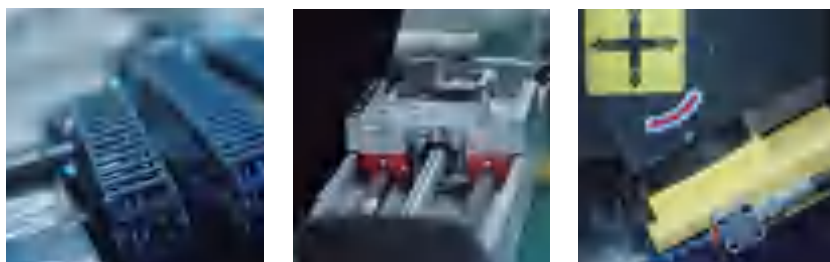
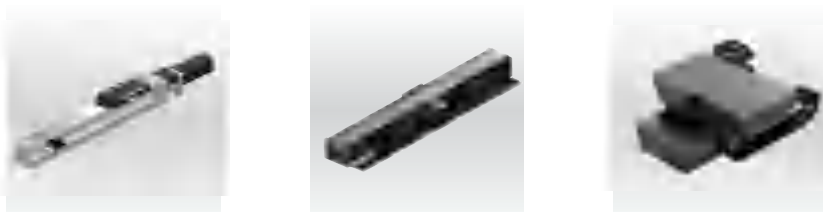


2013年,莱盟机器人在中国港口城市宁波诞生,专注智能制造领域,致力于为行业自动化提供系统性解决方案,助力加速中国产业升级。

In 2013, Limon was established in the Chinese port city of Ningbo, with a dedicated focus on intelligent manufacturing. Committed to providing systematic solutions for industrial automation, Limon actively contributes to accelerating the upgrade of China's industries.



高质量产品 High-Quality Products



莱盟赋能行业。主营产品线性模组、直线电机、精密平台等已广泛应用于新能源电池、新能源汽车、光伏、3C电子、半导体、液晶面板、生物医疗、工程机械等领域。

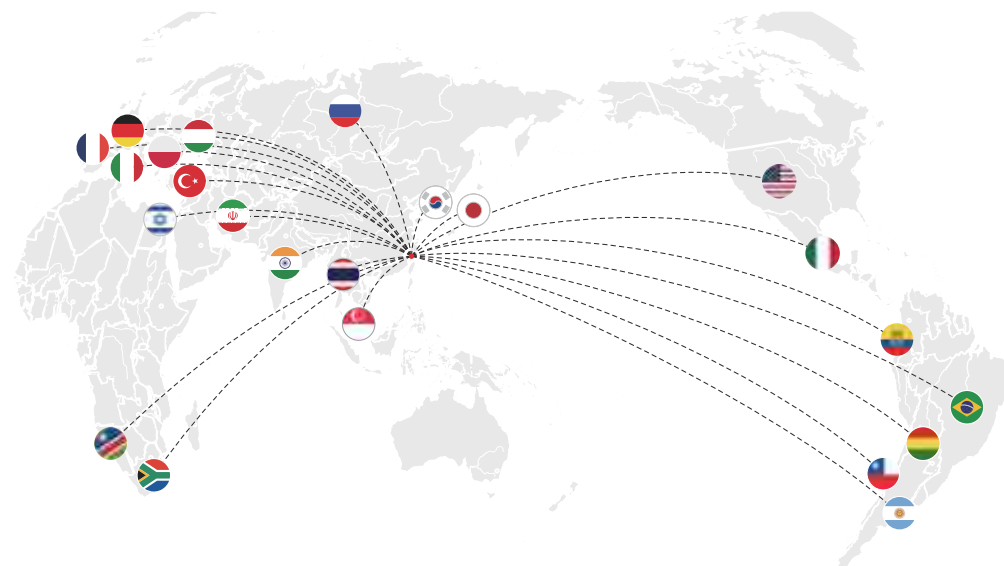
Limon empowers industries with our diverse range of products. Our main product lines, which include linear modules, linear motors, precision platforms, and more, have gained widespread adoption across various sectors, including new energy batteries, new energy vehicles, photovoltaics, 3C electronics, semiconductors, liquid crystal displays, bio-medical, and engineering machinery, among others.

全球化业务布局 Global Business Expansion

自成立以来,莱盟已在国内多个城市设立办事处,以便迅速响应客户需求。

在国际市场上,莱盟拥有前瞻的视野,积极参与各国际知名品牌的竞争。目前,莱盟的业务已经遍布全球30多个国家和地区,为客户提供超过2300个解决方案。

Since its establishment, Limon has strategically set up offices in numerous cities across China, ensuring a prompt response to customer needs. In the international market, Limon maintains a forward-thinking perspective and actively competes with globally recognized brands. Currently, Limon's business presence is extending to over 30 countries and regions worldwide, delivering more than 2300 solutions to meet the diverse needs of its clients.



汇聚智能装备行业尖端人才

Attracting Top Talent in the Intelligent Equipment Industry



莱盟以创新为引擎，汇聚了一支由国内外知名专家组成的核心技术团队，聚焦自动化底层技术，不断自主创新迭代，为客户提供性能卓越、品质优良、性价比高的产品。

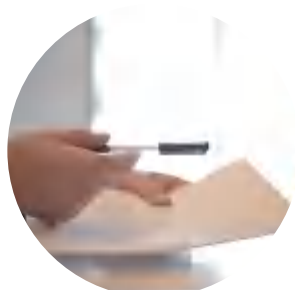
Limon, driven by innovation, has formed a core technical team comprising renowned experts from both domestic and international domains. With a focus on underlying automation technologies, the team consistently engages in independent innovation and iterative development. This commitment ensures the delivery of products to customers distinguished by outstanding performance, superior quality, and high cost-effectiveness.

“全周期 全流程 全方位”服务

"End-to-End, Full-Cycle, Comprehensive" Services

项目经理服务制

Project Management Service System



莱盟实行项目经理服务制度，全程跟进售前咨询、选品、下单、物流等环节，确保准时交付。

Limon implements a Project Management Service System, overseeing the entire process from pre-sales consultation, product selection, and ordering to logistics and beyond, ensuring timely delivery.

专业售后客服团队

Professional After-Sales Customer Service Team

莱盟拥有专业的客户服务团队，快速响应客户的售后需求，确保高效和优质的服务。

Limon boasts a professional customer service team that responds promptly to post-sales needs, ensuring efficient and high-quality service for our clients.



样品30天免费出借

Complimentary 30-day sample lending



如需展示和测试，客户可向销售工程师咨询莱盟的样品免费借用事宜。

For demonstration and testing purposes, clients can inquire with our sales engineers about the possibility of receiving complimentary sample loans from Limon.

展会/交流会

Trade Shows/Exhibitions and Conferences

莱盟定期参加行业展会，并举办同行交流活动，积极参与行业技术研讨与知识分享。

Limon consistently attends industry trade shows, hosts peer exchange events, and actively participates in technical discussions, contributing to knowledge sharing within the industry.





莱盟专注于智造未来，以推动中国工业产业升级为使命，助力中国智能制造，致力于成为智能装备企业最信赖的合作伙伴。

Limon is committed to shaping the future of intelligent manufacturing, with a mission to propel the advancement of China's industrial sector. We are dedicated to supporting intelligent manufacturing in China and aspire to become the most trusted partner for smart equipment enterprises.

莱盟产品

LIMON Products

GSC系列 - 轨道内嵌式丝杆驱动模组

GSC Series - Ball Screw Driven Module with Embedded Track



GLC系列 - 轨道内嵌式直线电机驱动模组

GLC Series - Linear Motor Driven Module with Embedded Track



GTC系列 - 轨道内嵌式同步带驱动模组

GTC Series - Belt Driven Module with Embedded Track



ITO/ITC系列 - 欧规同步带驱动模组

ITO/ITC Series - Euro Standard Belt Driven Module



ITZ系列 - 欧规同步带驱动模组 (Z轴提升专用型)

ITZ Series - Euro Standard Belt Driven Module (Dedicated for Z-axis Elevation)



YTO/YTC系列 - 亚规同步带驱动模组

YTO/YTC Series - Asian Standard Belt Driven Module



YSO/YSC系列 - 亚规丝杆驱动模组

YSO/YSC Series - Asian Standard Ball Screw Driven Module



MLO系列 - 直线电机驱动模组

MLO Series - Linear Motor Driven Module



www.limonrobot.cn

欢迎登录莱盟官方网站，
了解更多产品详情。

Welcome to the official website of limon for more product details.

GSC系列 - 轨道内嵌式丝杆驱动模组

GSC Series - Ball Screw Driven Module with Embedded Track

LIMON
PRECISION & SPEED

基础信息 Basic Information

- ★ 丝杆驱动 Ball-screw-driven
- ★ 轨道内嵌式 With Embedded Track
- ★ 全密型 Fully-closed Type
- ★ 无尘环境适用 Clean Room Environment
- ★ 本体宽度 Body width 40mm、50mm、80mm、120mm
- ★ 重复定位精度 Repeatability $\pm 0.005\text{mm}$

● 高直线度、高平整度 High Straightness and Flatness

本体和滑座采用一体成型工艺, 有效消除装配误差, 运行时平面度可达 $\pm 0.02\text{mm}/800\text{mm}$, 直线度可达 $\pm 0.02\text{mm}/800\text{mm}$ 。

The body and carriage utilize an integrated forming method to effectively minimize assembly errors. During operation, the flatness and straightness can each achieve a precision of 0.02mm per 800mm.

● 特殊钢带结构设计 Special Steel Belt Structural Design

- 防止异物进入, 有效降低维修和保养的频率, 提高使用寿命。

It prevents foreign objects from entering, significantly reducing the necessity for maintenance and repairs, and extending the service life.

- 减少粉尘污染, 可在无尘环境中使用(class 5)。

It can be used in a dust-free environment (class 5) and effectively reduce dust pollution.

● 马达搭配灵活 Flexible Motor Collocation

可按需搭配不同品牌和功率的马达, 并选择不同的马达安装方向, 使机台设计更加灵活。

To enhance the flexibility of the machine design, alternative motor brands, powers, and mounting orientations can be selected as needed.

马达安装方向

Motor Mounting Position Version

MS Type 马达直接安装 Straight Motor Mounting



ML Type 马达左折安装 Left Motor Mounting



MR Type 马达右折安装 Right Motor Mounting



MD Type 马达下折安装 Down Motor Mounting



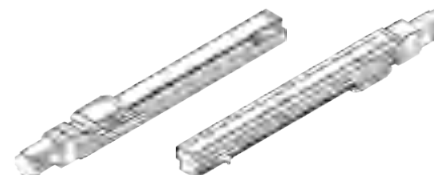
● 易组装 Simple Assembly

- 底部设置定位孔。

Positioning holes are provided at the bottom.

- 无需拆卸钢带, 可实现螺丝从下至上安装。

Screws can be installed from the bottom up without the need to remove the steel belt, facilitating a more convenient assembly process.



GLC系列 - 轨道内嵌式直线电机驱动模组

GLC Series - Linear Motor Driven Module with Embedded Track

LIMON
PRECISION & SPEED

基础信息 Basic Information

- ★ 铁芯平板直线电机 Iron Core Flat Linear Motor
- ★ 轨道内嵌式 With Embedded Track
- ★ 全密型 Fully-closed Type
- ★ 无尘环境适用 Clean Room Environment
- ★ 本体宽度 Body width 50mm、80mm
- ★ 重复定位精度 Repeatability $\pm 0.002\text{mm}$

● 轨道内嵌式结构 With Embedded Track

轨道嵌入本体后研磨, 运行时的直线度、平面度大幅提升。
After grinding the embedded guideway, both stroking straightness and flatness are significantly enhanced.



● 高性价比 Cost-effective

GLC系列直线电机驱动模组是高精度丝杆驱动模组的最佳替代方案。
The GLC series presents the optimal alternative to high-precision ball screw-driven modules.

● 性能全线升级 Performance Upgrade

- 第三代直线电机模组, 相比GSC丝杆模组, 速度提升400%、精度提升500%。
Compared to the GSC ball-screw-driven linear actuator, the third-generation linear motor demonstrates a 400% increase in speed and a 500% improvement in accuracy.
- 推力最高可达260N。
Max thrust 260N.
- 重复定位精度 $\pm 0.002\text{mm}$ 。
Repeatability accuracy $\pm 0.002\text{mm}$.
- 加减速最高可达2G。
Acceleration and deceleration of up to 2G.
- 满载时噪音 $\leq 62\text{db}$ 。
Noise $\leq 62\text{dB}$ when fully loaded.
- 最大行程可达1800mm。
The maximum stroke is 1800mm.

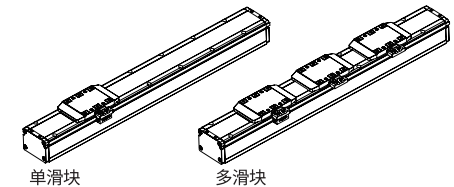
● 高无尘等级 High Dust-free Rating

全密型结构, 高无尘等级 (class 5), 可用于清洁室。
With a fully-closed structure and a class 5 dust-free rating, it is suitable for clean rooms.

● 适配各类滑块 Suitable for Various Types of Sliders

可搭配单滑块或多滑块, 适用于不同应用场景。

For various application settings, you can choose either a single slider or multiple sliders.



GTC系列 - 轨道内嵌式同步带驱动模组

GTC Series - Belt Driven Module with Embedded Track

LIMON
PRECISION & SPEED

基础信息 Basic Information

- ★ 皮带驱动 Belt-driven
- ★ 轨道内嵌式 With Embedded Track
- ★ 全密型 Fully-closed Type
- ★ 无尘环境适用 Clean Room Environment
- ★ 本体宽度 Body width 50mm、80mm
- ★ 重复定位精度 Repeatability $\pm 0.05\text{mm}$

● 集成注油孔 Integrated Oil Injection Hole

外部集成注油孔设计，一次性润滑所有轨道，避免拆机维护。

Utilizing an external integrated oil injection hole design, all tracks can be lubricated simultaneously without the necessity for disassembly maintenance.

● 皮带张力可调节 Adjustable Belt Tension

可从外部调节皮带张力，无需拆解。

It allows for external belt tension adjustment without the need for disassembly.



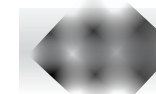
● 皮带选择 Belt Options

PU皮带: 适合无尘室使用, 发尘量少, 但噪音大

PU Belt: Suitable for use in clean rooms, it generates minimal dust but produces some noise.

橡胶皮带: 适合一般环境使用, 噪音小, 但发尘量大

Rubber belt: Suitable for general environments, it has low noise levels but tends to generate more dust.



橡胶皮带



PU皮带

● 马达搭配灵活 Flexible Motor Collocation

可按需搭配不同品牌和功率的马达, 并选择不同的马达安装方向, 使机台设计更加灵活。

To enhance the flexibility of the machine design, alternative motor brands, powers, and mounting orientations can be selected as needed.



马达上折安装
UP Motor Mounting



马达下折安装
Down Motor Mounting



马达左折安装
Left Motor Mounting



马达右折安装
Right Motor Mounting

● 高精度内嵌式滚珠导轨 High Precision Embedded Ball Guide

- 轨道嵌入本体后研磨, 运行时的直线度、平面度大幅提升。

After grinding the embedded guideway, both stroking straightness and flatness are significantly improved.

- 增大滑轨间距, 提高侧向力矩承载能力。

Increase the spacing between the sliders to improve lateral moment resistance.



ITO/ITC系列 - 欧规同步带驱动模组

ITO/ITC Series - Euro Standard Belt Driven Module

LIMON
PRECISION & SPEED

基础信息 Basic Information

- ★ 皮带驱动 Belt-driven
- ★ 半/全密型 Fully-closed / Semi-closed Type
- ★ 本体宽度 Body width 40mm、60mm、80mm、100mm、160mm
- ★ 重复定位精度 Repeatability $\pm 0.05\text{mm}$

● 马达搭配灵活 Flexible Motor Collocation

- 同步轮与联轴器一体式结构设计, 提高同心度, 防止打滑。

The integral structure design of the synchronous wheel and coupling enhances concentricity and prevents slippage.

- 缩短电机横向安装长度, 节省机台空间。

Minimize the transverse installation length of the motor to optimize space utilization on the machine.

- 马达可安装在模块的任意方向, 且随时可以转换。

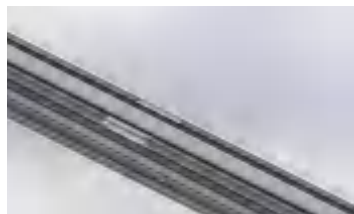
The motor can be placed on the module in any orientation and can be changed at any time.



● 型材可拼接 Splicable Profiles

型材可以进行拼接, 最长可达12米, 应用场景更广泛。

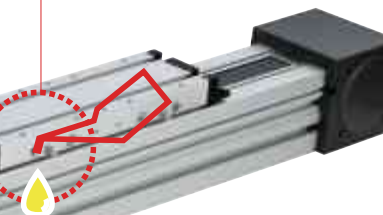
For a broader range of application possibilities, profiles can be spliced up to a length of 12 meters.



● 集成注油孔 Integrated Oil Injection Hole

外部集成注油孔设计, 一次性润滑所有轨道, 避免拆机维护。

By employing an external integrated oil injection hole design, all tracks can be lubricated simultaneously without the requirement for disassembly maintenance.



● 型材带托设计 Profile with Bracket Design

- 同步带无法下压, 与内部形成一个封闭空间, 有效防止异物进入。

Impossible of being pressed down, the timing belt creates an enclosed zone on the inside that effectively inhibits foreign objects from entering.

- 长行程使用时, 同步带不下垂, 避免与内部结构产生摩擦。

When used for long strokes, the timing belt does not sag, preventing friction with the internal structure.

- 抑制同步带上下摆动, 减少噪音。

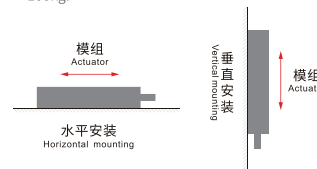
Prevent the timing belt from fluctuating and reduce the noise level.



● 水平或垂直安装方式均可 Vertical or Horizontal Mounting

可按需选择水平或垂直安装方式, 垂直负载最大可达100kg。

The installation can be done horizontally or vertically, with a maximum vertical load of 100kg.



ITZ系列 - 欧规同步带驱动模组 (Z轴提升专用型)

ITZ Series - Euro Standard Belt Driven Module (Dedicated for Z-axis Elevation)

LIMON
PRECISION & SPEED

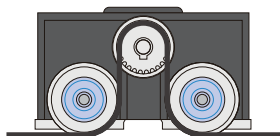
基础信息 Basic Information

- ★ 皮带驱动 Belt-driven
- ★ 半密型 Semi-closed Type
- ★ 一般环境适用 Conventional Environment
- ★ 本体宽度 Body width 60mm、80mm
- ★ 重复定位精度 Repeatability $\pm 0.05\text{mm}$

● Ω 型同步带 Ω Type Timing Belt

同步带为 Ω 型设计,使电机及减速机不随缸体移动,尤其适合快速、长距离抓取及搬运。

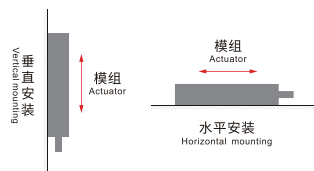
The timing belt has an Ω -type design, which makes it particularly suitable for quick, long-distance grabbing and handling because the motor and reducer do not move with the cylinder block.



● 水平或垂直安装方式均可 Vertical or Horizontal Mounting

可按需选择水平或垂直安装方式,垂直负载最大可达30kg。

The installation can be done either horizontally or vertically, with a maximum vertical load of 30 kg.



● 低自重 高性能 Low Weight, High Performance

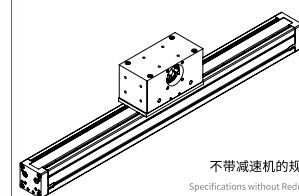
马达固定,外部集中供油,移动端重量仅型材和轨道。相比普通欧规皮带模组,自重减轻30%,产品动态性能大幅提高。

The motor is fixed and externally supplied with centralized lubrication. The moving end's weight consists solely of the profile and rail. Compared to conventional Euro-standard belt modules, there is a 30% reduction in self-weight, leading to a significant enhancement of dynamic performance for the product. is significantly higher.

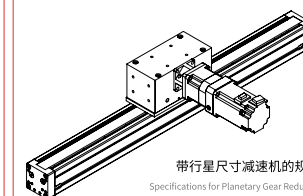
● 马达搭配灵活 Flexible Motor Collocation

可按需搭配不同品牌和功率的马达,并选择不同的马达安装方向,使机台设计更加灵活。

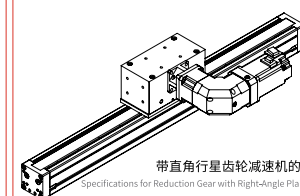
To enhance the flexibility of the machine design, alternative motor brands, powers, and mounting orientations can be selected as needed.



不带减速机的规格
Specifications without Reducer



带行星尺寸减速机的规格
Specifications for Planetary Gear Reducers



带直角行星齿轮减速机的规格
Specifications for Reduction Gear with Right-Angle Planetary

YTO/YTC系列- 亚规同步带驱动模组

YTO/YTC Series - Asian Standard Belt Driven Module

LIMON
PRECISION & SPEED

基础信息 Basic Information

- ★ 皮带驱动 Belt-driven
- ★ 半/全密型 Fully-closed / Semi-closed Type
- ★ 本体宽度 Body width 100mm、135mm、170mm、220mm
- ★ 重复定位精度 Repeatability $\pm 0.05\text{mm}$

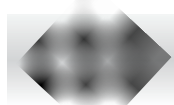
● 皮带选择 Belt Options

PU皮带: 适合无尘室使用, 发尘量少, 但噪音大

PU Belt: Suitable for use in clean rooms, it generates minimal dust but produces some noise.

橡胶皮带: 适合一般环境使用, 噪音小, 但发尘量大

Rubber belt: Suitable for general environments, it has low noise levels but tends to generate more dust.



橡胶皮带



PU皮带

● 皮带张力调节 Belt Tension Adjustment

采用双侧调节皮带装置, 避免松脱。

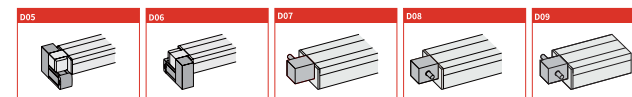
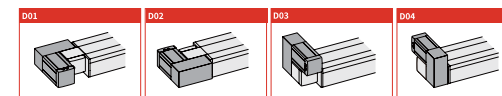
Adopt a double-adjusting belt device to prevent looseness.



● 马达搭配灵活 Flexible Motor Collocation

可按需搭配不同品牌和功率的马达, 并选择不同的马达安装方向, 使机台设计更加灵活。

To enhance the flexibility of the machine design, alternative motor brands, powers, and mounting orientations can be selected as needed.



● 高承载能力 High Carrying Capacity

- 双轨道结构, 稳定性强, 刚性高, 适合当悬臂轴使用。

Strong stability and high rigidity of the double guide structure make it ideal for usage as a cantilever shaft.

- 铝制机身, 本体和滑座采用一体成型工艺, 结构稳定, 刚性高。

The body and carriage are made of aluminum and use an integrated forming method for their solid structure and great rigidity.



YSO/YSC系列 - 亚规丝杆驱动模组

YSO/YSC Series - Asian Standard Ball Screw Driven Module

LIMON
PRECISION & SPEED

基础信息 Basic Information

- ★ 丝杆驱动 Ball-screw-driven
- ★ 半/全密型 Fully-closed / Semi-closed Type
- ★ 本体宽度 Body width 135mm、170mm、220mm
- ★ 重复定位精度 Repeatability $\pm 0.005\text{mm}$

● 低自重、高性能 Low Weight, High Performance

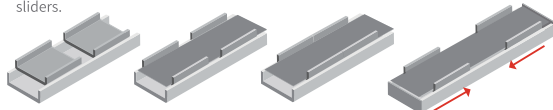
马达固定，外部集中供油，移动端重量仅型材和轨道。相比普通欧规皮带模组，自重减轻30%，产品动态性能大幅提高。

The motor is fixed, externally supplied with centralized lubrication, and the weight of the moving end is solely comprised of the profile and rail. Compared to conventional Euro-standard belt modules, there is a 30% reduction in self-weight, resulting in a significant enhancement of dynamic performance for the product.

● 适配各类滑块 Suitable for Various Types of Sliders

可搭配单滑块、多滑块、加长滑块，适用于不同应用场景。

For various application settings, you can choose either a single slider or multiple sliders.



双滑块
(同动型)

双滑块
(单动型)

滑块加长

滑块反向同动

● 高承载能力 High Carrying Capacity

高刚性本体 High rigidity body

铝制机身，本体和滑座采用一体成型工艺，结构稳定，刚性高。

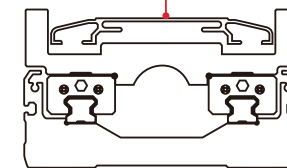
The body and carriage are made of aluminum and use an integrated forming method for their solid structure and great rigidity.

耐绕曲上盖 Resistant to winding cover

特殊抗绕曲设计，长行程使用时，上盖不容易扭曲变形。

When utilized for extended strokes, the top cover's unique anti-twisting design effectively prevents it from twisting and deforming.

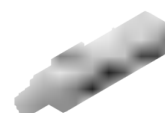
上盖



● 马达搭配灵活 Flexible Motor Collocation

可按需搭配不同品牌和功率的马达，并选择不同的马达安装方向，使机台设计更加灵活。

To enhance the flexibility of the machine design, alternative motor brands, powers, and mounting orientations can be selected as needed.



马达直接安装
Straight Motor Mounting



马达下折安装
Down Motor Mounting



马达左折安装
Left Motor Mounting



马达右折安装
Right Motor Mounting

MLO系列 - 直线电机驱动模组

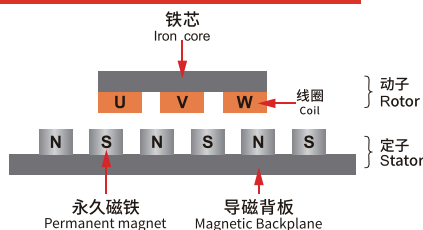
MLO Series - Linear Motor Driven Module

LIMON
PRECISION & SPEED

基础信息 Basic Information

- ★ 铁芯平板直线电机 Iron Core Flat Linear Motor
- ★ 半密型 Semi-closed Type
- ★ 一般环境适用 Conventional Environment
- ★ 本体宽度 Body width 110mm、135mm、210mm
- ★ 重复定位精度 Repeatability $\pm 0.002\text{mm}$

原理图 Schematic Diagram

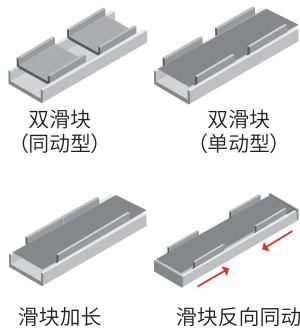


● 可搭配光栅尺或磁栅尺 Optical or Magnetic encoder adoptable

可选配不同分辨率的光栅尺或磁栅尺，提升定位精度。
To enhance positioning precision, one may opt for an optical or magnetic encoder with adjustable resolution.

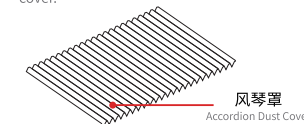
● 适配各类滑块 Suitable for Various Types of Sliders

可搭配单滑块、多滑块、加长滑块，适用于不同应用场景。
For various application settings, you can choose either a single slider or multiple sliders.



● 可搭配风琴罩 Accordian Dust Cover Applicable

在极端环境条件下，可搭配风琴罩使用。
It can be utilized in extreme environmental conditions when paired with an accordian dust cover.



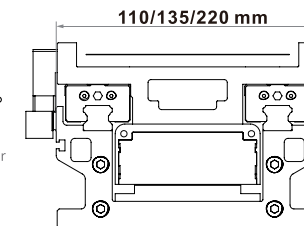
● 性能更优 Better Performance

- 推力最高可达2400N。
Max thrust 2400N.
- 加减速最高可达2G。
Acceleration and deceleration of up to 2G.
- 最大行程可达6000mm。
The maximum stroke is 6000mm.
- 重复定位精度 $\pm 0.002\text{mm}$ 。
Repeatability accuracy $\pm 0.002\text{mm}$.
- 抗偏心载荷、侧向载荷能力强。
Strong ability to resist eccentric load and side load.

● 空间利用率高 High Space Efficiency

主截面宽度为110/135/210mm，体积小、刚性高，适合空间小、负载大的工况条件。

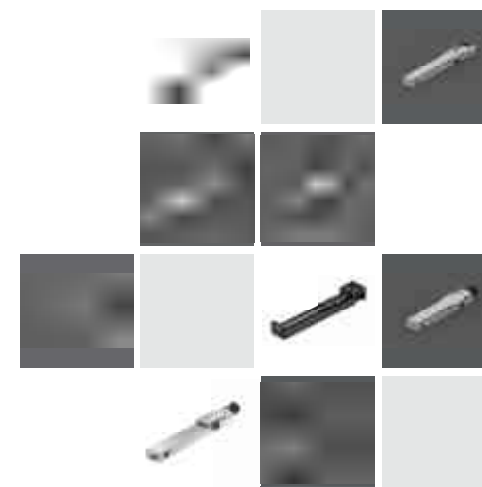
With a main section width of 110/135/210mm, this equipment is compact yet highly rigid, making it suitable for working in confined spaces with heavy loads.





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LINEAR PRECISION LINEAR SPEED



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