FMSZ系列
真空步进电机升降台

FMSZ Vacuum Stepper Motor
Vertical Stage

FMSZ85VR-20 FMSZ115VR-50
FMSZ80V-50

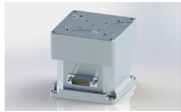
- 行程覆盖
  20mm、50mm
- 真空专用电机，真空度高
- 不锈钢主体设计，理想真空材料
- 免费标准版SDK
  Window、Linux环境下支持多种开发语言：C/C++、C#、Matlab、LabVIEW等
- 高性能控制器
  实现圆弧插补，直线插补
- 可选配EtherCAT总线控制

产品简介 OVERVIEW

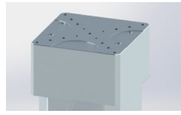
菲克科技开发的FMSZ系列真空步进电机升降台。经过特殊设计，方便与菲克科技的其余产品搭建成多维位移台。承载高，并可定制其它行程。搭配FMC01系列控制器。

The FMSZ series vacuum stepping motor vertical stage developed by Feinixs. Specially designed to facilitate the construction of multi-dimensional translation stages with other Feinixs' products. Heavy load, other strokes can be customized. Equipping with FMC01 series controller.

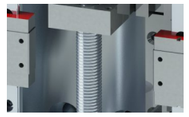
设计细节 FEATURES



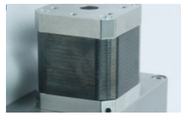
紧凑结构设计
更好适应有限空间的应用



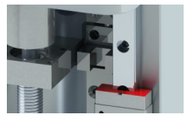
全不锈钢主体
无电镀处理，低释气
环境适用性更强



高品质研磨C5级滚珠丝杆
消间隙处理
高精度运行的保证



高品质真空步进电机
耐温-196～+250℃
真空度10^{-7}～10^{-3}Pa

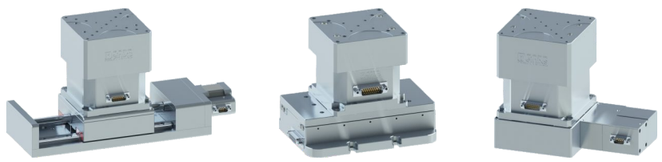


进口高精度
不锈钢直线滚珠导轨

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

组合搭配 TYPICAL ASSEMBLY



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

产品参数 SPECIFICATIONS

Model	FMSZ85VR-20	FMSZ115VR-50	FMSZ80V-50
行程 Travel(mm)	20	50	50
负载 Load Capacity(Kg)[1]	5	10	10
分辨率 Resolution(μm)	0.625	0.625	0.625
最小步进量 Min.Incremental Motion(μm)[2]	2	2	1
单向重复定位精度/保证值 Undirection Repeatability[3]/Guaranteed(μm)[4]	±1 or 2	±2 or 4	±1 or 2
单向重复定位精度/典型值 Undirection Repeatability/Typical(μm)	±0.5 or 1	±1 or 2	±0.5 or 1
双向重复定位精度/保证值 Bi-Directional Repeatability/Guaranteed(μm)	±2.5 or 5	±3 or 6	±2 or 4
双向重复定位精度/典型值 Bi-Directional Repeatability/Typical(μm)	±1 or 2	±2 or 4	±1 or 2
定位精度/保证值 Accuracy[3]/Guaranteed(μm)	±15 or 30	±20 or 40	±10 or 20
定位精度/典型值 Accuracy/Typical(μm)	±10 or 20	±15 or 30	±5 or 10
最大速度 Max.Speed(mm/s)[5]	10	10	20
直线度 Straightness(μm)	15	15	10
平整度 Flatness(μm)	15	15	10
偏摆 Yaw(arcsec)	30	40	30
俯仰 Pitch(arcsec)	30	40	30
重量 Weight(Kg)	3.2	6.8	5.2

※ 备注
[1]：垂直负载。
[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]：精度测量数据是平台在水平放置的情况下使用激光干涉仪测量的数据，测量标准参照GB/T17421-2000。
[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，根据负载和控制器的不同会有区别。

相关产品 RELATED PRODUCTS

FMC01-03

FMC01-Mini03

FMC01-NANO

位移台信号控制线

真空线缆

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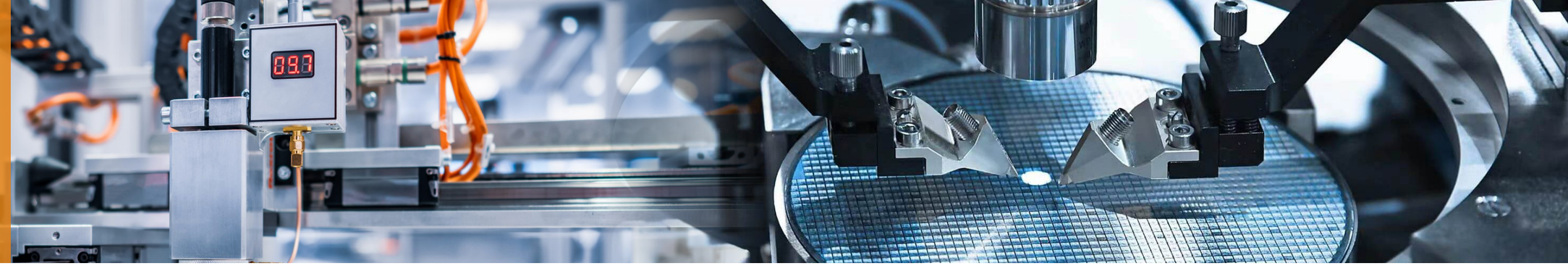

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Vertical Stage

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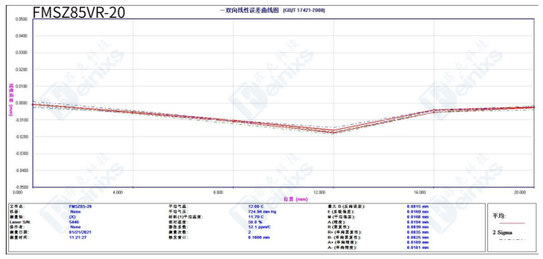
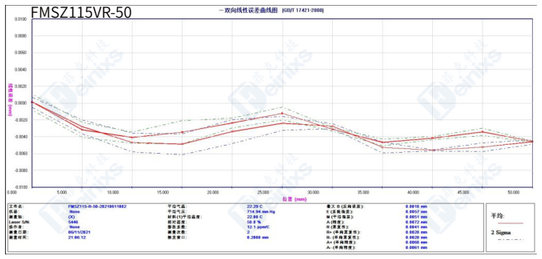
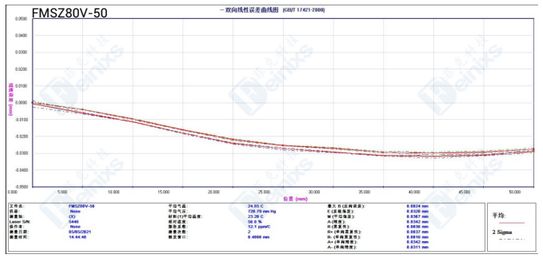
性能实测 ERROR CURVE







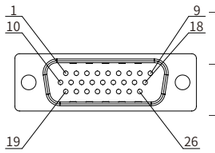
Each Stage is Tested with a Laser Interferometer. Product Identification and Traceability.

接线定义 HARDWARE CONNECTION

电气接口 Electric wiring diagram

FMSZ85VR-20、FMSZ115VR-50

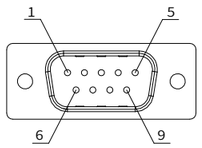
针脚	定义	针脚	定义
1	5V+	18	电机A+
2	0V	19	电机A-
3	A+	20	电机B+
4	A-	21	电机B-
5	B+	22	24V+
6	B-	23	近端限位
7	Z+	24	零点
8	Z-	25	远端限位
9	/	26	24V-



DB26公头

FMSZ80V-50

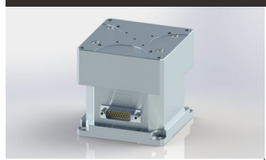
针脚	定义
1	24V+
2	远端限位
3	零点
4	近端限位
5	24V-
6	A-
7	A+
8	B+
9	B-

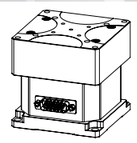


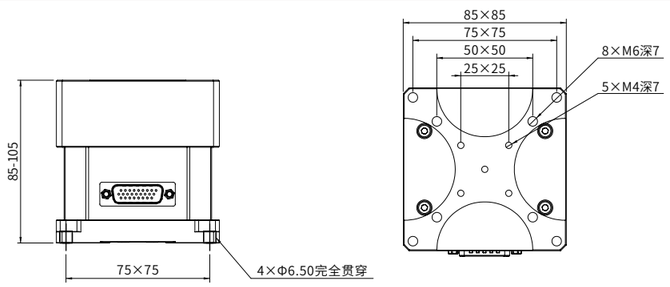
DB9公头

产品图纸 DIMENSIONS

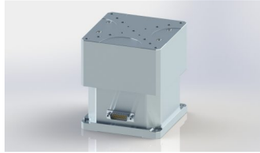
FMSZ85VR-20

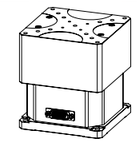


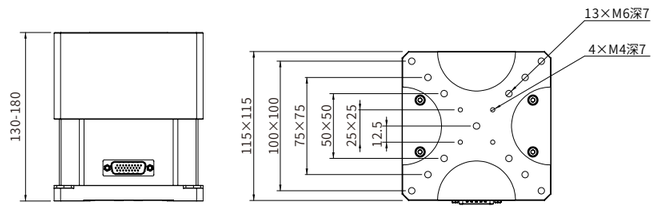




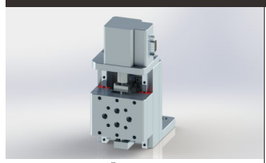
FMSZ115VR-50

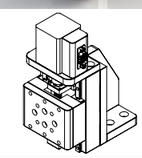


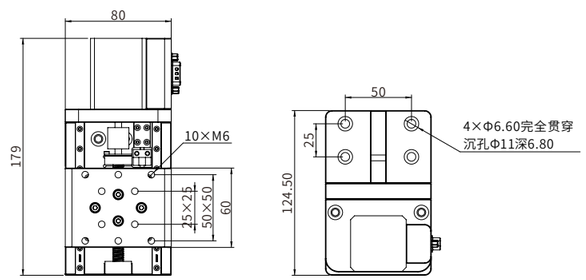




FMSZ80V-50







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