120 | -25                   | 265 |                       | 216  |           | 4.15                     | 116                       |                       | 11,500              | 32,000 | 7,710 |

|                |    |      |          |                    |
|----------------|----|------|----------|--------------------|
| 密封型 Seal type: | 不标 | 不带密封 | No entry | No seals           |
| LM20 LUU       | U  | 单密封  | U        | Seal on one side   |
|                | UU | 双密封  | UU       | Seal on both sides |
| M 镀镍           | M  | 镀镍   | M        | Nickle plated      |

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

| 公称轴径<br>Nominal<br>shaft<br>diameter<br>mm | 标准型<br>LME…LUU | 钢球<br>列数<br>Ball<br>circuit | 主要尺寸和公差 Major dimensions and tolerance |                       |           |                       |           |                       |              |                       | 偏心<br>Eccentricity<br>μm | 额定负荷<br>Basic load rating |                       | 重量<br>Weight<br>(g)   |                       |    |
|--|----------------|-----------------------------|--|-----------------------|-----------|-----------------------|-----------|-----------------------|--------------|-----------------------|--------------------------|---------------------------|-----------------------|-----------------------|-----------------------|----|
|  |                |                             | dr                                     |                       | D         |                       | L         |                       | B            |                       |                          | W                         | D <sub>1</sub>        | 动负荷<br>Dynamic<br>C N | 静负荷<br>Static<br>Co N |    |
|  |                |                             | mm                                     | 公差<br>Tolerance<br>μm | mm        | 公差<br>Tolerance<br>μm | mm        | 公差<br>Tolerance<br>μm | mm           | 公差<br>Tolerance<br>μm |                          | mm                        | 公差<br>Tolerance<br>μm | mm                    | 公差<br>Tolerance<br>μm |    |
| 8  | LME8LUU        | 4                           | 8                                      | +9<br>-1              | 16        | 0<br>-9               | 46        |                       | 33           |                       | 1.1                      | 15.2                      |                       | 421                   | 804                   | 40 |
| 12   | LME12LUU       | 4                           | 12                                     | 22                    | 0<br>-11  | 61                    | 0<br>-300 | 45.8                  | 0<br>-300    | 1.3<br>-21            | 15                       |                           | 813                   | 1,570                 | 80                    |    |
| 16   | LME16LUU       | 5                           | 16                                     | +11<br>-1             | 26        | 0<br>-13              | 68        | 49.8                  | 0<br>-300    | 1.3<br>-24.9          |                          |                           | 921                   | 1,780                 | 115                   |    |
| 20   | LME20LUU       | 5                           | 20                                     | 32                    | 0<br>-11  | 80                    | 61        |                       | 1.6<br>-30.5 |                       |                          |                           | 1,370                 | 2,740                 | 180                   |    |
| 25   | LME25LUU       | 6                           | 25                                     | +13<br>-2             | 40        | 0<br>-13              | 112       | 82                    | 1.85<br>-38  | 17                    |                          |                           | 1,570                 | 3,140                 | 430                   |    |
| 30   | LME30LUU       | 6                           | 30                                     | 47                    | 0<br>-15  | 123                   | 104.2     | 1.85<br>-44.5         | 20           |                       |                          |                           | 2,500                 | 5,490                 | 615                   |    |
| 40   | LME40LUU       | 6                           | 40                                     | 62                    | 0<br>-400 | 151                   | 121.2     | 2.15<br>-59           | 20           |                       |                          |                           | 3,430                 | 8,040                 | 1,400                 |    |
| 50   | LME50LUU       | 6                           | 50                                     | 75                    | 0<br>-15  | 192                   | 155.2     | 2.65<br>-72           | 20           |                       |                          |                           | 6,080                 | 15,900                | 2,320                 |    |
| 60   | LME60LUU       | 6                           | 60                                     | 90                    | 0<br>-20  | 209                   | 170       | 3.15<br>-86.5         | 25           |                       |                          |                           | 7,550                 | 20,000                | 3,920                 |    |
| 80   | LME80LUU       | 6                           | 80                                     | +19<br>-6             | 120       | -20                   | 265       | 216                   | 4.15<br>-116 | 30                    |                          |                           | 11,500                | 32,000                | 7,710                 |    |

|                |    |      |          |                    |
|----------------|----|------|----------|--------------------|
| 密封型 Seal type: | 不标 | 不带密封 | No entry | No seals           |
| LM20 LUU       | U  | 单密封  | U        | Seal on one side   |
|                | UU | 双密封  | UU       | Seal on both sides |
| M 镀镍           | M  | 镀镍   | M        | Nickle plated      |

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

### LM…LGA 锌合金保持架

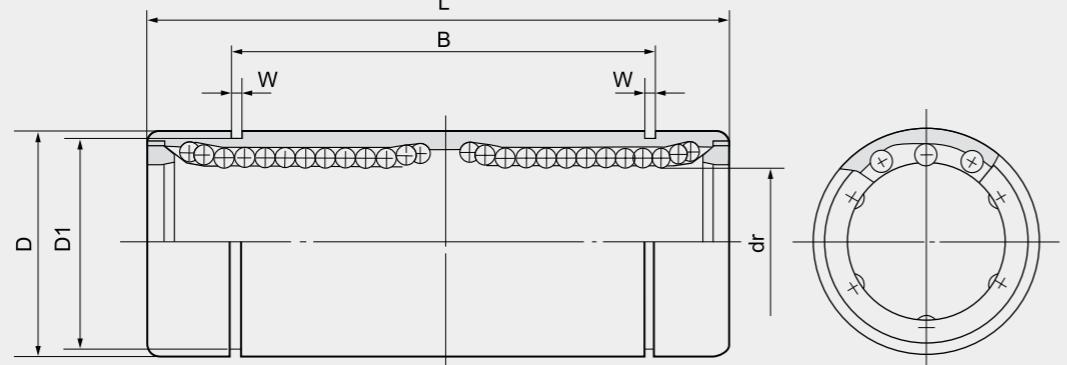
该类型尺寸是公制的，广泛应用于亚洲和其它国家。  
所有型号均可根据客户要求做镀镍处理，有防锈作用。

#### LM…LGA (Zinc alloy retainer)

This type is a metric dimension series widely used in Asia and other countries.  
All models can be done with nickle plated according to customers'requirements,  
with function of rust-proof.



**LM…LGA**



### LME…LGA 锌合金保持架

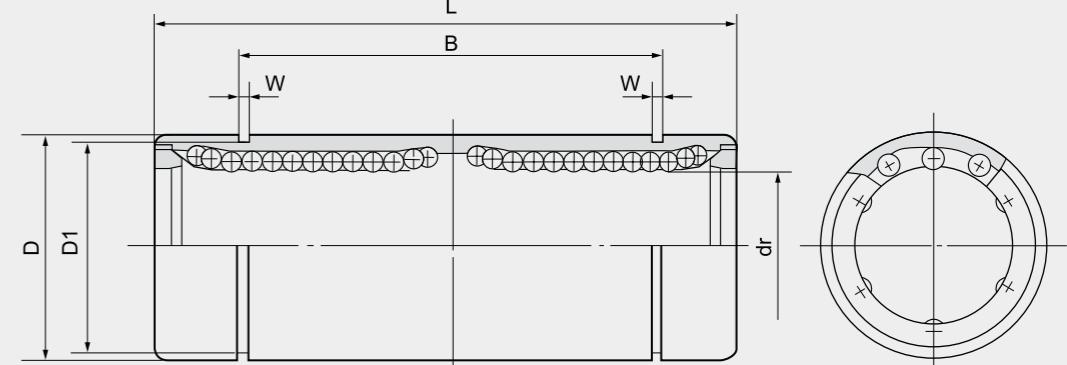
该类型尺寸是公制的，广泛应用于欧洲。  
所有型号均可根据客户要求做镀镍处理，有防锈作用。

#### LME…LGA (Zinc alloy retainer)

This type is a metric dimension series generally used in Europe.  
All models can be done with nickle plated according to customers'requirements,  
with function of rust-proof.



**LME…LGA**



| 公称轴径<br>Nominal<br>shaft<br>diameter<br>mm | 标准型<br>LM…LGA | 钢球<br>列数<br>Ball<br>circuit | 主要尺寸和公差 Major dimensions and tolerance |                        |    |                        |     |                        |     |      | 偏心<br>Eccentricity<br>μ m | 额定负荷<br>Basic load rating |                        | 重量<br>Weight<br>(g) |       |       |
|--|---------------|-----------------------------|--|------------------------|----|------------------------|-----|------------------------|-----|------|---------------------------|---------------------------|------------------------|---------------------|-------|-------|
|  |               |                             | dr                                     |                        | D  |                        | L   |                        | B   | W    | D <sub>1</sub>            | 动负荷<br>Dynamic<br>C N     | 静负荷<br>Static<br>Co N  |                     |       |       |
|  |               |                             | mm                                     | 公差<br>Tolerance<br>μ m | mm | 公差<br>Tolerance<br>μ m | mm  | 公差<br>Tolerance<br>μ m |     |      |                           | mm                        | 公差<br>Tolerance<br>μ m |                     |       |       |
| 6  | LM6LGA        | 4                           | 6                                      |                        | 12 | 0                      | 35  |                        | 27  |      | 1.1                       | 11.5                      |                        | 323                 | 530   | 18.6  |
| 8  | LM8LGA        | 4                           | 8                                      |                        | 15 | -13                    | 45  |                        | 35  |      | 1.1                       | 14.3                      |                        | 431                 | 784   | 35.6  |
| 10   | LM10LGA       | 4                           | 10                                     | 0                      | 19 | 55                     |     | 44                     |     | 1.3  | 18                        |                           | 15                     | 588                 | 1,100 | 67    |
| 12   | LM12LGA       | 4                           | 12                                     | -10                    | 21 | 0                      | 57  | 0                      | 46  | -300 | 1.3                       | 20                        |                        | 813                 | 1,570 | 90.4  |
| 13   | LM12LGA       | 4                           | 13                                     |                        | 23 | -16                    | 61  |                        | 46  |      | 1.3                       | 22                        |                        | 813                 | 1,570 | 104   |
| 16   | LM16LGA       | 5                           | 16                                     |                        | 28 |                        | 70  |                        | 53  |      | 1.6                       | 27                        |                        | 1,230               | 2,350 | 179   |
| 20   | LM20LGA       | 5                           | 20                                     |                        | 32 | 0                      | 80  |                        | 61  |      | 1.6                       | 30.5                      |                        | 1,400               | 2,740 | 230   |
| 25   | LM25LGA       | 6                           | 25                                     | 0                      | 40 | -19                    | 112 |                        | 82  |      | 1.85                      | 38                        | 20                     | 1,560               | 3,140 | 564   |
| 30   | LM30LGA       | 6                           | 30                                     |                        | 45 |                        | 123 | 0                      | 89  | -400 | 1.85                      | 43                        |                        | 2,490               | 5,490 | 632   |
| 35   | LM35LGA       | 6                           | 35                                     | 0                      | 52 | 0                      | 135 |                        | 99  |      | 2.1                       | 49                        | 25                     | 2,650               | 6,270 | 993   |
| 40   | LM40LGA       | 6                           | 40                                     | -15                    | 60 | -22                    | 151 |                        | 121 |      | 2.1                       | 57                        |                        | 3,430               | 8,040 | 1,460 |

LM20 L M G A      M      镀镍      M      Nickle plated

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

| 公称轴径<br>Nominal<br>shaft<br>diameter<br>mm | 标准型<br>LME…LGA | 钢球<br>列数<br>Ball<br>circuit | 主要尺寸和公差 Major dimensions and tolerance |                        |    |                        |     |                        |       |   | 偏心<br>Eccentricity<br>μ m | 额定负荷<br>Basic load rating |                        | 重量<br>Weight<br>(g) |       |       |
|--|----------------|-----------------------------|--|------------------------|----|------------------------|-----|------------------------|-------|---|---------------------------|---------------------------|------------------------|---------------------|-------|-------|
|  |                |                             | dr                                     |                        | D  |                        | L   |                        | B     | W | D <sub>1</sub>            | 动负荷<br>Dynamic<br>C N     | 静负荷<br>Static<br>Co N  |                     |       |       |
|  |                |                             | mm                                     | 公差<br>Tolerance<br>μ m | mm | 公差<br>Tolerance<br>μ m | mm  | 公差<br>Tolerance<br>μ m |       |   |                           | mm                        | 公差<br>Tolerance<br>μ m |                     |       |       |
| 8  | LME8LGA        | 4                           | 8                                      | +9<br>-1               | 16 | 0<br>-9                | 46  |                        | 33    |   | 1.1                       | 15.2                      |                        | 421                 | 804   | 50.4  |
| 12   | LME12LGA       | 4                           | 12                                     | 0                      | 22 | 0                      | 61  | 0                      | 45.8  |   | 1.3                       | 21                        | 15                     | 813                 | 1,570 | 103.8 |
| 16   | LME16LGA       | 5                           | 16                                     | +11<br>-1              | 26 | 0<br>-11               | 68  | -300                   | 49.8  |   | 1.3                       | 24.9                      |                        | 921                 | 1,780 | 148   |
| 20   | LME20LGA       | 5                           | 20                                     | 0                      | 32 |                        | 80  |                        | 61    |   | 1.6                       | 30.5                      |                        | 1,370               | 2,740 | 238.6 |
| 25   | LME25LGA       | 6                           | 25                                     | +13<br>-2              | 40 | 0<br>-13               | 112 |                        | 82    |   | 1.85                      | 38                        | 17                     | 1,570               | 3,140 | 543.8 |
| 30   | LME30LGA       | 6                           | 30                                     | 0                      | 47 |                        | 123 | 0<br>-400              | 104.2 |   | 1.85                      | 44.5                      |                        | 2,500               | 5,490 | 799.6 |
| 40   | LME40LGA       | 6                           | 40                                     | +16<br>-4              | 62 | 0<br>-15               | 151 |                        | 121.2 |   | 2.15                      | 59                        | 20                     | 3,430               | 8,040 | 1,778 |

LM20 L M G A      M      镀镍      M      Nickle plated

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

### LMB…UU 尼龙保持架

该类型尺寸是英制的，主要是美洲采用。

所有型号均可根据客户要求做镀镍处理，有防锈作用。

#### LMB…UU (Resin retainer)

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

All models can be done with nickel plated according to customers' requirements, with function of rust-proof.



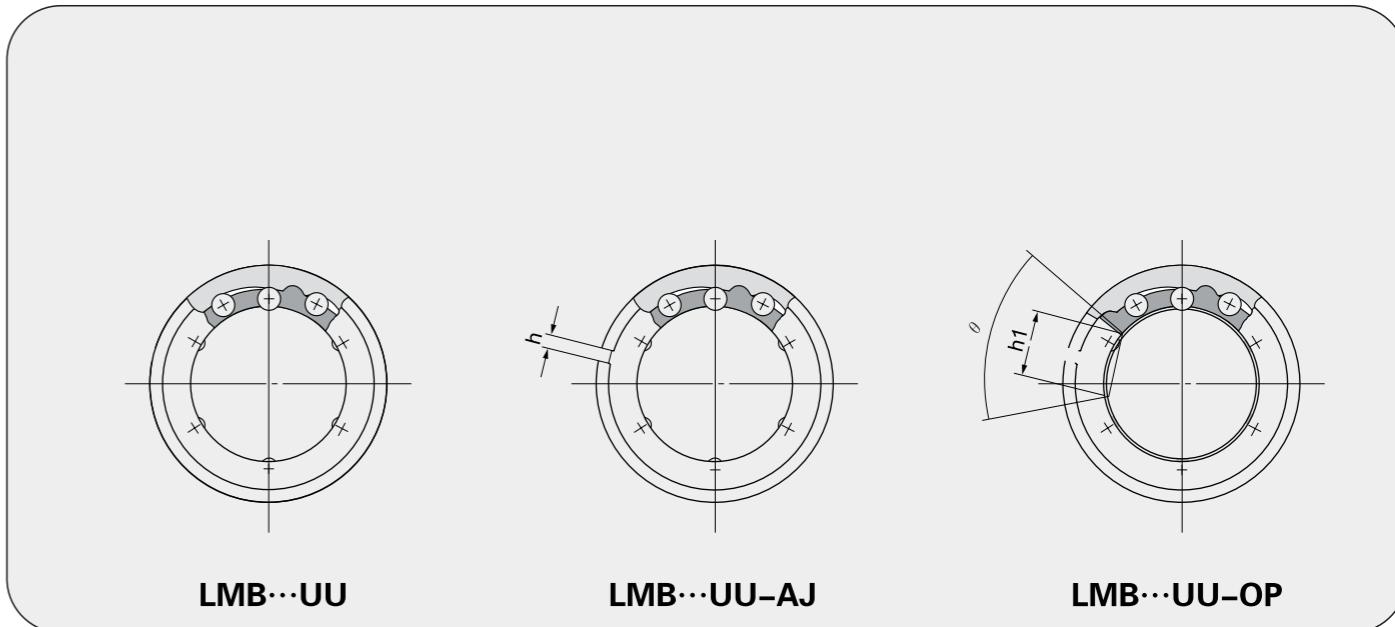
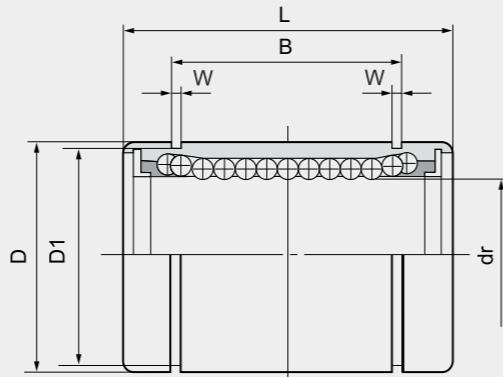
**LMB…UU**



**LMB…UU-AJ**



**LMB…UU-OP**



**LMB…UU**

**LMB…UU-AJ**

**LMB…UU-OP**

| 公称轴径<br>Nominal<br>shaft<br>diameter<br>Inch/mm | 尼龙保持架 Resin retainer |                         |                     |                    |                         |                     |                  |                         | dr                  |                  |                           |              |
|---|----------------------|-------------------------|---------------------|--------------------|-------------------------|---------------------|------------------|-------------------------|---------------------|------------------|---------------------------|--------------|
|   | 标准型<br>LMB…UU        | 钢球列数<br>Ball<br>circuit | 重量<br>Weight<br>(g) | 间隙调整型<br>LMB…UU-AJ | 钢球列数<br>Ball<br>circuit | 重量<br>Weight<br>(g) | 开口型<br>LMB…UU-OP | 钢球列数<br>Ball<br>circuit | 重量<br>Weight<br>(g) | Inch<br>mm       | 公差<br>Tolerance Inch/ μ m |              |
|   |                      |                         |                     |                    |                         |                     |                  |                         | Precision           | High             |                           |              |
| 1/4<br>6.350                                    | LMB4                 | 4                       | 8.0                 | LMB4-AJ            | 4                       | 7.5                 | —                | —                       | .2500<br>6.350      | 0<br>0           | 0<br>-.00040              |              |
| 3/8<br>9.525                                    | LMB6UU               | 4                       | 14                  | LMB6UU-AJ          | 4                       | 13.5                | —                | —                       | .3750<br>9.525      | -.00025<br>0     | 0<br>-.00040              |              |
| 1/2<br>12.700                                   | LMB8UU               | 4                       | 37                  | LMB8UU-AJ          | 4                       | 36.5                | LMB8UU-OP        | 3                       | 28                  | .5000<br>12.700  | 0<br>-.6                  | 0<br>-.9     |
| 5/8<br>15.875                                   | LMB10UU              | 4                       | 76                  | LMB10UU-AJ         | 4                       | 74                  | LMB10UU-OP       | 3                       | 57                  | .6250<br>15.875  | 0<br>-.6                  | 0<br>-.9     |
| 3/4<br>19.050                                   | LMB12UU              | 5                       | 95                  | LMB12UU-AJ         | 5                       | 93                  | LMB12UU-OP       | 4                       | 76                  | .7500<br>19.050  | 0<br>-.00030              | 0<br>-.00040 |
| 1<br>25.400                                     | LMB16UU              | 6                       | 200                 | LMB16UU-AJ         | 6                       | 198                 | LMB16UU-OP       | 5                       | 170                 | 1.0000<br>25.400 | 0<br>-.7                  | 0<br>-.10    |
| 1-1/4<br>31.750                                 | LMB20UU              | 6                       | 440                 | LMB20UU-AJ         | 6                       | 430                 | LMB20UU-OP       | 5                       | 370                 | 1.2500<br>31.750 | 0<br>0                    | 0<br>-.00035 |
| 1-1/2<br>38.100                                 | LMB24UU              | 6                       | 670                 | LMB24UU-AJ         | 6                       | 660                 | LMB24UU-OP       | 5                       | 570                 | 1.5000<br>38.100 | 0<br>0                    | 0<br>0       |
| 2<br>50.800                                     | LMB32UU              | 6                       | 1,140               | LMB32UU-AJ         | 6                       | 1,120               | LMB32UU-OP       | 5                       | 980                 | 2.0000<br>50.800 | 0<br>-.8                  | 0<br>-.12    |

|                              |    |      |               |                    |
|------------------------------|----|------|---------------|--------------------|
| 密封型 Seal type:<br>LMB20 M UU | 不标 | 不带密封 | No entry      | No seals           |
|                              | U  | 单密封  | U             | Seal on one side   |
|                              | UU | 双密封  | UU            | Seal on both sides |
| M 镀镍                         |    | M    | Nickel plated |                    |

注：小尺寸（1/4 Inch 内径）无密封。

Note: Smaller sizes (1/4Inch I.D.)  
are non-seal type only.

| 主要尺寸和公差 Major dimensions and tolerance |                        |                   |                        |                 |                        |                |                  | 偏心 Eccentricity Inch/ μ m |                  | 最大径向间隙 Radial clearance (Max) Inch/ μ m | 额定负荷 Basic load rating |                 |  |  |
|--|------------------------|-------------------|------------------------|-----------------|------------------------|----------------|------------------|---------------------------|------------------|---|------------------------|-----------------|--|--|
| D                                      |                        | L                 |                        | B               |                        | W              | D <sub>1</sub>   | h                         | h <sub>1</sub>   | θ                                       | Precision              | High            |  |  |
| Inch<br>mm                             | Tolerance<br>Inch/ μ m | Inch<br>mm        | Tolerance<br>Inch/ μ m | Inch<br>mm      | Tolerance<br>Inch/ μ m | Inch<br>mm     | Inch<br>mm       | Inch<br>mm                | Inch<br>mm       |   | Dynamic<br>C N         | Static<br>Co N  |  |  |
| .5000<br>12.700                        | .00045<br>-.11         | .7500<br>19.050   | 0<br>0                 | .5110<br>12.98  | 0<br>0                 | .0390<br>0.992 | .4687<br>11.906  | .04<br>1                  | —<br>—           | —<br>—                                  | —0.001<br>-3           | 206<br>225      | 265<br>314   |  |
| .6250<br>15.875                        | 0<br>0                 | .8750<br>22.225   | 0<br>-.008             | .6358<br>16.15  | 0<br>-.008             | .0390<br>0.992 | .5880<br>14.935  | .04<br>1                  | —<br>—           | .0003<br>0.005                          | 8<br>12                | —0.001<br>-4    | 510<br>784   | 774<br>1,180   |
| .8750<br>22.225                        | -.00050<br>0           | 1.2500<br>31.750  | 0<br>0                 | .9625<br>24.46  | 0<br>0                 | .0459<br>1.168 | .8209<br>20.853  | .06<br>1.5                | .34<br>7.9375    | 80°                                     | —<br>—                 | —<br>—          | 862<br>1,370   | 862<br>1,370   |
| 1.1250<br>28.575                       | -.13                   | 1.5000<br>38.100  | 0<br>-.200             | 1.1039<br>28.04 | 0<br>-.200             | .0559<br>1.422 | 1.0590<br>26.899 | .06<br>1.5                | .375<br>9.525    | 80°                                     | —<br>—                 | —<br>—          | 980<br>1,570   | 980<br>1,570   |
| 1.2500<br>31.750                       | 0<br>-.00065           | 1.6250<br>41.275  | 0<br>0                 | 1.1657<br>29.61 | 0<br>0                 | .0559<br>1.422 | 1.1760<br>29.870 | .06<br>1.5                | .4375<br>11.1125 | 60°                                     | .0004<br>0.006         | .0006<br>-.0002 | 1,570<br>2,740   | 1,570<br>2,740   |
| 1.5625<br>39.688                       | 0<br>-.16              | 2.2500<br>57.150  | 0<br>0                 | 1.7547<br>44.57 | 0<br>0                 | .0679<br>1.727 | 1.4687<br>37.306 | .06<br>1.5                | .5625<br>14.2875 | 50°                                     | 10<br>15               | .0005<br>-.6    | 2,180<br>4,020   | 2,180<br>4,020   |
| 2.0000<br>50.800                       | 0<br>-.00075           | 2.6250<br>66.675  | 0<br>-.012             | 2.0047<br>50.92 | 0<br>-.012             | .0679<br>1.727 | 1.8859<br>47.904 | .10<br>2.5                | .625<br>15.875   | 50°                                     | 12<br>20               | .0005<br>-.8    | 1N≈0.225lbs<br>1kg≈2.205lbs<br>SIUNIT: 1N≈0.225lbs<br>1kg≈2.205lbs | 1N≈0.225lbs<br>1kg≈2.205lbs<br>SIUNIT: 1N≈0.225lbs<br>1kg≈2.205lbs |
| 2.3750<br>60.325                       | 0<br>-.19              | 3.0000<br>76.200  | 0<br>-.300             | 2.4118<br>61.26 | 0<br>-.300             | .0859<br>2.184 | 2.2389<br>56.870 | .12<br>3                  | .75<br>19.05     | 50°                                     | 17<br>17               | .0007<br>.0010  | 3,820<br>7,940   | 3,820<br>7,940   |
| 3.0000<br>76.200                       | .00090<br>-.22         | 4.0000<br>101.600 | 0<br>0                 | 3.1917<br>81.07 | 0<br>0                 | .1029<br>2.616 | 2.8379<br>72.085 | .12<br>3                  | 1.0<br>25.40     | 50°                                     | 17<br>25               | .0007<br>-.13   | 3,820<br>7,940   | 3,820<br>7,940   |

### LMB··LUU 尼龙保持架

该类型尺寸是英制的，主要是美洲采用。

所有型号均可根据客户要求做镀镍处理，有防锈作用。

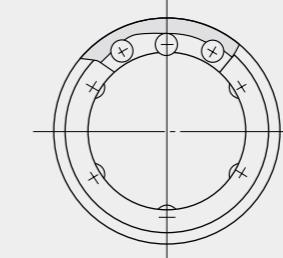
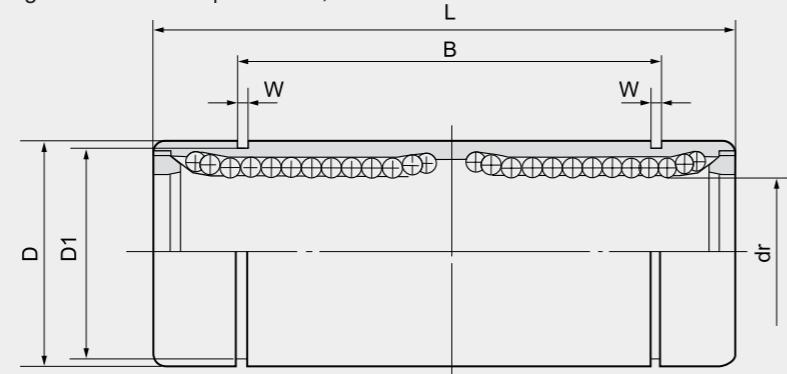
### LMB··LUU (Resin retainer)

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

All models can be done with nickle plated according to customers'requirements, with function of rust-proof.



**LMB··LUU**



**LMB··LUU**

| 公称轴径<br>Nominal<br>shaft<br>diameter<br>Inch/mm | 加长型<br>LMB··LUU | 重量<br>Weight<br>(g) | 钢球列数<br>Ball<br>circuit | 主要尺寸和公差 Major dimensions and tolerance |                              |
|---|-----------------|---------------------|-------------------------|--|------------------------------|
|   |                 |                     |                         | dr                                     |                              |
|   |                 |                     |                         | Inch<br>mm                             | 公差<br>Tolerance<br>Inch/ μ m |
| .1/4<br>6.350                                   | LMB4LUU         | 17.5                | 4                       | .2500<br>6.350                         |                              |
| .3/8<br>9.525                                   | LMB6LUU         | 28                  | 4                       | .3750<br>9.525                         | 0<br>-.00040                 |
| .1/2<br>12.700                                  | LMB8LUU         | 80                  | 4                       | .5000<br>12.700                        | 0<br>-.10                    |
| .5/8<br>15.875                                  | LMB10LUU        | 160                 | 4                       | .6250<br>15.875                        |                              |
| .3/4<br>19.050                                  | LMB12LUU        | 195                 | 5                       | .7500<br>19.050                        | 0<br>-.00050                 |
| .1<br>25.400                                    | LMB16LUU        | 410                 | 6                       | 1.0000<br>25.400                       | 0<br>-.12                    |
| 1-1/4<br>31.750                                 | LMB20LUU        | 820                 | 6                       | 1.2500<br>31.750                       |                              |
| 1-1/2<br>38.100                                 | LMB24LUU        | 1250                | 6                       | 1.5000<br>38.100                       | -0.00060<br>0<br>-.15        |
| .2<br>50.800                                    | LMB32LUU        | 1350                | 6                       | 2.0000<br>50.800                       |                              |

|                               |    |      |               |                    |
|-------------------------------|----|------|---------------|--------------------|
| 密封型 Seal type:<br>LMB20 LM UU | 不标 | 不带密封 | No entry      | No seals           |
|                               | U  | 单密封  | U             | Seal on one side   |
|                               | UU | 双密封  | UU            | Seal on both sides |
| M                             | 镀镍 | M    | Nickle plated |                    |

| D<br>Inch<br>mm  | 公差<br>Tolerance<br>Inch/ μ m | L<br>Inch<br>mm   | B<br>Inch<br>mm   | W<br>Inch<br>mm   | D1<br>Inch<br>mm  | 主要尺寸和公差 Major dimensions and tolerance |                              | 偏心<br>Eccentricity<br>Inch/ μ m | 额定负荷<br>Basic load rating    |            |
|------------------|------------------------------|-------------------|-------------------|-------------------|-------------------|--|------------------------------|---------------------------------|------------------------------|------------|
|                  |                              |                   |                   |                   |                   | dr                                     |                              |                                 |                              |            |
|                  |                              |                   |                   |                   |                   | Inch<br>mm                             | 公差<br>Tolerance<br>Inch/ μ m | Inch<br>mm                      | 公差<br>Tolerance<br>Inch/ μ m | Inch<br>mm |
| .5000<br>12.700  | .00050<br>-.13               | 1.3750<br>34.925  | 1.0220<br>25.959  |                   |                   | .0390<br>0.992                         | .4687<br>11.906              |                                 | 323                          | 530        |
| .6250<br>15.875  | 0                            | 1.5938<br>40.481  | 1.2716<br>32.298  | 0<br>-.012        | 0<br>-.012        | .0390<br>0.992                         | .5880<br>14.935              | .0006<br>15                     | 353                          | 630        |
| .8750<br>22.225  | -.00065<br>0                 | 2.3750<br>60.325  | 1.9250<br>48.895  |                   |                   | .0459<br>1.168                         | .8209<br>20.853              |                                 | 813                          | 1,570      |
| 1.1250<br>28.575 | -.16                         | 2.8125<br>71.438  | 2.2079<br>56.080  | 0<br>-.300        | 0<br>-.300        | .0559<br>1.422                         | 1.0590<br>26.899             |                                 | 1,230                        | 2,350      |
| 1.2500<br>31.750 | 0<br>-.00075                 | 3.0937<br>78.581  | 2.3314<br>59.218  |                   |                   | .0559<br>1.422                         | 1.1760<br>29.870             | .0008<br>20                     | 1,370                        | 2,740      |
| 1.5625<br>39.688 | 0<br>-.19                    | 4.2831<br>108.744 | 3.5049<br>89.139  |                   |                   | .0679<br>1.727                         | 1.4687<br>37.306             |                                 | 1,570                        | 3,140      |
| 2.0000<br>50.800 | 0<br>-.00090                 | 5.0000<br>127.000 | 4.0094<br>101.839 | 0<br>-.016        | 0<br>-.016        | .0679<br>1.727                         | 1.8859<br>47.904             | .0010<br>25                     | 2,500                        | 5,490      |
| 2.3750<br>60.325 | 0<br>-.22                    | 5.6875<br>144.463 | 4.8236<br>122.519 | 0<br>-.400        | 0<br>-.400        | .0859<br>2.184                         | 2.2389<br>56.870             |                                 | 3,430                        | 8,040      |
| 3.0000<br>76.200 | 0<br>-.25                    | 7.7500<br>196.850 | 6.3834<br>162.138 | 6.3834<br>162.138 | 6.3834<br>162.138 | .1029<br>2.616                         | 2.8379<br>72.085             | .0012<br>30                     | 6,080                        | 15,900     |

国际单位: 1N≈0.225lbs

1kg≈2.205lbs

SIUNIT: 1N≈0.225lbs

1kg≈2.205lbs