

超级直线轴承SLME Self-Aligning Linear Bearing Serie

简介 Introduction

● MYT超级直线型是直线轴承的一个特殊系列。此系列最大的特点就是具有很高的额定负载，并且具备自动调心功能，广泛应用于各类机械设备、仪器仪表、电气装置、光学设备、自动化移动装置等诸多领域。

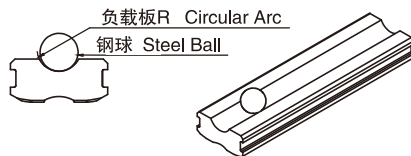
● MYT self-aligning linear bearing is a special serie of linear bearing family, with advantages of higher load capacity and self aligning function.it is widely used into many different applications ,such as various mechanical equipment, machine tools, electrical devices, optical equipment, automatic mobile devices and so on.

结构与优点 Structure and Features

1. 负载高，寿命长 Higher load capacity and longer life

每条负载板的滚道经精密研磨成与钢球配合的沟曲率R的接触模式，使其钢球表面承受的极限压力大幅度提高，从而比普通产品负载量增加到约3倍，寿命增加到约27倍。

Compare with ordinary products, self-aligning serie's load capacity are up to three times and life longer about 27 times, because finely grinding of the raceway of each load plate provides circular arc contact to the ball element resulting in a greater dispersion of the load.



2. 具备调心功能 Self-aligning function

负载板设计其中心部位的外径圆弧为定位点，并且略高于两端部位，中间凸起圆弧用于调心，克服安装或加工不当引起的误差，使其能承受更大的负载。

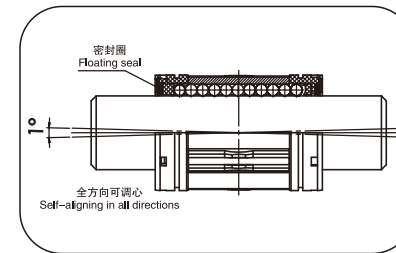
The uniquely design of load plates are based on pivot point, and higher at two ends. The center acts as fulcrum to compensate slight deviation between shaft and inner bore that might be caused by assembling errors and inaccurate machining, which can help to have higher load capacity.

3. 可调节密封圈 Adjustable Seal

由于本系列具有调心功能，两端面的外径、内径会发生偏心，而此系列中的密封圈不是固定不动的，而是可以调节的，能一直保持着跟随轴的状态，顺利运行。

With feature of self aligning, out diameter and inner bore are deviation while keeping equal and constant contact to the shaft. Adjustable seal design helps to run very well and move comfortable.

图2 可调节密封圈及具备调心功能
Fig 2. Adjustable seal and self aligning feature

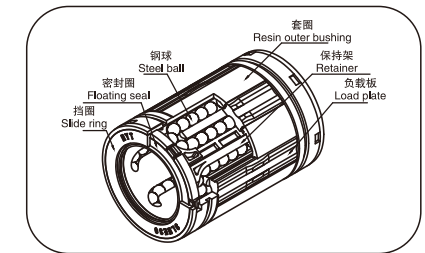


4. 高速化 High speed

SLME系列实现了对高速性方面的提升，运动速度可达5m/s。

SLME serie improve high-speed performance,the maximum speed reach 5m/s.

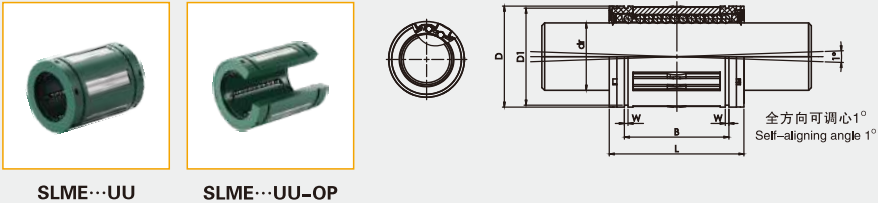
图3 SLME型的结构
Fig 3. Structure of SLME



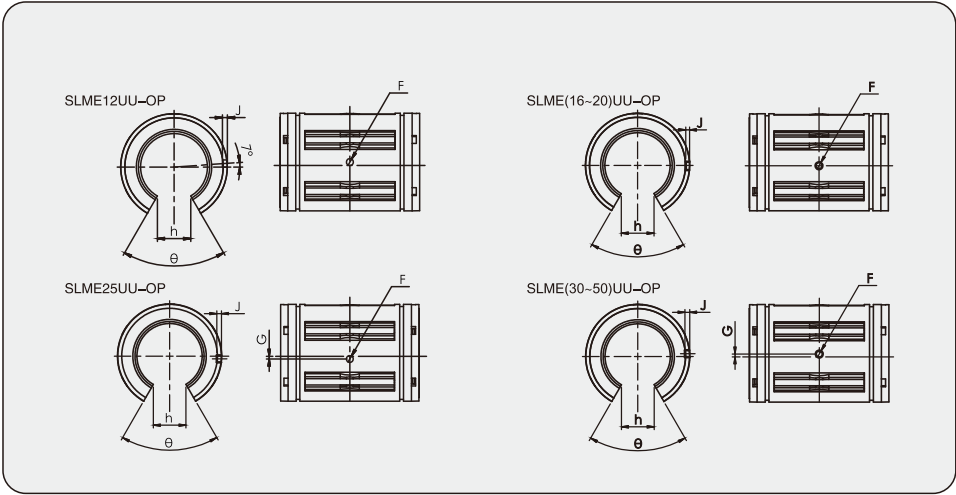
直线轴承的代号 Type Number Format

SLME	30	A	UU	-OP
SLME型 公称轴径 Nominal Shaft Diameter				不标 No entry
				标准型 Standard type
				OP
A 镀镍 Nickle plated				不标 No entry
				不带密封 No seal
				UU
				双侧密封 Seals on both sides

SLME...UU 超级直线轴承
该类型尺寸是公制的，广泛应用于欧洲。
SLME...UU Self aligning linear bearing (SLME serie)
This type is a metric dimension series widely used in Europe.



公称轴径 Nominal Shaft diameter mm	标准型 SLME...UU	钢球 列数 Ball circuit	重量 Weight (g)	开口型 SLME...UU-OP	钢球 列数 Ball circuit	重量 Weight (g)	主要尺寸和公差 Major dimensions and tolerance				
							dr		D		L
							mm	公差 Tolerance μ m	mm	mm	
8	SLME8UU	4	7.2	—	—	—	8		16	25	± 200
10	SLME10UU	5	13.9	—	—	—	10	+8 0	19	29	
12	SLME12UU	5	21	SLME12UU-OP	4	16.3	12		22	32	
16	SLME16UU	5	26	SLME16UU-OP	4	21	16	+9	26	36	
20	SLME20UU	6	54	SLME20UU-OP	5	45	20	-1	32	45	
25	SLME25UU	6	122	SLME25UU-OP	5	102	25	+11	40	58	
30	SLME30UU	6	193	SLME30UU-OP	5	161	30	-1	47	68	
40	SLME40UU	6	354	SLME40UU-OP	5	295	40	+13	62	80	
50	SLME50UU	6	615	SLME50UU-OP	5	518	50	-2	75	100	



主要尺寸和公差 Major dimensions and tolerance									额定负荷 Basic load rating	
B		W mm	D1 mm	开口型					动负荷 Dynamic C N	静负荷 Static Co N
mm	公差 Tolerance μ m			h mm	Θ	F mm	G mm	J mm		
16.5	0 -200	1.1	15.2	—	—	—	—	—	423	534
22		1.3	18	—	—	—	—	—	750	935
22.9		1.3	21	6.5	66°	3	—	0.7	1020	1290
24.9		1.3	24.9	9	68°		—	1.0	1250	1550
31.5		1.6	30.3	9	55°		—	1.0	2090	2630
44.1	0 -300	1.85	37.5	11.5	57°		1.5	1.5	3780	4720
52.1		1.85	44.5	14	57°		2	1.7	5470	6810
60.6		2.15	59	19.5	56°		1.5	2.4	6590	8230
77.6		2.65	72	22.5	54°	5	2.5	2.4	10800	13500