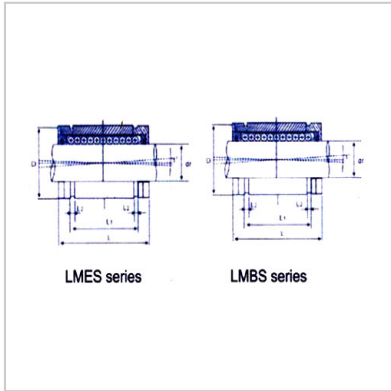
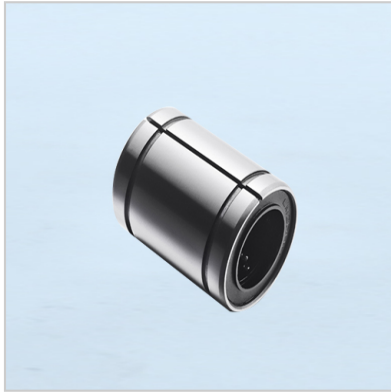


Linear Bearings

Metric series-LMBS 50LMBS 50 UU



Shaft Dia (mm) : 50

Standard Type :

Without seal : LMBS 50

With seal : LMBS 50 UU

No. of ball circuit : 6

Weight g : 580

Dimension(mm) :

D : 75

L +/-0.2 : 100

L1 +/-0.2 : 77.40

L2 min : 2.70

Diametral Tolerance :

Dr(mm) : 50

Tol (um) : 2 +13

Load Rating :

Dynamic Cr(Nf) : 11460

Static Cor(N) : 7940

介绍:

Linear bearings are usually composed of a bearing sleeve, steel balls, a cage, and a shaft. The inner surface of the bearing sleeve has multiple arc-shaped raceways, in which the steel balls roll. The cage is used to maintain the uniform distribution of the steel balls, allowing them to roll smoothly between the shaft and the bearing sleeve, thereby achieving linear motion.

Linear bearings work based on the principle of rolling friction. When the shaft moves in a straight line in the bearing sleeve, the steel balls roll between the shaft and the raceway of the bearing sleeve, converting sliding friction into rolling friction, greatly reducing frictional resistance and enabling the shaft to move in a straight line with high precision and low friction. Meanwhile, due to the point contact between the steel ball and the raceway, it can withstand a certain radial load.

Application area

Automation equipment: such as automated production lines, robots, CNC machine tools, etc., used to achieve high-precision linear motion, ensuring the positioning accuracy and motion stability of the equipment.

Electronic equipment manufacturing: In the fields of semiconductor manufacturing equipment, LCD panel production equipment and other electronic manufacturing, linear bearings are used for precise positioning and



transmission, meeting the requirements for high-precision linear motion in the production process.

Medical devices: such as medical imaging equipment, surgical instruments, etc.