

LINEAR MODULE FOR LITHIUM BATTERY 日规锂电通用模组



TPA 玖钧传动·智造兴邦

详细代理商资料查询TPA官网 Please check TPA official website for detailed agent information

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TPA 网站
TPA website



微信公众号
Wechat public account



产品资料
Product Information



三维选型
Three-dimensional selection



抖音号
Douyin



产品型录编号: TPA-BD-ZE-004



— 玖钧传动·智造兴邦 —



— 玖 钧 传 动 · 智 造 兴 邦 —

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公司简介

COMPANY INTRO ▶

TPA玖钧传动创立于2016年，隶属玖钧集团，总部坐落在中国·昆山，现有二大研发中心和制造基地（昆山、深圳）；全国拥有十几处服务据点。产品畅销海内外主要有：中国（含台湾）、东南亚、欧美。总生产面积达50000平方米+，在职员工500人+，拥有各类先进设备近400台+。

注册商标TPA，寓意：TPA玖钧传动在摸索中“Transfer”不断改变，工作中“Passion”充满激情，发展中“Active”积极进取，永远以昂扬的斗志奋发向前。

TPA玖钧传动——专注于高速高精传动产品，是一家集专业研发、生产、销售、售后、服务为一体的国家级专精特新“小巨人”企业、国家高新技术企业、国家级博士后科研工作站、江苏省级专精特新、创新型中小企业、江苏省潜在独角兽企业。主要产品有：精密直线模组（日规模组、欧规模组、电动缸、钢基模组、内嵌式铝基模组、简易模组）、精密直线电机（单轴直线电机、直线电机平台、动定子）、磁悬浮智能传输系统（磁驱环形线、磁悬浮传输系统）。

TPA玖钧传动产品主要服务于：新能源、3C、半导体、新型显示、医疗、汽车、线路板、军工等八大产业领域。被广泛应用于取放、搬运、定位、分类、扫描、检测、点胶、焊锡等各类作业形式，模块化的产品满足客户多元化的应用场景。

TPA玖钧传动将秉承“永远为伙伴提供优质的服务，有责方远，利他共赢”的公司使命，优化产品，不断创新，始终坚持以高效的运作，优质的产品，精益求精的精神服务客户。

TPA玖钧传动以技术为核心、产品为基础、市场为导向、出色的服务团队、打造“TPA玖钧传动·智造兴邦”的行业新标杆。

TPA Jiujun Transmission was founded in 2016 and is affiliated with Jiujun Group. Its headquarters is located in Kunshan, China. Currently, it has two major R&D centers and manufacturing bases (in Kunshan and Shenzhen); it also has more than ten service outlets across the country. Its products are sold worldwide, mainly in China (including Taiwan), Southeast Asia, and Europe and America. The total production area is over 50,000 square meters, with more than 500 employees, and it possesses nearly 400 sets of advanced equipment.

Registered trademark TPA, its meaning: TPA Jiujun Transmission continuously "Transfers" and changes in the process of exploration; "Passion" is full of enthusiasm in the work; "Active" is proactive and enterprising in the development; always advancing forward with an energetic spirit.

TPA Jiujun Transmission - dedicated to high-speed and high-precision transmission products, is a national-level specialized, innovative "little giant" enterprise, a national high-tech enterprise, a national postdoctoral research station, an Jiangsu provincial specialized, innovative small and medium-sized enterprise, a potential unicorn enterprise in Jiangsu Province. Its main products include: precision linear modules (Japanese scale group, European scale group, electric cylinder, steel base module, embedded aluminum base module, simple module), precision linear motors (single-axis linear motor, linear motor platform, moving and stationary stators), magnetic levitation intelligent

transmission systems (magnetic drive ring line, magnetic levitation transmission system).

The TPA Jiujun transmission products mainly serve eight major industrial sectors: new energy, 3C, semiconductors, new display, healthcare, automobiles, circuit boards, and military industries. They are widely used in various operation forms such as loading and unloading, transportation, positioning, classification, scanning, inspection, dispensing, soldering, etc. The modular products can meet the diversified application scenarios of customers.

TPA Jiujun Transmission will adhere to the company mission of "always providing high-quality services to partners, taking responsibility far, and achieving mutual benefit through altruism", optimize its products, continuously innovate, and always provide services to customers with efficient operations, high-quality products, and the spirit of striving for excellence.

TPA Jiujun Transmission takes technology as its core, products as its foundation, market as its orientation, and an outstanding service team to create a new industry benchmark of "TPA Jiujun Transmission - Empowering the Nation through Manufacturing".



>> 公司价值观 Corporate values

核心的竞争和公司的价值观是企业品牌价值的重要体现。
The core competition and the company's values are the important embodiment of enterprise brand value.



出色的营销团队，专业的产品咨询，悉心的客户服务，完善的售后体系。
Excellent marketing team, professional product consultation, attentive customer service and perfect after-sales system.

正直, 尊重个人。任何讨论都以改善工作为前提。尊重差异, 保护多样式的个性。
Integrity and respect for individuals. Any discussion is premised on improving the work. Respect differences and protect multi-style personalities.

敬业, 客户至上。为客户提供无可挑剔的服务。公司在做任何事情或任何决定时都必须同时考虑到客户的感受和利益。
Dedicated, customer first. Provide impeccable service to customers. The company must consider the feelings and interests of customers at the same time when doing anything or making any decision.

专业, 充满激情。勤奋和敬业让我们出色, 投入让我们生动, 激情让我们卓越。
Professional and full of passion. Diligence and dedication make us outstanding, devotion makes us vivid, and passion makes us outstanding.

主动, 不断创新。每个人都是推动公司前进的力量。我们崇尚个人主动创新。任何对公司有益的事情大家都会不遗余力的支持, 主动配合。我们相信每个人的努力都会对公司产生深远的影响。
Initiative and continuous innovation. Everyone is a force to push the company forward. We advocate individual initiative innovation. Everyone will spare no effort to support and actively cooperate with anything that is beneficial to the company. We believe that everyone's efforts will have a profound impact on the company.

我们的优势 Our advantage



1 平台优势 Platform advantage

专业的传动组件制造厂商, 有苏州、深圳、宁波三大生产制造基地和研发中心, 拥有45000余平方米生产制造车间, 自有加工设备近400台+, 销售的产品都具有全自主知识产权。
Professional transmission component manufacturers, Suzhou, Shenzhen, Ningbo three major manufacturing bases and R & D center, with more than 45,000 square meters of production and manufacturing workshops, its own processing equipment of nearly 400 +, the sales of products have full independent intellectual property rights.

2 团队优势 Team advantage

公司组织架构齐全, 团队核心成员均在行业耕耘十余年, 团队年轻化, 富有活力, 勇于担当, 可为客户提供准确的选型方案及其他相关咨询服务。
The company has a complete organizational structure, and the core members of the team have worked in the industry for more than ten years. The team is young, energetic and courageous, and can provide customers with accurate selection schemes and other related consulting services.

3 技术优势 Technological advantage

公司拥有百余位行业内资深技术研发人员, 可为客户提供非标定制化需求, 多样灵活的方案。
The company has more than 100 senior technical research and development personnel in the industry, can provide customers with non-standard customized needs, diverse and flexible solutions.

4 产品优势 Product advantage

核心配件自产, 自给率高, 立足于自动化设备传动领域, 产品类别齐全, 可满足客户在传动形式上多种需求。
Professional transmission component manufacturers, Suzhou, Shenzhen, Ningbo three major manufacturing bases and R & D center, with more than 45,000 square meters of production and manufacturing workshops, its own processing equipment of nearly 400 +, the sales of products have full independent intellectual property rights.

5 品质优势 Quality advantage

拥有先进的制造设备、专业的检测设备, 完整的生产工艺流程、专业的团队, 多道品质检验流程, 确保产品一致性。
With advanced manufacturing equipment, professional testing equipment, complete production process, professional team, multi-channel quality inspection process to ensure product consistency.

6 服务优势 Service advantage

我司拥有全球化销售网络, 办事处及专业的售后团队, 更快速响应客户售前、售中、售后服务需求。
Our company has a global sales network, offices and professional after-sales team, more quickly respond to customer pre-sale, sale, after-sales service needs.

7 社会责任 Social responsibility

为员工提供舒适、安全、健康的工作环境, 精密传动配件自产自销, 打破进口依赖, 摆脱“卡脖子”障碍, 专注高速高精传动产品, 为国家智能制造发展添砖加瓦。
To provide employees with a comfortable, safe and healthy working environment, self-production and self-marketing of precision transmission parts, breaking the import dependence, getting rid of the "jam neck" barrier, focusing on high-speed and high-precision transmission products, and contributing to the development of national intelligent manufacturing.

8 价格优势 Price advantage

规模大、产能高、编制精、人员结构稳定; 可帮助客户降低生产成本, 提高产品利润及市场竞争力。
Large scale, high production capacity, fine establishment, stable personnel structure; It can help customers reduce production costs, improve product profits and market competitiveness.

TPA公司环境
Company Environment



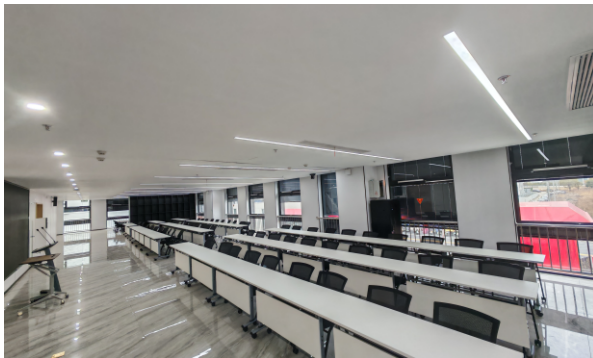
华东制造基地 East China Manufacturing Base



华南制造基地 South China Manufacturing Base



加工车间 Processing workshop



多功能培训厅 Multifunctional Training Hall



无尘车间 Dust-free workshop



组装车间 Assembly shop



CNC加工中心 CNC machining center

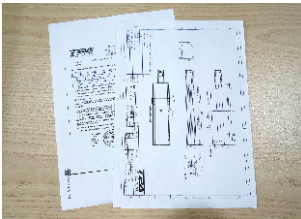


办公环境 Office environment

TPA模组生产流程
Production process



1. 按照客户需求设计定制图纸。
Design customized drawings according to customer requirements.



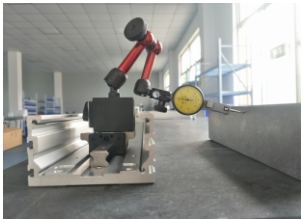
2. 订单确认, 客户回传合同及图纸。
Order confirmation, Customers return contracts and drawings.



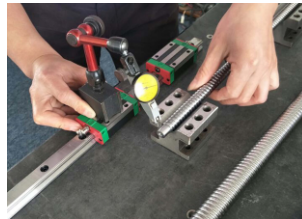
3. 按照图纸CNC生产加工。
CNC production and processing according to drawings



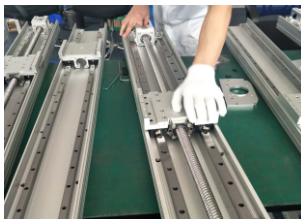
4. 检查底座平面度。
Check the flatness of the base.



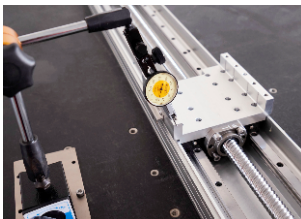
5. 检查底座平行度。
Check the parallelism of the base.



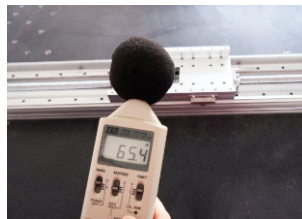
6. 检查螺杆同心度垂直度。
Check the verticality of screw concentricity.



7. 检查有无卡顿情况。
Check for any stuck condition.



8. 通电测试重复定位精度。
Test the accuracy of repeated positioning by electrifying.



9. 模组运行噪音检测。
Running noise detection of module.

TPA
玖钧传动
Motion Control

线性模组出厂检验报告
LINEAR SLIDING TABLE FACTORY INSPECTION REPORT

产品名称: _____ 生产单号: _____
产品类型: _____ 订单号: _____

检验项目		检验结果	
1. 外观检查			
1.1 外观无划伤、无油污	是/否	是/否	是/否
1.2 丝杆无异物、无油污	是/否	是/否	是/否
1.3 丝杆无变形、无裂纹	是/否	是/否	是/否
1.4 丝杆无锈蚀、无氧化	是/否	是/否	是/否
1.5 丝杆无变形、无裂纹	是/否	是/否	是/否
1.6 丝杆无锈蚀、无氧化	是/否	是/否	是/否
1.7 丝杆无变形、无裂纹	是/否	是/否	是/否
1.8 丝杆无锈蚀、无氧化	是/否	是/否	是/否
1.9 丝杆无变形、无裂纹	是/否	是/否	是/否
1.10 丝杆无锈蚀、无氧化	是/否	是/否	是/否
2. 性能测试			
2.1 运行平稳	是/否	是/否	是/否
2.2 运行速度	是/否	是/否	是/否
2.3 运行精度	是/否	是/否	是/否
2.4 运行噪音	是/否	是/否	是/否
2.5 运行寿命	是/否	是/否	是/否
2.6 运行温度	是/否	是/否	是/否
2.7 运行湿度	是/否	是/否	是/否
2.8 运行压力	是/否	是/否	是/否
2.9 运行电流	是/否	是/否	是/否
2.10 运行电压	是/否	是/否	是/否
3. 包装检查			
3.1 包装完好	是/否	是/否	是/否
3.2 包装数量	是/否	是/否	是/否
3.3 包装规格	是/否	是/否	是/否
3.4 包装标识	是/否	是/否	是/否
3.5 包装附件	是/否	是/否	是/否
3.6 包装材料	是/否	是/否	是/否
3.7 包装环境	是/否	是/否	是/否
3.8 包装时间	是/否	是/否	是/否
3.9 包装地点	是/否	是/否	是/否
3.10 包装人员	是/否	是/否	是/否

检验日期: _____ 检验人: _____
玖钧传动·智造兴邦
www.tparobot.cn

滑台出厂均附有相应检验报告, 确保产品符合使用要求, 方准予出厂。
The sliding table is shipped with the corresponding inspection report to ensure that the products meet the use requirements, and the sliding table is allowed to leave the factory.

滑台模组规格索引

Spec index of electric actuator

HNR半封闭螺杆模组

HNR Series Semi-Sealing Type Screw Driven Linear Actuator

使用环境 Environment	传动方式 Drive Method	规格 Specifications	马达容量 Motor output	本体宽度 Body Width(mm)	重复定位精度 Repeated positioning accuracy (mm)	螺杆规格(C7级) Ball screw specification		最大可搬重量 Maximum Payload(kg)		最高速度*1 Maximum speed (mm/s)	行程 Stroke	标准行程及最高使用速度*2 Stroke(mm) & Maximum speed (mm/s)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
						外径 Outer diameter(mm)	导程 Lead(mm)	水平使用 Horizontal(kg)	垂直使用 Vertical(kg)			代表速度 Speed																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
一般环境 General environment	滚珠螺杆 Ball screw	TPA-HNR-100T	100W	102	±0.01	16	5	50	12	250		250																225	200	175	150	125	100																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								

*1:最高速度(MM/S)是以伺服马达最高转速3000RPM为基准。

The highest speed is based on the maximum servo motor's rpm(3000).

步进马达最高转速500RPM为基准。

The highest speed is based on the maximum sepping motor' s rpm(3000).

*2:标准行程内的黑色数字,代表该行程内可使用最高安全速度,若超过此速度,滑台可能会有严重共振产生。

written here is the standard storke' s makimum safe speed.if over this speed,it may casue serious virbration

滑台模组规格索引

Spec index of electric actuator

HNB半封闭同步带模组
HNB Series Semi-Sealing Belt Driven Linear Actuator

使用环境 Environment	传动方式 Drive method	规格 Specifications	马达容量 Motor output	本体宽度 Body Width(mm)	重复定位精度 Repeated positioning accuracy	最大可搬重量 Maximum Payload(kg)	标准行程 Stroke pitch(mm)	皮带规格 Belt specifications		理论最高速度*1 Theoretical maximum speed (mm/s)	行程 Stroke	标准行程与建议最高使用速度*2 Stroke(mm) & Maximum speed (mm/s)													
								皮带宽度 Belt width(mm)	导程 Lead(mm)			100-1800	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850	2950	3050
一般环境 General environment	联轴器传动/同步带传动 Coupling/belt drive	TPA-HNB-135T	200W	135	±0.04	25	50~3050 (间距50)	25	40	2000		2000													
		TPA-HNB-170T	400W	170	±0.04	45	50~3050 (间距50)	30	40	2000		2000													
		TPA-HNB-220T	750W	220	±0.04	85	50~3050 (间距50)	50	40	2000		2000													
		TPA-HNB-270D	1000W	270	±0.04	130	50~3050 (间距50)	50	80	2000		2000													

HNR

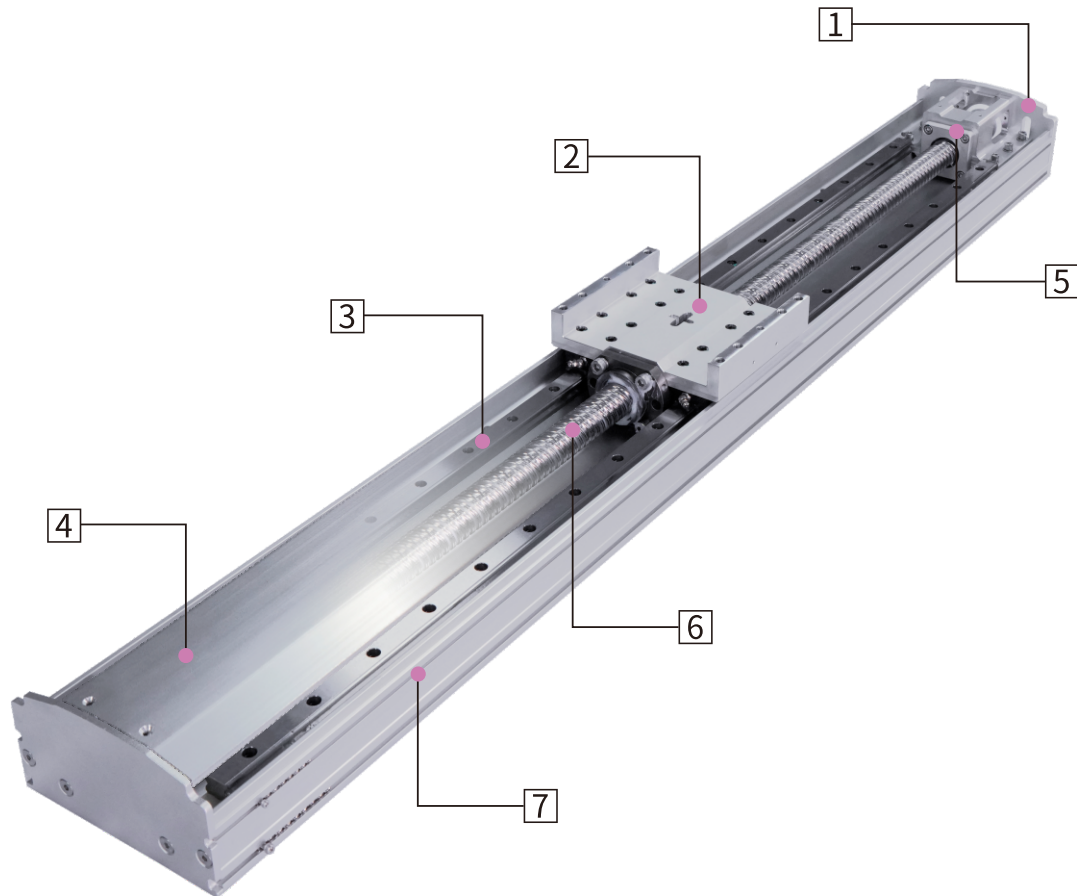
HNB

参考资料
Reference data



螺杆模组内部结构图说明

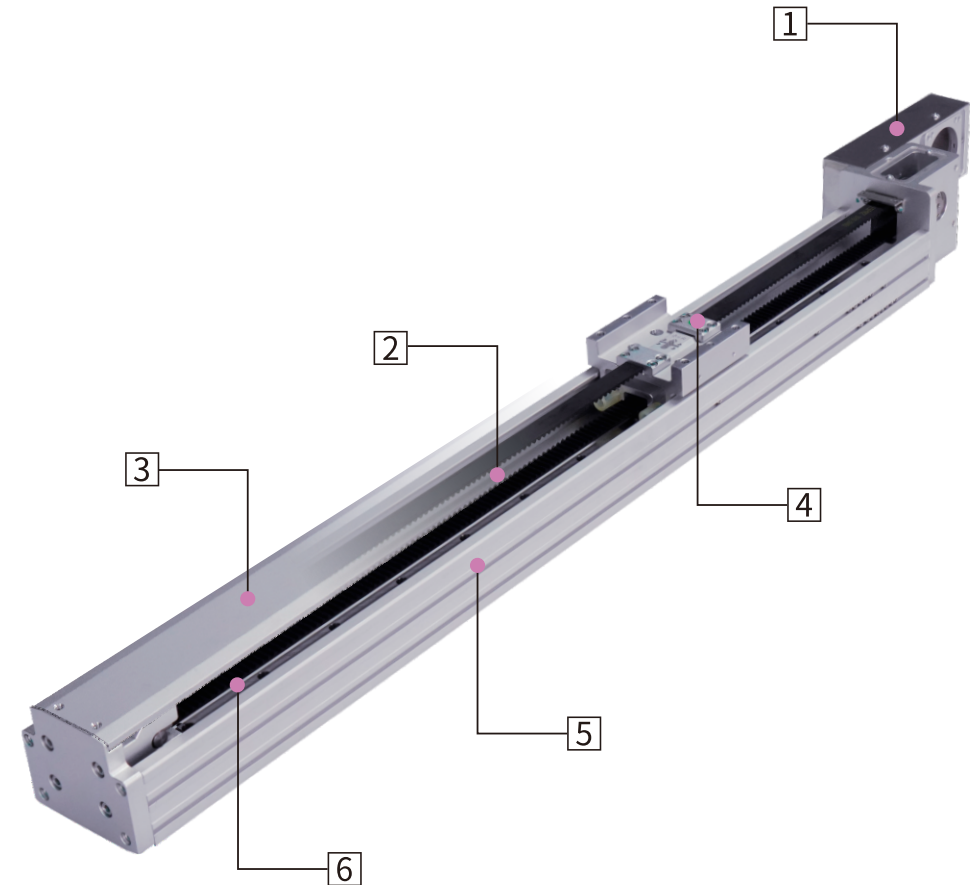
Description of Internal Structure Diagram of Screw Driven Linear Actuator



- ① 法兰板 Flange plate
安装便捷, 方便互换不同的伺服电机。 Easy to install, easy to swap different servo motors.
- ② 滑座 Slide
高强度、高刚性, 供客户安装便捷。 High strength, high rigidity, convenient for customers to install.
- ③ 精密直线导轨 Precision linear guide
精度高、刚性高、适合高速运动、保证运行时的直线度和平行度。
High precision, high rigidity, suitable for high-speed movement, to ensure the straightness and parallelism during operation.
- ④ 铝护盖 Aluminum cover
外形美观、可防异物。 Beautiful appearance, can prevent foreign bodies.
- ⑤ 螺杆/电机固定座 Screw/motor fixing seat
防呆设计、吸收安装误差、与法兰板配合安装保证电机、联轴器、和滚珠螺杆的同心度。
Fool proof design, absorption of installation errors, and installation with flange plate to ensure the concentricity of motor, coupling, and ball screw.
- ⑥ 精密滚珠螺杆 Precision ball bearing screw
精度根据需求可选配。 The precision can be selected according to the demand.
- ⑦ 铝基座 Aluminum base
整体结构设计紧凑、高强度、高刚性。 The overall structure design is compact, high strength, high rigidity.

同步带模组内部结构图说明

Description of internal Structure Diagram of Belt Driven Linear Actuator



- ① 传动机构 Transmission mechanism
通过伺服电机回转运动传递给同步轮, 再由同步轮与同步带齿与齿的啮合传递动力。
It is transferred to the synchronous wheel through the rotary movement of the servo motor, and then the power is transferred by the meshing between the synchronous wheel and the teeth of the synchronous belt.
- ② 高强度钢丝同步带 High strength steel wire timing belt
高强度、高张力、抗磨损、低噪音。 High strength, high tension, wear resistance, low noise.
- ③ 铝护盖 Aluminum cover
外形美观、可防异物。 Beautiful appearance, can prevent Foreign material.
- ④ 滑座 Slide
高强度、高刚性, 供客户安装便捷。 High strength, high rigidity, convenient for customers to install.
- ⑤ 铝基座 Aluminum base
整体结构设计紧凑、高强度、高刚性。 The overall structure design is compact, high strength, high rigidity.
- ⑥ 精密直线导轨 Precision linear guide
精度高、刚性高、适合高速运动、保证运行时的直线度和平行度。
High precision, high rigidity, suitable for high-speed movement, to ensure the straightness and parallelism during operation.

HNR

HNB

参考资料
Reference
data



重复精度
Repeat Accuracy
±0.01 mm

此图仅供参考, 出货规格详见尺寸图面
This drawing is for reference only, Please refer to the size drawing for shipment specifications.

最大行程
Max stroke 1050mm

最高速度
Max speed 1600mm/s

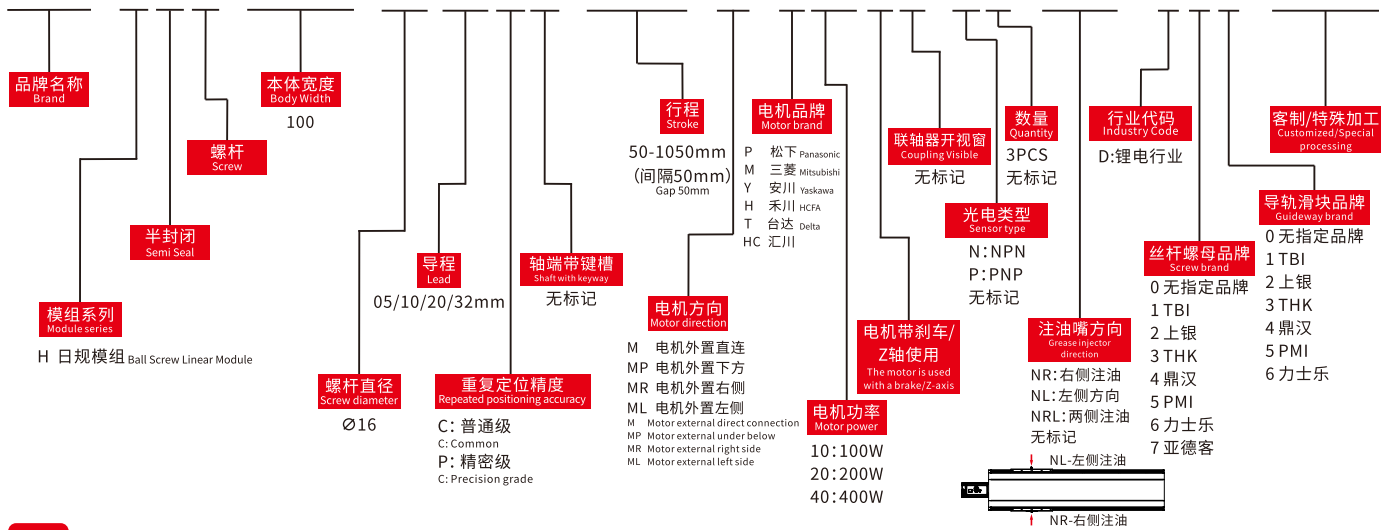
马达容量
Motor output 100W

滚珠螺杆
Ball screw Ø16mm

直线滑轨
Linear guide 15X12.5

型号表达方式 Ordering method

TPA-HNR-100T-1610CK-L100-M-P10BC-N3-NRL-D00-P000



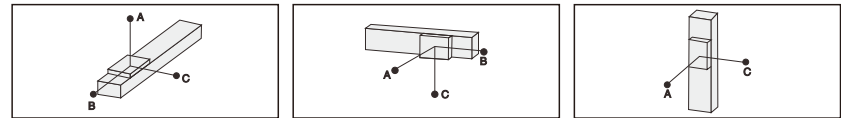
产品性能参数如下 Product performance parameters are as follows

规格 Spec	重复定位精度 (mm) Repeat positioning accuracy (mm)	±0.01			
	丝杆导程 (mm) Lead screw lead (mm)	5	10	20	32
	最高速度 (mm/s) Maximum speed (mm/s)	250	500	1000	1600
	最大可搬重量 Maximum carrying weight	水平使用(kg) Horizontal (kg)	50	30	18
		垂直使用(kg) Vertical (kg)	12	8	3
	定格推力(N) Stationary thrust (N)	341	170	85	53
部品 Parts	标准行程 (mm) Standard stroke (mm)	50-1050mm/50间隔			
	AC伺服马达容量 Capacity of AC servo motor	100			
	滚珠螺杆外径 (mm) Ball screw Ø (mm)	Φ16			
	高刚性直线滑轨 High-rigidity linear guide rails	W15XH12.5			
	联轴器 Coupling	10X8			
原点感应器 Origin sensor	外挂 Cheat	EE-SX672(NPN)			
	内置 Built-in	EE-SX674(NPN)			

注1: 使用非上述功率电机时请依据实际参数推算。
Note 1: When using a motor with a power other than the above, please calculate according to the actual parameters.

注2: 最高速度因行程和负载而异, 当螺杆细长比大于1:50时, 可能会因螺杆临界速度产生共振和抖动, 应适当下调运行速度, 一般螺杆每增长100mm, 速度应下调10~15%。
Note 2: The maximum speed varies with stroke and load. When the screw slenderness ratio is greater than 1:50, resonance and jitter may occur due to the critical speed of the screw, so the running speed should be reduced appropriately. Generally, the speed should be reduced by 10~15% for every 100mm increase of the screw.

容许负载力矩表 N.m Allowable overhang

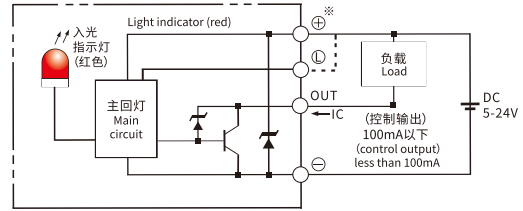


(单位Unit:mm)				(单位Unit:mm)				(单位Unit:mm)			
水平安装 Horizontal installation				侧面安装 Side mounting				垂直安装 Vertical installation			
导程 5 Lead	A	B	C	导程 5 Lead	A	B	C	导程 5 Lead	A	B	C
30kg	882	65	78	25kg	100	84	1102	5kg	544	544	
40kg	606	43	51	35kg	63	52	725	8kg	341	341	
50kg	437	29	35	50kg	250	29	433	12kg	227	227	
导程 10 Lead	A	B	C	导程 10 Lead	A	B	C	导程 10 Lead	A	B	C
15kg	875	138	157	10kg	250	221	1311	4kg	606	606	
25kg	485	73	83	20kg	110	97	633	8kg	303	303	
30kg	386	56	64	30kg	64	56	384	-	-	-	
导程 20 Lead	A	B	C	导程 20 Lead	A	B	C	导程 20 Lead	A	B	C
5kg	1160	384	396	8kg	347	316	955	2kg	961	961	
10kg	561	180	181	12kg	147	144	455	3kg	639	639	
18kg	288	88	89	18kg	89	88	288	-	-	-	
导程 32 Lead	A	B	C	导程 32 Lead	A	B	C	导程 32 Lead	A	B	C
3kg	822	444	385	2kg	591	682	1256	-	-	-	
5kg	492	255	224	5kg	224	225	488	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	

搭配伺服马达一览表 Suitable motor brand

品牌 Brand	马达记号 Mark	刹车有无 Brake	马达容量 Motor capacity	电源电压 AC-Voltage	伺服马达型号 Servo motor model	驱动器型号 Driver Model
三菱 Mitsubishi	M	无刹车(水平式样) No brake (horizontal type)	400	220	HG-KN43J-S100	MR-JE-40A
松下 Panasonic	P	无刹车(水平式样) No brake (horizontal type)	400	220	MHMF042L1U2M	MBDLN25SE
台达 Delta	T	无刹车(水平式样) No brake (horizontal type)	400	220	ECM-B3M-C20604RS1	ASD-B3-0421-L

感应器连接图<原点及端点> Sensor layout



HNR

HNB

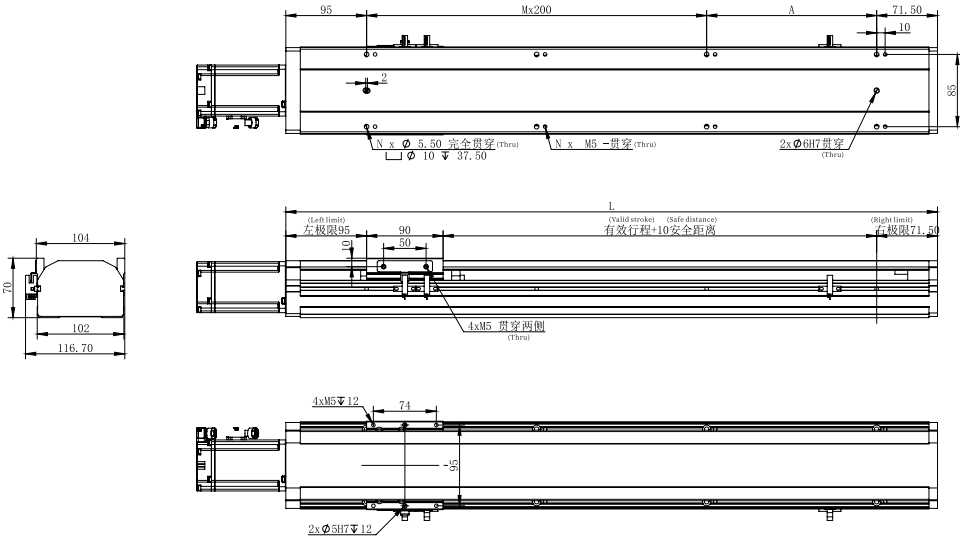
参考资料
Reference data



电机外置直连/电机内置直连
Motor external direct connection/Motor built in direct connection

M 电机外置直连 Motor external direct connection

单位:Unit: mm



*不含电机重量。*Motor weight not included.

有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	316.5	366.5	416.5	466.5	516.5	566.5	616.5	666.5	716.5	766.5	816.5	866.5	916.5	966.5	1016.5	1066.5	1116.5	1166.5	1216.5	1266.5	1316.51
A	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	50
M	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
N	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14
KG	4.65	5.05	5.45	5.85	6.25	6.65	7.05	7.45	7.85	8.25	8.65	9.05	9.45	9.85	10.25	10.65	11.05	11.45	11.85	12.25	12.65

如有超长行程及定制需求, 请咨询我司业务。 If you have extra long trip and custom requirements, please consult our business.

MEMO

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重复精度
Repeat Accuracy
±0.01
mm

此图仅供参考, 出货规格详见尺寸图面
This drawing is for reference only, Please refer to the size drawing for shipment specifications.

最大行程
Max stroke 1050mm

最高速度
Max speed 1600mm/s

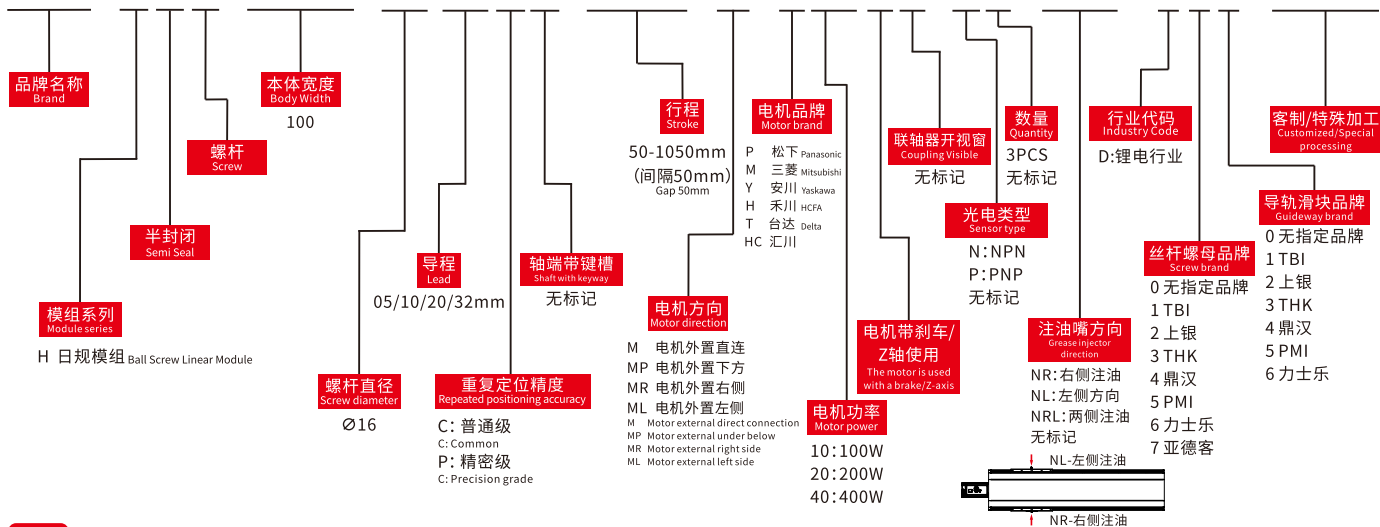
马达容量
Motor output 100W

滚珠螺杆
Ball screw Ø16mm

直线滑轨
Linear guide 20X18

型号表达方式 Ordering method

TPA-HNR-100TS-1610CK-L100-M-P10BC-N3-NRL-D00-P000

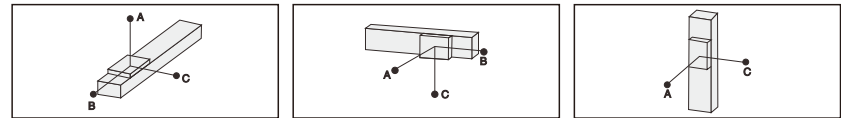


产品性能参数如下 Product performance parameters are as follows

规格 Spec	重复定位精度 (mm) Repeat positioning accuracy (mm)		±0.01			
	丝杆导程 (mm) Lead screw lead (mm)		5	10	20	32
	最高速度 (mm/s) Maximum speed (mm/s)		250	500	1000	1600
	最大可搬重量 Maximum carrying weight	水平使用(kg)Horizontal (kg)	50	30	18	5
		垂直使用(kg)Vertical (kg)	12	8	3	-
	定格推力(N) Stationary thrust (N)		341	170	85	53
	标准行程 (mm) Standard stroke (mm)		50-1050mm/50间隔			
部品 Parts	AC伺服马达容量 Capacity of AC servo motor		100			
	滚珠螺杆外径 (mm) Ball screwφ (mm)		φ16			
	高刚性直线滑轨 High-rigidity linear guide rails		W20XH18			
	联轴器 Coupling		10X8			
	原点感应器 Origin sensor	外挂 Cheat	EE-SX672(NPN)			
内置 Built-in		EE-SX674(NPN)				

注1: 使用非上述功率电机时请依据实际参数推算。
Note 1: When using a motor with a power other than the above, please calculate according to the actual parameters.
注2: 最高速度因行程和负载而异, 当螺杆细长比大于1:50时, 可能会因螺杆临界速度产生共振和抖动, 应适当下调运行速度, 一般螺杆每增长100mm, 速度应下调10~15%。
Note 2: The maximum speed varies with stroke and load. When the screw slenderness ratio is greater than 1:50, resonance and jitter may occur due to the critical speed of the screw, so the running speed should be reduced appropriately. Generally, the speed should be reduced by 10~15% for every 100mm increase of the screw.

容许负载力矩表 N.m Allowable overhang

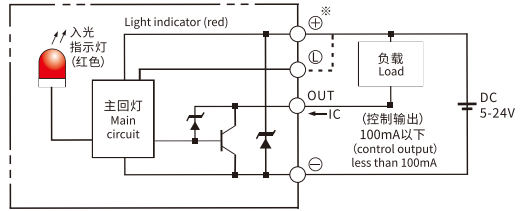


(单位Unit:mm)				(单位Unit:mm)				(单位Unit:mm)							
水平安装 Horizontal installation				侧面安装 Side mounting				垂直安装 Vertical installation							
导程 5 Lead	30kg	547	42	42	导程 5 Lead	25kg	52	53	670	导程 5 Lead	5kg	310	310		
	40kg	391	29	29		导程 10 Lead	35kg	35	35		455	8kg	192	192	
	50kg	298	22	21			导程 10 Lead	50kg	21		22	298	12kg	129	129
导程 10 Lead	15kg	521	84	80	导程 10 Lead			10kg	124	131	770	导程 10 Lead	4kg	344	344
	25kg	298	47	44		导程 20 Lead		20kg	58	61	382		8kg	172	172
	30kg	242	37	35			导程 20 Lead	30kg	37	37	242		导程 20 Lead	-	-
导程 20 Lead	5kg	675	224	193	导程 20 Lead			8kg	160	185	562	导程 20 Lead		2kg	546
	10kg	330	107	93		导程 32 Lead		12kg	76	88	272			3kg	364
	18kg	175	55	48			导程 32 Lead	18kg	48	55	175		导程 32 Lead	-	-
导程 32 Lead	3kg	486	259	198	导程 32 Lead			2kg	300	393	733	导程 32 Lead			
	5kg	288	152	116		导程 32 Lead		5kg	116	152	288			导程 32 Lead	
	-	-	-	-			导程 32 Lead	-	-	-	-		导程 32 Lead		
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						导程 32 Lead							导程 32 Lead		
				导程											

搭配伺服马达一览表 Suitable motor brand

品牌 Brand	马达记号 Mark	刹车有无 Brake	马达容量 Motor capacity	电源电压 AC-Voltage	伺服马达型号 Servo motor model	驱动器型号 Driver Model
三菱 Mitsubishi	M	无刹车(水平式样) No brake (horizontal type)	400	220	HG-KN43J-S100	MR-JE-40A
松下 Panasonic	P	无刹车(水平式样) No brake (horizontal type)	400	220	MHMF042L1U2M	MBDLN25SE
台达 Delta	T	无刹车(水平式样) No brake (horizontal type)	400	220	ECM-B3M-C20604RS1	ASD-B3-0421-L

感应器连接图<原点及端点> Sensor layout



HNR

HNB

参考资料
Reference data

电机外置直连/电机内置直连

Motor external direct connection/Motor built in direct connection

M 电机外置直连 Motor external direct connection

单位:Unit:mm



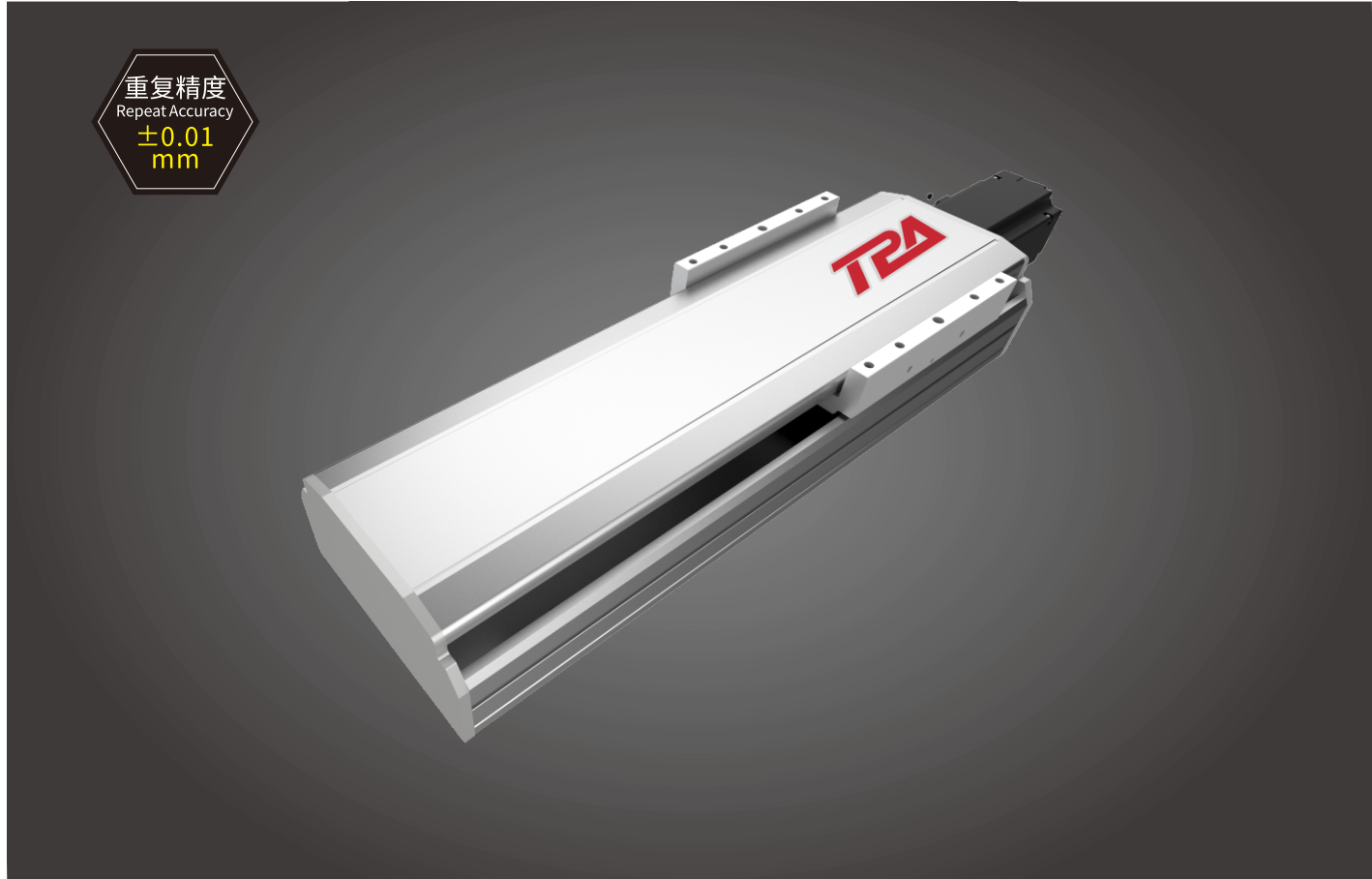
*不含电机重量。*Motor weight not included.

Motor weight not included.																					
有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300
A	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
N	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14
KG	4.25	4.65	5.05	5.45	5.85	6.25	6.65	7.05	7.45	7.85	8.25	8.65	9.05	9.45	9.85	10.25	10.65	11.05	11.45	11.85	12.25

如有超长行程及定制需求, 请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.

MEMO

MEMO



重复精度
Repeat Accuracy
 ± 0.01
mm

此图仅供参考, 出货规格详见尺寸图面
This drawing is for reference only, Please refer to the size drawing for shipment specifications.

最大行程
Max stroke
1050mm

最高速度
Max speed
1600mm/s

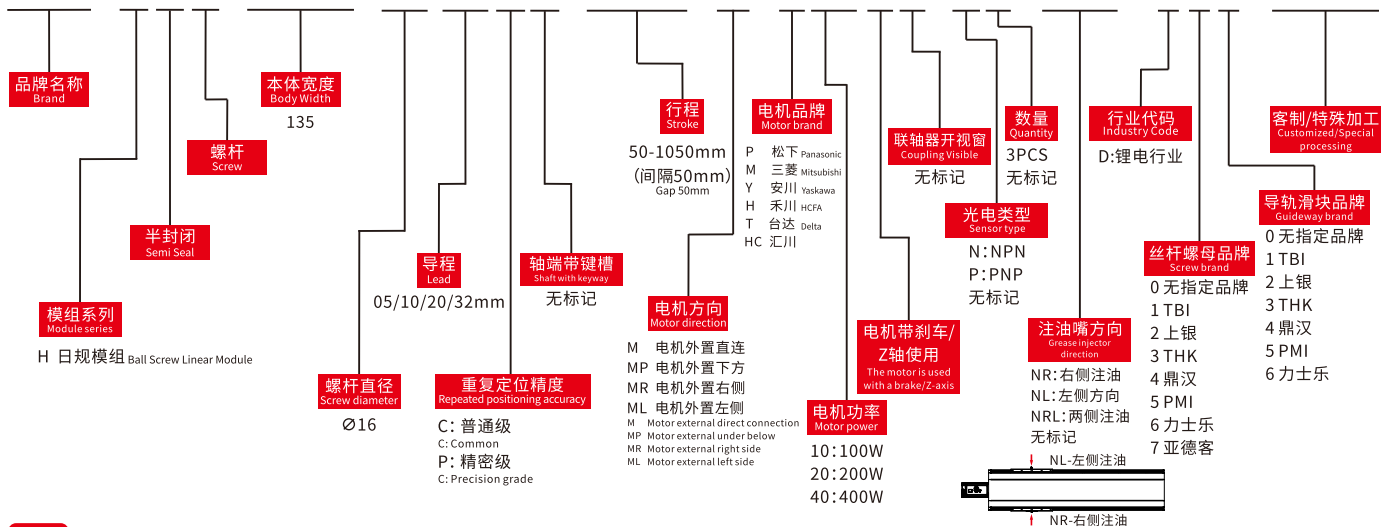
马达容量
Motor output
400W

滚珠螺杆
Ball screw
 $\varnothing 16$ mm

直线滑轨
Linear guide
15X12.5

型号表达方式 Ordering method

TPA-HNR- 135T -1610CK-L100-M-P40BC-N3-NRL-D00-P000



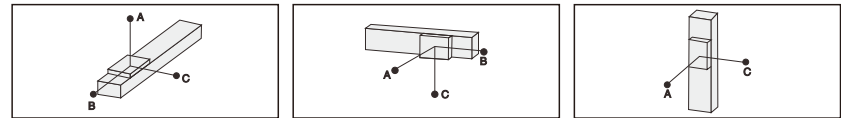
产品性能参数如下 Product performance parameters are as follows

规格 Spec	重复定位精度 (mm) Repeat positioning accuracy (mm)		±0.01			
	丝杆导程 (mm) Lead screw lead (mm)		5	10	20	32
	最高速度 (mm/s) Maximum speed (mm/s)		250	500	1000	1600
	最大可搬重量 Maximum carrying weight	水平使用(kg)Horizontal (kg)	110	88	40	30
		垂直使用(kg)Vertical (kg)	33	22	10	8
	定格推力(N) Stationary thrust (N)		1388	694	347	218
标准行程 (mm) Standard stroke (mm)			50-1050mm/50间隔			
部品 Parts	AC伺服马达容量 Capacity of AC servo motor		400			
	滚珠螺杆外径 (mm) Ball screw∅(mm)		φ16			
	高刚性直线滑轨 High-rigidity linear guide rails		W15XH12.5			
	联轴器 Coupling		10X14/11			
	原点感应器 Origin sensor	外挂 Cheat	EE-SX672(NPN)			
内置 Built-in		EE-SX674(NPN)				

注1: 使用非上述功率电机时请依据实际参数推算。
Note 1: When using a motor with a power other than the above, please calculate according to the actual parameters.

注2: 最高速度因行程和负载而异, 当螺杆细长比大于1:50时, 可能会因螺杆临界速度产生共振和抖动, 应适当下调运行速度, 一般螺杆每增长100mm, 速度应下调10~15%。
Note 2: The maximum speed varies with stroke and load. When the screw slenderness ratio is greater than 1:50, resonance and jitter may occur due to the critical speed of the screw, so the running speed should be reduced appropriately. Generally, the speed should be reduced by 10~15% for every 100mm increase of the screw.

容许负载力矩表 N.m Allowable overhang

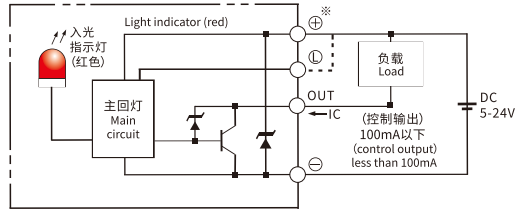


(单位Unit:mm)					(单位Unit:mm)					(单位Unit:mm)			
水平安装 Horizontal installation		A	B	C	侧面安装 Side mounting		A	B	C	垂直安装 Vertical installation		A	C
导程 5 Lead	60kg	2512	242	232	导程 5 Lead	55kg	257	269	2883	导程 5 Lead	15kg	1118	1118
	80kg	1811	172	164		75kg	178	186	2000		22kg	770	770
	95kg	1537	138	133		95kg	133	138	1537		27kg	626	626
导程 10 Lead	30kg	2727	470	430	导程 10 Lead	35kg	363	395	2368	导程 10 Lead	10kg	1500	1500
	50kg	1577	266	242		55kg	218	238	1445		14kg	1072	1072
	75kg	1004	164	150		75kg	150	164	1004		18kg	833	833
导程 20 Lead	10kg	2304	1222	1028	导程 20 Lead	12kg	854	1019	2552	导程 20 Lead	4kg	2980	2980
	22kg	1443	540	451		20kg	500	596	1588		7kg	1700	1700
	35kg	1005	324	271		35kg	271	324	1005		-	-	-
导程 32 Lead	10kg	1555	840	623	导程 32 Lead	8kg	787	1060	1980				
	15kg	1033	545	405		15kg	405	545	1033				
	-	-	-	-		-	-	-	-				

搭配伺服马达一览表 Suitable motor brand

品牌 Brand	马达记号 Mark	刹车有无 Brake	马达容量 Motor capacity	电源电压 AC-Voltage	伺服马达型号 Servo motor model	驱动器型号 Driver Model
三菱 Mitsubishi	M	无刹车(水平式样) No brake (horizontal type)	400	220	HG-KN43J-S100	MR-JE-40A
松下 Panasonic	P	无刹车(水平式样) No brake (horizontal type)	400	220	MHMF042L1U2M	MBDLN25SE
台达 Delta	T	无刹车(水平式样) No brake (horizontal type)	400	220	ECM-B3M-C20604RS1	ASD-B3-0421-L

感应器连接图<原点及端点> Sensor layout



HNR

HNB

参考资料
Reference data

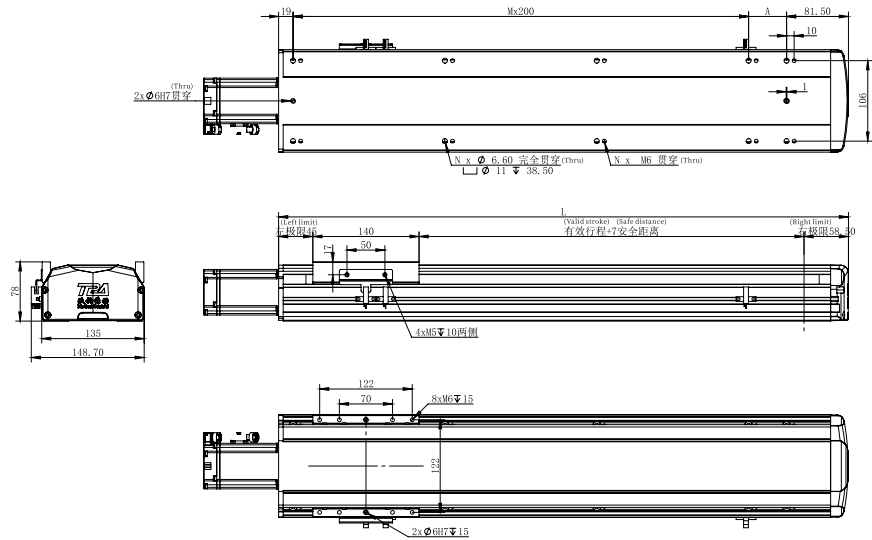


电机外置直连/电机内置直连

Motor external direct connection/Motor built in direct connection

M 电机外置直连 Motor external direct connection

单位:Unit: mm



*不含电机重量。*Motor weight not included.

有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	300.5	350.5	400.5	450.5	500.5	550.5	600.5	650.5	700.5	750.5	800.5	850.5	900.5	950.5	1000.5	1050.5	1100.5	1150.5	1200.5	1250.5	1300.5
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14
KG	8.75	9.3	9.85	10.4	10.95	11.5	12.05	12.6	13.15	13.7	14.25	14.8	15.35	15.9	16.45	17	17.55	18.1	18.65	19.2	19.75

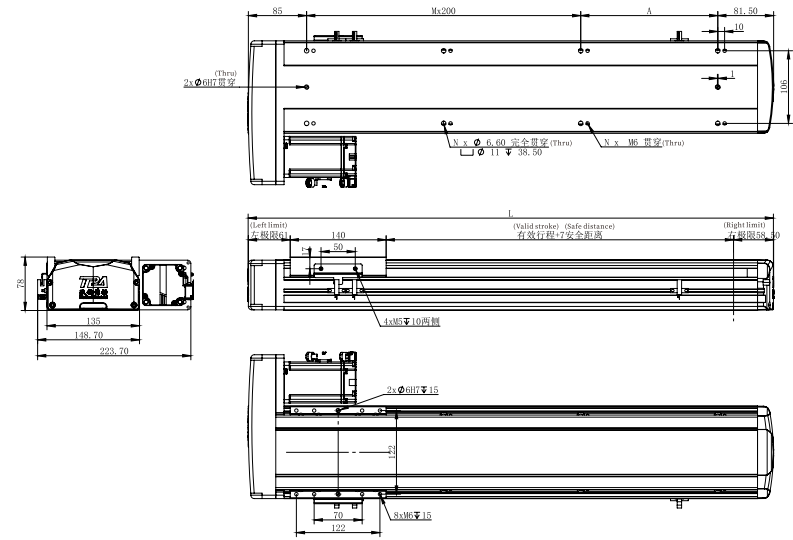
如有超长行程及定制需求, 请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.

电机外置下方/电机外置左侧

Motor external under below / Motor external left side

ML 电机外置左侧 Motor external left side

单位:Unit: mm



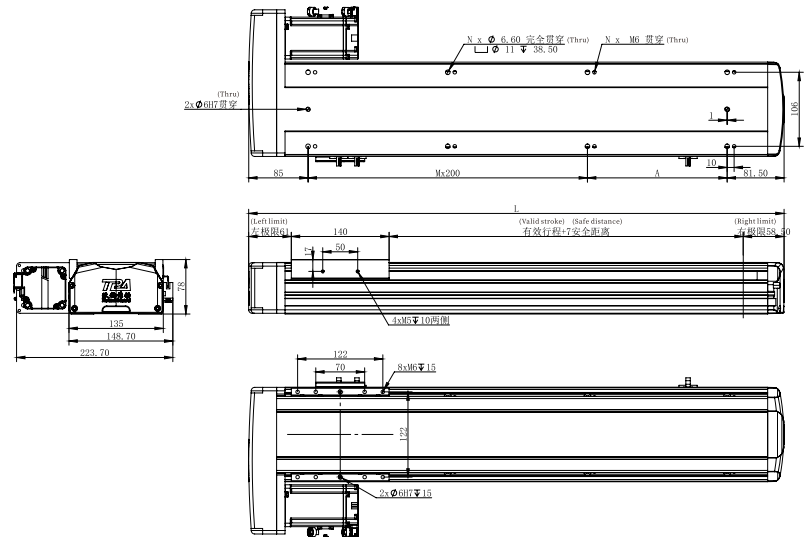
*不含电机重量。*Motor weight not included.

有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	316.5	366.5	416.5	466.5	516.5	566.5	616.5	666.5	716.5	766.5	816.5	866.5	916.5	966.5	1016.5	1066.5	1116.5	1166.5	1216.5	1266.5	1316.5
A	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
N	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14
KG	9.4	9.94	10.48	11.02	11.56	12.1	12.64	13.18	13.72	14.26	14.8	15.34	15.88	16.42	16.96	17.5	18.04	18.58	19.12	19.66	20.2

如有超长行程及定制需求, 请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.

MR 电机外置右侧 Motor external right side

单位:Unit: mm



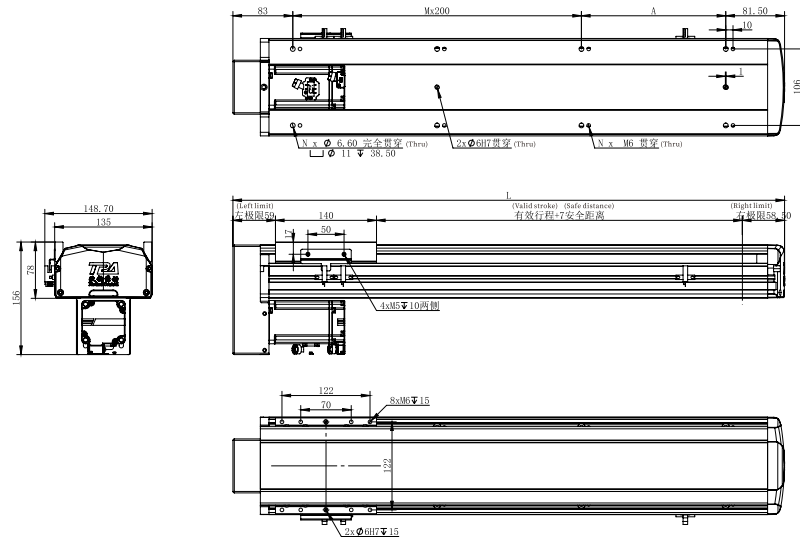
*不含电机重量。*Motor weight not included.

有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	314.5	364.5	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1116.5	1166.5	1216.5	1266.5	1316.5
A	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
N	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14
KG	9.4	9.94	10.48	11.02	11.56	12.1	12.64	13.18	13.72	14.26	14.8	15.34	15.88	16.42	16.96	17.5	18.04	18.58	19.12	19.66	20.2

如有超长行程及定制需求, 请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.

MP 电机外置下折 Motor external Fold down

单位:Unit: mm



*不含电机重量。*Motor weight not included.

有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	316.5	366.5	416.5	466.5	516.5	566.5	616.5	666.5	716.5	766.5	816.5	866.5	916.5	966.5	1016.5	1066.5	1116.5	1166.5	1216.5	1266.5	1316.5
A	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
N	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14
KG	9.4	9.94	10.48	11.02	11.56	12.1	12.64	13.18	13.72	14.26	14.8	15.34	15.88	16.42	16.96	17.5	18.04	18.58	19.12	19.66	20.2

如有超长行程及定制需求, 请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.



重复精度
Repeat Accuracy
 ± 0.01
mm

此图仅供参考, 出货规格详见尺寸图面
This drawing is for reference only, Please refer to the size drawing for shipment specifications.

最大行程
Max stroke 1250mm

最高速度
Max speed 2000mm/s

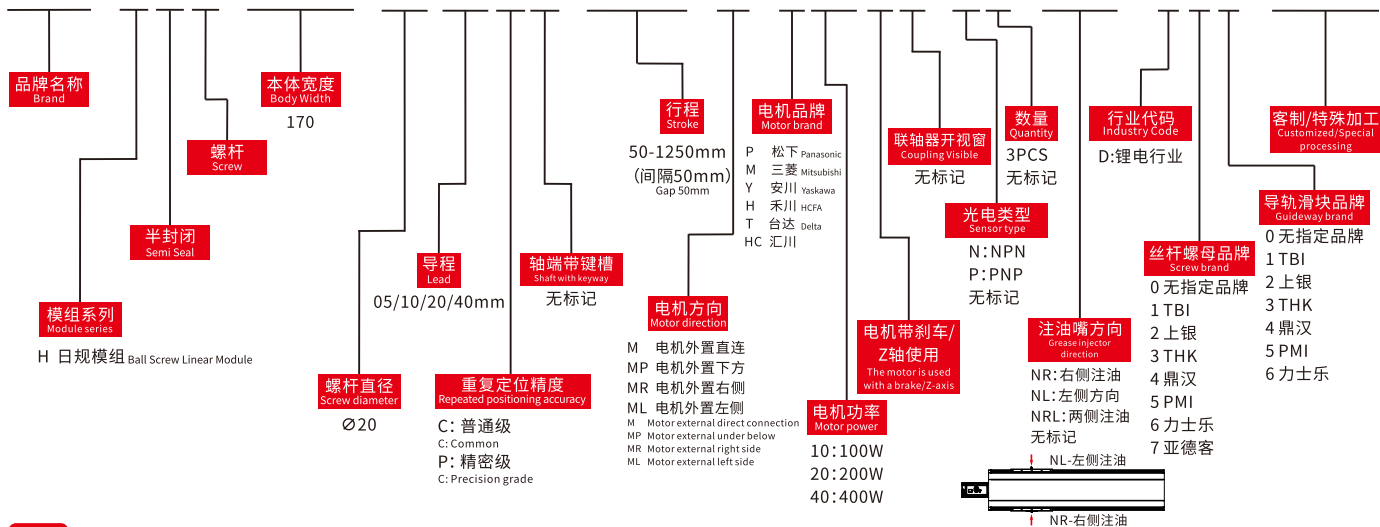
马达容量
Motor output 400W

滚珠螺杆
Ball screw $\varnothing 20$ mm

直线滑轨
Linear guide 20X15

型号表达方式 Ordering method

TPA-HNR- 170T -2010CK-L100-M-P40BC-N3-NRL-D00-P000



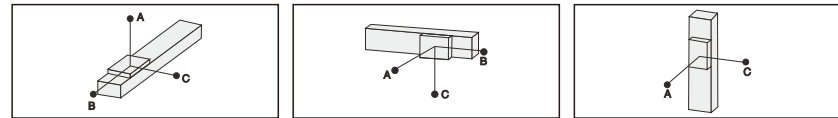
产品性能参数如下 Product performance parameters are as follows

规格 Spec	重复定位精度 (mm) Repeat positioning accuracy (mm)	± 0.01			
	丝杆导程 (mm) Lead screw lead (mm)	5	10	20	40
	最高速度 (mm/s) Maximum speed (mm/s)	250	500	1000	2000
	最大可搬重量 Maximum carrying weight	水平使用(kg) Horizontal (kg) 垂直使用(kg) Vertical (kg)			
部品 Parts	定格推力(N) Stationary thrust (N)	1388	694	347	147
	标准行程 (mm) Standard stroke (mm)	50-1250mm/50间隔			
	AC伺服马达容量 Capacity of AC servo motor	400			
	滚珠螺杆外径 (mm) Ball screw $\varnothing$ (mm)	$\varnothing 20$			
	高刚性直线滑轨 High-rigidity linear guide rails	W20XH15			
	联轴器 Coupling	12X14			
原点感应器 Origin sensor	外挂 Cheat	EE-SX672(NPN)			
	内置 Built-in	EE-SX674(NPN)			

注1: 使用非上述功率电机时请依据实际参数推算。
Note 1: When using a motor with a power other than the above, please calculate according to the actual parameters.

注2: 最高速度因行程和负载而异, 当螺杆细长比大于1:50时, 可能会因螺杆临界速度产生共振和抖动, 应适当下调运行速度, 一般螺杆每增长100mm, 速度应下调10~15%。
Note 2: The maximum speed varies with stroke and load. When the screw slenderness ratio is greater than 1:50, resonance and jitter may occur due to the critical speed of the screw, so the running speed should be reduced appropriately. Generally, the speed should be reduced by 10~15% for every 100mm increase of the screw.

容许负载力矩表 N.m Allowable overhang

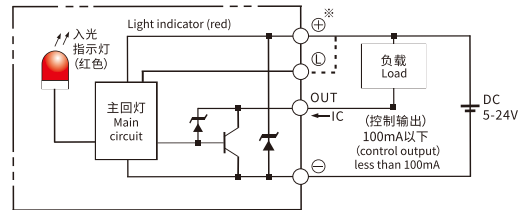


(单位Unit:mm)				(单位Unit:mm)				(单位Unit:mm)			
水平安装 Horizontal installation				侧面安装 Side mounting				垂直安装 Vertical installation			
导程 5 Lead	A	B	C	导程 5 Lead	A	B	C	导程 5 Lead	A	B	C
70kg	3235	349	408	75kg	377	322	2988	20kg	1368	1368	
90kg	2482	263	306	95kg	288	246	2333	30kg	911	911	
120kg	1850	187	217	120kg	218	187	1850	40kg	683	683	
导程 10 Lead	A	B	C	导程 10 Lead	A	B	C	导程 10 Lead	A	B	C
65kg	1911	338	373	60kg	408	368	2092	15kg	1618	1618	
85kg	1445	248	276	80kg	296	266	1554	25kg	970	970	
110kg	1102	182	202	110kg	202	182	1102	30kg	808	808	
导程 20 Lead	A	B	C	导程 20 Lead	A	B	C	导程 20 Lead	A	B	C
35kg	1666	547	538	30kg	633	644	1961	10kg	1922	1922	
55kg	1030	331	328	50kg	365	369	1143	14kg	1377	1377	
75kg	733	231	230	75kg	230	231	733	-	-	-	
导程 40 Lead	A	B	C	导程 40 Lead	A	B	C	导程 40 Lead	A	B	C
15kg	1126	740	577	12kg	729	936	1417	4kg	2377	2377	
22kg	755	491	384	22kg	384	491	755	7kg	1356	1356	
-	-	-	-	-	-	-	-	-	-	-	

搭配伺服马达一览表 Suitable motor brand

品牌 Brand	马达记号 Mark	刹车有无 Brake	马达容量 Motor capacity	电源电压 AC-Voltage	伺服马达型号 Servo motor model	驱动器型号 Driver Model
三菱 Mitsubishi	M	无刹车(水平式样) No brake (horizontal type)	400	220	HG-KN43J-S100	MR-JE-40A
松下 Panasonic	P	无刹车(水平式样) No brake (horizontal type)	400	220	MHMF042L1U2M	MBDLN25SE
台达 Delta	T	无刹车(水平式样) No brake (horizontal type)	400	220	ECM-B3M-C20604RS1	ASD-B3-0421-L

感应器连接图<原点及端点> Sensor layout



HNR

HNB

参考资料
Reference data

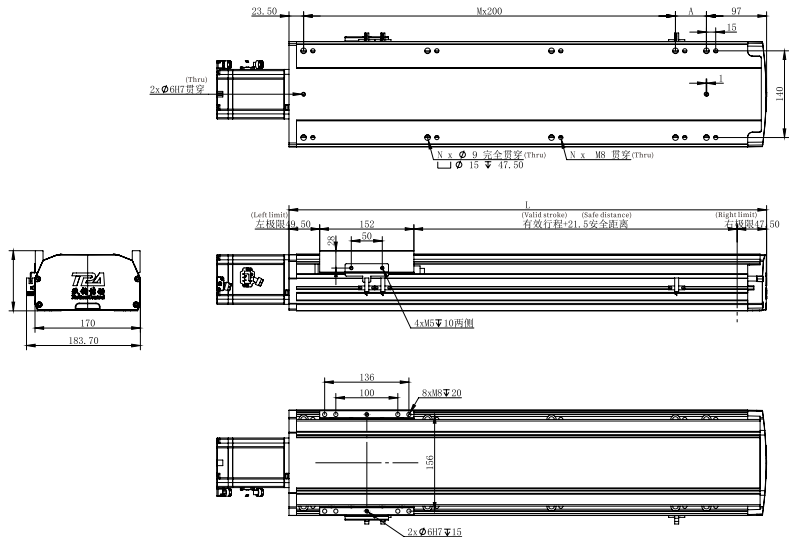


电机外置直连/电机内置直连

Motor external direct connection/Motor built in direct connection

M 电机外置直连 Motor external direct connection

单位:Unit: mm



*不含电机重量。*Motor weight not included.

有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	320.5	370.5	420.5	470.5	520.5	570.5	620.5	670.5	720.5	770.5	820.5	870.5	920.5	970.5	1020.5	1070.5	1120.5	1170.5	1220.5	1270.5	1320.5	1370.5	1420.5	1470.5	1520.5
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16
KG	9.61	10.2	10.79	11.57	12.34	13.11	13.88	14.65	15.42	16.19	16.96	17.73	18.5	19.27	20.04	20.81	21.58	22.35	23.12	23.89	24.66	25.43	26.2	26.97	27.74

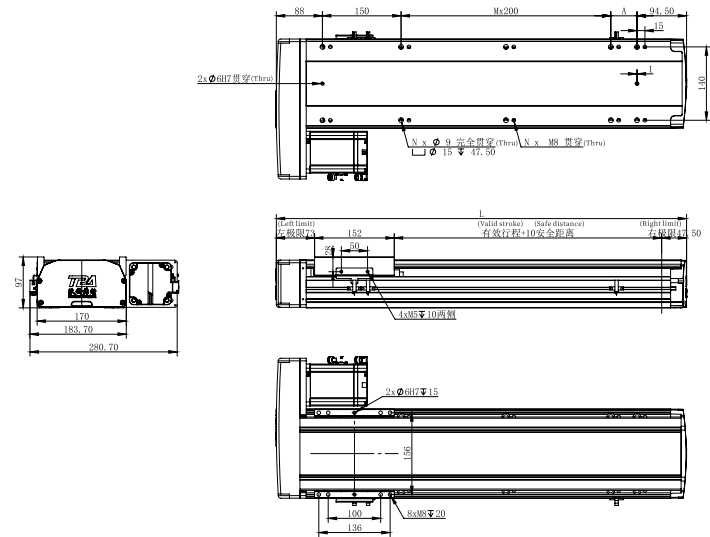
如有超长行程及定制需求,请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.

电机外置下方/电机外置左侧

Motor external under below / Motor external left side

ML 电机外置左侧 Motor external left side

单位:Unit: mm



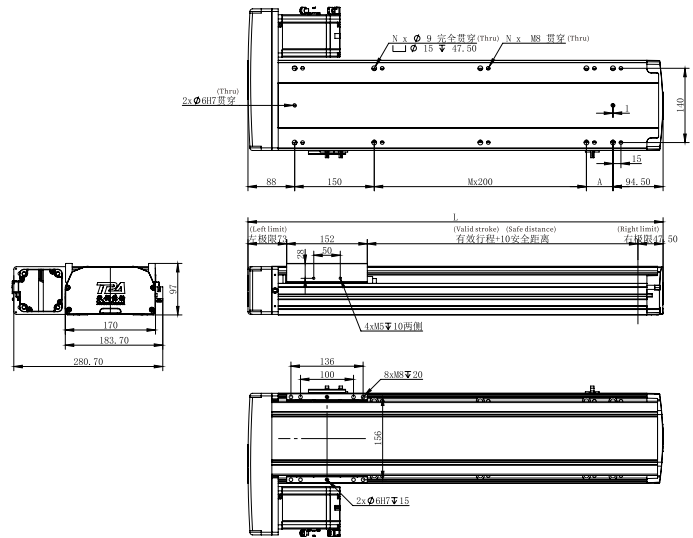
*不含电机重量。*Motor weight not included.

有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	332.5	382.5	432.5	482.5	532.5	582.5	632.5	682.5	732.5	782.5	832.5	882.5	932.5	982.5	1032.5	1082.5	1132.5	1182.5	1232.5	1282.5	1332.5	1382.5	1432.5	1482.5	1532.5
A	0	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	1	12	12	14	14	14	14	16	16	16	16
KG	9.53	10.3	11.07	11.84	12.61	13.38	14.15	14.92	15.69	16.46	17.23	18	18.77	19.54	20.31	21.08	21.85	22.62	23.39	24.16	24.93	25.7	26.47	27.24	28.01

如有超长行程及定制需求,请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.

MR 电机外置右侧 Motor external right side

单位:Unit: mm



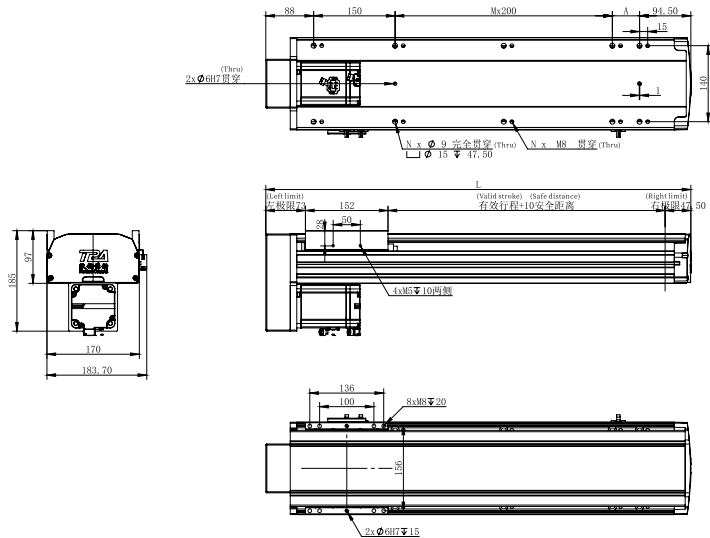
*不含电机重量。*Motor weight not included.

有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	332.5	382.5	432.5	482.5	532.5	582.5	632.5	682.5	732.5	782.5	832.5	882.5	932.5	982.5	1032.5	1082.5	1132.5	1182.5	1232.5	1282.5	1332.5	1382.5	1432.5	1482.5	1532.5
A	0	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16
KG	9.53	10.3	11.07	11.84	12.61	13.38	14.15	14.92	15.69	16.46	17.23	18	18.77	19.54	20.31	21.08	21.85	22.62	23.39	24.16	24.93	25.7	26.47	27.24	28.01

如有超长行程及定制需求,请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.

MP 电机外置下折 Motor external Fold down

单位:Unit: mm



*不含电机重量。*Motor weight not included.

有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	332.5	382.5	432.5	482.5	532.5	582.5	632.5	682.5	732.5	782.5	832.5	882.5	932.5	982.5	1032.5	1082.5	1132.5	1182.5	1232.5	1282.5	1332.5	1382.5	1432.5	1482.5	1532.5
A	0	50	100	150	200	50	100	150	200	50	100	150	200	503	100	150	200	50	100	150	200	50	100	150	200
M	0	0	0	0	0	1	1	1	1	2	2	2	2	1	3	3	3	4	4	4	4	5	5	5	5
N	4	6	6	6	6	8	8	8	8	10	10	10	10	2	12	12	12	14	14	14	14	16	16	16	16
KG	9.53	10.3	11.07	11.84	12.61	13.38	14.15	14.92	15.69	16.46	17.23	18	18.77	19.54	20.31	21.08	21.85	22.62	23.39	24.16	24.93	25.7	26.47	27.24	28.01

如有超长行程及定制需求,请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.



重复精度
Repeat Accuracy
 ± 0.01
mm

此图仅供参考, 出货规格详见尺寸图面
This drawing is for reference only, Please refer to the size drawing for shipment specifications.

最大行程
Max stroke
1500mm

最高速度
Max speed
2000mm/s

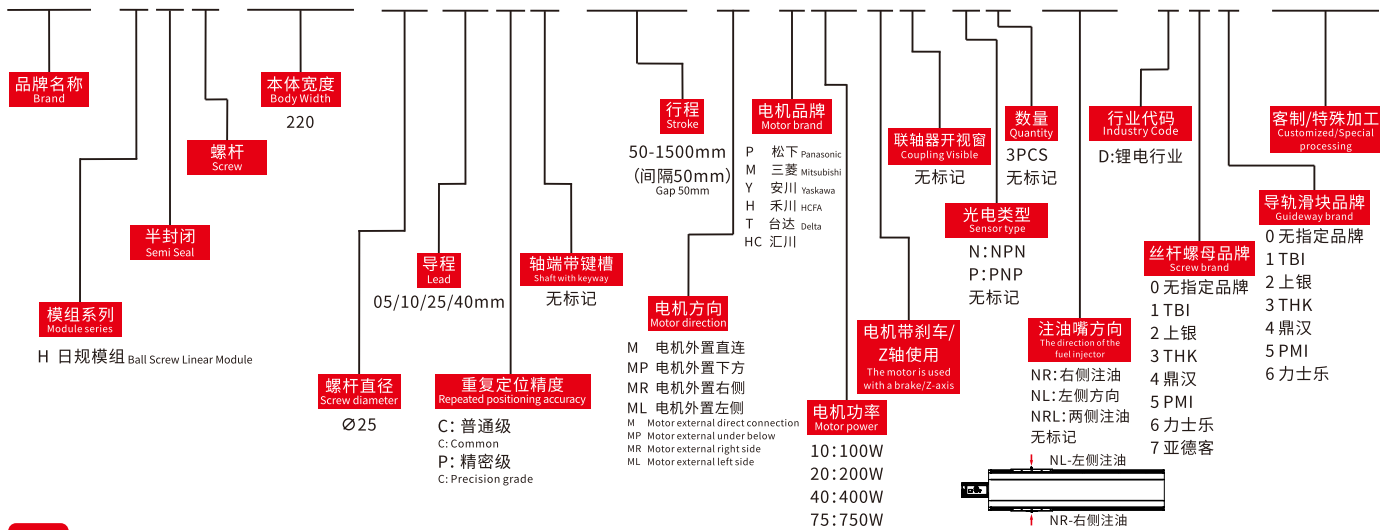
马达容量
Motor output
750W

滚珠螺杆
Ball screw
 $\varnothing 25$ mm

直线滑轨
Linear guide
23X18

型号表达方式 Ordering method

TPA-HNR- 220T -2510CK-L100-M-P75BC-N3-NRL-D00-P000



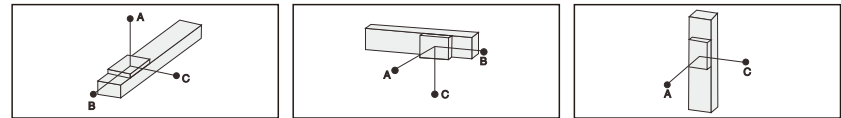
产品性能参数如下 Product performance parameters are as follows

规格 Spec	重复定位精度 (mm) Repeat positioning accuracy (mm)		±0.01			
	丝杆导程 (mm) Lead screw lead (mm)		5	10	25	40
	最高速度 (mm/s) Maximum speed (mm/s)		250	500	1250	2000
	最大可搬重量 Maximum carrying weight	水平使用(kg)Horizontal (kg)	150	150	105	43
		垂直使用(kg)Vertical (kg)	55	45	20	12
	定格推力(N) Stationary thrust (N)		2563	1281	640	320
标准行程 (mm) Standard stroke (mm)			50-1500mm/50间隔			
部品 Parts	AC伺服马达容量 Capacity of AC servo motor		750			
	滚珠螺杆外径 (mm) Ball screw∅(mm)		C7φ25			C7φ20
	高刚性直线滑轨 High-rigidity linear guide rails		W23XH18			
	联轴器 Coupling		17X19			12X19
	原点感应器 Origin sensor	外挂 Cheat	EE-SX672(NPN)			
		内置 Built-in	EE-SX674(NPN)			

注1: 使用非上述功率电机时请依据实际参数推算。
Note 1: When using a motor with a power other than the above, please calculate according to the actual parameters.

注2: 最高速度因行程和负载而异, 当螺杆细长比大于1:50时, 可能会因螺杆临界速度产生共振和抖动, 应适当下调运行速度, 一般螺杆每增长100mm, 速度应下调10~15%。
Note 2: The maximum speed varies with stroke and load. When the screw slenderness ratio is greater than 1:50, resonance and jitter may occur due to the critical speed of the screw, so the running speed should be reduced appropriately. Generally, the speed should be reduced by 10~15% for every 100mm increase of the screw.

容许负载力矩表 N.m Allowable overhang

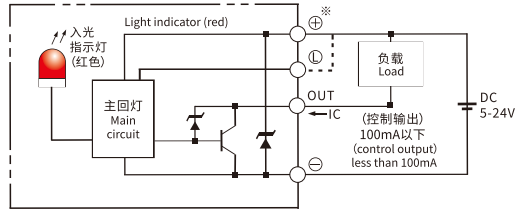


(单位Unit:mm)					(单位Unit:mm)					(单位Unit:mm)			
水平安装 Horizontal installation		A	B	C	侧面安装 Side mounting		A	B	C	垂直安装 Vertical installation		A	C
导程 5 Lead	100kg	5000	633	557	导程 5 Lead	110kg	500	569	4500	导程 5 Lead	30kg	2355	2355
	125kg	3880	491	431		130kg	412	469	3711		40kg	1768	1768
	150kg	3357	396	347		150kg	347	396	3357		55kg	1288	1288
导程 10 Lead	100kg	3220	563	474	导程 10 Lead	110kg	427	503	2900	导程 10 Lead	25kg	2505	2505
	125kg	2554	434	367		130kg	351	414	2444		35kg	1795	1795
	150kg	2113	349	295		150kg	295	349	2113		45kg	1396	1396
导程 20 Lead	65kg	1522	614	458	导程 20 Lead	70kg	420	564	1404	导程 20 Lead	15kg	2711	2711
	85kg	1136	451	336		90kg	315	420	1066		20kg	2033	2033
	105kg	893	350	262		105kg	262	350	893		-	-	-
导程 40 Lead	18kg	2445	1616	1052	导程 40 Lead	15kg	1272	1955	2948	导程 40 Lead	7kg	3511	3511
	30kg	1436	938	613		24kg	778	1190	1813		12kg	2055	2055
	43kg	978	630	412		43kg	412	630	978		-	-	-

搭配伺服马达一览表 Suitable motor brand

品牌 Brand	马达记号 Mark	刹车有无 Brake	马达容量 Motor capacity	电源电压 AC-Voltage	伺服马达型号 Servo motor model	驱动器型号 Driver Model
三菱 Mitsubishi	M	无刹车(水平式样) No brake (horizontal type)	400	220	HG-KN43J-S100	MR-JE-40A
松下 Panasonic	P	无刹车(水平式样) No brake (horizontal type)	400	220	MHMF042L1U2M	MBDLN25SE
台达 Delta	T	无刹车(水平式样) No brake (horizontal type)	400	220	ECM-B3M-C20604RS1	ASD-B3-0421-L

感应器连接图<原点及端点> Sensor layout



HNR

HNB

参考资料
Reference data

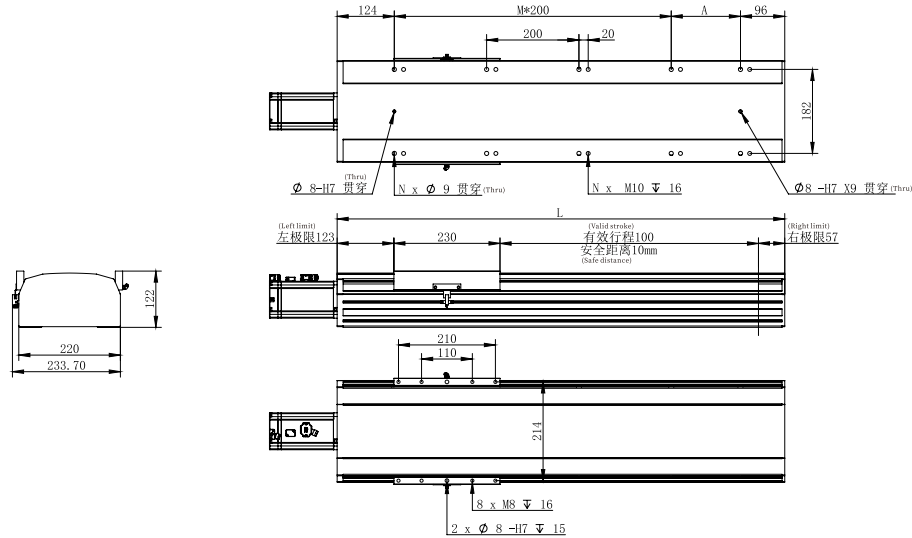


电机外置直连/电机内置直连

Motor external direct connection/Motor built in direct connection

M 电机外置直连 Motor external direct connection

单位:Unit: mm



*不含电机重量。*Motor weight not included.

有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
L	470	520	570	620	670	720	770	820	870	920	970	1020	1070	1120	1170	1220	1270	1320	1370	1420	1470	1520	1570	1620	1670	1720	1770	1820	1870	1920
A	50	10	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
M	1	0	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8
N	6	16	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
KG	25.4	26.86	28.32	29.78	31.24	32.7	34.16	35.62	37.08	38.54	40	41.46	42.92	44.38	45.84	47.3	48.76	50.22	51.68	53.14	54.6	56.06	57.52	58.98	60.44	61.9	63.36	64.82	66.28	67.74

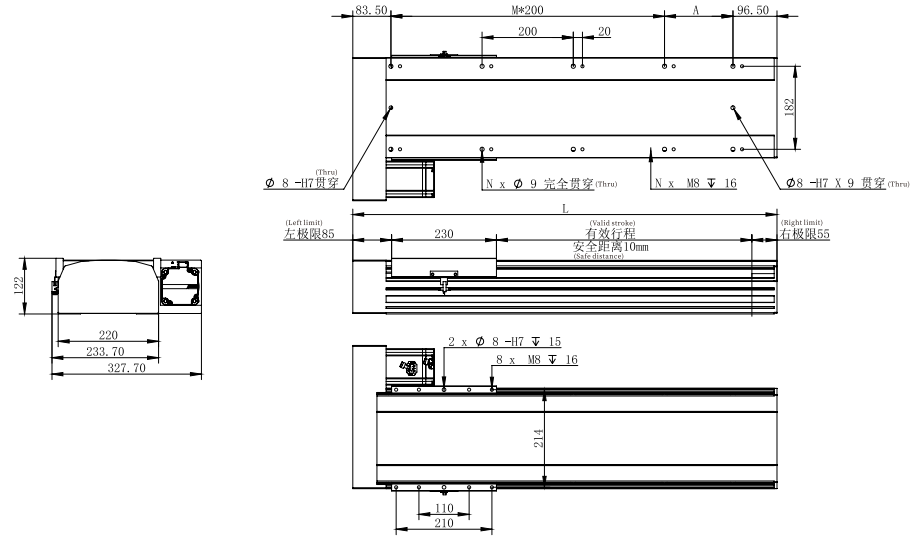
如有超长行程及定制需求, 请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.

电机外置下方/电机外置左侧

Motor external under below / Motor external left side

ML 电机外置左侧 Motor external left side

单位:Unit: mm



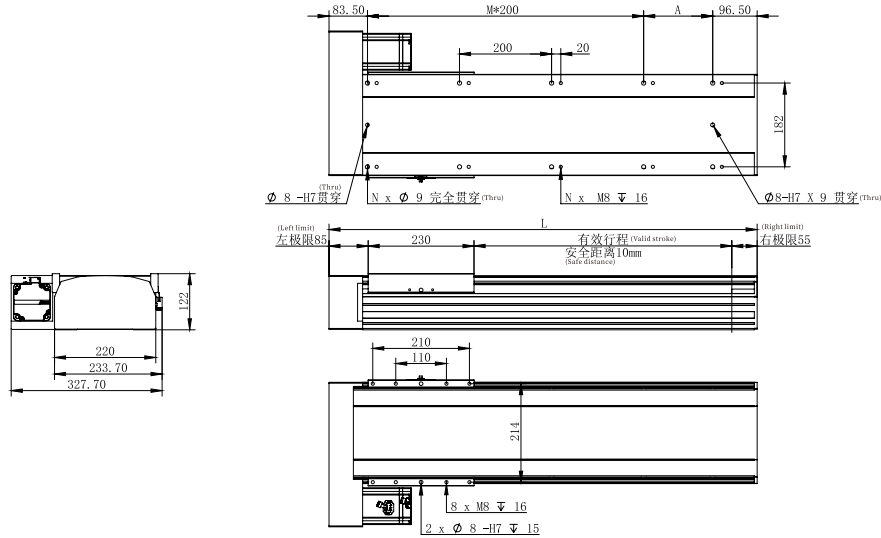
*不含电机重量。*Motor weight not included.

有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
L	430	480	530	580	630	680	730	780	830	880	930	980	1030	1080	1130	1180	1230	1280	1330	1380	1430	1480	1530	1580	1630	1680	1730	1780	1830	1880
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
KG	24.2	25.66	27.12	28.58	30.04	31.5	32.96	34.42	35.88	37.34	38.8	40.26	41.72	43.18	44.64	46.1	47.56	49.02	50.48	51.94	53.4	54.86	56.32	57.78	59.24	60.7	62.16	63.62	65.08	66.54

如有超长行程及定制需求, 请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.

MR 电机外置右侧 Motor external right side

单位:Unit: mm



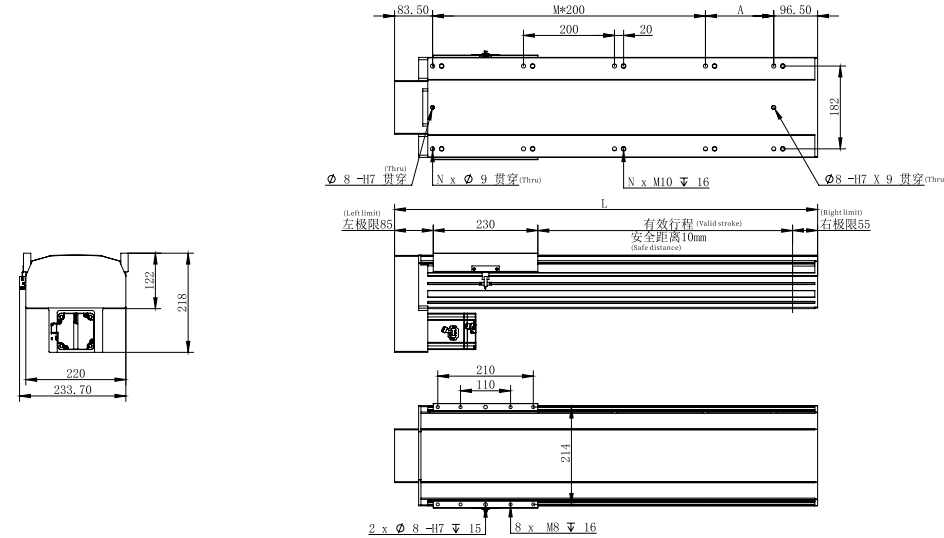
*不含电机重量。*Motor weight not included.

有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
L	430	480	530	580	630	680	730	780	830	880	930	980	1030	1080	1130	1180	1230	1280	1330	1380	1430	1480	1530	1580	1630	1680	1730	1780	1830	1880
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
KG	24.2	25.66	27.12	28.58	30.04	31.5	32.96	34.42	35.88	37.34	38.8	40.26	41.72	43.18	44.64	46.1	47.56	49.02	50.48	51.94	53.4	54.86	56.32	57.78	59.24	60.7	62.16	63.62	65.08	66.54

如有超长行程及定制需求, 请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.

MP 电机外置下折 Motor external Fold down

单位:Unit: mm



*不含电机重量。*Motor weight not included.

有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
L	430	480	530	580	630	680	730	780	830	880	930	980	1030	1080	1130	1180	1230	1280	1330	1380	1430	1480	1530	1580	1630	1680	1730	1780	1830	1880
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
KG	24.2	25.66	27.12	28.58	30.04	31.5	32.96	34.42	35.88	37.34	38.8	40.26	41.72	43.18	44.64	46.1	47.56	49.02	50.48	51.94	53.4	54.86	56.32	57.78	59.24	60.7	62.16	63.62	65.08	66.54

如有超长行程及定制需求, 请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.



重复精度
Repeat Accuracy
 ± 0.01
mm

此图仅供参考, 出货规格详见尺寸图面
This drawing is for reference only, Please refer to the size drawing for shipment specifications.

最大行程
Max stroke
1800mm

最高速度
Max speed
1600mm/s

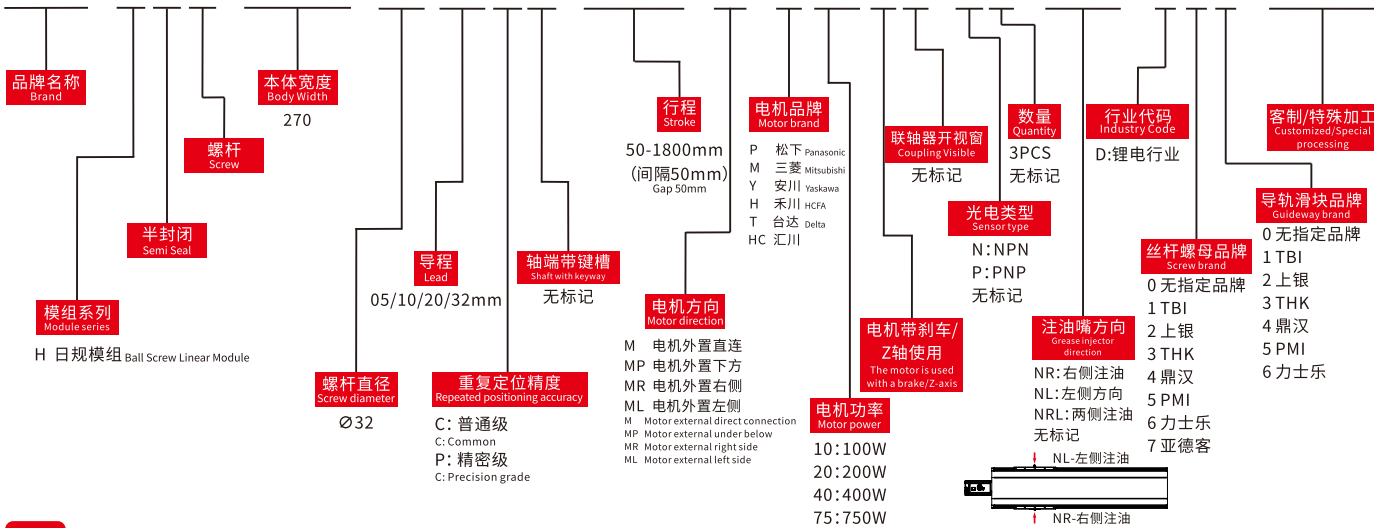
马达容量
Motor output
1000W

滚珠螺杆
Ball screw
 $\varnothing 32$ mm

直线滑轨
Linear guide
28X26

型号表达方式 Ordering method

TPA-HNR- 270D -3210CK-L100-M-P1KBC-N3-NRL-D00-P000

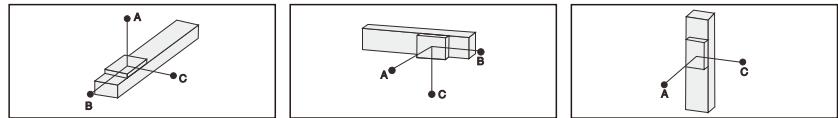


产品性能参数如下 Product performance parameters are as follows

规格 Spec	重复定位精度 (mm) Repeat positioning accuracy (mm)	± 0.01			
	丝杆导程 (mm) Lead screw lead (mm)	5	10	20	32
	最高速度 (mm/s) Maximum speed (mm/s)	250	500	1000	1600
	最大可搬重量 Maximum carrying weight	水平使用(kg) Horizontal (kg) 垂直使用(kg) Vertical (kg)			
部品 Parts	定格推力(N) Stationary thrust (N)	3698	1849	925	462
	标准行程 (mm) Standard stroke (mm)	50-1800/50间隔			
	AC伺服马达容量 Capacity of AC servo motor	1000			
	滚珠螺杆外径 (mm) Ball screw $\varnothing$ (mm)	C7- $\varnothing 32$			
	高刚性直线滑轨 High-rigidity linear guide rails	W28XH26			
联轴器 Coupling	联轴器 Coupling	20X19			
	原点感应器 Origin sensor	外挂 Cheat 内置 Built-in	EE-SX672(NPN) EE-SX674(NPN)		

注1: 使用非上述功率电机时请依据实际参数推算。
Note 1: When using a motor with a power other than the above, please calculate according to the actual parameters.
注2: 最高速度因行程和负载而异, 当螺杆细长比大于1:50时, 可能会因螺杆临界速度产生共振和抖动, 应适当下调运行速度, 一般螺杆每增长100mm, 速度应下调10~15%。
Note 2: The maximum speed varies with stroke and load. When the screw slenderness ratio is greater than 1:50, resonance and jitter may occur due to the critical speed of the screw, so the running speed should be reduced appropriately. Generally, the speed should be reduced by 10~15% for every 100mm increase of the screw.

容许负载力矩表 N.m Allowable overhang

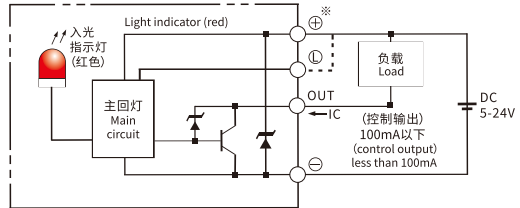


(单位Unit:mm)					(单位Unit:mm)					(单位Unit:mm)			
水平安装 Horizontal installation					侧面安装 Side mounting					垂直安装 Vertical installation			
A		B	C		A		B	C		A		C	
导程 5 Lead	135kg	5150	733	660	导程 5 Lead	135kg	650	670	4750	导程 5 Lead	45kg	2500	2500
	175kg	3980	550	532		175kg	512	570	3819		65kg	1850	1850
	230kg	3460	400	350		230kg	447	496	3557		85kg	1350	1350
导程 10 Lead	135kg	3420	663	480	导程 10 Lead	135kg	557	523	3100	导程 10 Lead	35kg	2560	2560
	175kg	2754	533	370		175kg	455	490	2650		55kg	1895	1895
	230kg	2313	459	330		230kg	396	430	2315		75kg	1445	1445
导程 20 Lead	77kg	2722	710	588	导程 20 Lead	77kg	520	665	1670	导程 20 Lead	10kg	2819	2819
	100kg	1316	551	386		100kg	470	600	1270		30kg	2398	2398
	135kg	1013	455	332		135kg	369	455	1010		-	-	-
导程 40 Lead	48kg	2640	1817	1152	导程 32 Lead	48kg	1475	2230	3150	导程 32 Lead	5kg	3899	3899
	62kg	1666	998	683		62kg	991	1390	1918		10kg	2218	2218
	80kg	1177	730	422		80kg	552	678	1078		-	-	-

搭配伺服马达一览表 Suitable motor brand

品牌 Brand	马达记号 Mark	刹车有无 Brake	马达容量 Motor capacity	电源电压 AC-Voltage	伺服马达型号 Servo motor model	驱动器型号 Driver Model
三菱 Mitsubishi	M	无刹车(水平式样) No brake (horizontal type)	1000	220	HG-SNS102J	MR-JET-100G
松下 Panasonic	P	无刹车(水平式样) No brake (horizontal type)	1000	220	MSMF102L1G6M	MDDA103A1A
台达 Delta	T	无刹车(水平式样) No brake (horizontal type)	1000	220	ECM-E3M-E21310RSE	ASD-E3-1021-L

感应器连接图<原点及端点> Sensor layout

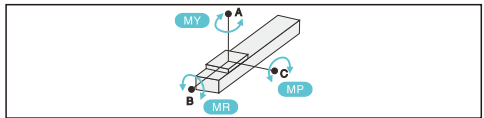


HNR

HNB

参考资料
Reference data

静态容许负载惯量 Static loading moment



	(单位Unit:N.m)
MY	3223
MP	3223
MR	2843

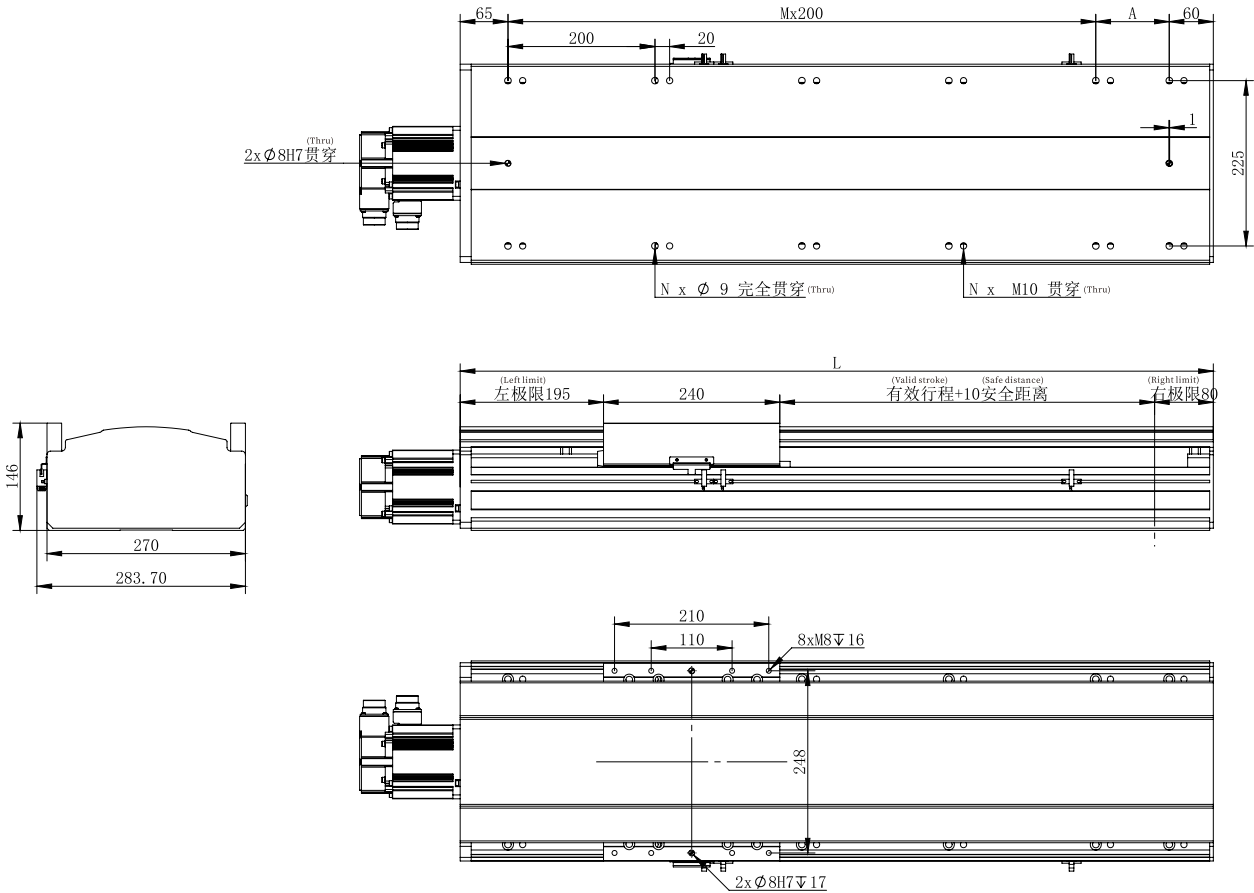
*力矩表所表示的数据,代表重心。
The torque value in the chart indicate the center of gravity.
*符合型录规范的正常试用下,保证寿命为10000公里。
Operation life is 10,000km when the product is using under the specified conditions.
*倒吊使用无法套用标准规范,如有需求请咨询我司业务。
The standard specification cannot be applied to the use of inverted crane. Please consult our business if necessary.



电机外置直连/电机内置直连
Motor external direct connection/Motor built in direct connection

M 电机外置直连 Motor external direct connection

单位:Unit: mm



*不含电机重量。*Motor weight not included.

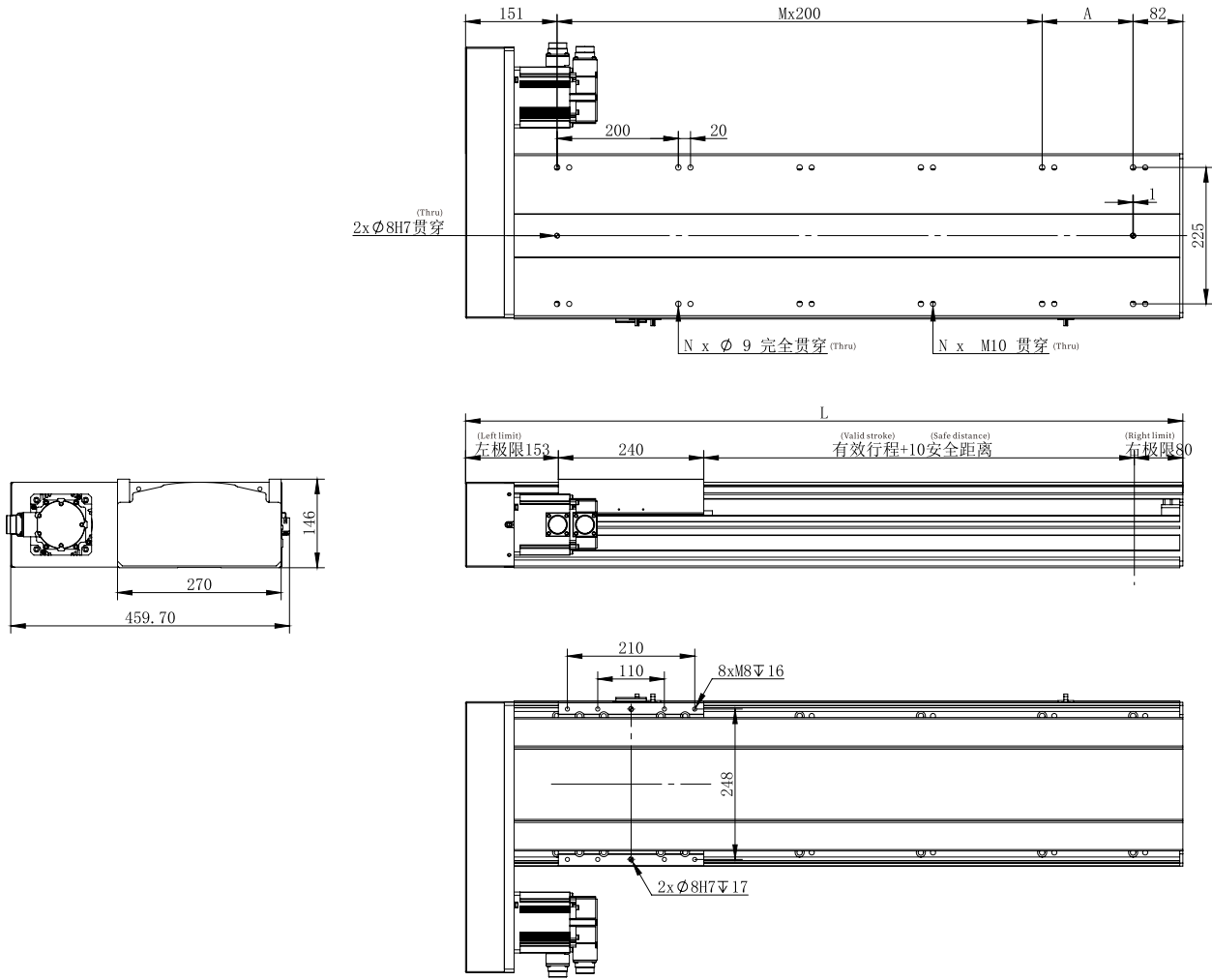
有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900
L	575	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375	1425
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
M	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6
N	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16
KG	38	42	46	50	54	58	62	66	70	74	78	82	86	90	94	98	102	106

有效行程 Stroke	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	1750	1800
L	1475	1525	1575	1625	1675	1725	1775	1825	1875	1925	1975	2025	2075	2125	2175	2225	2275	2325
A	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	6	6	7	7	7	7	8	8	8	8	9	9	9	9	10	10	10	10
N	16	16	18	18	18	18	20	20	20	20	22	22	22	22	24	24	24	24
KG	110	114	118	122	126	130	134	138	142	146	150	154	158	162	166	170	174	178

如有超长行程及定制需求, 请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.

MR 电机外置右侧 Motor external right side

单位:Unit: mm



*不含电机重量。*Motor weight not included.

有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900
L	575	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375	1425
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
M	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6
N	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16
KG	38	42	46	50	54	58	62	66	70	74	78	82	86	90	94	98	102	106

有效行程 Stroke	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	1750	1800
L	1475	1525	1575	1625	1675	1725	1775	1825	1875	1925	1975	2025	2075	2125	2175	2225	2275	2325
A	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	6	6	7	7	7	7	8	8	8	8	9	9	9	9	10	10	10	10
N	16	16	18	18	18	18	20	20	20	20	22	22	22	22	24	24	24	24
KG	110	114	118	122	126	130	134	138	142	146	150	154	158	162	166	170	174	178

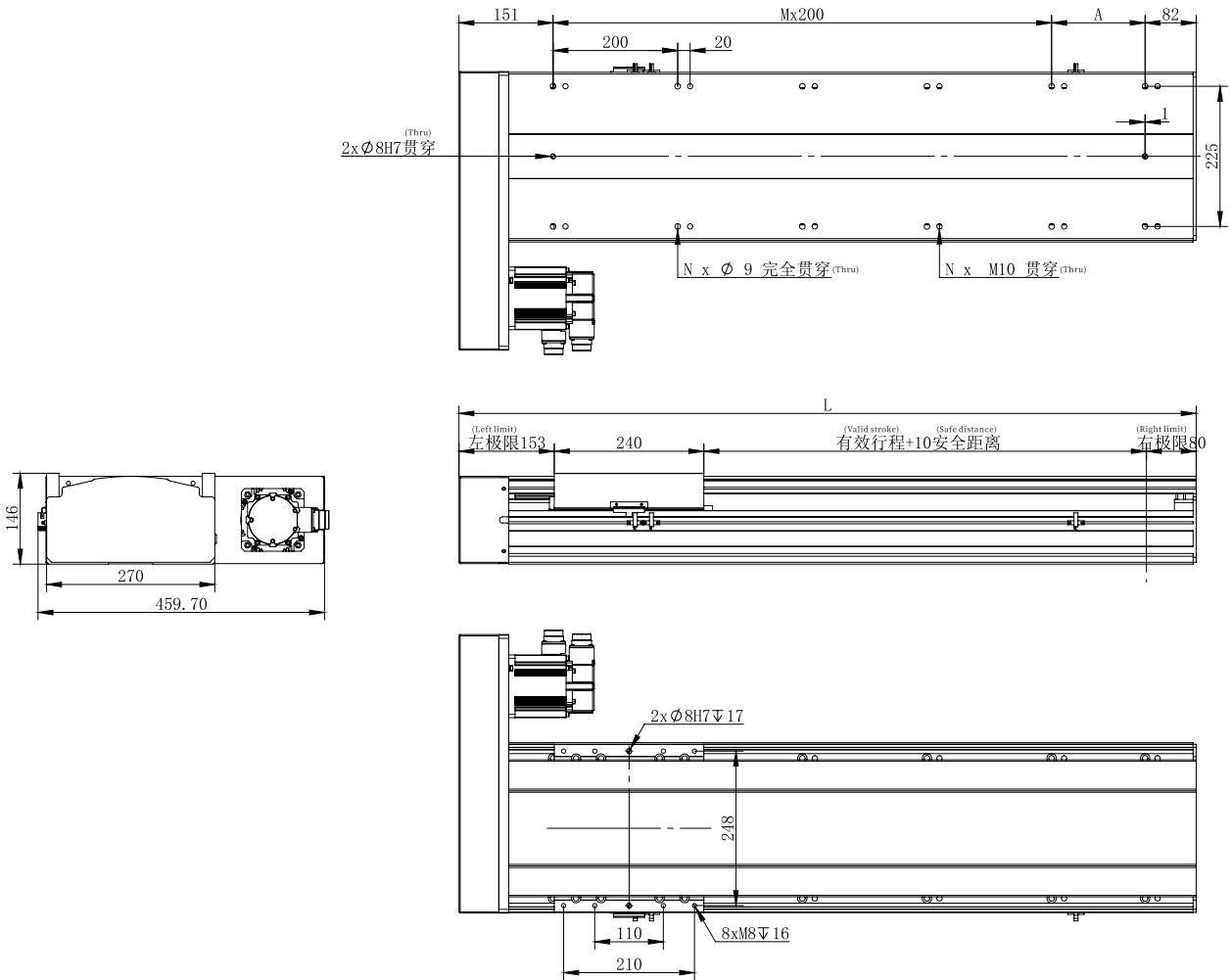
如有超长行程及定制需求, 请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.



电机外置下方/电机外置左侧
Motor external under below / Motor external left side

ML 电机外置左侧 Motor external left side

单位:Unit: mm



*不含电机重量。*Motor weight not included.

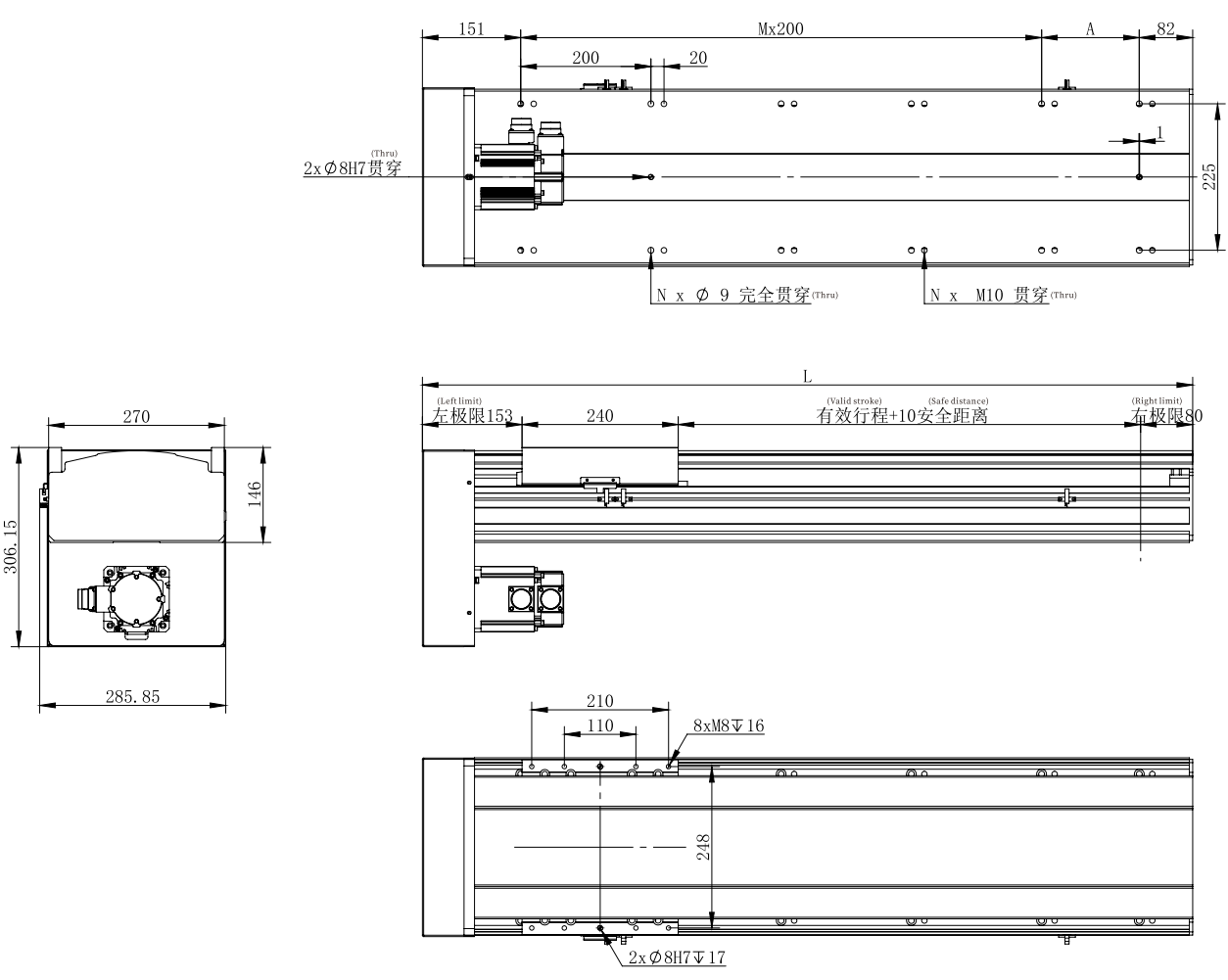
有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900
L	575	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375	1425
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
M	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6
N	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16
KG	38	42	46	50	54	58	62	66	70	74	78	82	86	90	94	98	102	106

有效行程 Stroke	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	1750	1800
L	1475	1525	1575	1625	1675	1725	1775	1825	1875	1925	1975	2025	2075	2125	2175	2225	2275	2325
A	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	6	6	7	7	7	7	8	8	8	8	9	9	9	9	10	10	10	10
N	16	16	18	18	18	18	20	20	20	20	22	22	22	22	24	24	24	24
KG	110	114	118	122	126	130	134	138	142	146	150	154	158	162	166	170	174	178

如有超长行程及定制需求,请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.

MP 电机外置下折 Motor external Fold down

单位:Unit: mm



*不含电机重量。*Motor weight not included.

有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900
L	575	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375	1425
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
M	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6
N	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16
KG	38	42	46	50	54	58	62	66	70	74	78	82	86	90	94	98	102	106

有效行程 Stroke	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	1750	1800
L	1475	1525	1575	1625	1675	1725	1775	1825	1875	1925	1975	2025	2075	2125	2175	2225	2275	2325
A	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	6	6	7	7	7	7	8	8	8	8	9	9	9	9	10	10	10	10
N	16	16	18	18	18	18	20	20	20	20	22	22	22	22	24	24	24	24
KG	110	114	118	122	126	130	134	138	142	146	150	154	158	162	166	170	174	178

如有超长行程及定制需求,请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.



重复精度
Repeat Accuracy
 ± 0.04
mm

此图仅供参考, 出货规格详见尺寸图面
This drawing is for reference only, Please refer to the size drawing for shipment specifications.

最大行程
Max stroke
3050mm

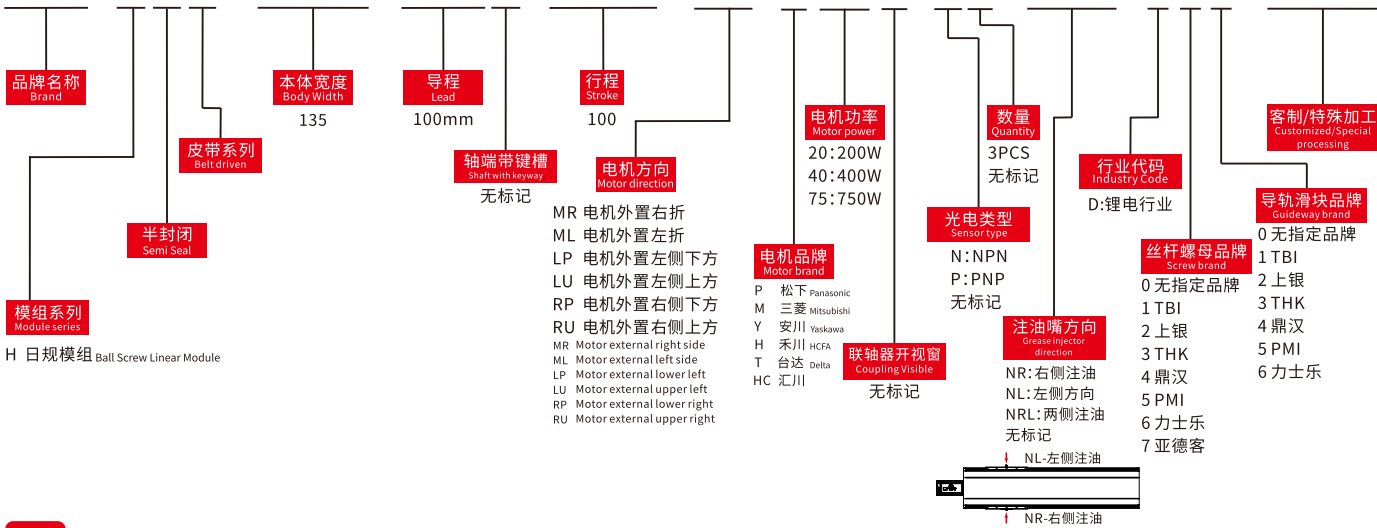
最高速度
Max speed
2000mm/s

马达容量
Motor output
200W

直线滑轨
Linear guide
15X12.5

型号表达方式 Ordering method

TPA-HNB-135T-100K-L100-ML-P20C-N3-NRL-D00-P000

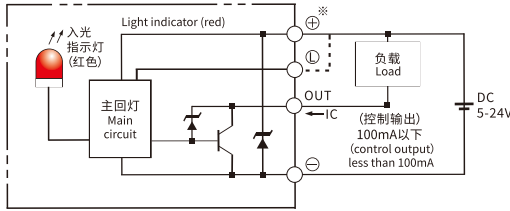


产品性能参数如下 Product performance parameters are as follows

规格 Spec	重复定位精度 (mm) Repeat positioning accuracy (mm)	± 0.04	
	皮带导程 (mm) Belt lead (mm)	40	100
	最高速度 (mm/s) Maximum speed (mm/s)	2000	
	最大可搬重量 Maximum carrying weight	水平使用 (kg) Horizontal (kg)	25
		垂直使用 (kg) Vertical (kg)	/
部 品 Parts	定格推力 (N) Stationary thrust (N)	100	
	标准行程 (mm) Standard stroke (mm)	50-3050mm/50间隔	
	AC伺服马达容量 Capacity of AC servo motor	200	
	皮带宽度 (mm) Belt width (mm)	25	
	高刚性直线滑轨 High-rigidity linear guide rails	W15XH12.5	
	原点感应器 Origin sensor	外挂 Cheat	EE-SX672(NPN)

注1: 使用非上述功率电机时请依据实际参数推算。
Note 1: When using a motor with a power other than the above, please calculate according to the actual parameters.

感应器连接图<原点及端点> Sensor layout

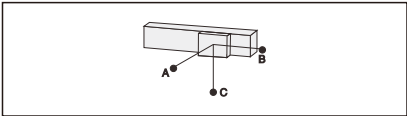
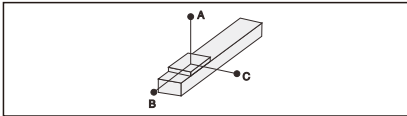


HNR

HNB

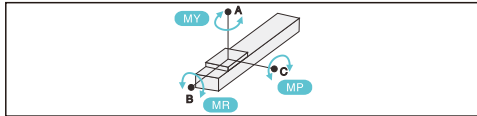
参考资料
Reference data

容许负载力矩表 N.m Allowable overhang



(单位Unit:mm)					(单位Unit:mm)				
水平安装 Horizontal installation		A	B	C	侧面安装 Side mounting		A	B	C
负载 Load	10kg	1794	688	538	负载 Load	15kg	348	446	1170
	20kg	858	324	253		18kg	285	365	961
	25kg	670	251	197		25kg	197	251	670

静态容许负载惯量 Static loading moment



(单位Unit:N.m)	
MY	551
MP	552
MR	485

*力矩表所表示的数据,代表重心。
The torque value in the chart indicate the center of gravity.
*符合型录规范的正常试用下,保证寿命为10000公里。
Operation life is 10,000km when the product is using under the specified conditions.
*倒吊使用无法套用标准规范,如有需求请咨询我司业务。
The standard specification cannot be applied to the use of inverted crane. Please consult our business if necessary.

搭配伺服马达一览表 Suitable motor brand

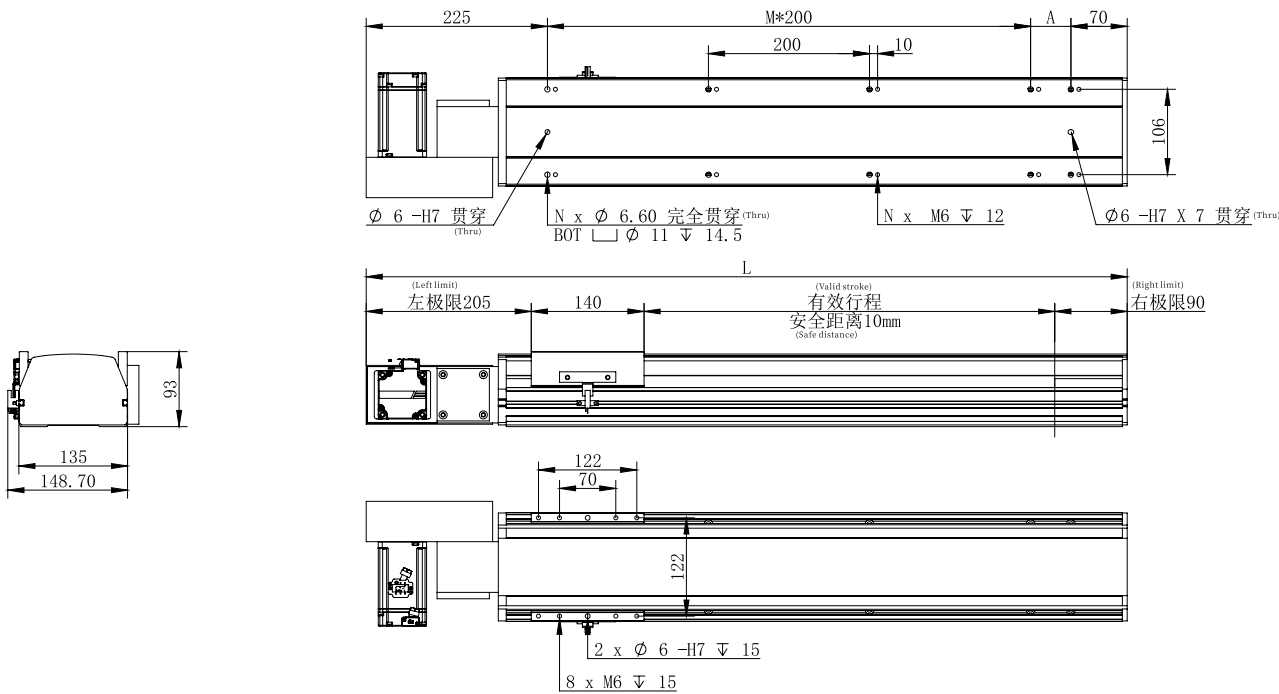
品牌 Brand	马达记号 Mark	刹车有无 Brake	马达容量 Motor capacity	电源电压 AC-Voltage	伺服马达型号 Servo motor model	驱动器型号 Driver Model
三菱 Mitsubishi	M	无刹车(水平式样) No brake (horizontal type)	400	220	HG-KN43J-S100	MR-JE-40A
松下 Panasonic	P	无刹车(水平式样) No brake (horizontal type)	400	220	MHMF042L1U2M	MBDLN25SE
台达 Delta	T	无刹车(水平式样) No brake (horizontal type)	400	220	ECM-B3M-C20604RS1	ASD-B3-0421-L



电机外置左侧/电机外置右侧
Motor external left side / Motor external right side

ML 电机外置左侧 Motor external left side

单位:Unit: mm



*不含电机重量。*Motor weight not included.

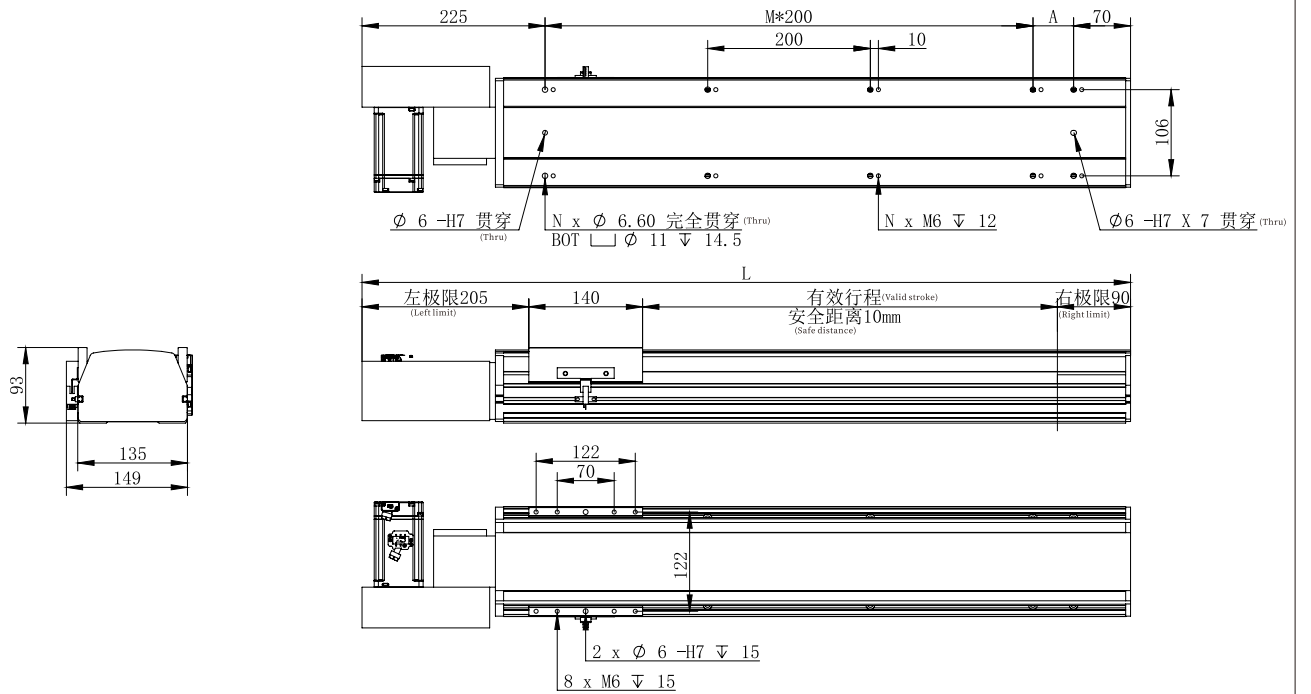
有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
L	495	545	595	645	695	745	795	845	895	945	995	1045	1095	1145	1195	1245	1295	1345	1395	1445	1495	1545	1595	1645	1695	1745	1795	1845	1895	1945	1995
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
KG	8.2	8.6	9	9.4	9.8	10.2	10.6	11	11.4	11.8	12.2	12.6	13	13.4	13.8	14.2	14.6	15	15.4	15.8	16.2	16.6	17	17.4	17.8	18.2	18.6	19	19.4	19.8	20.2

有效行程 Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	2045	2095	2145	2195	2245	2295	2345	2395	2445	2495	2545	2595	2645	2695	2745	2795	2845	2895	2945	2995	3045	3095	3145	3195	3245	3295	334	3395	3445	3495
A	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	550	100	150	200
M	8	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15
N	20	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34
KG	20.6	30	30.4	30.8	31.2	31.6	32	32.4	32.8	33.2	33.6	34	34.4	34.8	35.2	35.6	36	36.4	36.8	37.2	37.6	38	38.4	38.8	39.2	39.6	40	40.4	40.8	41.2

如有超长行程及定制需求, 请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.

MR 电机外置右侧 Motor external right side

单位:Unit: mm



*不含电机重量。*Motor weight not included.

有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
L	495	545	595	645	695	745	795	845	895	945	995	1045	1095	1145	1195	1245	1295	1345	1395	1445	1495	1545	1595	1645	1695	1745	1795	1845	1895	1945	1995
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
KG	8.2	8.6	9	9.4	9.8	10.2	10.6	11	11.4	11.8	12.2	12.6	13	13.4	13.8	14.2	14.6	15	15.4	15.8	16.2	16.6	17	17.4	17.8	18.2	18.6	19	19.4	19.8	20.2

有效行程 Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	2045	2095	2145	2195	2245	2295	2345	2395	2445	2495	2545	2595	2645	2695	2745	2795	2845	2895	2945	2995	3045	3095	3145	3195	3245	3295	334	3395	3445	3495
A	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	550	100	150	200
M	8	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15
N	20	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34
KG	20.6	30	30.4	30.8	31.2	31.6	32	32.4	32.8	33.2	33.6	34	34.4	34.8	35.2	35.6	36	36.4	36.8	37.2	37.6	38	38.4	38.8	39.2	39.6	40	40.4	40.8	41.2

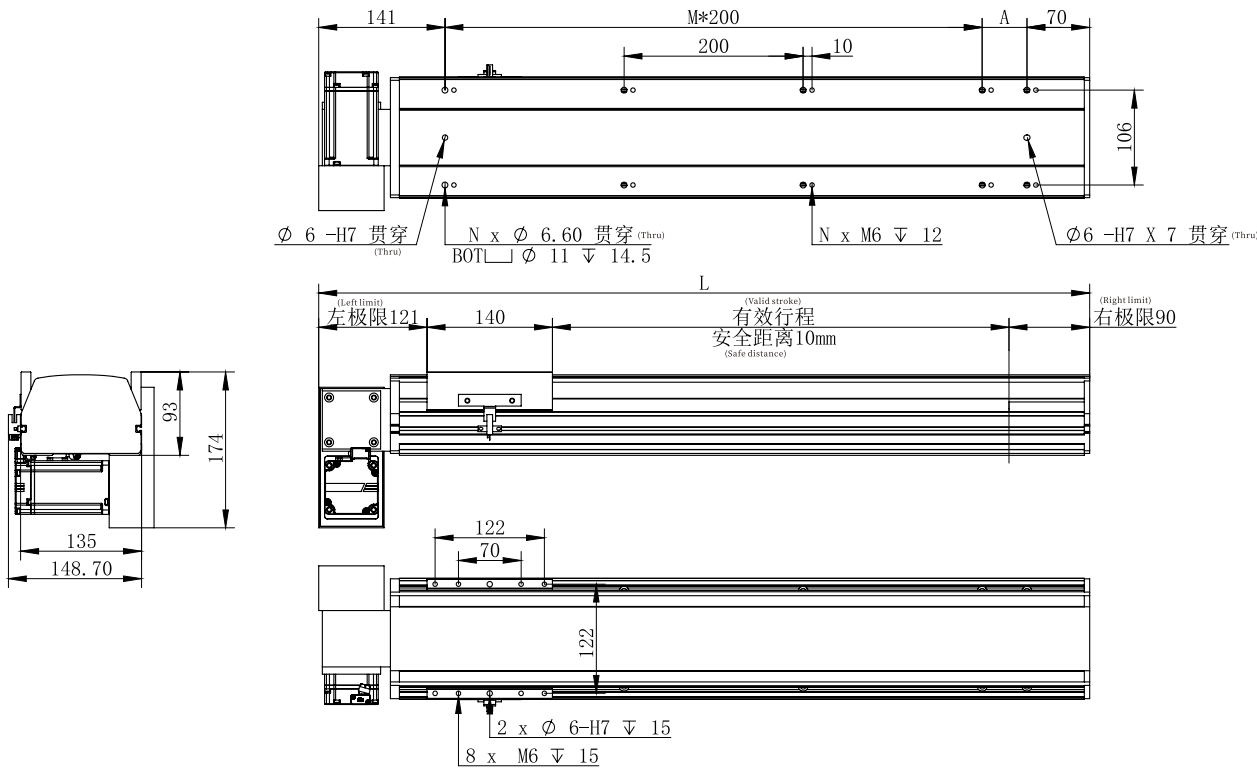
如有超长行程及定制需求, 请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.



电机外置左下/电机外置左上
Motor external lower left /Motor external upper left

LP 电机外置左下 Motor external lower left

单位:Unit: mm



*不含电机重量。*Motor weight not included.

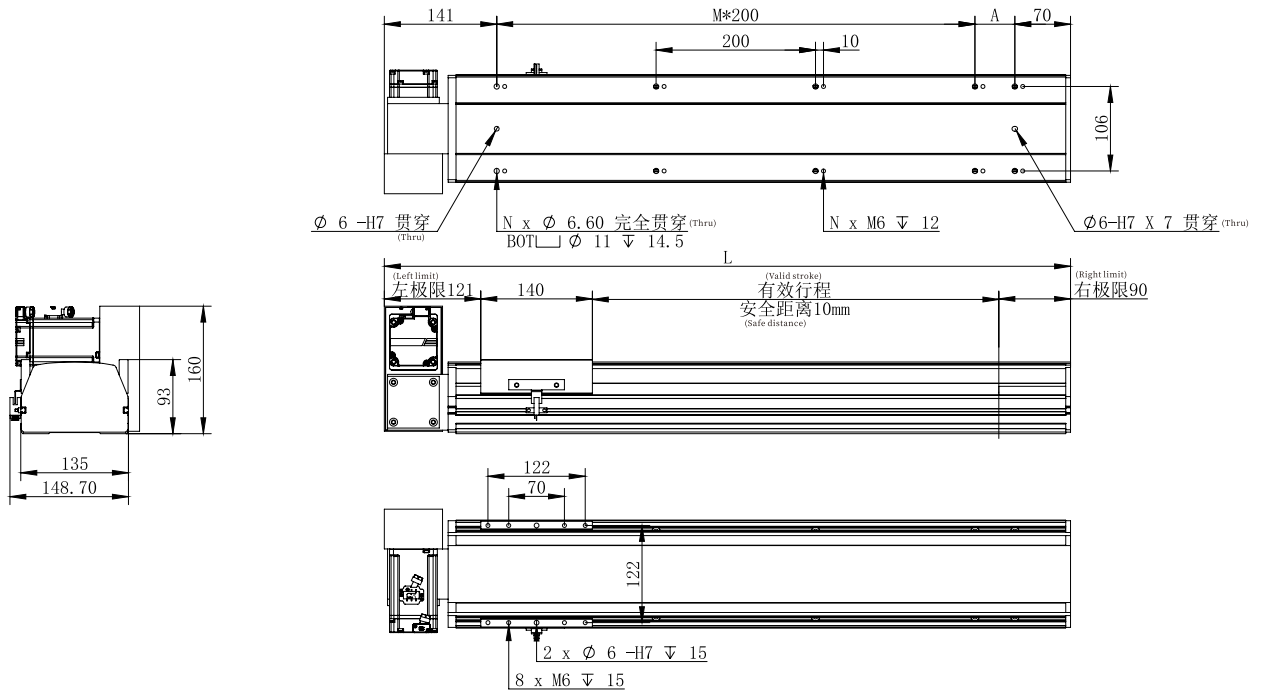
有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
L	411	461	511	561	611	661	711	761	811	86	911	961	1011	1061	1111	1161	1211	1261	1311	1361	1411	1461	1511	1561	1611	1661	1711	1761	1811	1861	1911
A	200	50	100	150	200	50	100	150	200	150	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
KG	8.2	8.6	9	9.4	9.8	10.2	10.6	11	11.4	11.8	12.2	12.6	13	13.4	13.8	14.2	14.6	15	15.4	15.8	16.2	16.6	17	17.4	17.8	18.2	18.6	19	19.4	19.8	20.2

有效行程 Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	1961	2011	2061	2111	2161	2211	2261	2311	2361	2411	2461	2511	2561	2611	2661	2711	2761	2811	2861	2911	2961	3011	3061	3111	3161	3211	3261	3311	3361	3411
A	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	8	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15
N	20	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34
KG	20.6	30	30.4	30.8	31.2	31.6	32	32.4	32.8	33.2	33.6	34	34.4	34.8	35.2	35.6	36	36.4	36.8	37.2	37.6	38	38.4	38.8	39.2	39.6	40	40.4	40.8	41.2

如有超长行程及定制需求, 请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.

LU 电机外置左上 Motor external upper left

单位:Unit: mm



*不含电机重量。*Motor weight not included.

有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
L	411	461	511	561	611	661	711	761	811	86	911	961	1011	1061	1111	1161	1211	1261	1311	1361	1411	1461	1511	1561	1611	1661	1711	1761	1811	1861	1911
A	200	50	100	150	200	50	100	150	200	150	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
KG	8.2	8.6	9	9.4	9.8	10.2	10.6	11	11.4	11.8	12.2	12.6	13	13.4	13.8	14.2	14.6	15	15.4	15.8	16.2	16.6	17	17.4	17.8	18.2	18.6	19	19.4	19.8	20.2

有效行程 Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	1961	2011	2061	2111	2161	2211	2261	2311	2361	2411	2461	2511	2561	2611	2661	2711	2761	2811	2861	2911	2961	3011	3061	3111	3161	3211	3261	3311	3361	3411
A	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	8	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15
N	20	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34
KG	20.6	30	30.4	30.8	31.2	31.6	32	32.4	32.8	33.2	33.6	34	34.4	34.8	35.2	35.6	36	36.4	36.8	37.2	37.6	38	38.4	38.8	39.2	39.6	40	40.4	40.8	41.2

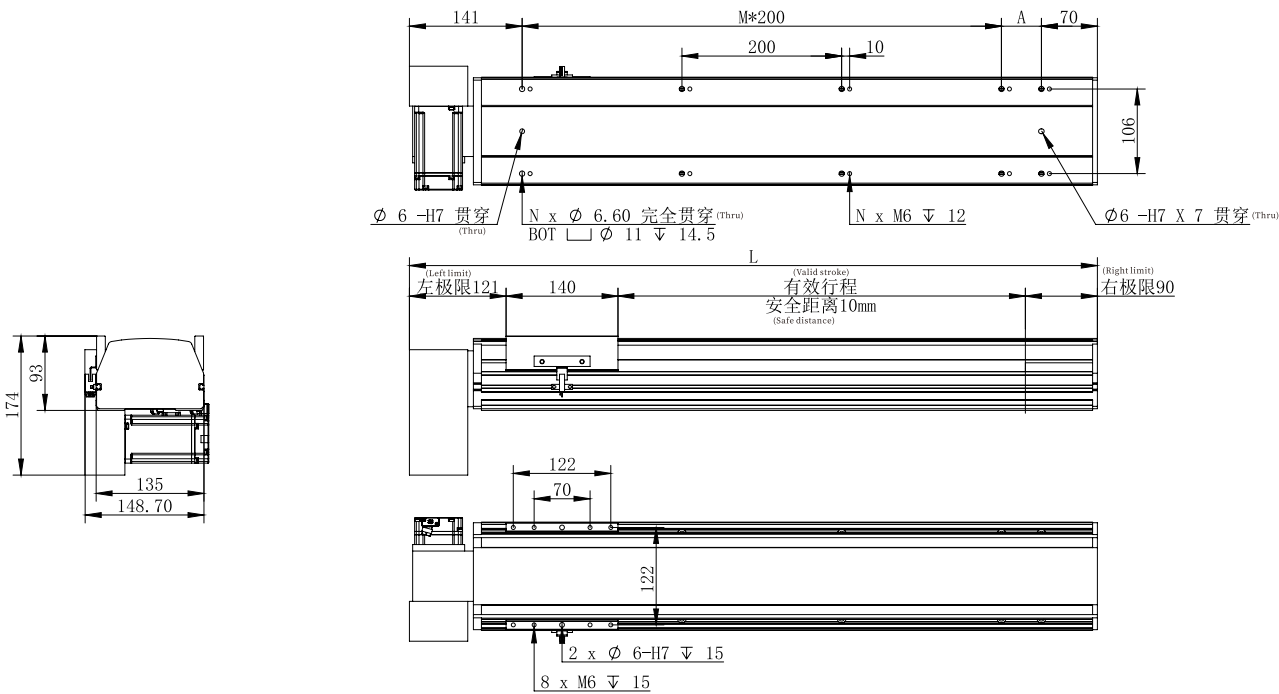
如有超长行程及定制需求, 请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.



电机外置右下/电机外置右上
Motor external lower right /Motor external upper right

RP 电机外置右下 Motor external lower right

单位:Unit: mm



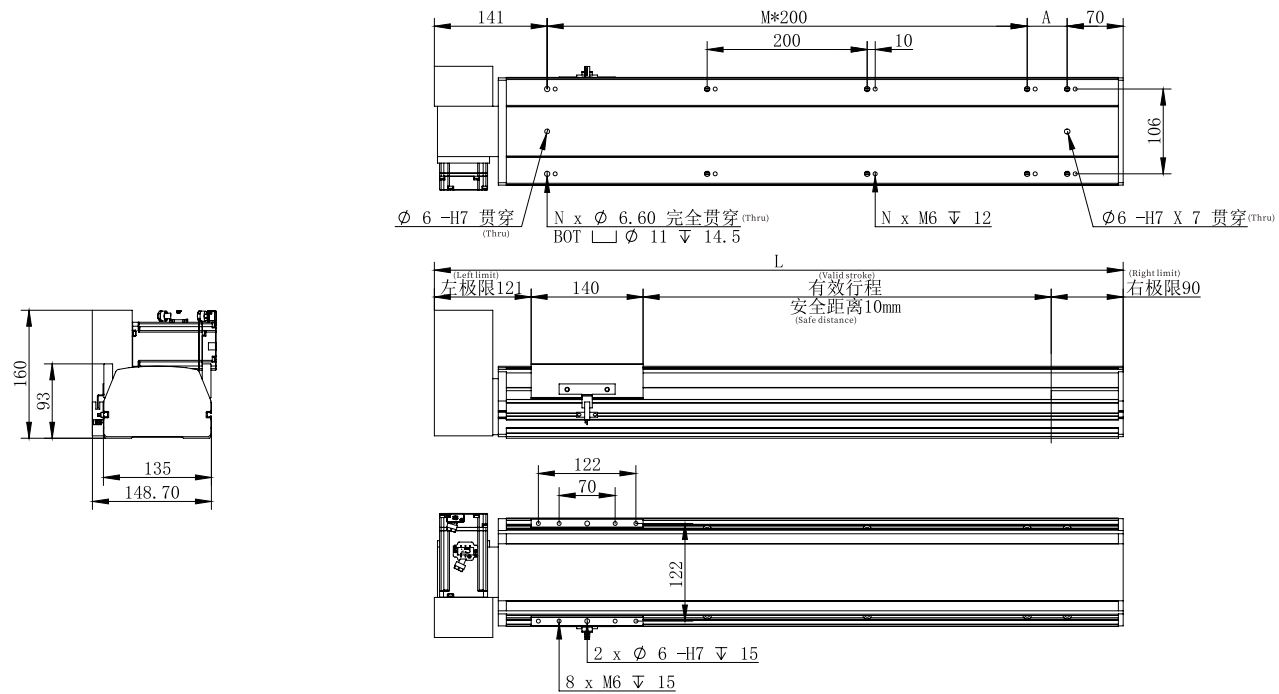
*不含电机重量。*Motor weight not included.

有效行程 Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	1961	2011	2061	2111	2161	2211	2261	2311	2361	2411	2461	2511	2561	2611	2661	2711	2761	2811	2861	2911	2961	3011	3061	3111	3161	3211	3261	3311	3361	3411
A	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	8	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15
N	20	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34
KG	20.6	30	30.4	30.8	31.2	31.6	32	32.4	32.8	33.2	33.6	34	34.4	34.8	35.2	35.6	36	36.4	36.8	37.2	37.6	38	38.4	38.8	39.2	39.6	40	40.4	40.8	41.2

如有超长行程及定制需求, 请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.

RU 电机外置右上 Motor external upper right

单位:Unit: mm



*不含电机重量。*Motor weight not included.

有效行程 Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	1961	2011	2061	2111	2161	2211	2261	2311	2361	2411	2461	2511	2561	2611	2661	2711	2761	2811	2861	2911	2961	3011	3061	3111	3161	3211	3261	3311	3361	3411
A	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	8	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15
N	20	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34
KG	20.6	30	30.4	30.8	31.2	31.6	32	32.4	32.8	33.2	33.6	34	34.4	34.8	35.2	35.6	36	36.4	36.8	37.2	37.6	38	38.4	38.8	39.2	39.6	40	40.4	40.8	41.2

如有超长行程及定制需求, 请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.



重复精度
Repeat Accuracy
 ± 0.04
mm

此图仅供参考, 出货规格详见尺寸图面
This drawing is for reference only, Please refer to the size drawing for shipment specifications.

最大行程
Max stroke
3050mm

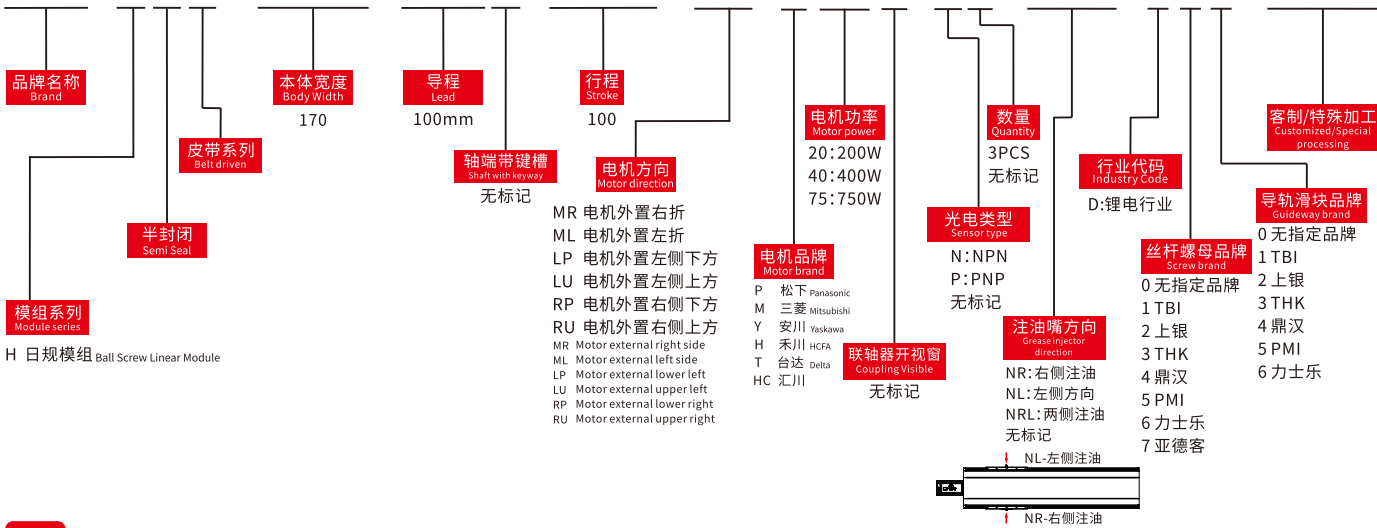
最高速度
Max speed
2000mm/s

马达容量
Motor output
400W

直线滑轨
Linear guide
20X15

型号表达方式 Ordering method

TPA-HNB-170T-100K-L100-ML-P40C-N3-NRL-D00-P000

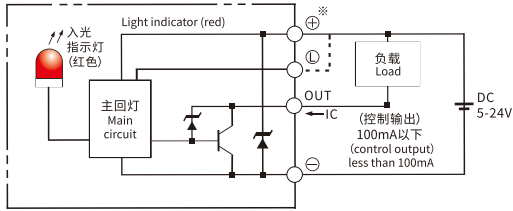


产品性能参数如下 Product performance parameters are as follows

规格 Spec	重复定位精度 (mm) Repeat positioning accuracy (mm)	± 0.04	
	皮带导程 (mm) Belt lead (mm)	40	100
	最高速度 (mm/s) Maximum speed (mm/s)	2000	
	最大可搬重量 Maximum carrying weight	水平使用 (kg) Horizontal (kg)	45
部 品 Parts		垂直使用 (kg) Vertical (kg)	/
	定格推力 (N) Stationary thrust (N)	204	
	标准行程 (mm) Standard stroke (mm)	50-3050mm/50间隔	
	AC伺服马达容量 Capacity of AC servo motor	400	
部 品 Parts	皮带宽度 (mm) Belt width (mm)	30	
	高刚性直线滑轨 High-rigidity linear guide rails	W20XH15	
	原点感应器 Origin sensor	外挂 Cheat	EE-SX672(NPN)

注1: 使用非上述功率电机时请依据实际参数推算。
Note 1: When using a motor with a power other than the above, please calculate according to the actual parameters.

感应器连接图<原点及端点> Sensor layout

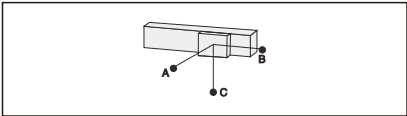
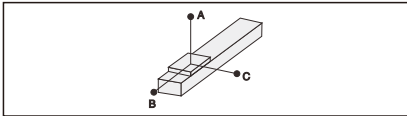


HNR

HNB

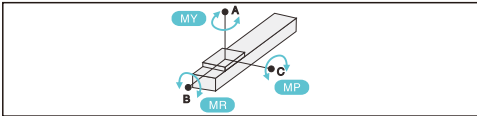
参考资料
Reference data

容许负载力矩表 N.m Allowable overhang



(单位Unit:mm)					(单位Unit:mm)				
水平安装 Horizontal installation		A	B	C	侧面安装 Side mounting		A	B	C
负 载 Load	10kg	2942	1133	1033	负 载 Load	15kg	616	742	1933
	20kg	1430	547	498		25kg	390	428	1127
	30kg	926	350	320		35kg	269	294	781
	45kg	588	219	201		45kg	201	219	588

静态容许负载惯量 Static loading moment



(单位Unit:N.m)	
MY	1032
MP	1034
MR	908

*力矩表所表示的数据,代表重心。
The torque value in the chart indicate the center of gravity.
*符合型录规范的正常试用下,保证寿命为10000公里。
Operation life is 10,000km when the product is using under the specified conditions.
*倒吊使用无法套用标准规范,如有需求请咨询我司业务。
The standard specification cannot be applied to the use of inverted crane. Please consult our business if necessary.

搭配伺服马达一览表 Suitable motor brand

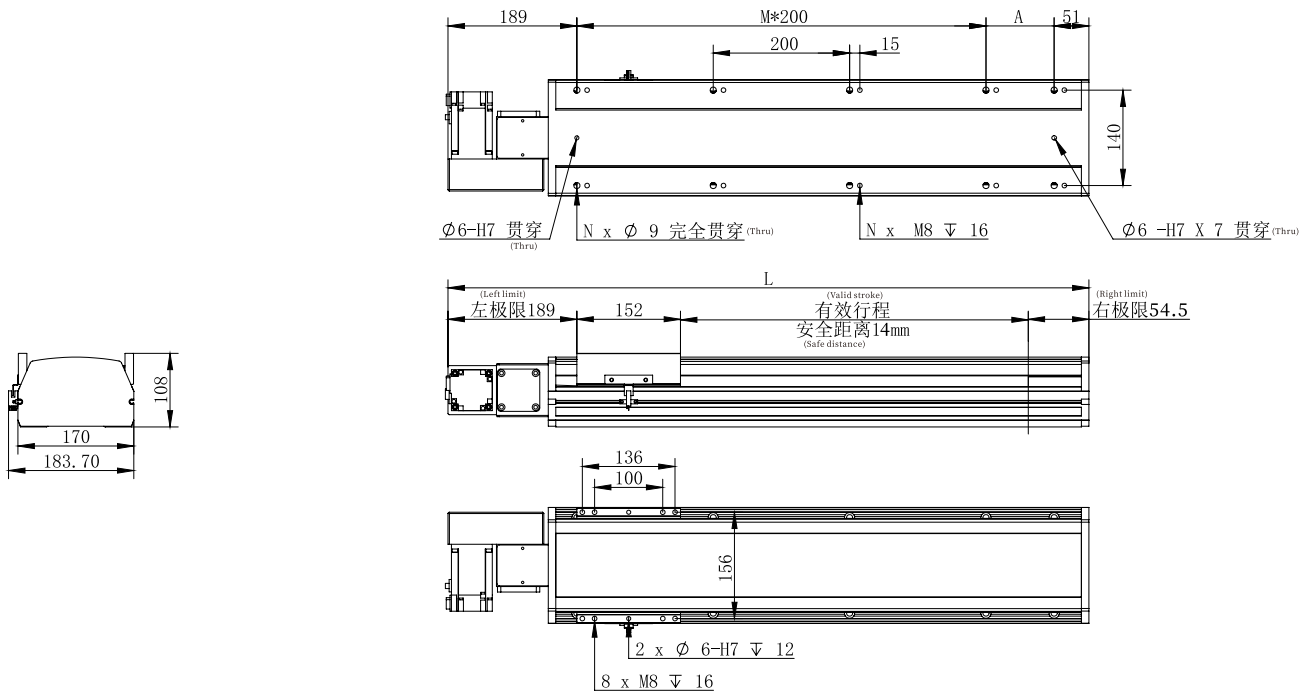
品牌 Brand	马达记号 Mark	刹车有无 Brake	马达容量 Motor capacity	电源电压 AC-Voltage	伺服马达型号 Servo motor model	驱动器型号 Driver Model
三菱 Mitsubishi	M	无刹车(水平式样) No brake (horizontal type)	400	220	HG-KN43J-S100	MR-JE-40A
松下 Panasonic	P	无刹车(水平式样) No brake (horizontal type)	400	220	MHMF042L1U2M	MBDLN25SE
台达 Delta	T	无刹车(水平式样) No brake (horizontal type)	400	220	ECM-B3M-C20604RS1	ASD-B3-0421-L



电机外置左侧/电机外置右侧
Motor external left side / Motor external right side

ML 电机外置左侧 Motor external left side

单位:Unit: mm



*不含电机重量。*Motor weight not included.

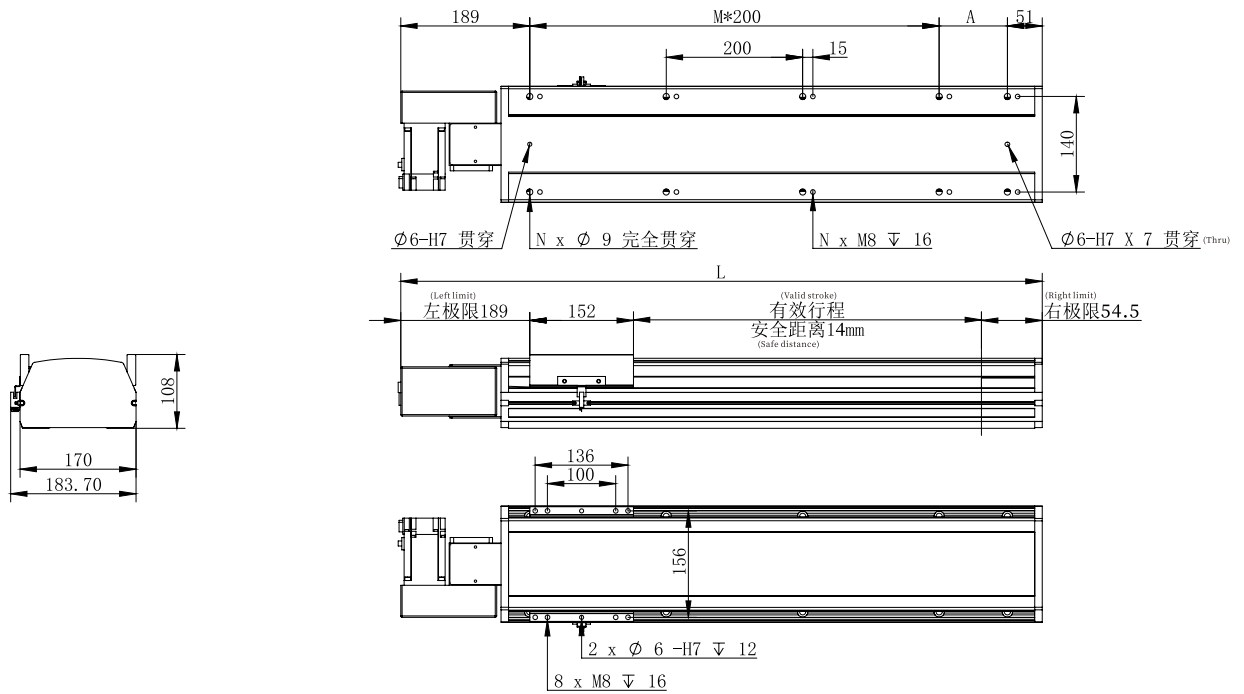
有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
L	490	540	590	640	690	740	790	840	890	940	990	1040	1090	1140	1190	1240	1290	1340	1390	1440	1490	1540	1590	1640	1690	1740	1790	1840	1890	1940	1990
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20
KG	10.2	12	13.8	14.6	15.4	16.2	17	17.8	18.6	19.4	20.2	21	21.8	22.6	23.4	24.2	25	25.8	26.6	27.4	28.2	29	29.8	30.6	31.4	32.2	33	33.8	34.6	35.4	36.2

有效行程 Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	2040	2090	2140	2190	2240	2290	2340	2390	2440	2490	2540	2590	2640	2690	2740	2790	2840	2890	2940	2990	3040	3090	3140	3190	3240	3290	3340	3390	3440	3490
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50
M	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	16
N	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	36
KG	37	37.8	38.6	39.4	40.2	41	41.8	42.6	43.4	44.2	45	45.8	46.6	47.4	48.2	49	49.8	50.6	51.4	52.2	53	53.8	54.6	55.4	56.2	57	57.8	58.6	59.4	60.2

如有超长行程及定制需求, 请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.

MR 电机外置右侧 Motor external right side

单位:Unit: mm



*不含电机重量。*Motor weight not included.

有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
L	490	540	590	640	690	740	790	840	890	940	990	1040	1090	1140	1190	1240	1290	1340	1390	1440	1490	1540	1590	1640	1690	1740	1790	1840	1890	1940	1990
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20
KG	10.2	12	13.8	14.6	15.4	16.2	17	17.8	18.6	19.4	20.2	21	21.8	22.6	23.4	24.2	25	25.8	26.6	27.4	28.2	29	29.8	30.6	31.4	32.2	33	33.8	34.6	35.4	36.2

有效行程 Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	2040	2090	2140	2190	2240	2290	2340	2390	2440	2490	2540	2590	2640	2690	2740	2790	2840	2890	2940	2990	3040	3090	3140	3190	3240	3290	3340	3390	3440	3490
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50
M	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	16
N	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	36
KG	37	37.8	38.6	39.4	40.2	41	41.8	42.6	43.4	44.2	45	45.8	46.6	47.4	48.2	49	49.8	50.6	51.4	52.2	53	53.8	54.6	55.4	56.2	57	57.8	58.6	59.4	60.2

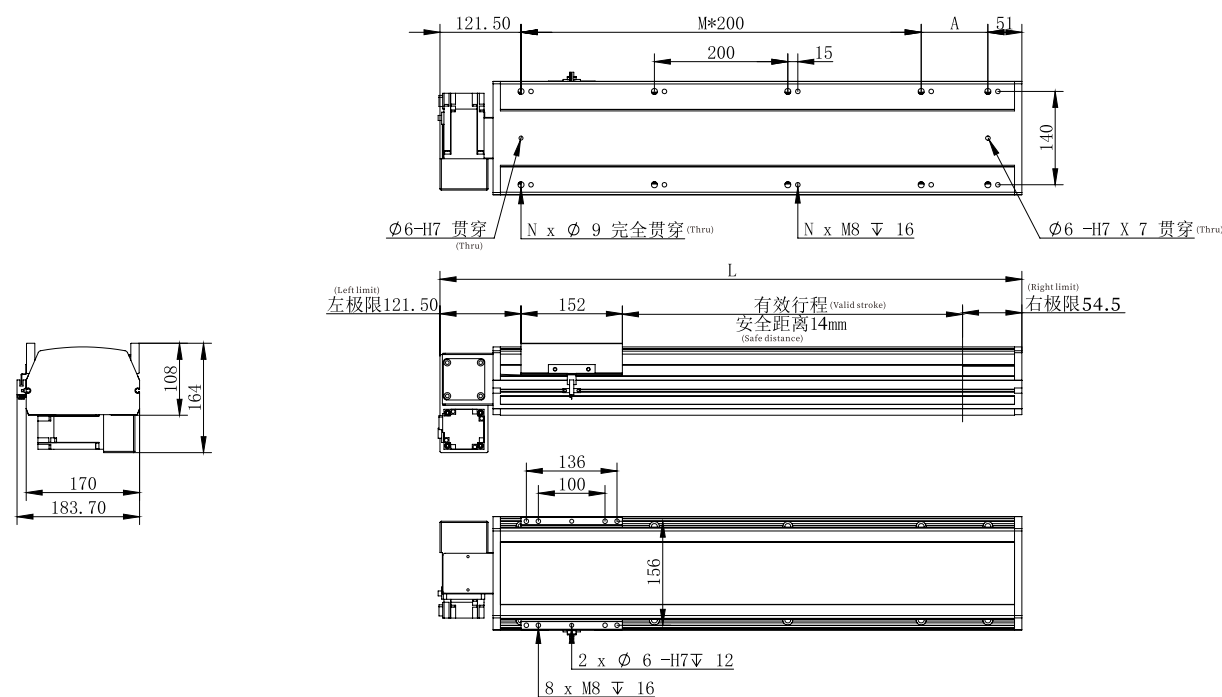
如有超长行程及定制需求, 请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.

电机外置左下/电机外置左上

Motor external lower left / Motor external upper left

LP 电机外置左下 Motor external lower left

单位:Unit:mm



*不含电机重量。*Motor weight not included.

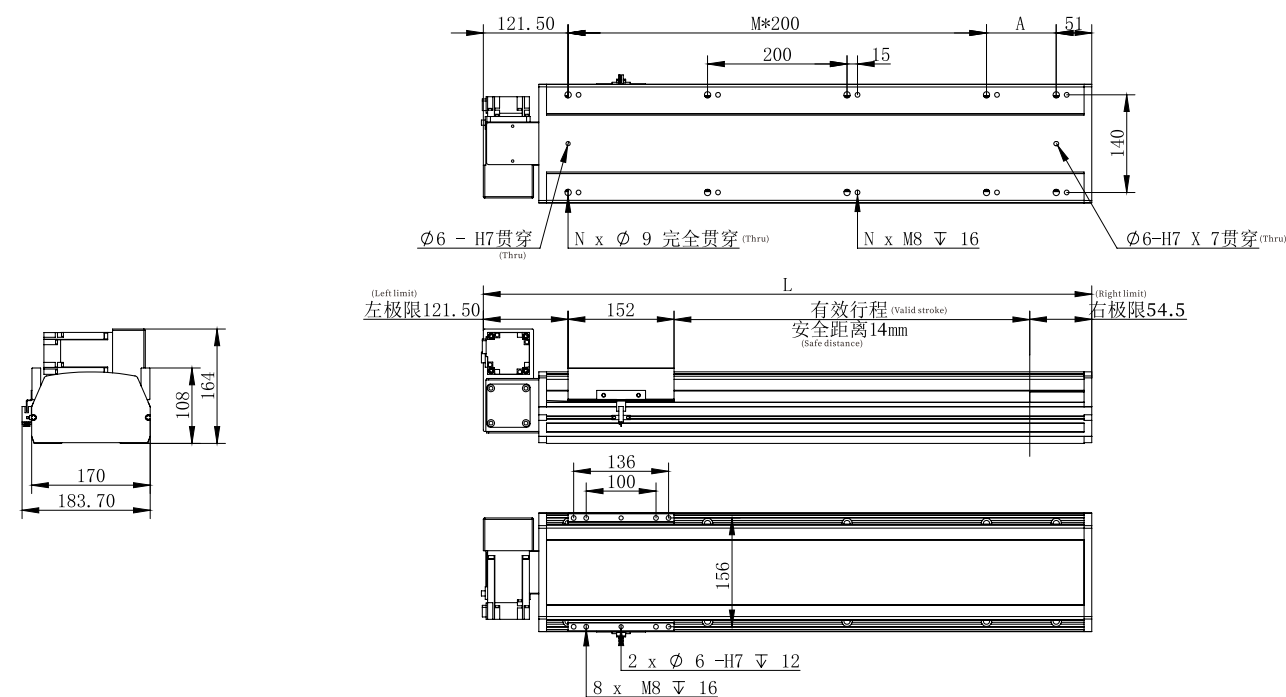
有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	
L	422	472.5	522.5	572.5	622.5	672.5	722.5	772.5	822.5	872.5	922.51	972.5	1022.5	1072.5	1122.5	1172.5	1222.5	1272.5	1322.5	1372.5	1422.5	1472.5	1522.5	1572.5	1622.5	1672.5	1722.5	1772.5	1822.5	1872.5	1922.5	
A	550	100	150	200	50	100	150	200	50	100	50	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	1550
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8	
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20	
KG	10.2	12	13.8	14.6	15.4	16.2	17	17.8	18.6	19.4	20.2	21	21.8	22.6	23.4	24.2	25	25.8	26.6	27.4	28.2	29	29.8	30.6	31.4	32.2	33	33.8	34.6	35.4	36.2	

有效行程 Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	1972.5	2022.5	2072.5	2122.5	2172.5	2222.5	2272.5	2322.5	2372.5	2422.5	2472.5	2522.5	2572.5	2622.5	2672.5	2722.5	2772.5	2822.5	2872.5	2922.5	2972.5	3022.5	3072.5	3122.5	3172.5	3222.5	3272.5	3322.5	3372.5	3422.5
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50
M	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	16
N	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	36
KG	37	37.8	38.6	39.4	40.2	41	41.8	42.6	43.4	44.2	45	45.8	46.6	47.4	48.2	49	49.8	50.6	51.4	52.2	53	53.8	54.6	55.4	56.2	57	57.8	58.6	59.4	60.2

如有超长行程及定制需求, 请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.

LU 电机外置左上 Motor external upper left

单位:Unit:mm



*不含电机重量。*Motor weight not included.

有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	
L	422	472.5	522.5	572.5	622.5	672.5	722.5	772.5	822.5	872.5	922.51	972.5	1022.5	1072.5	1122.5	1172.5	1222.5	1272.5	1322.5	1372.5	1422.5	1472.5	1522.5	1572.5	1622.5	1672.5	1722.5	1772.5	1822.5	1872.5	1922.5	
A	550	100	150	200	50	100	150	200	50	100	50	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	185
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8	8
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20	20
KG	10.2	12	13.8	14.6	15.4	16.2	17	17.8	18.6	19.4	20.2	21	21.8	22.6	23.4	24.2	25	25.8	26.6	27.4	28.2	29	29.8	30.6	31.4	32.2	33	33.8	34.6	35.4	36.2	36.2

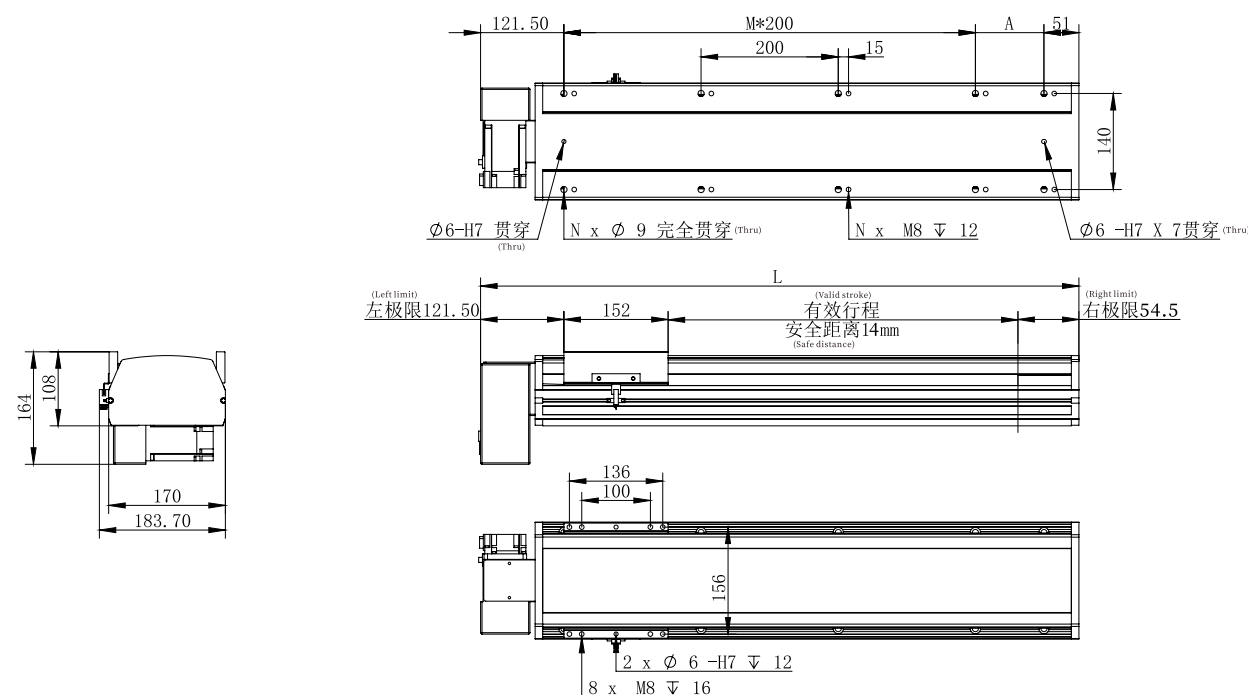
有效行程 Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	1972.5	2022.5	2072.5	2122.5	2172.5	2222.5	2272.5	2322.5	2372.5	2422.5	2472.5	2522.5	2572.5	2622.5	2672.5	2722.5	2772.5	2822.5	2872.5	2922.5	2972.5	3022.5	3072.5	3122.5	3172.5	3222.5	3272.5	3322.5	3372.5	3422.5
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50
M	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	16
N	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	36
KG	37	37.8	38.6	39.4	40.2	41	41.8	42.6	43.4	44.2	45	45.8	46.6	47.4	48.2	49	49.8	50.6	51.4	52.2	53	53.8	54.6	55.4	56.2	57	57.8	58.6	59.4	60.2

如有超长行程及定制需求, 请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.

电机外置右下/电机外置右上
Motor external lower right /Motor external upper right

RP 电机外置右下 Motor external lower right

单位:Unit:mm



*不含电机重量。*Motor weight not included.

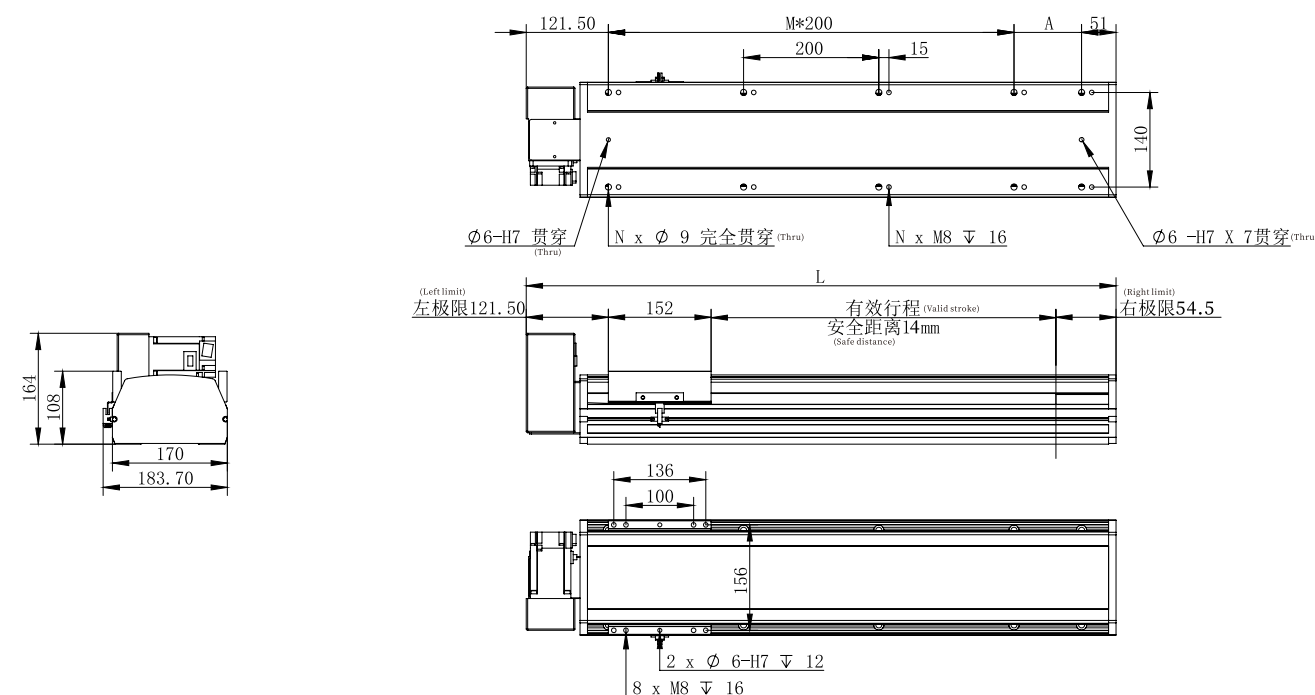
有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	
L	422	472.5	522.5	572.5	622.5	672.5	722.5	772.5	822.5	872.5	922.51	972.5	1022.5	1072.5	1122.5	1172.5	1222.5	1272.5	1322.5	1372.5	1422.5	1472.5	1522.5	1572.5	1622.5	1672.5	1722.5	1772.5	1822.5	1872.5	1922.5	
A	550	100	150	200	50	100	150	200	50	100	50	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	1550
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8	
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20	
KG	10.2	12	13.8	14.6	15.4	16.2	17	17.8	18.6	19.4	20.2	21	21.8	22.6	23.4	24.2	25	25.8	26.6	27.4	28.2	29	29.8	30.6	31.4	32.2	33	33.8	34.6	35.4	36.2	

有效行程 Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	1972.5	2022.5	2072.5	2122.5	2172.5	2222.5	2272.5	2322.5	2372.5	2422.5	2472.5	2522.5	2572.5	2622.5	2672.5	2722.5	2772.5	2822.5	2872.5	2922.5	2972.5	3022.5	3072.5	3122.5	3172.5	3222.5	3272.5	3322.5	3372.5	3422.5
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50
M	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	16
N	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	36
KG	37	37.8	38.6	39.4	40.2	41	41.8	42.6	43.4	44.2	45	45.8	46.6	47.4	48.2	49	49.8	50.6	51.4	52.2	53	53.8	54.6	55.4	56.2	57	57.8	58.6	59.4	60.2

如有超长行程及定制需求,请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.

RU 电机外置右上 Motor external upper right

单位:Unit:mm



*不含电机重量。*Motor weight not included.

有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	
L	422	472.5	522.5	572.5	622.5	672.5	722.5	772.5	822.5	872.5	922.51	972.5	1022.5	1072.5	1122.5	1172.5	1222.5	1272.5	1322.5	1372.5	1422.5	1472.5	1522.5	1572.5	1622.5	1672.5	1722.5	1772.5	1822.5	1872.5	1922.5	
A	550	100	150	200	50	100	150	200	50	100	50	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	180
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8	8
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20	20
KG	10.2	12	13.8	14.6	15.4	16.2	17	17.8	18.6	19.4	20.2	21	21.8	22.6	23.4	24.2	25	25.8	26.6	27.4	28.2	29	29.8	30.6	31.4	32.2	33	33.8	34.6	35.4	36.2	

有效行程 Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	1972.5	2022.5	2072.5	2122.5	2172.5	2222.5	2272.5	2322.5	2372.5	2422.5	2472.5	2522.5	2572.5	2622.5	2672.5	2722.5	2772.5	2822.5	2872.5	2922.5	2972.5	3022.5	3072.5	3122.5	3172.5	3222.5	3272.5	3322.5	3372.5	3422.5
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50
M	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	13	14	14	14	14	15	15	15	15
N	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	30	32	32	32	32	34	34	34	36
KG	37	37.8	38.6	39.4	40.2	41	41.8	42.6	43.4	44.2	45	45.8	46.6	47.4	48.2	49	49.8	50.6	51.4	52.2	53	53.8	54.6	55.4	56.2	57	57.8	58.6	59.4	60.2

如有超长行程及定制需求,请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.



重复精度
Repeat Accuracy
±0.04 mm

此图仅供参考, 出货规格详见尺寸图面
This drawing is for reference only, Please refer to the size drawing for shipment specifications.

最大行程
Max stroke
3050mm

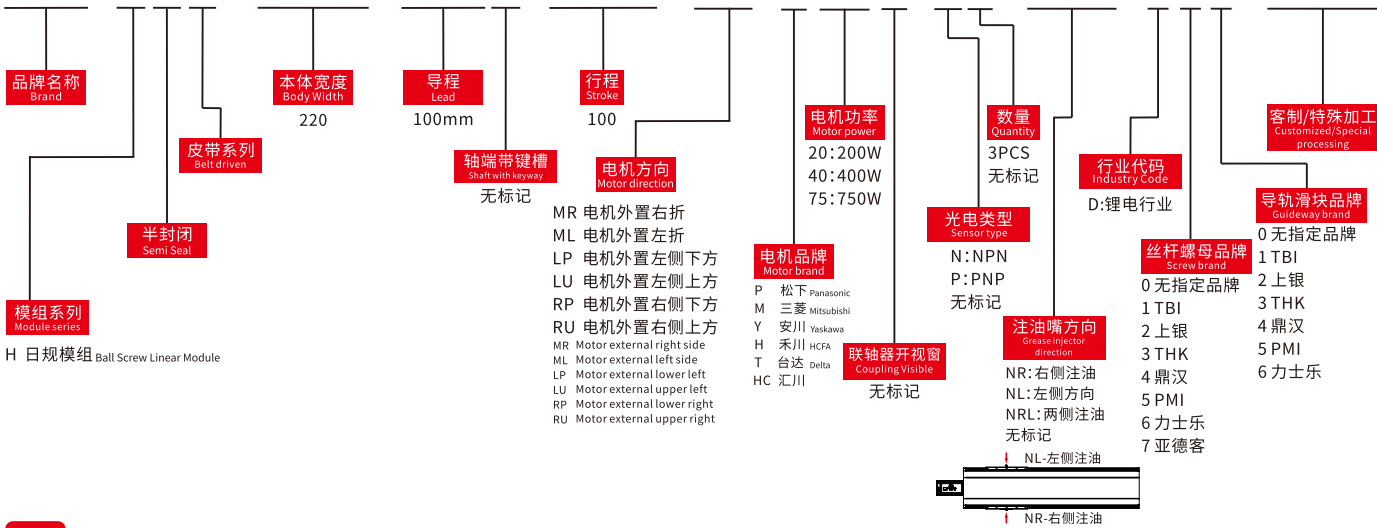
最高速度
Max speed
2000mm/s

马达容量
Motor output
750W

直线滑轨
Linear guide
23X22

型号表达方式 Ordering method

TPA-HNB-220T-100K-L100-ML-P75C-N3-NRL-D00-P000

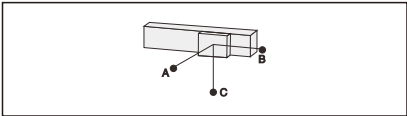
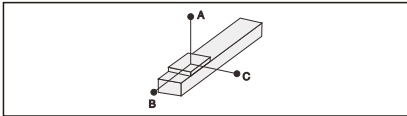


产品性能参数如下 Product performance parameters are as follows

规格 Spec	重复定位精度 (mm) Repeat positioning accuracy (mm)	±0.04	
	皮带导程 (mm) Belt lead (mm)	40	100
	最高速度 (mm/s) Maximum speed (mm/s)	2000	
	最大可搬重量 Maximum carrying weight	水平使用(kg) Horizontal (kg)	85
		垂直使用(kg) Vertical (kg)	/
部 品 Parts	定格推力(N) Stationary thrust (N)	367	
	标准行程 (mm) Standard stroke (mm)	50-3050mm/50间隔	
	AC伺服马达容量 Capacity of AC servo motor	750	
	皮带宽度 (mm) Belt width (mm)	50	
	高刚性直线滑轨 High-rigidity linear guide rails	W23XH22	
原点感应器 Origin sensor	外挂 Cheat	EE-SX672(NPN)	

注1: 使用非上述功率电机时请依据实际参数推算。
Note 1: When using a motor with a power other than the above, please calculate according to the actual parameters.

容许负载力矩表 N.m Allowable overhang

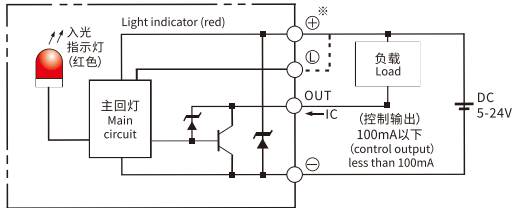


(单位Unit:mm)					(单位Unit:mm)				
水平安装 Horizontal installation		A	B	C	侧面安装 Side mounting		A	B	C
负载 Load	45kg	1588	600	349	负载 Load	40kg	500	685	1805
	65kg	1052	328	285		60kg	315	430	1152
	85kg	768	281	206		85kg	206	281	768

搭配伺服马达一览表 Suitable motor brand

品牌 Brand	马达记号 Mark	刹车有无 Brake	马达容量 Motor capacity	电源电压 AC-Voltage	伺服马达型号 Servo motor model	驱动器型号 Driver Model
三菱 Mitsubishi	M	无刹车(水平式样) No brake (horizontal type)	400	220	HG-KN43J-S100	MR-JE-40A
松下 Panasonic	P	无刹车(水平式样) No brake (horizontal type)	400	220	MHMF042L1U2M	MBDLN25SE
台达 Delta	T	无刹车(水平式样) No brake (horizontal type)	400	220	ECM-B3M-C20604RS1	ASD-B3-0421-L

感应器连接图<原点及端点> Sensor layout



HNR

HNB

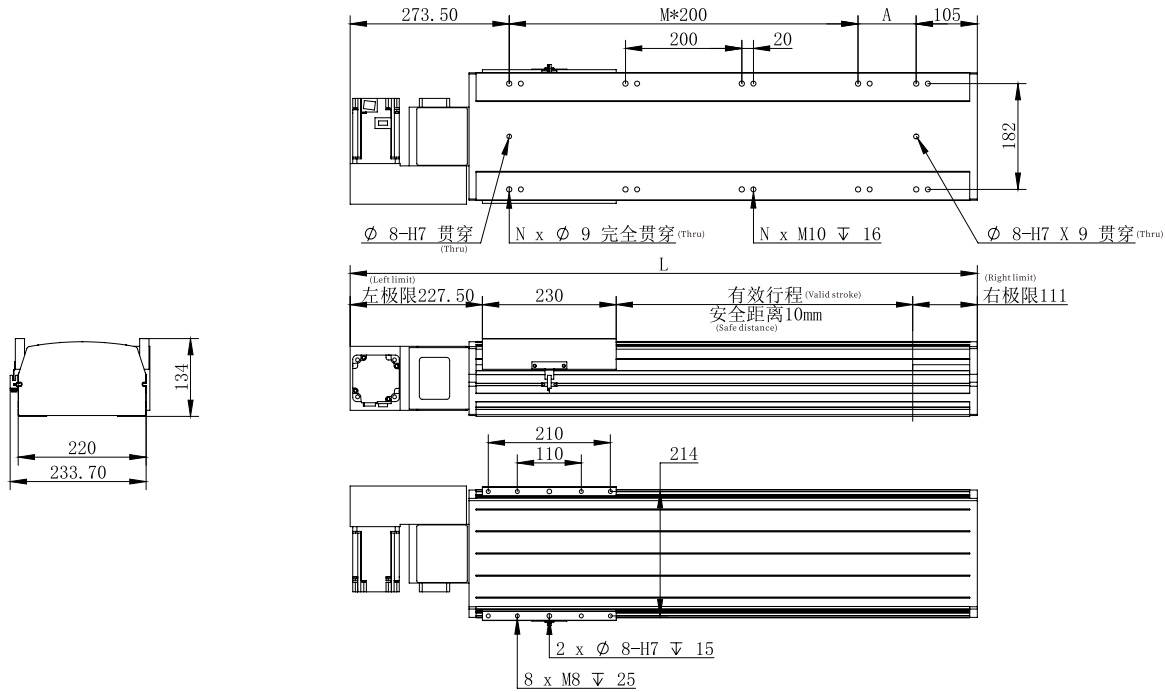
参考资料
Reference data



电机外置左侧/电机外置右侧
Motor external left side / Motor external right side

ML 电机外置左侧 Motor external left side

单位:Unit: mm



*不含电机重量。*Motor weight not included.

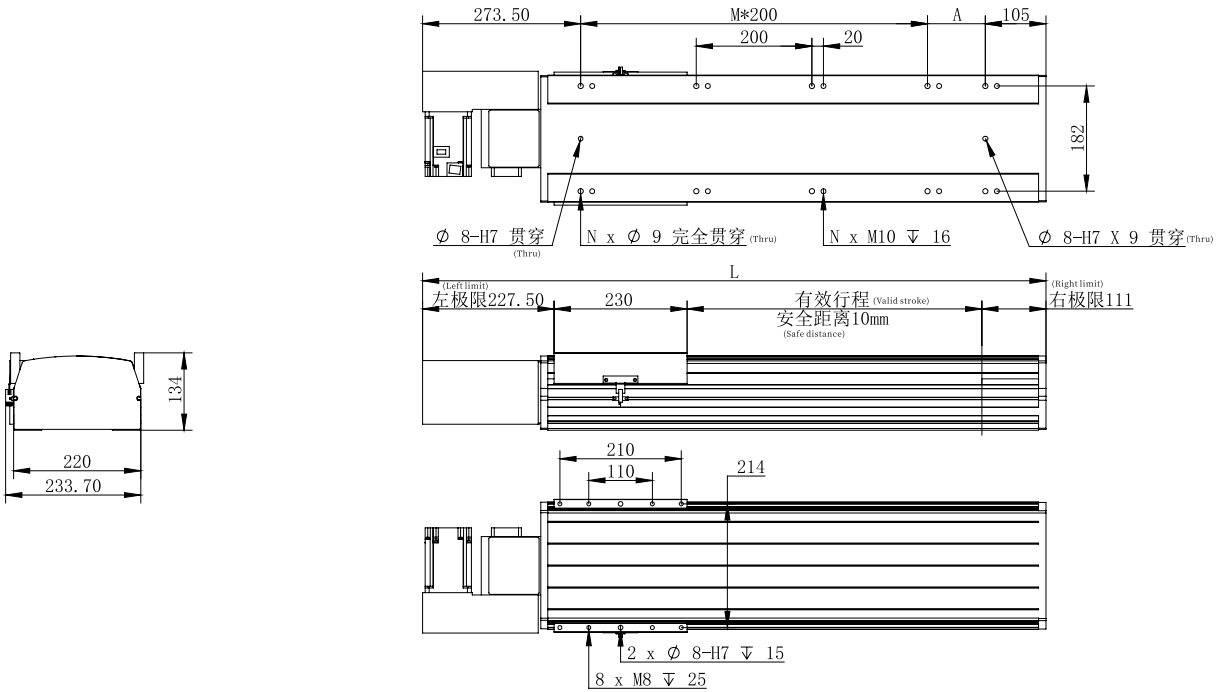
有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
L	628.5	678.5	728.5	778.5	828.5	878.5	928.5	978.5	1028.5	1078.5	1128.5	1178.5	1228.5	1278.5	1328.5	1378.5	1428.5	1478.5	1528.5	1578.5	1628.5	1678.5	1728.5	1778.5	1828.5	1878.5	1928.5	1978.5	2028.5	2078.5	2128.5
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20
KG	28.8	30	31.2	32.4	33.6	34.8	36	37.2	38.4	39.6	40.8	42	43.2	44.4	45.6	46.8	48	49.2	50.4	51.6	52.8	54	55.2	56.4	57.6	58.8	60	61.2	62.4	63.6	64.8

有效行程 Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	2178.5	2228.5	2278.5	2328.5	2378.5	2428.5	2478.5	2528.5	2578.5	2628.5	2678.5	2728.5	2778.5	2828.5	2878.5	2928.5	2978.5	3028.5	3078.5	3128.5	3178.5	3228.5	3278.5	3328.5	3378.5	3428.5	3478.5	3528.5	3578.5	3628.5
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50
M	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	16
N	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	36
KG	66	67.2	68.4	69.6	70.8	72	73.2	74.4	75.6	76.8	78	79.2	80.4	81.6	82.8	84	85.2	86.4	87.6	88.8	90	91.2	92.4	93.6	94.8	96	97.2	98.4	99.6	100.8

如有超长行程及定制需求, 请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.

MR 电机外置右侧 Motor external right side

单位:Unit: mm



*不含电机重量。*Motor weight not included.

有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
L	628.5	678.5	728.5	778.5	828.5	878.5	928.5	978.5	1028.5	1078.5	1128.5	1178.5	1228.5	1278.5	1328.5	1378.5	1428.5	1478.5	1528.5	1578.5	1628.5	1678.5	1728.5	1778.5	1828.5	1878.5	1928.5	1978.5	2028.5	2078.5	2128.5
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20
KG	28.8	30	31.2	32.4	33.6	34.8	36	37.2	38.4	39.6	40.8	42	43.2	44.4	45.6	46.8	48	49.2	50.4	51.6	52.8	54	55.2	56.4	57.6	58.8	60	61.2	62.4	63.6	64.8

有效行程 Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	2178.5	2228.5	2278.5	2328.5	2378.5	2428.5	2478.5	2528.5	2578.5	2628.5	2678.5	2728.5	2778.5	2828.5	2878.5	2928.5	2978.5	3028.5	3078.5	3128.5	3178.5	3228.5	3278.5	3328.5	3378.5	3428.5	3478.5	3528.5	3578.5	3628.5
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50
M	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	16
N	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	36
KG	66	67.2	68.4	69.6	70.8	72	73.2	74.4	75.6	76.8	78	79.2	80.4	81.6	82.8	84	85.2	86.4	87.6	88.8	90	91.2	92.4	93.6	94.8	96	97.2	98.4	99.6	100.8

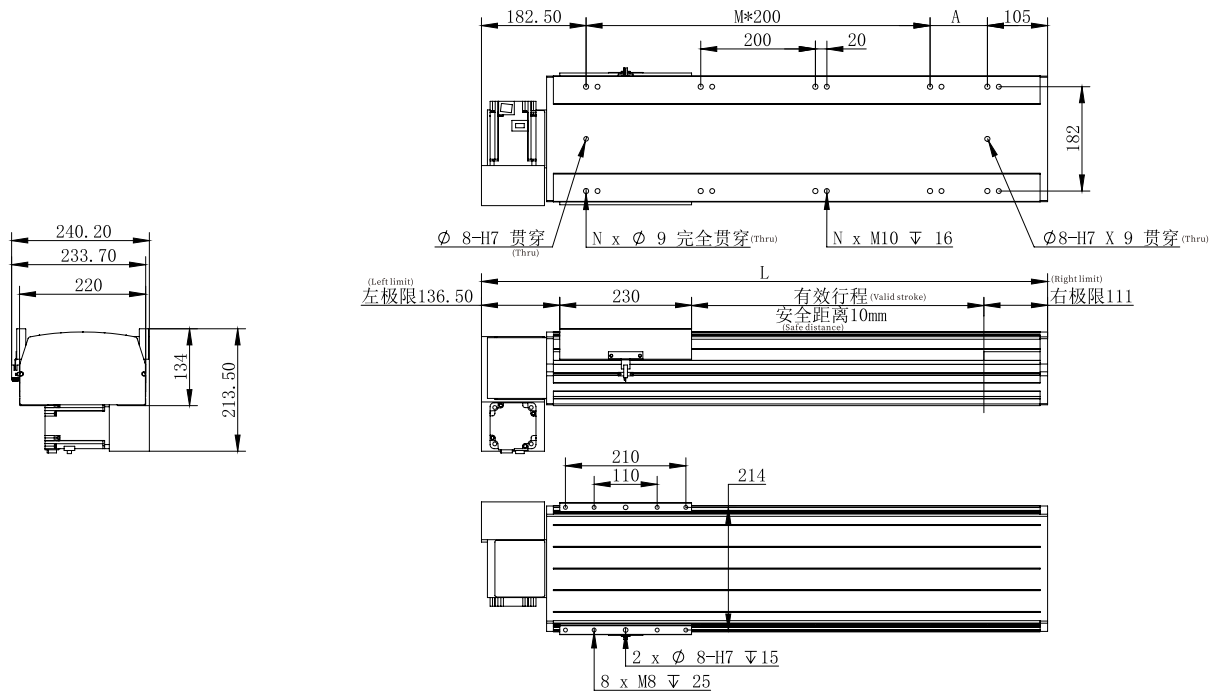
如有超长行程及定制需求, 请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.



电机外置左下/电机外置左上
Motor external lower left /Motor external upper left

LP 电机外置左下 Motor external lower left

单位:Unit:mm



*不含电机重量。*Motor weight not included.

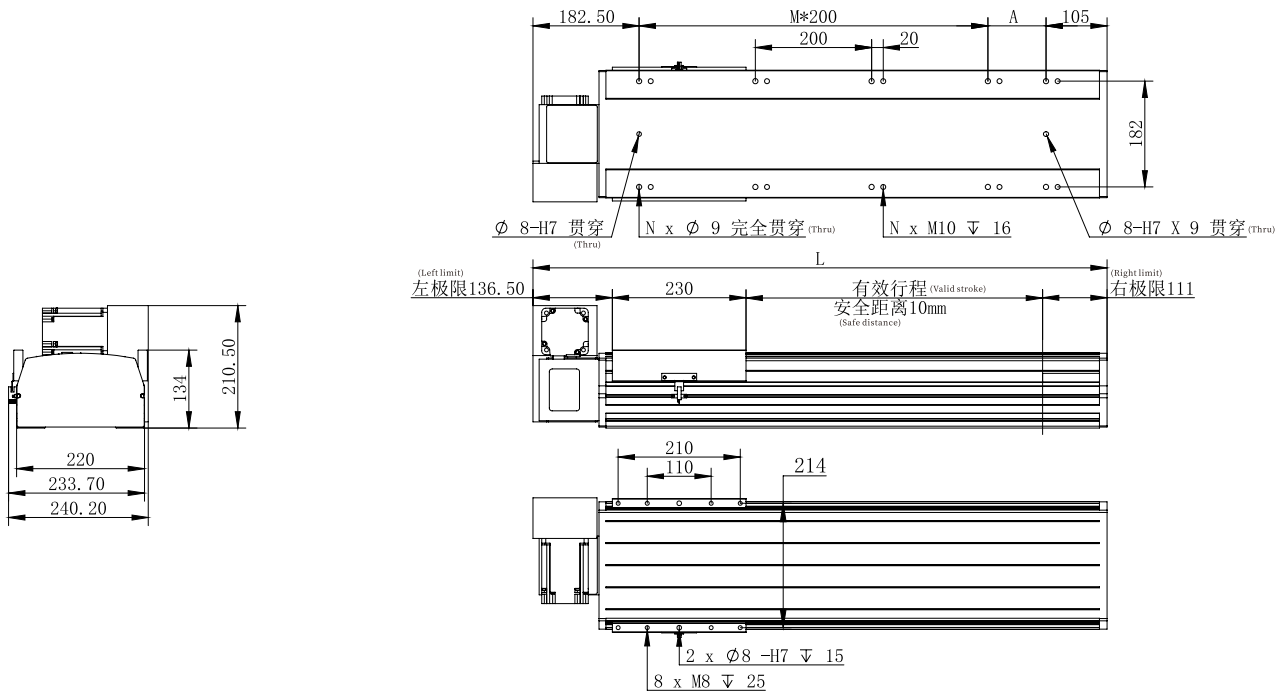
有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
L	537.5	587.5	637.5	687.5	737.5	787.5	837.5	887.5	937.5	987.5	1037.5	1087.5	1137.5	1187.5	1237.5	1287.5	1337.5	1387.5	1437.5	1487.5	1537.5	1587.5	1637.5	1687.5	1737.5	1787.5	1837.5	1887.5	1937.5	1987.5	2037.5
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20
KG	28.8	30	31.2	32.4	33.6	34.8	36	37.2	38.4	39.6	40.8	42	43.2	44.4	45.6	46.8	48	49.2	50.4	51.6	52.8	54	55.2	56.4	57.6	58.8	60	61.2	62.4	63.6	64.8

有效行程 Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	2087.5	2137.5	2187.5	2237.5	2287.5	2337.5	2387.5	2437.5	2487.5	2537.5	2587.5	2637.5	2687.5	2737.5	2787.5	2837.5	2887.5	2937.5	2987.5	3037.5	3087.5	3137.5	3187.5	3237.5	3287.5	3337.5	3387.5	3437.5	3487.5	3537.5
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50
M	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	16
N	20	22	22	22	22	2	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	36
KG	66	67.2	68.4	69.6	70.8	72	73.2	74.4	75.6	76.8	78	79.2	80.4	81.6	82.8	84	85.2	86.4	87.6	88.8	90	91.2	92.4	93.6	94.8	96	97.2	98.4	99.6	100.8

如有超长行程及定制需求, 请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.

LU 电机外置左上 Motor external upper left

单位:Unit:mm



*不含电机重量。*Motor weight not included.

有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
L	537.5	587.5	637.5	687.5	737.5	787.5	837.5	887.5	937.5	987.5	1037.5	1087.5	1137.5	1187.5	1237.5	1287.5	1337.5	1387.5	1437.5	1487.5	1537.5	1587.5	1637.5	1687.5	1737.5	1787.5	1837.5	1887.5	1937.5	1987.5	2037.5
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20
KG	28.8	30	31.2	32.4	33.6	34.8	36	37.2	38.4	39.6	40.8	42	43.2	44.4	45.6	46.8	48	49.2	50.4	51.6	52.8	54	55.2	56.4	57.6	58.8	60	61.2	62.4	63.6	64.8

有效行程 Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	2087.5	2137.5	2187.5	2237.5	2287.5	2337.5	2387.5	2437.5	2487.5	2537.5	2587.5	2637.5	2687.5	2737.5	2787.5	2837.5	2887.5	2937.5	2987.5	3037.5	3087.5	3137.5	3187.5	3237.5	3287.5	3337.5	3387.5	3437.5	3487.5	3537.5
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50
M	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	16
N	20	22	22	22	22	2	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	36
KG	66	67.2	68.4	69.6	70.8	72	73.2	74.4	75.6	76.8	78	79.2	80.4	81.6	82.8	84	85.2	86.4	87.6	88.8	90	91.2	92.4	93.6	94.8	96	97.2	98.4	99.6	100.8

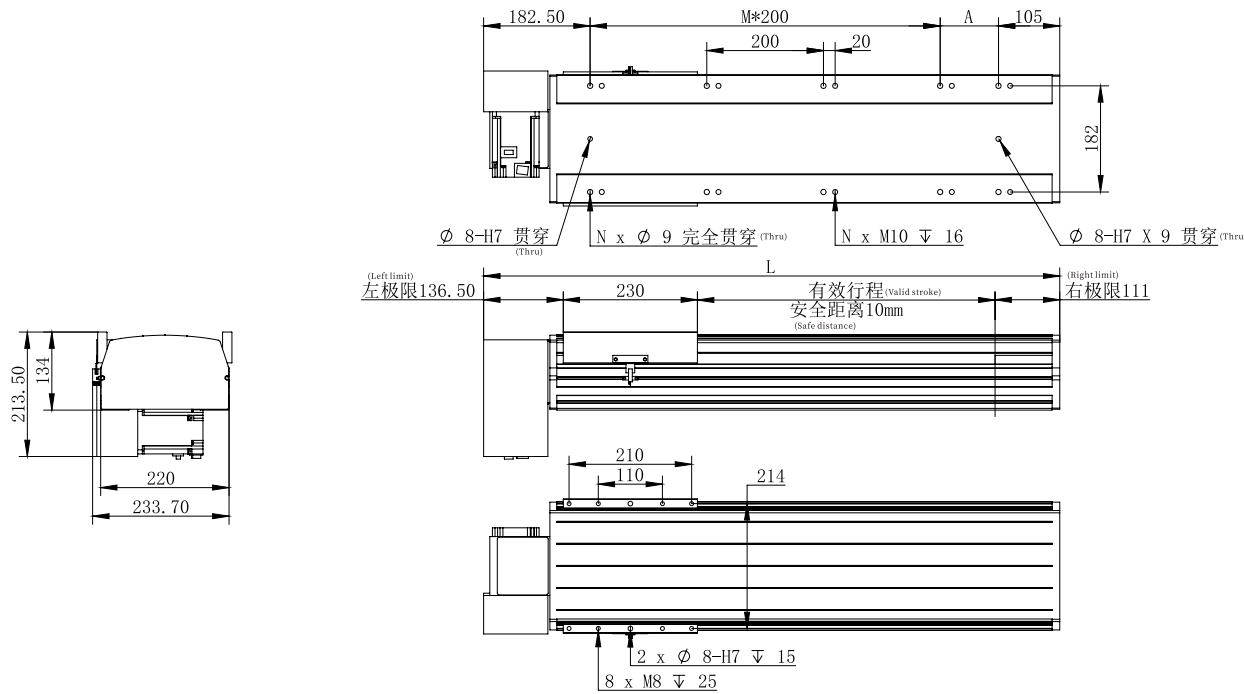
如有超长行程及定制需求, 请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.



电机外置右下/电机外置右上
Motor external lower right /Motor external upper right

RP 电机外置右下 Motor external lower right

单位:Unit: mm



*不含电机重量。*Motor weight not included.

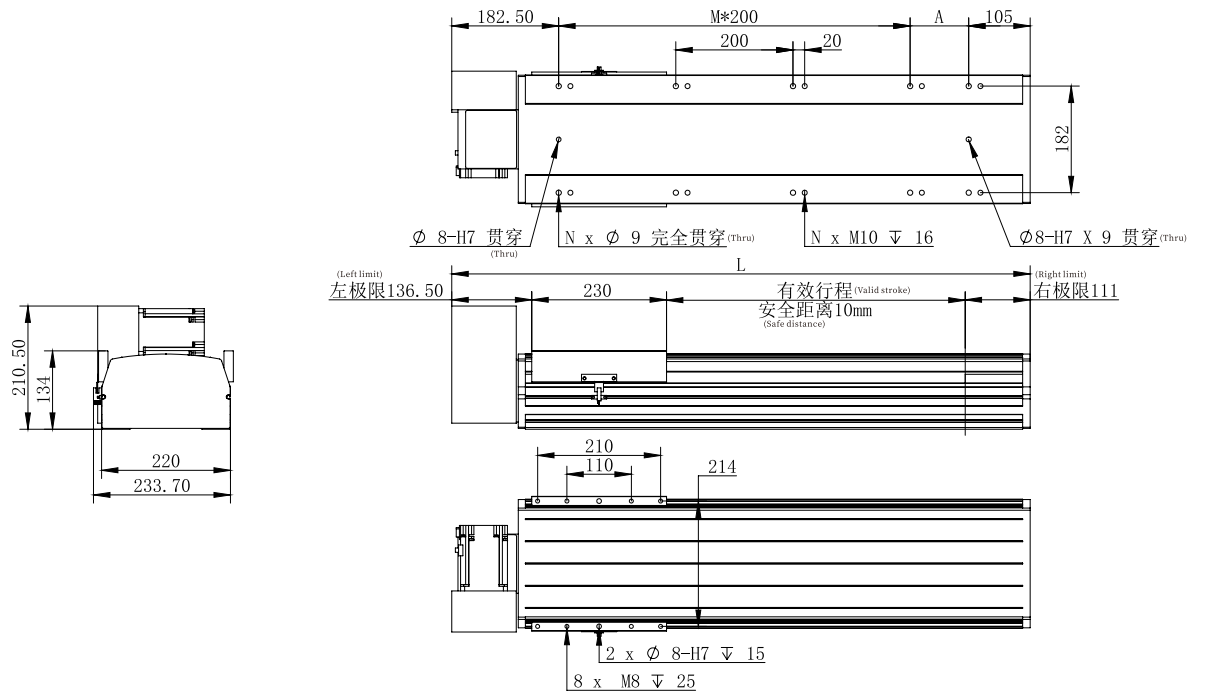
有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
L	537.5	587.5	637.5	687.5	737.5	787.5	837.5	887.5	937.5	987.5	1037.5	1087.5	1137.5	1187.5	1237.5	1287.5	1337.5	1387.5	1437.5	1487.5	1537.5	1587.5	1637.5	1687.5	1737.5	1787.5	1837.5	1887.5	1937.5	1987.5	2037.5
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20
KG	28.8	30	31.2	32.4	33.6	34.8	36	37.2	38.4	39.6	40.8	42	43.2	44.4	45.6	46.8	48	49.2	50.4	51.6	52.8	54	55.2	56.4	57.6	58.8	60	61.2	62.4	63.6	64.8

有效行程 Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	2087.5	2137.5	2187.5	2237.5	2287.5	2337.5	2387.5	2437.5	2487.5	2537.5	2587.5	2637.5	2687.5	2737.5	2787.5	2837.5	2887.5	2937.5	2987.5	3037.5	3087.5	3137.5	3187.5	3237.5	3287.5	3337.5	3387.5	3437.5	3487.5	3537.5
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50
M	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	16
N	20	22	22	22	22	2	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	36
KG	66	67.2	68.4	69.6	70.8	72	73.2	74.4	75.6	76.8	78	79.2	80.4	81.6	82.8	84	85.2	86.4	87.6	88.8	90	91.2	92.4	93.6	94.8	96	97.2	98.4	99.6	100.8

如有超长行程及定制需求, 请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.

RU 电机外置右上 Motor external upper right

单位:Unit: mm



*不含电机重量。*Motor weight not included.

有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
L	537.5	587.5	637.5	687.5	737.5	787.5	837.5	887.5	937.5	987.5	1037.5	1087.5	1137.5	1187.5	1237.5	1287.5	1337.5	1387.5	1437.5	1487.5	1537.5	1587.5	1637.5	1687.5	1737.5	1787.5	1837.5	1887.5	1937.5	1987.5	2037.5
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20
KG	28.8	30	31.2	32.4	33.6	34.8	36	37.2	38.4	39.6	40.8	42	43.2	44.4	45.6	46.8	48	49.2	50.4	51.6	52.8	54	55.2	56.4	57.6	58.8	60	61.2	62.4	63.6	64.8

有效行程 Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	2087.5	2137.5	2187.5	2237.5	2287.5	2337.5	2387.5	2437.5	2487.5	2537.5	2587.5	2637.5	2687.5	2737.5	2787.5	2837.5	2887.5	2937.5	2987.5	3037.5	3087.5	3137.5	3187.5	3237.5	3287.5	3337.5	3387.5	3437.5	3487.5	3537.5
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50
M	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	16
N	20	22	22	22	22	2	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	36
KG	66	67.2	68.4	69.6	70.8	72	73.2	74.4	75.6	76.8	78	79.2	80.4	81.6	82.8	84	85.2	86.4	87.6	88.8	90	91.2	92.4	93.6	94.8	96	97.2	98.4	99.6	100.8

如有超长行程及定制需求, 请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.



重复精度
Repeat Accuracy
 ± 0.04
mm

此图仅供参考, 出货规格详见尺寸图面
This drawing is for reference only, Please refer to the size drawing for shipment specifications.

最大行程
Max stroke
3050mm

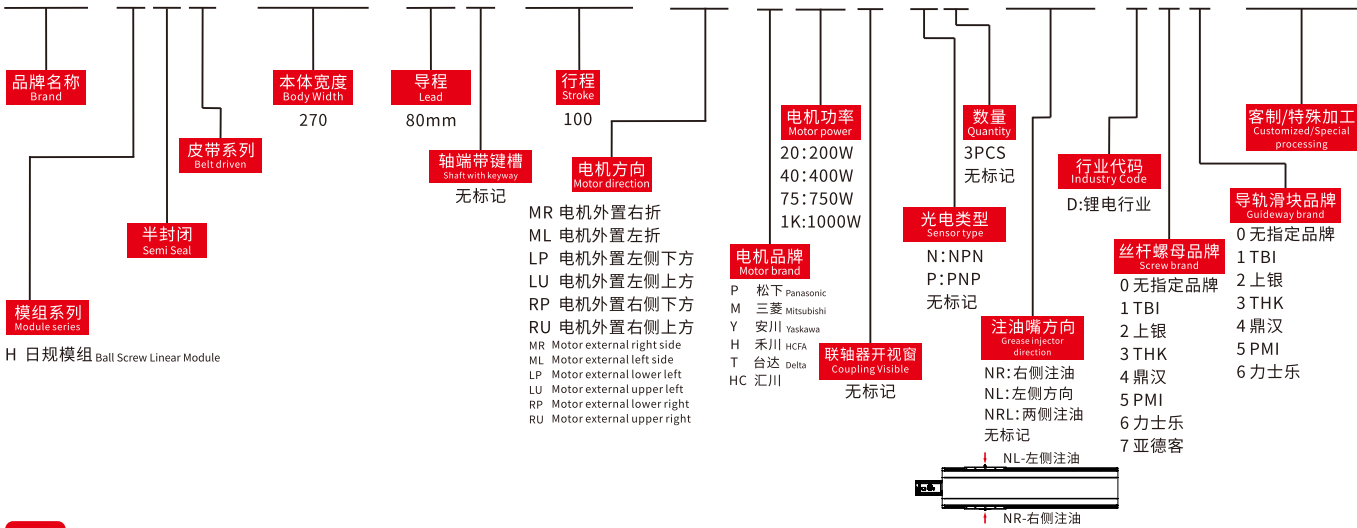
最高速度
Max speed
2000mm/s

马达容量
Motor output
1000W

直线滑轨
Linear guide
28x26

型号表达方式 Ordering method

TPA-HNB-270D-80K-L100-ML-P1KC-N3-NRL-D00-P000

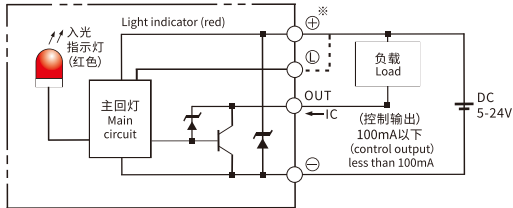


产品性能参数如下 Product performance parameters are as follows

规格 Spec	重复定位精度 (mm) Repeat positioning accuracy (mm)	± 0.04	
	皮带导程 (mm) Belt lead (mm)	160	80
	最高速度 (mm/s) Maximum speed (mm/s)	2000	
	最大可搬重量 Maximum carrying weight	水平使用 (kg) Horizontal (kg)	130
		垂直使用 (kg) Vertical (kg)	/
部 品 Parts	定格推力 (N) Stationary thrust (N)	245	490
	标准行程 (mm) Standard stroke (mm)	50-3050mm/50间隔	
	AC伺服马达容量 Capacity of AC servo motor	1000	
	皮带宽度 (mm) Belt width (mm)	50	
	高刚性直线滑轨 High-rigidity linear guide rails	W28XH26	
原点感应器 Origin sensor	外挂 Cheat	EE-SX672(NPN)	
	内置 Built-in	EE-SX674(NPN)	

注1: 使用非上述功率电机时请依据实际参数推算。
Note 1: When using a motor with a power other than the above, please calculate according to the actual parameters.

感应器连接图<原点及端点> Sensor layout

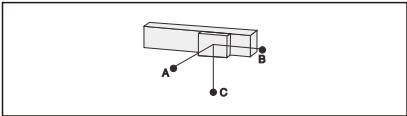
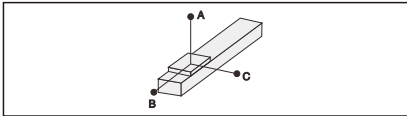


HNR

HNB

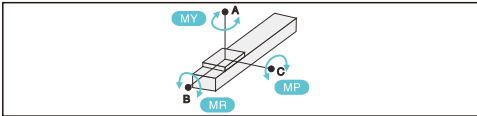
参考资料
Reference data

容许负载力矩表 N.m Allowable overhang



(单位Unit:mm)					(单位Unit:mm)				
水平安装 Horizontal installation		A	B	C	侧面安装 Side mounting		A	B	C
负载 Load	90kg	2064	780	454	负载 Load	90kg	650	891	2350
	110kg	1368	426	376		110kg	410	560	1498
	130kg	995	365	268		130kg	268	366	998

静态容许负载惯量 Static loading moment



(单位Unit:N.m)	
MY	2052
MP	2052
MR	1810

*力矩表所表示的数据,代表重心。
The torque value in the chart indicate the center of gravity.
*符合型录规范的正常试用下,保证寿命为10000公里。
Operation life is 10,000km when the product is using under the specified conditions.
*倒吊使用无法套用标准规范,如有需求请咨询我司业务。
The standard specification cannot be applied to the use of inverted crane. Please consult our business if necessary.

搭配伺服马达一览表 Suitable motor brand

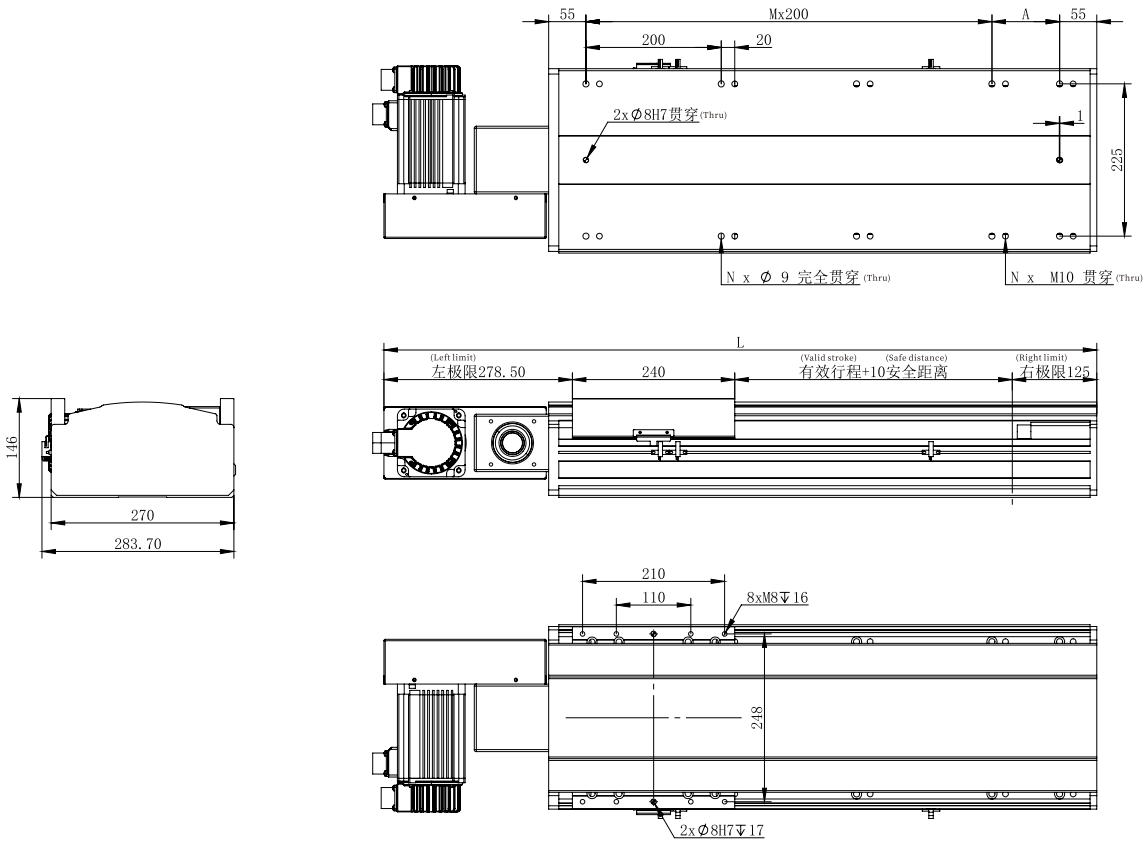
品牌 Brand	马达记号 Mark	刹车有无 Brake	马达容量 Motor capacity	电源电压 AC-Voltage	伺服马达型号 Servo motor model	驱动器型号 Driver Model
三菱 Mitsubishi	M	无刹车(水平式样) No brake (horizontal type)	1000	220	HG-SNS102J	MR-JET-100G
松下 Panasonic	P	无刹车(水平式样) No brake (horizontal type)	1000	220	MSMF102L1G6M	MDDA103A1A
台达 Delta	T	无刹车(水平式样) No brake (horizontal type)	1000	220	ECM-E3M-E21310RSE	ASD-E3-1021-L



电机外置左侧/电机外置右侧
Motor external left side / Motor external right side

ML 电机外置左侧 Motor external left side

单位:Unit: mm



*不含电机重量。*Motor weight not included.

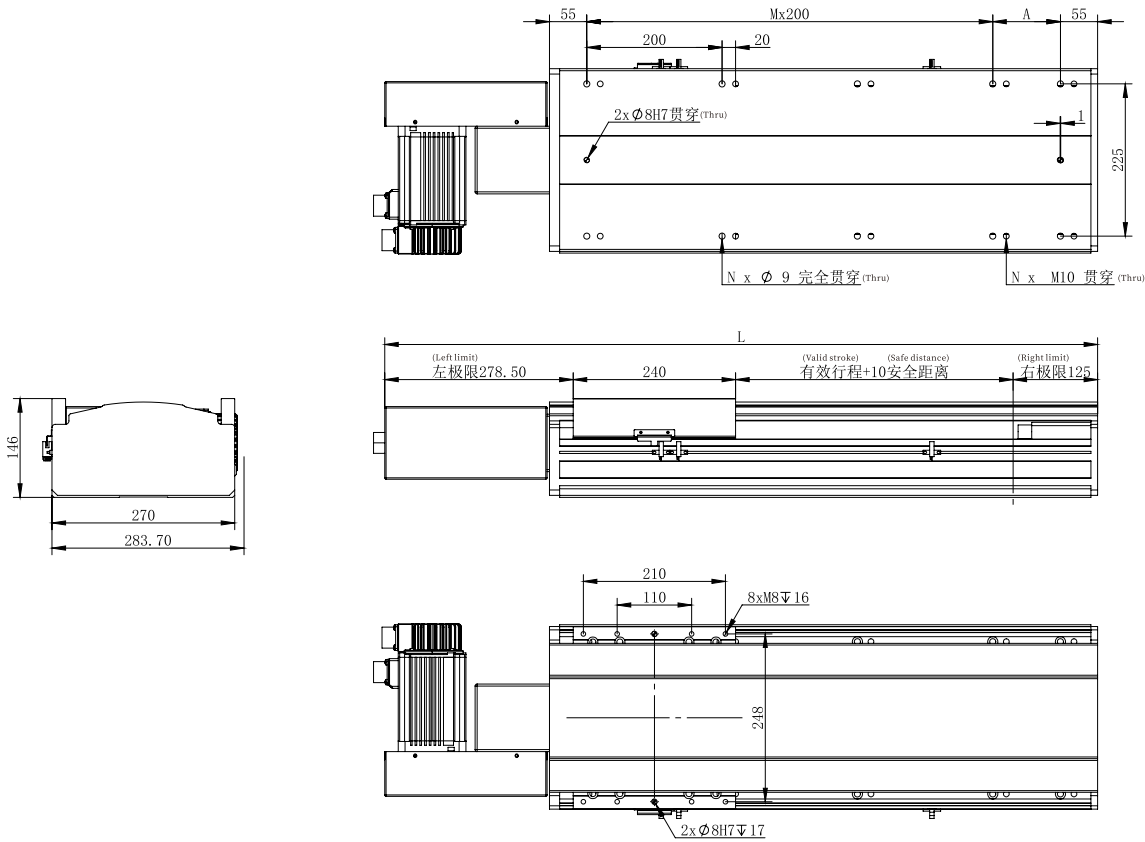
有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
L	703.5	753.5	803.5	853.5	903.5	953.5	1003.5	1053.5	1103.5	1153.5	1203.5	1253.5	1303.5	1353.5	1403.5	1453.5	1503.5	1553.5	1603.5	1653.5	1703.5	1753.5	1803.5	1853.5	1903.5	1953.5	2003.5	2053.5	2103.5	2153.5	2203.5
A	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50
M	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8	8	9
N	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20	20	22
KG	32.6	34.8	37	39.2	41.4	43.6	45.8	48	50.2	52.4	54.6	56.8	59	61.2	63.4	65.6	67.8	70	72.2	74.4	76.6	78.8	81	83.2	85.4	87.6	89.8	92	94.2	96.4	98.6

有效行程 Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	2253.5	2303.5	2353.5	2403.5	2453.5	2503.5	2553.5	2603.5	2653.5	2703.5	2753.5	2803.5	2853.5	2903.5	2953.5	3003.5	3053.5	3103.5	3153.5	3203.5	3253.5	3303.5	3353.5	3403.5	3453.5	3503.5	3553.5	3603.5	3653.5	3703.5
A	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	16	16	16
N	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	36	36	36
KG	100.8	103	105.2	107.4	109.6	111.8	114	116.2	118.4	120.6	122.8	125	127.2	129.4	131.6	133.8	136	138.2	140.4	142.6	144.8	147	149.2	151.4	153.6	155.8	158	160.2	162.4	164.6

如有超长行程及定制需求, 请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.

MR 电机外置右侧 Motor external right side

单位:Unit: mm



*不含电机重量。*Motor weight not included.

有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
L	703.5	753.5	803.5	853.5	903.5	953.5	1003.5	1053.5	1103.5	1153.5	1203.5	1253.5	1303.5	1353.5	1403.5	1453.5	1503.5	1553.5	1603.5	1653.5	1703.5	1753.5	1803.5	1853.5	1903.5	1953.5	2003.5	2053.5	2103.5	2153.5	2203.5
A	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50
M	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8	8	9
N	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20	20	22
KG	32.6	34.8	37	39.2	41.4	43.6	45.8	48	50.2	52.4	54.6	56.8	59	61.2	63.4	65.6	67.8	70	72.2	74.4	76.6	78.8	81	83.2	85.4	87.6	89.8	92	94.2	96.4	98.6

有效行程 Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	2253.5	2303.5	2353.5	2403.5	2453.5	2503.5	2553.5	2603.5	2653.5	2703.5	2753.5	2803.5	2853.5	2903.5	2953.5	3003.5	3053.5	3103.5	3153.5	3203.5	3253.5	3303.5	3353.5	3403.5	3453.5	3503.5	3553.5	3603.5	3653.5	3703.5
A	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	16	16	16
N	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	36	36	36
KG	100.8	103	105.2	107.4	109.6	111.8	114	116.2	118.4	120.6	122.8	125	127.2	129.4	131.6	133.8	136	138.2	140.4	142.6	144.8	147	149.2	151.4	153.6	155.8	158	160.2	162.4	164.6

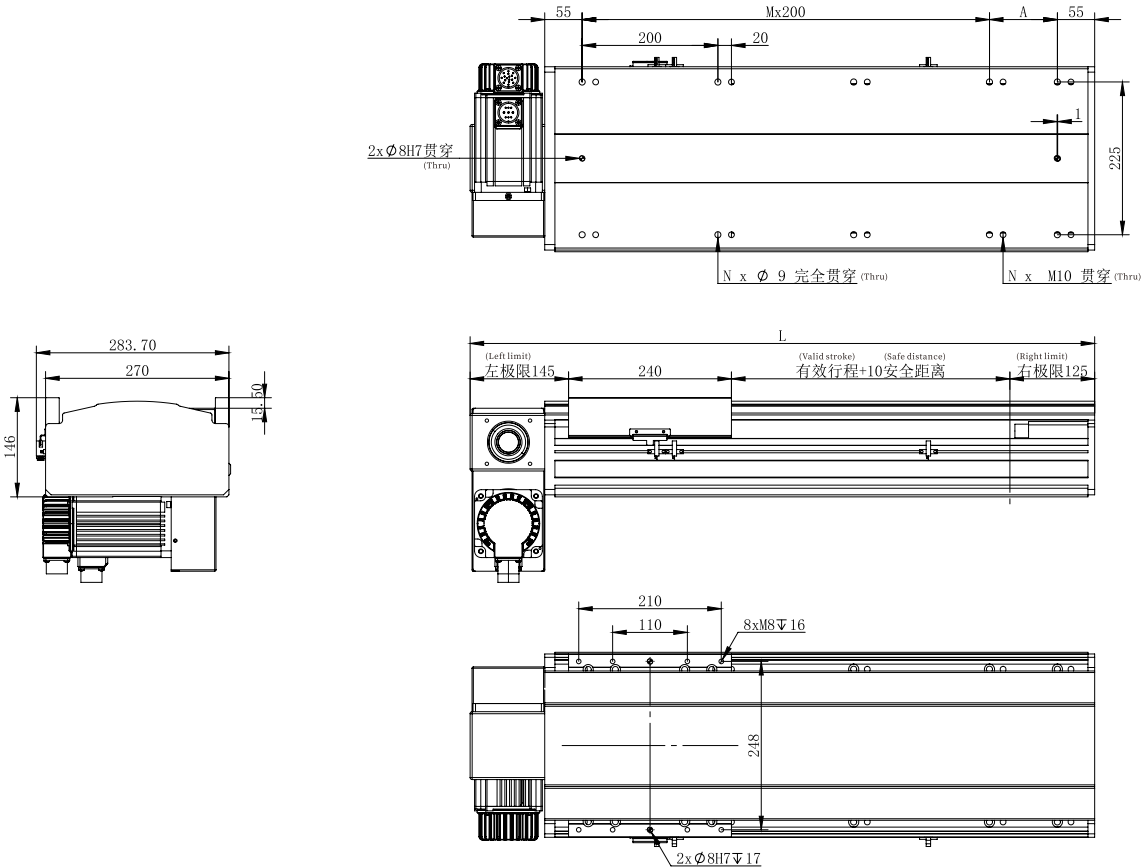
如有超长行程及定制需求, 请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.



电机外置左下/电机外置左上
Motor external lower left /Motor external upper left

LP 电机外置左下 Motor external lower left

单位:Unit: mm



*不含电机重量。*Motor weight not included.

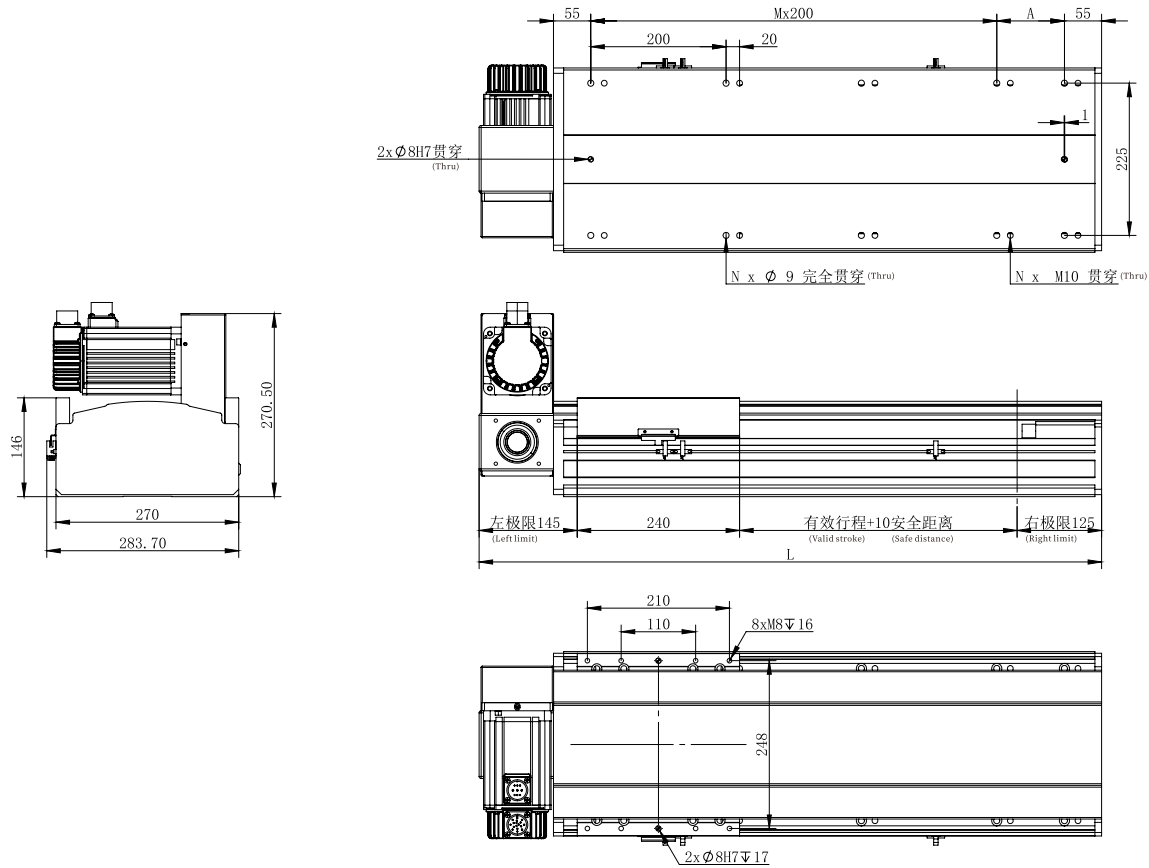
有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
L	570	620	670	720	770	820	870	920	970	1020	1070	1120	1170	1220	1270	1320	1370	1420	1470	1520	1570	1620	1670	1720	1770	1820	1870	1920	1970	2020	2070
A	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50
M	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8	8	9
N	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20	20	22
KG	32.6	34.8	37	39.2	41.4	43.6	45.8	48	50.2	52.4	54.6	56.8	59	61.2	63.4	65.6	67.8	70	72.2	74.4	76.6	78.8	81	83.2	85.4	87.6	89.8	92	94.2	96.4	98.6

有效行程 Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	2120	2170	2220	2270	2320	2370	2420	2470	2520	2570	2620	2670	2720	2770	2820	2870	2920	2970	3020	3070	3120	3170	3220	3270	3320	3370	3420	3470	3520	3570
A	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	16	16	16
N	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	36	36	36
KG	100.8	103	105.2	107.4	109.6	111.8	114	116.2	118.4	120.6	122.8	125	127.2	129.4	131.6	133.8	136	138.2	140.4	142.6	144.8	147	149.2	151.4	153.6	155.8	158	160.2	162.4	164.6

如有超长行程及定制需求,请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.

LU 电机外置左上 Motor external upper left

单位:Unit: mm



*不含电机重量。*Motor weight not included.

有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
L	570	620	670	720	770	820	870	920	970	1020	1070	1120	1170	1220	1270	1320	1370	1420	1470	1520	1570	1620	1670	1720	1770	1820	1870	1920	1970	2020	2070
A	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50
M	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8	8	9
N	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20	20	22
KG	32.6	34.8	37	39.2	41.4	43.6	45.8	48	50.2	52.4	54.6	56.8	59	61.2	63.4	65.6	67.8	70	72.2	74.4	76.6	78.8	81	83.2	85.4	87.6	89.8	92	94.2	96.4	98.6

有效行程 Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	2120	2170	2220	2270	2320	2370	2420	2470	2520	2570	2620	2670	2720	2770	2820	2870	2920	2970	3020	3070	3120	3170	3220	3270	3320	3370	3420	3470	3520	3570
A	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	16	16	16
N	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	36	36	36
KG	100.8	103	105.2	107.4	109.6	111.8	114	116.2	118.4	120.6	122.8	125	127.2	129.4	131.6	133.8	136	138.2	140.4	142.6	144.8	147	149.2	151.4	153.6	155.8	158	160.2	162.4	164.6

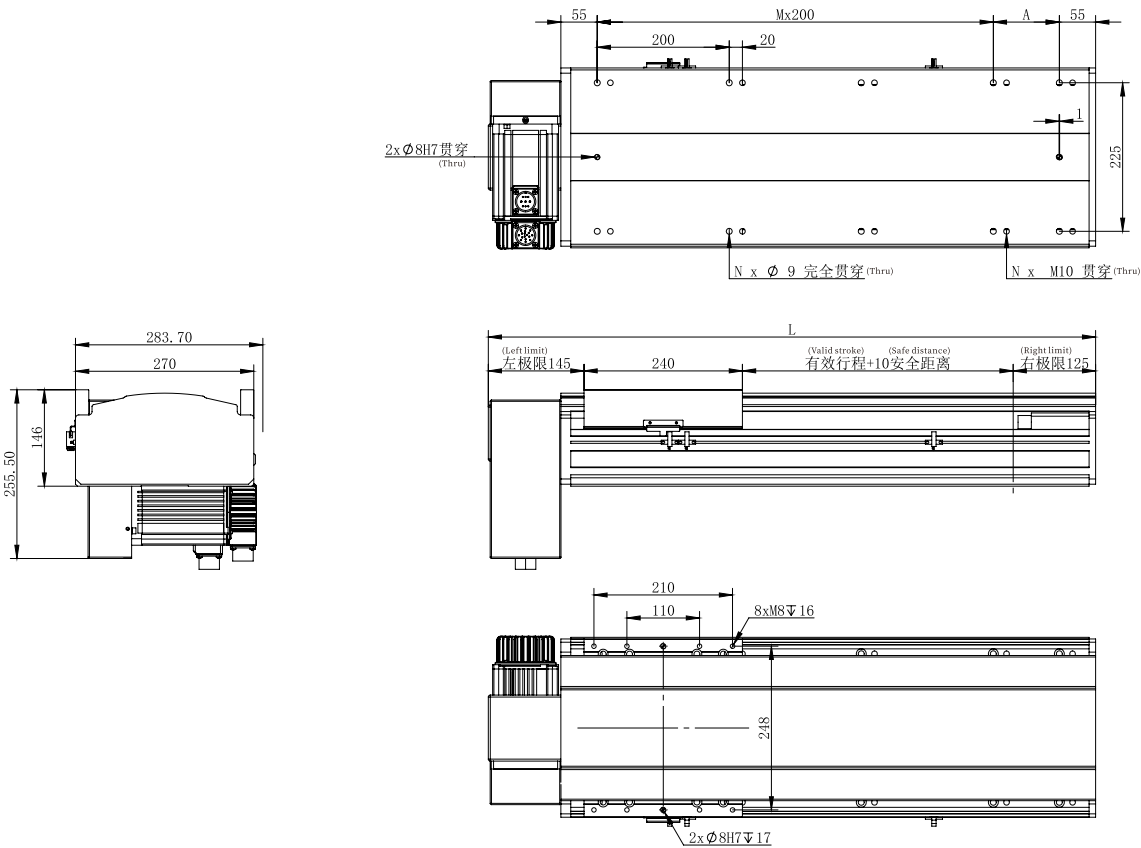
如有超长行程及定制需求,请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.



电机外置右下/电机外置右上
Motor external lower right / Motor external upper right

RP 电机外置右下 Motor external lower right

单位:Unit: mm



*不含电机重量。*Motor weight not included.

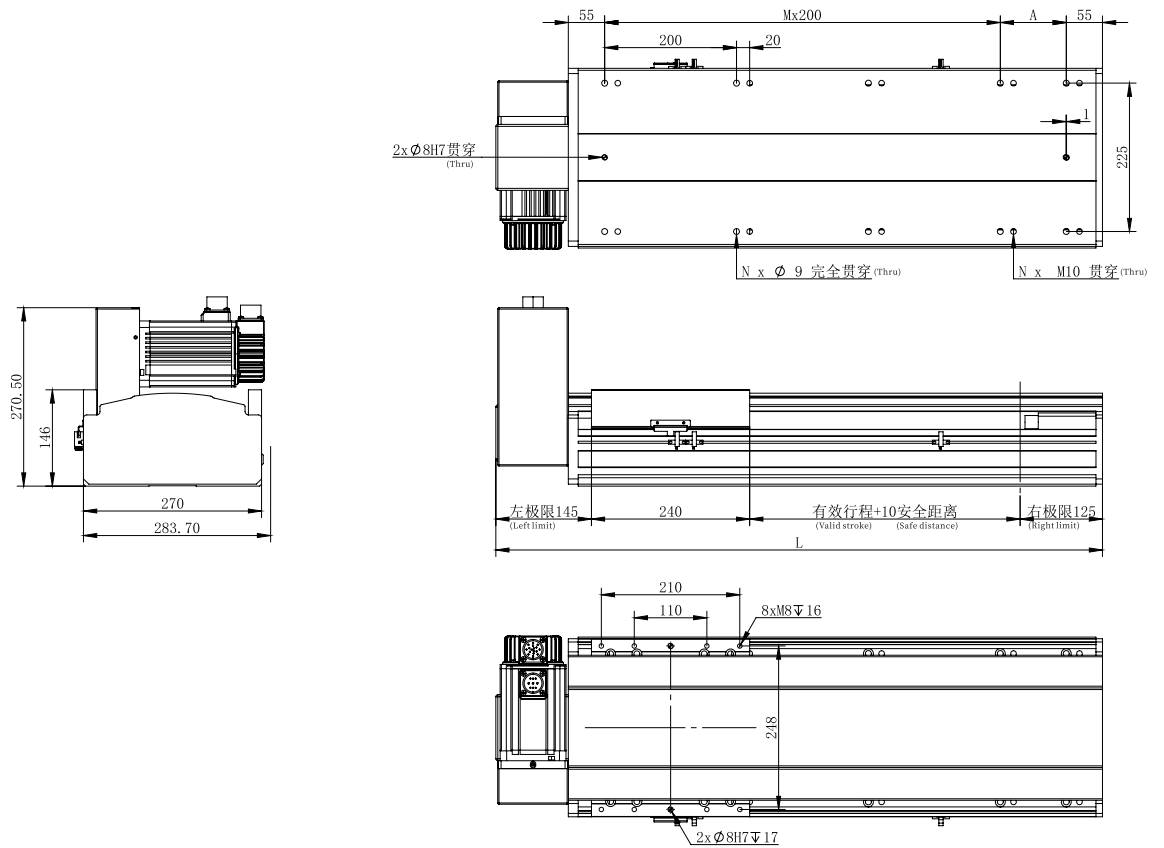
有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
L	570	620	670	720	770	820	870	920	970	1020	1070	1120	1170	1220	1270	1320	1370	1420	1470	1520	1570	1620	1670	1720	1770	1820	1870	1920	1970	2020	2070
A	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50
M	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8	8	9
N	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20	20	22
KG	32.6	34.8	37	39.2	41.4	43.6	45.8	48	50.2	52.4	54.6	56.8	59	61.2	63.4	65.6	67.8	70	72.2	74.4	76.6	78.8	81	83.2	85.4	87.6	89.8	92	94.2	96.4	98.6

有效行程 Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	2120	2170	2220	2270	2320	2370	2420	2470	2520	2570	2620	2670	2720	2770	2820	2870	2920	2970	3020	3070	3120	3170	3220	3270	3320	3370	3420	3470	3520	3570
A	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	16	16	16
N	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	36	36	36
KG	100.8	103	105.2	107.4	109.6	111.8	114	116.2	118.4	120.6	122.8	125	127.2	129.4	131.6	133.8	136	138.2	140.4	142.6	144.8	147	149.2	151.4	153.6	155.8	158	160.2	162.4	164.6

如有超长行程及定制需求, 请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.

RU 电机外置右上 Motor external upper right

单位:Unit: mm



*不含电机重量。*Motor weight not included.

有效行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
L	570	620	670	720	770	820	870	920	970	1020	1070	1120	1170	1220	1270	1320	1370	1420	1470	1520	1570	1620	1670	1720	1770	1820	1870	1920	1970	2020	2070
A	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50
M	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8	8	9
N	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20	20	22
KG	32.6	34.8	37	39.2	41.4	43.6	45.8	48	50.2	52.4	54.6	56.8	59	61.2	63.4	65.6	67.8	70	72.2	74.4	76.6	78.8	81	83.2	85.4	87.6	89.8	92	94.2	96.4	98.6

有效行程 Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	2120	2170	2220	2270	2320	2370	2420	2470	2520	2570	2620	2670	2720	2770	2820	2870	2920	2970	3020	3070	3120	3170	3220	3270	3320	3370	3420	3470	3520	3570
A	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	16	16	16
N	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	36	36	36
KG	100.8	103	105.2	107.4	109.6	111.8	114	116.2	118.4	120.6	122.8	125	127.2	129.4	131.6	133.8	136	138.2	140.4	142.6	144.8	147	149.2	151.4	153.6	155.8	158	160.2	162.4	164.6

如有超长行程及定制需求, 请咨询我司业务。If you have extra long trip and custom requirements, please consult our business.



减速机

Reducer

当使用上有低转速的运转需求时,则可使用减速机来降低马达回转速度,且可避免低速时不稳定运转。此外减速机能提高输出扭矩,扭矩输出比例按马达输出乘减速比,选配上需要注意不能超出减速机额定扭矩。

When there is a need for low-speed operation, a reducer can be used to reduce the rotation speed of the motor, and unstable operation at low speed can be avoided. In addition, the reducer can improve the output torque, torque The output ratio is multiplied by the reduction ratio according to the motor output, and attention should be paid in the selection not to exceed the rated torque of the reducer.

减速范例:3000rpm的马达,搭配上减速比1:5的减速机,即3000/5=600rpm=10rps。

其速度为:(导程X转速)200X10=2000MM/S。

Example of deceleration: 3000rpm motor, matched with reducer with 1: 5 upper reduction ratio, that is, 3000/5 = 600 rpm = 10 RPS.
Its speed is: (lead x rotation speed) 200x10 = 2000MM/s.

※减速机会有高温产生,如果接触将有可能造成人员烫伤。所以接触检查等情况时,请切断控制器电源,静待片刻并在确认温度下降之后再行接触。如果有任何减速机搭配上的疑问,请与本公司联系。

※There is high temperature in the deceleration opportunity, and it may cause scalding if contacted. Therefore, please cut off the power supply of the controller and be quiet during contact inspection. Wait for a moment and make contact after confirming the temperature drop. If you have any questions about the matching of reducers, please contact our company.



减速机参考资料 Reducer reference

厂牌Brand	型号Model
APEX	AB060
	AB090
TWPX	PS060
	PS090
CST	RH060
	RH092
PHT	DS060
GTC	GNP60

滑台选配时可应使用需求,选择加装减速机,上列附表为减速机厂牌以及型号;而其详细规格尺寸信息,请参阅各厂牌规格。

When selecting the sliding table, you can choose to install the reducer according to the use requirements. The attached table above shows the brand and model of the reducer. And its detailed specification and size information, Please refer to the specifications of each brand.

伺服电机计算 Calculations about servo motors

A-电机扭矩计算公式: A- motor torque calculation formula:

$$T=9.5 \times P / N$$

T=电机扭矩 T = motor torque

P=电机功率 P = motor power

N=电机转速 N = motor speed

B-螺杆推力计算公式: B- Screw thrust calculation formula:

$$F=T_m \times 2 \times \pi \times \eta / S$$

F=螺杆推力 F=Ball screw thrust

T_m=入力扭矩 T_m=Force torque

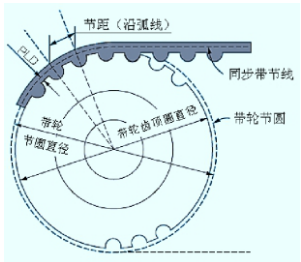
η=马达正效率 η=Positive efficiency of motor

S=螺杆导程 S=Lead of ball screw

C-皮带轮导程计算公式: B- pulley lead calculation formula:

节圆直径PD=节距×齿数/π

Pitch diameter PD= pitch × number of teeth/π



滚珠螺杆精度等级

Accuracy grade of ball screw

滚珠螺杆(示意图)

Ball screw(schematic diagram)



滚珠螺杆国际标准精度等级(单位:0.001mm)
International standard accuracy grade of ball screw

等级Class		研磨级Grinding grade							转造级Rolling grade		
		C0	C1	C2	C3	C4	C5	C6	C7	C8	C10
V300	ISO, DIN	—	6	—	12	—	23	—	52	—	210
	TBI/PMI	3. 5	5	—	8	—	18	—	50	—	210
	HIWIN	3. 5	5	6	8	12	18	23	50	100	210

螺杆外径、精度与制造长度对照表(单位:mm)
Diameter, accuracy and manufacturing length of ball serew

精度等级 Accuracy	外径Diameter								
	6	8	10	12	16	20	25	28	32
C3	170	250	500	630	1000	1400	1800	2000	2500
C4	170	250	500	630	1000	1400	1800	2000	2500
C5	170	250	500	630	1410	1700	2400	2500	3000
C6	400	800	1000	1200	1500	1800	2500	3000	3000
C7	400	800	1000	1200	3000	3000	4000	4000	4500

精度等级 Accuracy	外径Diameter								
	36	40	45	50	55	63	70	80	100
C3	3200	3500	4000	4500	5000	6000	7100	10000	10000
C4	3200	3500	4000	4500	5000	6000	7100	10000	10000
C5	3200	3800	4000	5000	5500	6900	7100	10000	10000
C6	4000	4000	4000	5600	5600	6900	7100	10000	10000
C7	4500	5600	5600	5600	5600	6900	7100	10000	10000

- 选配螺杆型滑台时,可应实际使用需求选配螺杆等级,下表为螺杆等级使用推荐表

When selecting the screw slide table, the screw grade can be selected according to the actual use requirements. The following table is the recommendation table for the use of screw grade.

用途Use	精密等级Accuracy	
	C5	C7
专用机Special machine	●	
木工机Woodworking machine		●
机械手臂(一般级) Robot Arm(General Grade)	●	●
传统机械Traditional machinery	●	
搬送装置Transport device	●	●
X-Y平台 X-Y stage	●	
阀门Valve		●
动力转向器Power steering gear		●
玻璃研磨机Glass grinder	●	
表面研磨机Surface grinder	●	
半导体设备Semiconductor equipment		●
全电式射出成形机 All electric injection molding	●	●



联轴器

Coupling

膜片联轴器安装注意说明 Notes on Installation of Diaphragm Coupling

锁付螺丝时有相对应之锁固力，请参阅下表，切勿过度施力或是未锁紧。
locking force when locking screws, please refer to the following table, do not overexert or unlocked.

在夹紧螺丝处于松动状态下，请确认连轴器是否能沿轴向和旋转方向轻轻移动。如果不能平稳移动的话，需重新调整两个轴的同心度（马达锁固螺丝）。

When the clamping screw is loose, please confirm whether the coupling can move slightly in the axial and rotational directions. If you can't move smoothly, you need to readjust two. Concentricity of shaft (motor locking screw).

两个轴的同心度若差异太大时，将产生异音或是造成连轴器损坏。
If the concentricity of the 2 axes is too large, it will cause abnormal sound or cause damage to the coupling.

若自行购买马达安装，安装联轴器时需特别注意下列几点：
◆ 锁付螺丝时相对应之锁固力，请参阅右表，切勿过度施力或是未锁紧。
◆ 在夹紧螺丝虽处于松动状态下，请确认连轴器是否能沿轴向和旋转方向轻轻移动。如果不能平稳移动的话，需重新调整2个轴的同心度（马达锁固螺丝）。
◆ 2个轴的同心度若差异太大时，将产生异音或是造成连轴器损坏。

※调整2个轴的对心若有问题时，请与本公司联络。

If you purchase the motor for installation by yourself, pay special attention to the following points when installing the coupling:
◆ Please refer to the right table for the corresponding locking force when locking screws. Do not apply excessive force or unlock them.
◆ Although the clamping screw is loose, please confirm whether the coupling can be light in the axial and rotational directions. Move lightly. If it can't move smoothly, it is necessary to readjust the concentricity of the two shafts (motor locking screws).
◆ If the concentricity of two shafts is too different, abnormal sound will be produced or the coupling will be damaged.

※If there is any problem in adjusting the alignment of two axes, please contact our company.

夹紧螺栓 The clamping bolt	锁紧扭矩 Locking torque (N·m)
M2. 5	1. 0~1. 1
M2. 5	1. 0~1. 1
M3	1. 5~1. 9
M4	3. 4~4. 1
M4	3. 4~4. 1
M5	7. 0~8. 5

联轴器参考资料 Reference data of coupling

型号 Model	容许扭矩 Permissible torque [N·m]	最大容许误差 Maximum permissible error			最高转速 Max speed [min ⁻¹]	扭转弹性 Torsional elasticity [N·m/rad]	轴向弹性 Axial elasticity [N·m/rad]	转动惯量 Moment of inertia [kg·m ²]	质量 Weight [kg]
		偏心 Eccentricity [mm]	偏角 Declination [°]	轴向位移 Axial displacement [mm]					
SFC-005SA2	0. 5	0. 02	0. 5	±0. 05	10000	500	140	0. 25x10 ⁻⁶	0. 007
SFC-010SA2	0. 8	0. 02	1	±0. 1	10000	1400	140	0. 58x10 ⁻⁶	0. 011
SFC-020SA2	1. 5	0. 02	1	±0. 15	10000	3700	64	2. 36x10 ⁻⁶	0. 025
SFC-030SA2	4	0. 02	1	±0. 2	10000	8000	64	4. 00x10 ⁻⁶	0. 033
								6. 06x10 ⁻⁶	0. 041
								8. 12x10 ⁻⁶	0. 049
SFC-035SA2	6	0. 02	1	±0. 25	10000	18000	112	18. 43x10 ⁻⁶	0. 084
SFC-040SA2	10	0. 02	1	±0. 3	10000	20000	80	16. 42x10 ⁻⁶	0. 076
								22. 98x10 ⁻⁶	0. 09
								29. 53x10 ⁻⁶	0. 105
SFC-050SA2	25	0. 02	1	±0. 4	10000	32000	48	54. 88x10 ⁻⁶	0. 156
								77. 10x10 ⁻⁶	0. 185
								99. 33x10 ⁻⁶	0. 214
SFC-060SA2	60	0. 02	1	±0. 45	10000	70000	76. 4	143. 7x10 ⁻⁶	0. 279
								206. 1x10 ⁻⁶	0. 337
								268. 5x10 ⁻⁶	0. 396
SFC-080SA2	100	0. 02	1	±0. 55	10000	140000	128	709. 3x10 ⁻⁶	0. 727
SFC-090SA2	180	0. 02	1	±0. 65	10000	100000	108	1227x10 ⁻⁶	0. 959
SFC-100SA2	250	0. 02	1	±0. 74	10000	120000	111	1858x10 ⁻⁶	1. 181

※表中的转动惯量及质量是最大孔径时之值；表中的扭转弹性常数仅为元件部分之值。
※The moment of inertia and mass in the table are the values at the maximum aperture; The values of torsional elasticity constants in the table are only the values of components.

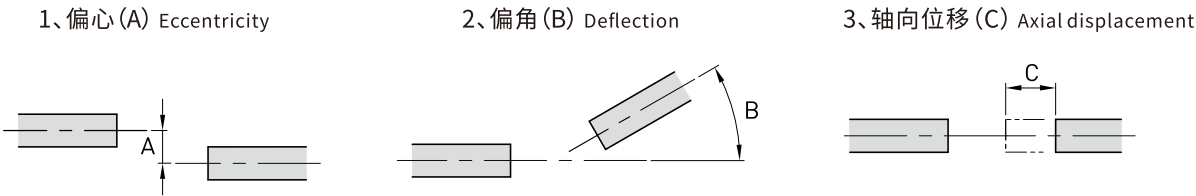
图1 Figure 1

图2 Figure 2

尺寸 Size	夹紧螺栓 Clamping bolt	锁紧扭矩 Locking torque (N·m)
20	M2. 5	1. 0~1. 1
25	M2. 5	1. 0~1. 1
30	M3	1. 5~1. 9
35	M4	3. 4~4. 1
40	M4	3. 4~4. 1
50	M5	7. 0~8. 5

如图1、2先套上联轴器，用手先转动，检测同心度，然后按照左图扭力锁紧螺丝。
As shown in figure 1、2,first put on the coupling, turn it by hand to detect the concentricity,and then lock the screw according to the torsional force in the left figure.

螺杆肩部与电机轴两轴组装时，需注意以下三种基本偏差，说明图示如下：
When assembling the screw and the motor shaft, the following three basic deviation should be paid attention to. The illustration is as follows:





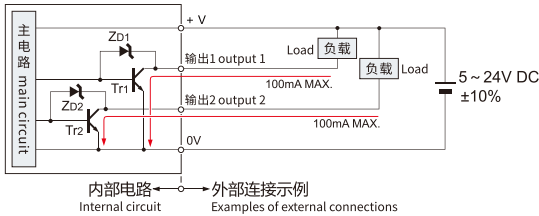
光电感应器接线说明

Wiring instructions of photoelectric sensor

直流4线式NPN输出 DC 4 wire NPN output

输入、输出电路

Input and output circuits

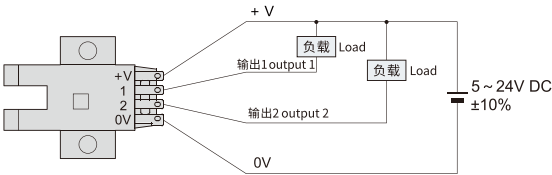


(注1): 对不使用的输出线, 请务必进行绝缘处理。
(Note 1): The unused output lines must be insulated.

符号... ZD1, ZD2: 电涌吸收齐纳二极管 Surge absorption zener diode
Symbol... Tr1, Tr2: NPN输出晶体管 NPN output transistor

连接图

Connected graph



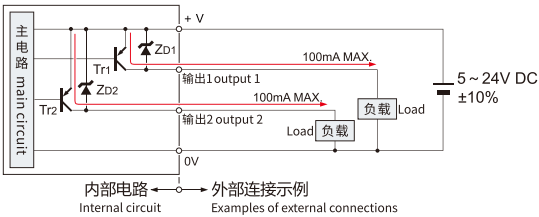
输出动作 Output action

	输出动作 Output action
输出1 output 1	遮光时ON Shading time ON
输出2 output 2	入光时ON Incident light ON

直流4线式PNP输出 DC 4 wire PNP output

输入、输出电路

Input and output circuits

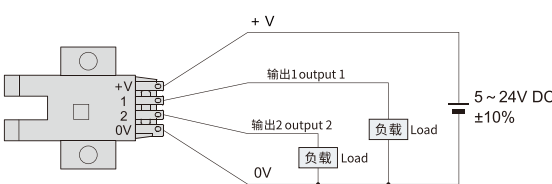


(注1): 对不使用的输出线, 请务必进行绝缘处理。
(Note 1): The unused output lines must be insulated.

符号... ZD1, ZD2: 电涌吸收齐纳二极管 Surge absorption zener diode
Symbol... Tr1, Tr2: PNP输出晶体管 PNP output transistor

连接图

Connected graph



输出动作 Output action

	输出动作 Output action
输出1 output 1	遮光时ON Shading time ON
输出2 output 2	入光时ON Incident light ON

使用安全注意事项

Safety use and cautions

◆ 以下为几条建议以防产品使用过程中产生问题。
Here are a few Suggestions to prevent problems during product use.

为防止事故发生及安全维护, 请使用本公司产品前, 必须了解产品的特性和使用条件、安装说明。

In order to prevent accidents and safety maintenance, before you use the company's product, you must understand the characteristics of the products and use conditions, installation instructions.

请在选型的参数范围内使用本型号的产品, 不可超出参数范围使用, 否则会造成不可预知的危险。如果是特殊条件使用, 必须确认在可控安全性能之内, 方能使用, 对产品参数如有疑问, 在未使用之前, 可咨询本公司相关技术。

Please use the product of this model within the selected parameter range, and do not use it beyond the parameter range, otherwise it will cause unpredictable danger. If it is used under special conditions, it must be confirmed that it is within the controllable safety performance before it can be used. If you have any questions about the product parameters, you can consult the relevant technology of our company before you use it.

请勿私自拆卸本产品结构, 功能做分解及改造, 如因人为造成的一切原因, 本公司不负责产品故障造成的损失。

Please do not disassemble the structure and function of this product without permission, and decompose and transform it. For all reasons caused by man-made, our company will not be responsible for the loss caused by product failure.

请注意: 当产品为垂直安装的时候, 请注意拆卸马达时, 滑座物件是否会自行下降, 建议拆卸的时候将滑座物件下降到最低端再拆卸。

Please note: When the product is installed vertically, please pay attention to whether the slide object will drop by itself when the motor is disassembled. It is recommended to remove the slide object. Lower to the lowest end before disassembly.

产品运行前, 先检查电缆线端子是否接触良好, 否则会导致电机发热发烫, 运行不畅。

Before running the product, check whether the cable terminals are in good contact or not, otherwise the motor will become hot and run poorly.

调试马达参数的时候需要考虑到惯性及加减速等原因, 先手动控制, 来回点动, 防止调试不适当, 撞坏物件。不允许手及其它物体接触, 保持一定安全距离, 防止造成误伤。

When debugging the parameters of the motor, we need to consider the reasons of inertia, acceleration and deceleration. We should control the motor manually and move it back and forth to prevent the inappropriate debugging and damage the object. It is not allowed to contact hands and other objects to maintain a safe distance and prevent accidental injury.

当选用螺杆传动产品的时候, 如超出螺杆细长比参数, 可能会发生共振现象, 此时应降低移动速度。如选用皮带传动产品的时候, 如电机报警, 产品运行不动, 此时因加减速机, 调节电机刚性, 加大扭矩, 从而平稳运行。

When the screw drive product is selected, if the slenderness ratio parameter of the screw exceeds, resonance may occur, so the moving speed should be reduced. Choose a belt. When the product is driven, such as the motor alarm, the product will not move. At this time, the reducer is added to adjust the rigidity of the motor and increase the torque, so as to run smoothly.

安装本产品时, 请务必确认所有的螺丝均已按要求锁紧, 否则产品运行时可能会发生危险。

When installing this product, please make sure that all screws are locked as required, otherwise the product may be in danger during operation.

请不要在接通电源的情况下进行产品拆装或零部件拆装, 否则可能发生触电、故障或其它危险。

Please do not disassemble the product or parts when the power is turned on, otherwise electric shock, malfunction or other dangers may occur.

禁止撕除警告标示, 或者警告标示被其它物品遮挡, 否则可能因为没有看到警告而导致事故发生。

It is forbidden to tear off the warning signs, or the warning signs are blocked by other objects, otherwise the accident may occur because you don't see the warning.

本注意事项无法完全涵盖所有的问题, 请务必详细了解产品及其使用说明, 并遵守相关安全守则, 做好必要保护措施, 以免造成产品损坏或导致人身安全问题。如有其它相关问题, 可咨询本公司。

This note can not cover all the problems. Please be sure to understand the product and its instructions in detail. comply with relevant safety codes, and take necessary protective measures to avoid product damage or personal safety problems. If you have any other related questions, you can consult us.

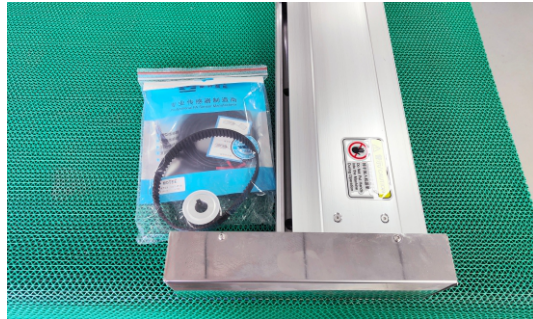


同步带轮的安装方法

Installation of timing pulley and motor

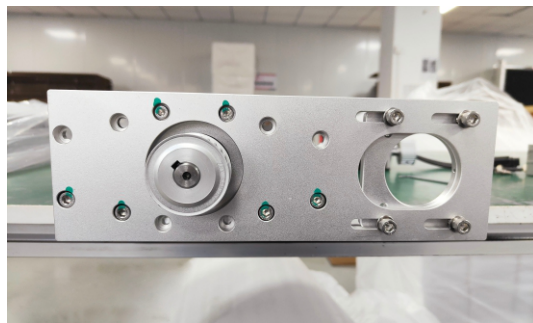
1、下图为螺杆模组的转折形式：成品模组+同步轮+同步带+槽型光电（同步带形式模组安装方法一致，可参考本文）。

1、The following figure shows the turning form of screw module: finished module+synchronous wheel+synchronous belt+groove photoelectric (the installation method of synchronous belt module is the same, please refer to this article).



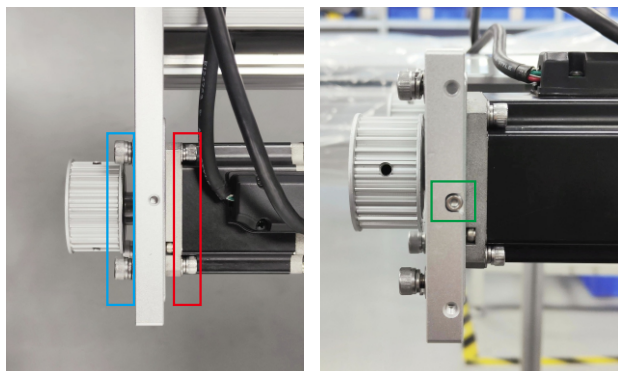
2、拆卸固定钣金螺丝后，即可看到丝杆端同步轮我厂已安装好。只需要客户安装电机/减速机端的同步轮。

2、After removing the screws fixing the sheet metal, we can see that the screw end synchronous wheel has been installed in our factory. Only the customer needs to install the synchronous wheel at the motor/reducer end.



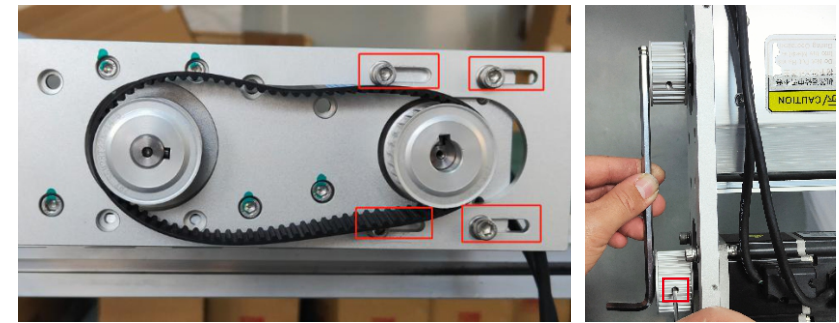
3、安装电机（一般电机包装内有螺丝提供），并锁紧固定电机的4颗螺丝（红色区域）之后拧松固定拉板的固定螺丝（蓝色和绿色区域）。

3、Install the motor (screws are provided in the general motor package), and after locking the four screws (red areas) that fix the motor, loosen the fixing screws (blue and green areas) that fix the pull plate.



4、因拧松固定拉板的螺丝。电机端同步轮可左右来回活动。借助6MM六角扳手（不限于扳手）。

4、Loosen the screw fixing the pull plate. The synchronous wheel at the motor end can move back and forth left and right. With the help of a 6MM hex wrench (not limited to wrenches).



5、固定同步轮上紧固螺丝（一般情况下2个）。蓝色区域M3螺丝锁紧，红色区域螺丝会向右侧移动。蓝色区域张紧中，可用手感受同步带的张紧，也可使用专业设备测试张紧。最后在安装钣金折罩，固定螺丝即可。

5、Fastening screws on the synchronizing wheel (usually 2). The blue area M3 screw is locked, and the red area screw will move to the right. In the blue area, feel is available. When the timing belt is tensioned, you can also use professional equipment to test the tension. Finally, install the sheet metal folding cover and fix the screws.

