FMSZ系列
步进电机升降台

FMSZ Stepper Motor Vertical Stage

FMSZ85R-20 FMSZ115R-50
FMSZ145-120

- 行程覆盖
  20mm、50mm、120mm
- 整体台面升降、断电自锁
- 可配0.5μm光栅尺做闭环控制
- 免费标准版SDK
  Window、Linux环境下支持多种开发语言：C/C++、C#、Matlab、LabVIEW等
- 高性能控制器
  实现圆弧插补，直线插补，位置记忆，任意图形导入
- 可选配EtherCAT总线控制

产品应用 APPLICATION FIELDS

- 样品台 Sample Stage
- 姿态调整 Posture Adjustment
- 光学测试 Optical Test
- 光学设备 Optical Equipment

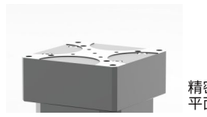
产品简介 OVERVIEW

针对一些系统搭建，全方位不能遮挡的情况，菲克科技开发了经济型FMSZ系列整体台面升降台。采用上海鸣志一体化丝杠电机，无需联轴器，避免了联轴器偏心扰动。预留了大连榕树的内置光栅尺接口，可做闭环进一步提高精度。让体积，性能，行程，精度做到完美匹配。

In view of the situation that some systems cannot be blocked in all directions, Feinixs has developed the economical FMSZ series of integral vertical stage. Shanghai MOONS' integrated motor lead screw is used, no coupling is required. Coupling eccentric disturbances are avoided. The built-in grating scale interface of Dalian Banyan is reserved, which can be closed-loop to further improve the accuracy. Let the volume, performance, stroke, and precision match very well.

设计细节 FEATURES

紧凑结构设计
更好适应有限空间的应用



精密研磨安装岛
平面度高达2μm

高品质步进滚珠丝杆电机
直接驱动

镀金实心针接口
确保电气连接万无一失

组合搭配 TYPICAL ASSEMBLY

It can be flexibly combined into multi-axis motion system,Contact for more information

相关产品 RELATED PRODUCTS

FMC01-H

FMC01-Mini

位移台信号控制线

产品参数 SPECIFICATIONS

Model	FMSZ85R-20	FMSZ115R-50	FMSZ145-120
行程 Travel(mm)	20	50	120
负载* Load Capacity(Kg)[1]	5	10	20
断电保持最大负载/保证值 Max. Holding Load (Power-Off)/Guaranteed(Kg)	1		
分辨率 Resolution(μm)	0.625	0.625	0.625
最小步进量 Min.Incremental Motion(μm)[2]	2	2	2
单向重复定位精度/保证值* Undirection Repeatability[3]/Guaranteed(μm)[4]	±1 or 2	±2 or 4	±2 or 4
单向重复定位精度/典型值 Undirection Repeatability/Typical(μm)	±0.5 or 1	±1 or 2	±1 or 2
双向重复定位精度/保证值 Bi-Directional Repeatability/Guaranteed(μm)	±2.5 or 5	±3 or 6	±4 or 8
双向重复定位精度/典型值 Bi-Directional Repeatability/Typical(μm)	±1 or 2	±2 or 4	±2 or 4
定位精度/保证值 Accuracy[3]/Guaranteed(μm)	±15 or 30	±20 or 40	±20 or 40
定位精度/典型值 Accuracy/Typical(μm)	±10 or 20	±15 or 30	±15 or 30
最大速度* Max.Speed(mm/s)[5]	10	10	10
直线度 Straightness(μm)	15	15	15
平整度 Flatness(μm)	15	15	15
偏摆 Yaw(arcsec)	30	40	60
俯仰 Pitch(arcsec)	30	40	60
重量 Weight(Kg)	1.2	2.9	6.8

※ 备注
[1]：负载为水平放置下的中心垂直负载：FMSZ85R-20最大负载为15kg
[2]：最小运动增量不等同于分辨率，最小运动增量是指运动系统在连续、稳定情况下能够移动的最小量。一般来说，系统分辨率远小于最小运动增量。考虑传动结构和编码器对系统误差的影响，直线电机位移台与步进电机位移台相比，其最小运动增量更加接近于分辨率
[3]：精度数据为平台水平放置时，采用激光干涉仪依据 GB/T17421-2000 标准测得；产品精度随负载大小存在差异，为保证精度，建议负载控制在标称范围内使用
[4]：典型值和保证值的区别见技术指南
[5]：最大速度为典型值，随负载与控制器不同有所差异：空载最大速度为13mm/s,标称负载下最大速度为10mm/s

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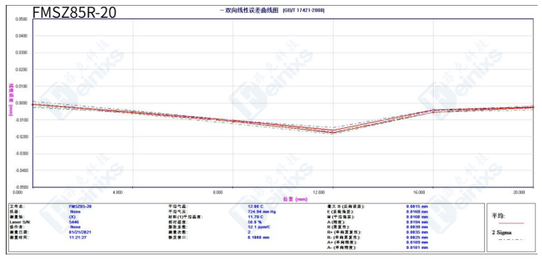
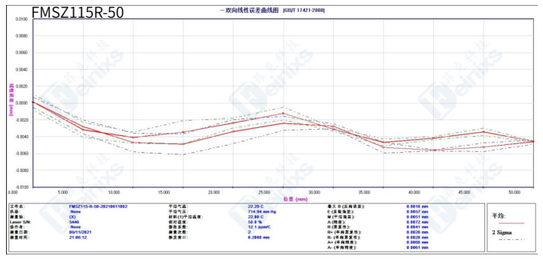
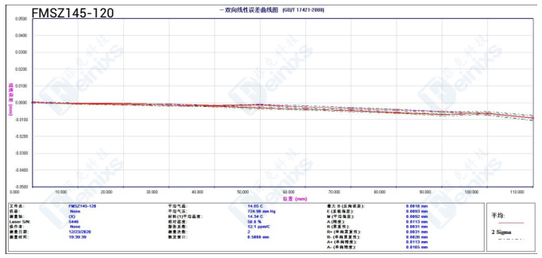
性能实测 ERROR CURVE



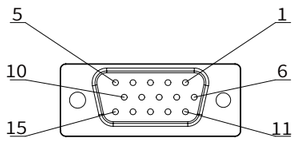




Each Stage is Tested with a Laser Interferometer. Product Identification and Traceability.

接线定义 HARDWARE CONNECTION

电气接口 Electric wiring diagram

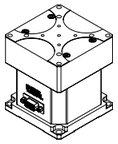


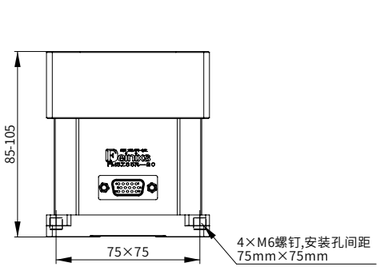
VGA-DB15 母头

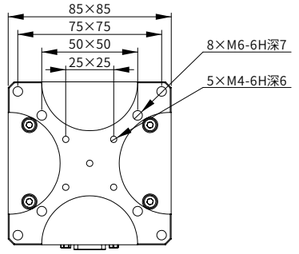
针脚	定义
1	24V+
2	Limit-
3	Zero
4	Limit+
5	24V-
6	A+
7	A-
8	B+
9	B-
10-15	/

产品图纸 DIMENSIONS

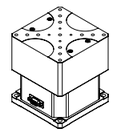
FMSZ85R-20

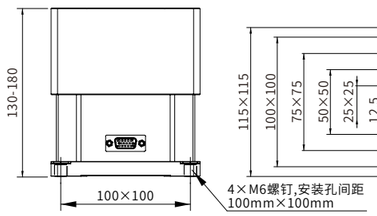


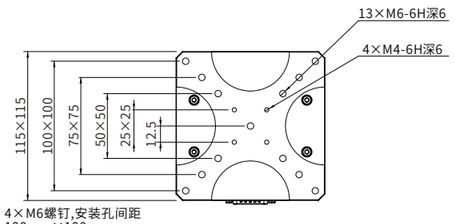




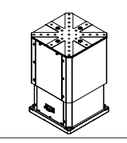
FMSZ115R-50

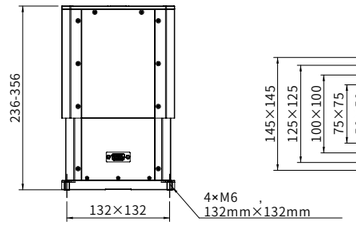


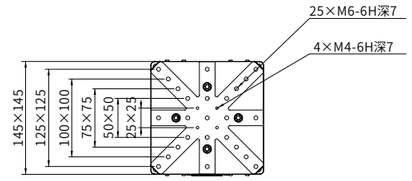




FMSZ145-120







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