

TPA[®]
玖钧传动
Motion Control

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Motion Control

2023

3

BUILT-IN RAIL LINEAR ACTUATOR
内嵌式模组

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

全球运营中心: Global operation center:
地址: 上海市松江区北松公路5239号
Address: No.5239 Beisong Highway, Songjiang District, Shanghai

华东制造基地: East China manufacturing base:
地址: 江苏省昆山市高新区莱斯路15号
Address: No.15 Laisi Road, High-tech Zone, Kunshan City, Jiangsu Province

华南制造基地: South China manufacturing base:
地址: 深圳市坪山区龙田街道竹坑社区翠景路43号
Address: No.43 Cuijing Road, Zhukeng Community, Longtian Street, Pingshan District, Shenzhen

北京办事处: Beijing office:
地址: 北京市亦庄经济开发区科创四街青英梦谷3号
Address: No.3 Jingying Menggu, Kechuang 4th Street, Yizhuang Economic Development Zone, Beijing

无锡办事处: Wuxi office:
地址: 无锡新吴区梅村镇花半里
Address: Huabanli, Meicun Town, Xinwu District, Wuxi

浙江办事处: Zhejiang office:
地址: 宁波市海曙区古林镇绿荷苑北
North of Lvheyuan, Gulin Town, Haishu District, Ningbo

华中办事处: Central China office:
地址: 武汉市东湖高新区关南园四路37号东港科技园
Address: Donggang Science Park, No.37 Guannanyuan 4th Road, Donghu High-tech Zone, Wuhan

东莞办事处: Dongguan office:
地址: 东莞市南城街道白马路天安数码城D1栋
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公司简介

COMPANY INTRO

TPA玖钧传动创立于2016年10月,隶属玖钧集团,总投资3亿元人民币,总部坐落在中国·上海,现有上海、深圳、苏州三大研发中心,华东和华南两大制造基地;总生产面积达20000余平方米,在职员工300人以上,拥有各类加工设备近200台。

注册商标TPA,寓意TPA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玖钧传动是一家专业研发、生产、销售、售后、服务为一体的国家高新技术企业、江苏省民营科技企业、江苏省级专精特新、昆山市专精特新。主要产品有:日规模组、欧规模组、内嵌式模组、电动缸、简易模组、钢基模组、直驱电机、高精度直线电机平台等。

TPA玖钧传动产品主要服务于3C、面板、激光、半导体、汽车、生物医药、光伏、锂电等工业生产及其他非标自动化设备;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 motion control was founded in October 2016, affiliated to JiuJun Group, with a total investment of 300 million yuan, headquartered in Shanghai, China, with three R&D centers in Shanghai, Shenzhen and Suzhou, and two manufacturing bases in East China and South China; The total production area is more than 20,000 square meters, with more than 300 employees and nearly 200 processing equipment of various types.

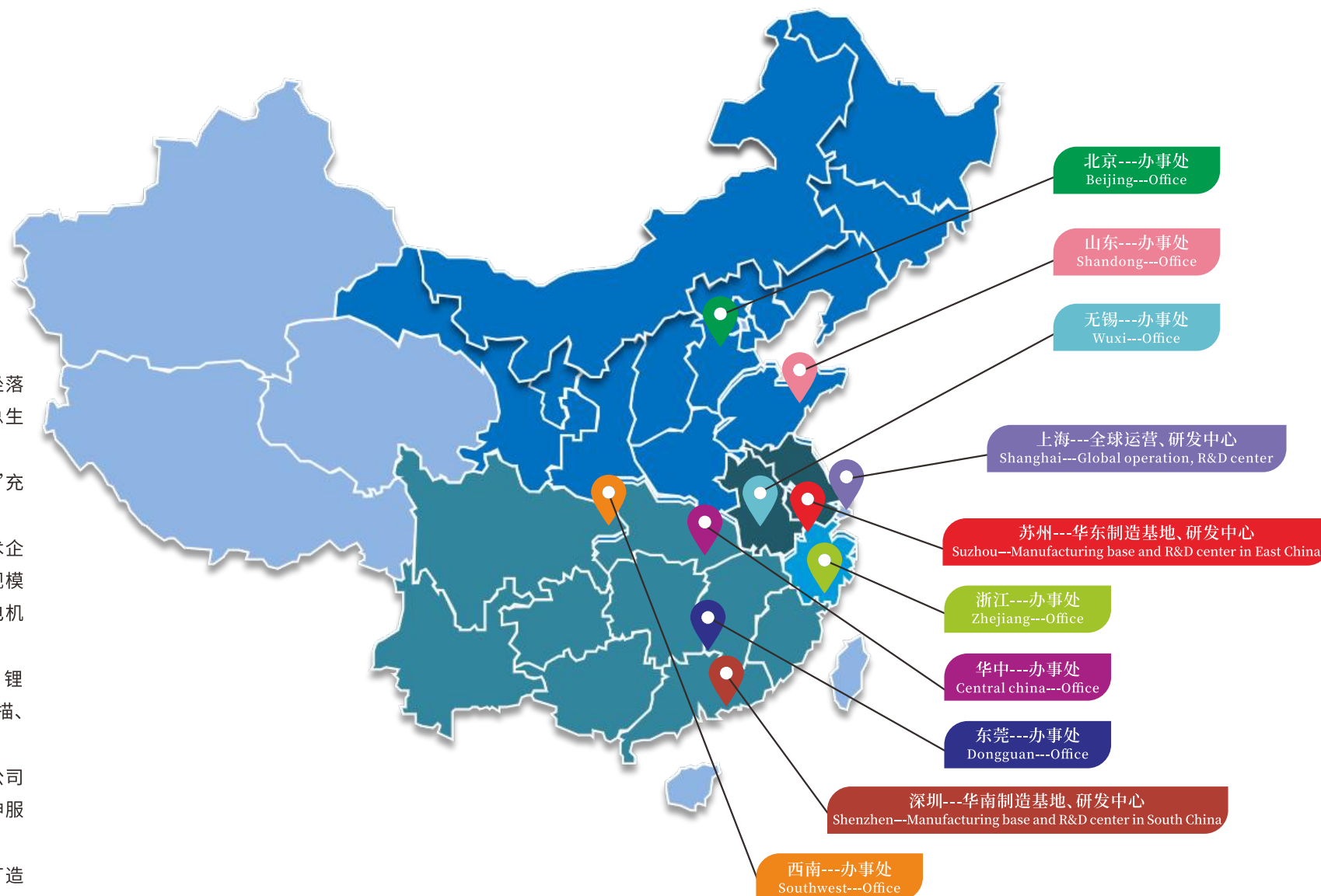
The trademark TPA means "Transfer" "Passion" and "Active", TPA motion control will always strive forward with high morale in the market.

TPA motion control is a national high-tech enterprise specializing in research and development, production, sales, after-sales and service, we are a private technology enterprise in Jiangsu Province, Jiangsu provincial-level specialization and Kunshan specialization. Our main products are: ball screw driven linear module, belt driven linear module, gear rack linear module, built-in rail linear module, high rigidity linear module, simple module, multi-axis, linear motor, direct drive motors, high-precision linear motor stage, etc.

TPA motion control products mainly serve 3C, panel, laser, semiconductor, automobile, biomedical, photovoltaic, lithium battery and other industrial production lines and some custom automation equipment; they are widely used in pick-and-place, handling, positioning, classification, scanning, testing, dispensing, soldering and other various operation, we supply modular products to meet the diversified application of customers.

TPA motion control will adhere to the corporate mission of "always provide high-quality services to partners, be responsible for the long-term, altruistic and win-win". We optimize products, continue to innovate, and always adhere to efficient operation, high-quality products, and the spirit of excellence to serve customers.

TPA motion control takes technology as the core, product as the basis, market as the orientation, and excellent service team to create a new industry benchmark of "TPA motion control-Intelligent Manufacturing and Prosperity".



公司使命 company mission

永远为伙伴提供最优质的服务,有责方远,利他共赢!

Always provide quality service to partners and have a sense of responsibility, to develop better and win together.



>> 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.

>> 服务与支持 Service & Support

- ◆ 方案选型建议 Scheme selection suggestion
依据客户现场使用构想为客户提供合理、经济、可行的工业机器人选型方案。为客户提供多轴组合机构设计。
Provide customers with reasonable, economical and feasible industrial robot selection scheme according to the customer's field use conception. Provide customers with multi-axis combined mechanism design.
- ◆ 技术参数计算 Technical parameter calculation
依据客户使用要求和条件, 为客户提供相关的工程技术参数计算。
According to customers' requirements and conditions, provide customers with relevant engineering and technical parameters calculation.
- ◆ 2D/3D/CAD 图档支持 2D/3D/CAD drawing file support
向客户提供全系列产品的2D/3D/CAD图档以及客制化产品的CAD数据, 节省客户设计和建模时间。
Provide customers with 2D/3D/CAD drawings and files of a full range of products and CAD data of customized products, saving customers time in design and modeling.
- ◆ 控制系统支持 Control system support
向客户提供多种控制系统解决方案, 控制系统具备优良的操控产品特征, 使用方便, 性能优越。
Provide customers with a variety of control system solutions. The control system has excellent control product features, easy to use and superior performance.
- ◆ 执行终端结构设计 Execute terminal structure design
依据客户使用目的为客户设计机械手终端执行单元和组件。
Design manipulator terminal execution units and components for customers according to their use purposes.
- ◆ 客制化产品设计与服务 Customized product design and service
具备为客户提供特殊定制化工业机器人应用产品的能力, 更能针对客户独特要求, 为客户量身定制自动化系统解决方案。
It has the ability to provide customers with special customized industrial robot application products, and can be tailored to customers' unique requirements. Automation solution.

>> 产品特色设计 Product features

- ◆ 最高速度 Max speed
最高速度可达3600mm/s。 The maximum speed can reach 3600mm/s.
- ◆ 最高精度 Max accuracy
重复定位精度±0.005mm。 The repeated positioning accuracy is ±0.005mm.
- ◆ 最大行程 Max stroke
滑台行程以50mm作为间隔, 螺杆最长至2000mm; 皮带最长至3000mm。
The travel of the sliding table is 50mm apart, and the longest screw is 2000mm; The longest belt is 3000mm.
- ◆ 高刚性 High rigidity
采用一体成型铝基型本体, 并设计分析出最佳刚性及重量比之完美搭配。
The aluminum-based body is integrally formed, and the perfect combination of the best rigidity and weight ratio is designed and analyzed.
- ◆ 扁平化 Low profile
滑台安装高度较其他滑台低, 更利于在机台上的配置。
The installation height of the slide table is lower than other slide tables, which is more conducive to the configuration on the machine.
- ◆ 多样式 Multiple styles
多样式的马达安装位置及滑台型式, 让机台设计上更加有选择性。
Multi-style motor installation positions and sliding table types make the machine design more selective.

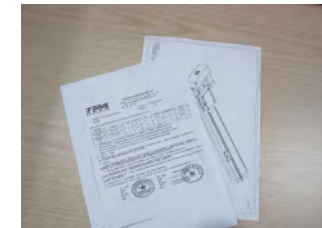
工厂图 Factory view



TPA模组生产流程 Production process



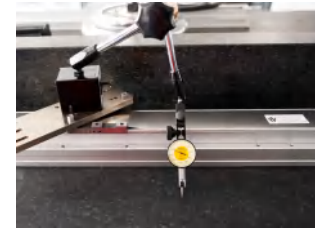
1. 按照客户需求设计定制图纸。
Design customized drawings according to customer requirements.



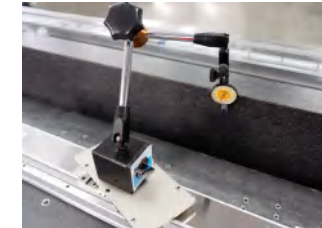
2. 订单确认, 客户回传合同及图纸。
Order confirmation. Customers return contracts and drawings.



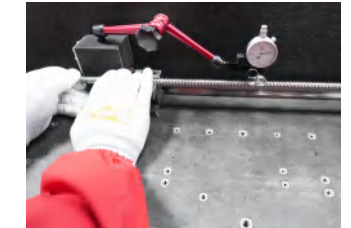
3. 按照图纸CNC生产加工。
CNC production and processing according to drawings



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



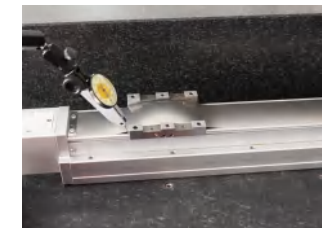
5. 检查底座平行度。
Check the parallelism of the base.



6. 检查螺杆全跳动。
Check the full run-out of the screw.



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

产品名称: _____ 合同号: _____
产品型号: _____ 订单号: _____

检验项目		检验结果		判定	
1	外观检查				
2	尺寸检查				
3	重量检查				
4	表面粗糙度				
5	硬度				
6	垂直度				
7	平行度				
8	全跳动				
9	重复定位精度				
10	运行噪音				

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

GCR内嵌式铝基模组 GCR Series Built-in Rail Aluminium-Based Linear Actuator

使用环境 Environment	传动方式 Driven mode	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	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)	标准行程及最高使用速度*2 Stroke(mm) & Maximum speed (mm/s)																	页数 Page
						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																	
											行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	
无尘环境 Clean room	滚珠螺杆 Ball screw	TPA-GCR-40	50W	44	±0.005	12	5	25	10	250																		009
							10	20	5	500																		
							20	12	2	1000																		
		100W	5	25	10	250																						
			10	20	8	500																						
			20	12	3.5	1000																						
	TPA-GCR-50	100W	54	±0.005	12	5	30	10	250																		017	
						10	15	5	500																			
						20	10	2.5	1000																			
	TPA-GCR-80	200W	82	±0.005	16	5	50	15	250																		021	
						10	30	8	500																			
						20	18	3	1000																			
TPA-GCR-120	400W	120	±0.005	16	5	110	33	250																		029		
					10	88	22	500																				
					20	40	10	1000																				
TPA-GCR-150	750W	150	±0.005	20	5	120	50	250																		033		
					10	120	40	500																				
					20	83	25	1000																				
							40	43	12	2000																		

内嵌式皮带模组 Built-in Rail Belt Driven Type 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	皮带规格(C7级) Belt specifications		最大可搬重量 Maximum Payload(kg)		最高速度*1 Maximum speed (mm/s)	标准行程及最高使用速度*2 Stroke(mm) & Maximum speed (mm/s)																	页数 Page
						皮带宽度 Belt width(mm)	导程 Lead(mm)	水平使用 Horizontal(kg)	垂直使用 Vertical(kg)		代表速度 Speed																	
											行程 Stroke	50	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	
无尘环境 Clean room	同步带 Synchronous belt	TPA-GCB-50	100W	54	±0.04	9	21	5	-	1050																		037
							42	5	-	2100																		
		TPA-GCB-80	200W	82	±0.04	15	24	15	-	1200																		043
							48	15	-	2400																		
		TPA-GCB-120	200W	120	±0.04	25	35	25	-	1750																		049
							70	25	-	3500																		
TPA-GCBS-50	100W	54	±0.04	9	42	5(双滑座)	-	2100																		055		
TPA-GCBS-80	200W	82	±0.04	15	48	15(双滑座)	-	2400																		061		

GCRS内嵌式对开模组 GCRS Series Built-in Rail Right/Left Sliders Ball Screw 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	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)	标准行程及最高使用速度*2 Stroke(mm) & Maximum speed (mm/s)																	页数 Page
						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																	
											行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	
无尘环境 Clean room	滚珠螺杆 Ball screw	TPA-GCRS-50	100W	52	±0.005	12	05	30	10	250																		067
		TPA-GCRS-80	200W	82	±0.005	16	10	30	10	500																		071

*1:最高速度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).

*2:标准行程内的黑色数字,代表该行程内可使用的最高安全速度。若超过此速度,滑台可能会有严重共振产生。
The black number in the standard trip represents the highest safe speed that can be used in the trip. If this speed is exceeded, the sliding table may have serious resonance.



内嵌式铝基模组内部结构图说明

Description of internal structure diagram of embedded aluminum-based linear actuator

滑座刚性强化 Carriage rigidity strengthening

本体与滑座一体成型,改善原始刚性较差问题。
It is integrally formed with the slide base to solve the problem of poor original rigidity.

滑座最优设计,无需塞装螺母,使得滚珠螺杆副机构和U型轨道副结构整合在一个滑座基座上:

- ①减少了配合间隙带来的精度误差;
- ②自主发明结构;
- ③高刚性的整体化结构设计;
- ④整体滑座重量更轻;

Optimal design of the slide base, no need to plug nuts, makes the ball screw pair mechanism and U-shaped rail The track pair structure is integrated on a slide base:

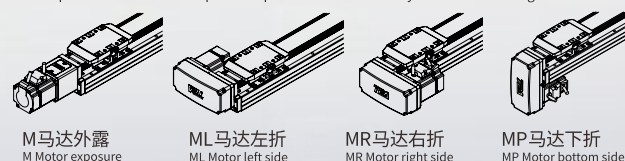
- ① reducing the precision error caused by fit clearance;
- ② Self-invented structure;
- ③ Integrated structural design with high rigidity;
- ④ The overall slider is lighter in weight;

体积更小 Smaller size

宽度缩小,让设备安装所需空间更小。
The width is reduced, so that the space required for equipment installation is smaller.

马达安装位置 Motor installation position

多方向马达安装位置可供选择,让机台设计更加方便。
Multiple motor installation position provides the flexibility for machine design.



马达品牌 Motor brand

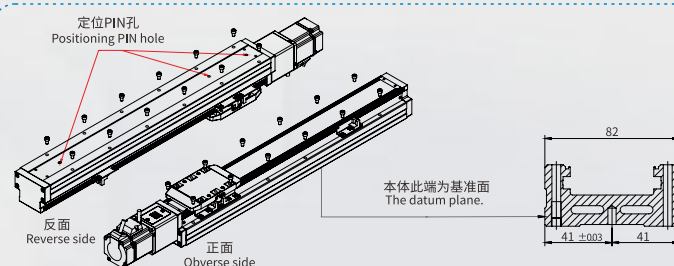
可搭配各品牌的伺服马达。 Can be matched with servo motors of various brands.

马达品牌 Motor brand		
三菱 Mitsubishi	松下 Panasonic	台达 Delta

其它马达品牌规格,请联系TPA业务人员。
For other motor brand specifications, please contact TPA business personnel.

组装,省时、方便 Easy assemble

- ①不需拆卸钢带,即可由上往下固定或由下往上固定。
 - ②本体侧面增加安装基准面承靠。
 - ③本体底部有定位PIN孔。
- ① It can be fixed from top to bottom or from bottom to top without removing the steel belt.
② Install datum bearing on the side of the body.
③ The bottom of the body is provided with a positioning PIN hole.



特性 Characteristics

- ①可定制行程。
 - ②高刚性。
 - ③安装维护方便。
 - ④体积小、重量轻。
 - ⑤高精度。
 - ⑥密封防尘性能佳。
- ① Can customize the trip. ② High rigidity. ③ Easy installation and maintenance.
④ Small size and light weight. ⑤ High precision. ⑥ Good sealing and dustproof performance.

应用领域 Application field

- ①FPD产业。
 - ②医疗自动化产业。
 - ③半导体。
 - ④精密测量仪器。
- ① FPD industry. ② Medical automation industry.
③ semiconductor. ④ Precision measuring instruments.

不易发尘 Reduce dust

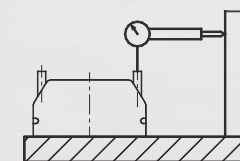
特殊钢带结构设计,可减少发尘;可用于洁净室环境。
Special steel strip cover sealing design can prevent dirt and foreign objects from penetrating inside. Can be used in Clean Room environment.

保养简单 Easy to maintain

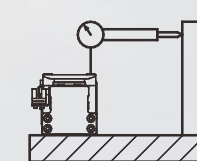
全系列两侧皆可外部注油,不需拆盖。
External greasing design, easy maintenance without removing the cover.

精度提升 Improve accuracy

因为采用铝本体结构,本体强度大幅增加,顺畅度更好。且钢材轨道嵌入铝本体后再研磨处理,因此行走的等高度及直线精度也提升到 $\pm 0.02\text{mm}$ 以下。
Because of the aluminum body structure, the body strength is greatly increased and the smoothness is better. And the steel track is embedded in the aluminum body, after grinding treatment, so the walking height and linear accuracy is also improved to $\pm 0.02\text{mm}$ or less.



普通开放式滑台直线度 $\pm 0.05\text{mm}$
*行走1000mm时。
The straightness of the common is $\pm 0.05\text{mm}$.
*Measure length is 1000mm.



GCR50直线度 $\pm 0.02\text{mm}$
*行走800mm时。
Straightness of GCR50 is $\pm 0.02\text{mm}$.
*Measure length is 800mm.



重复精度
Repeat Accuracy
±0.005 mm

此图仅供参考, 出货规格详见尺寸图面
This picture for reference only, specs details according with the drawing.

最大行程
Max Stroke **800mm**

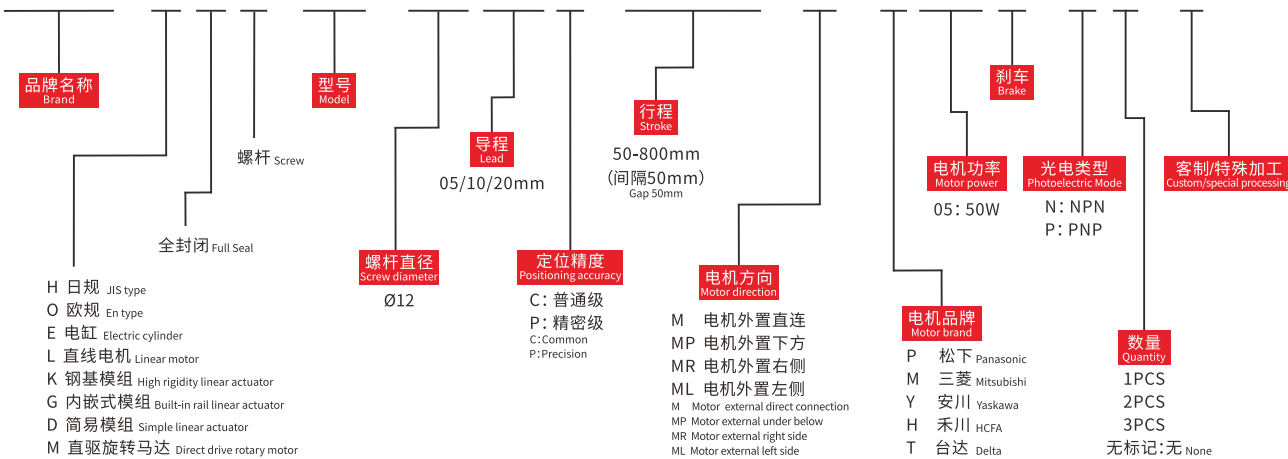
最高速度
Max Speed **1000mm/s**

马达容量
Motor Output **50W**

滚珠螺杆
Ball Screw **Ø12mm**

型号表达方式 Ordering method

TPA-GCR-40-1210C-L800-M-P05B-N3-F

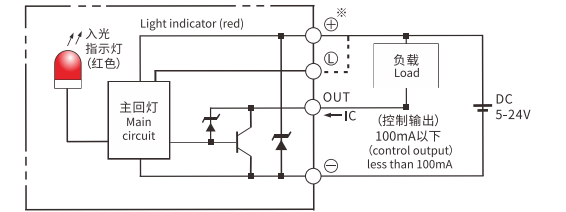


产品性能参数如下 Product performance parameters are as follows

规格 Spec	重复定位精度 (mm) Repeated positioning accuracy (mm)	±0.005			
	螺杆菌程 (mm) Ball screw lead (mm)	5	10	20	
	最高速度 (mm/s) ^{※2} Maximum speed (mm/s)	250	500	1000	
	最大可搬重量 Maximum Payload	水平使用 (kg) Horizontal (kg)	25	20	12
		垂直使用 (kg) Vertical (kg)	10	5	2
定规格力 (N) Rated thrust (N)	341 170 85				
部品 Parts	标准行程 (mm) Stroke pitch (mm) ^{※1}	50~800mm/50 间隔 50mm Pitch			
	AC伺服马达容量 (W) AC servo motor output (w)	50			
	滚珠螺杆外径 (mm) Ball screw Ø (mm)	C7Ø12			
	联轴器 (mm) Coupling (mm)	7X8			
	原点感应器 Original Sense	外挂 Outside	TPA-N674-WR		

※1 行程超过550mm时,会产生螺杆菌偏摆,此时请将速度调降。
※1 When the stroke exceeds 550mm, the screw deflection will occur. Please reduce the speed at this time.
※2 马达加减速设定0.2秒。
※2 Acceleration and deceleration value is set 0.2 second.

感应器连接图<原点及端点> Sensor layout



容许负载力矩表 N.m Allowable overhang

导程 Lead	水平安装 Horizontal installation				侧面安装 Side mounting				垂直安装 Vertical installation			
	A	B	C	导程 Lead	A	B	C	导程 Lead	A	B	C	
5	9.5kg	618	71	95	9.5kg	95	71	618	5kg	138	138	
10	19kg	418	31	45	19kg	43	31	399	7kg	105	105	
20	28kg	257	12	25	28kg	24	12	247	9.5kg	86	86	
5	4.5kg	570	138	185	4.5kg	171	138	570	0.9kg	760	760	
10	9.5kg	335	67	85	9.5kg	81	65	335	2.8kg	247	247	
20	14kg	238	40	52	14kg	50	40	226	4kg	147	147	
5	4.5kg	304	114	130	4.5kg	124	114	304	0.8kg	570	570	
10	7.5kg	209	67	80	7.5kg	71	67	209	1.5kg	285	285	
20	9.5kg	166	52	60	9.5kg	57	52	162	2kg	238	238	

静态容许负载惯量 Static loading moment

MY	MP	MR
79	79	116

*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.

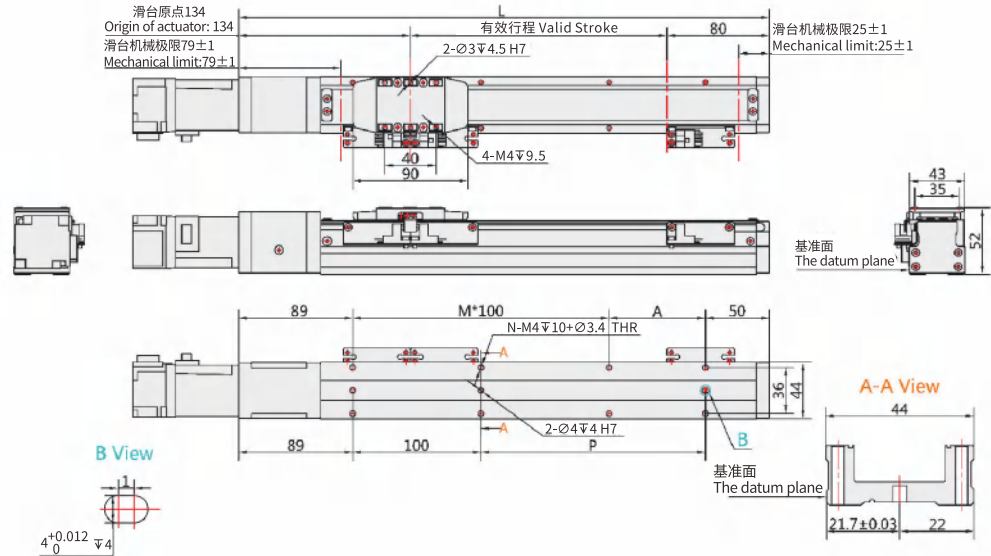
搭配伺服马达一览表 Suitable motor brand

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)	50	220	HG-KR053	MR-J4-10A
		有刹车(垂直式样) With brakes (vertical type)	50	220	HG-KR053B	MR-J4-10A
松下 Panasonic	P	无刹车(水平式样) No brake (horizontal type)	50	220	MHMD5A2G1U	MADHT1505
		有刹车(垂直式样) With brakes (vertical type)	50	220	MHMD5A2G1V	MADHT1505
台达 Delta	T	无刹车(水平式样) No brake (horizontal type)	50	220	ECMA-C1040FES	ASD-B20121-B
		有刹车(垂直式样) With brakes (vertical type)	50	220	ECMA-C1040FFS	ASD-B20121-B



电机外置直连/电机外置下方
Motor external direct connection/Motor external under below

M 电机外置直连 Motor external direct connection

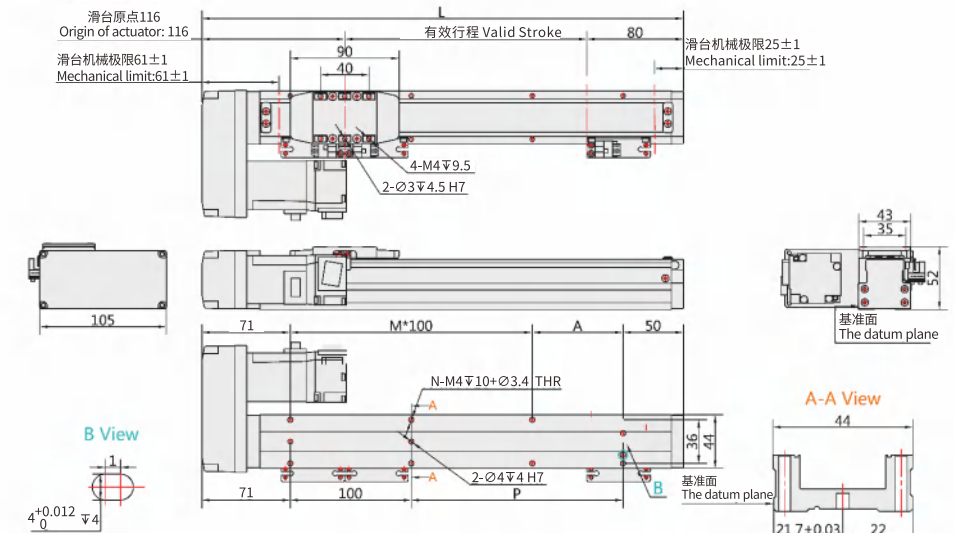


单位:Unit: mm

有效行程 Valid Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	264	314	364	414	464	514	564	614	664	714	764	814	864	914	964	1014
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.36	1.61	1.86	2.11	2.36	2.6	2.85	3.1	3.34	3.59	3.84	4.09	4.34	4.59	4.84	5.09

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

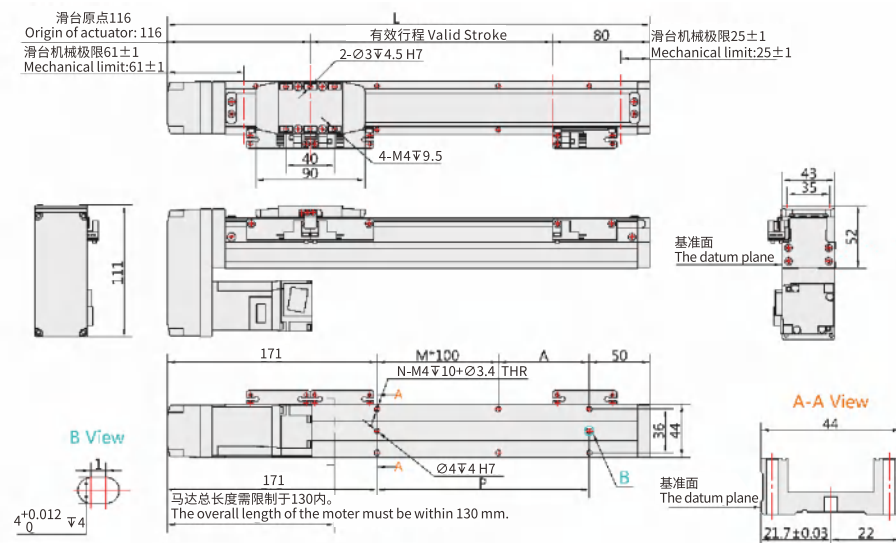
ML 电机外置左侧 Motor external left side



单位:Unit: mm

有效行程 Valid Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	246	296	346	396	446	496	546	596	646	696	746	796	846	896	946	996
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.66	1.91	2.16	2.4	2.65	2.9	3.14	3.39	3.64	3.89	4.14	4.39	4.64	4.89	5.14	5.39

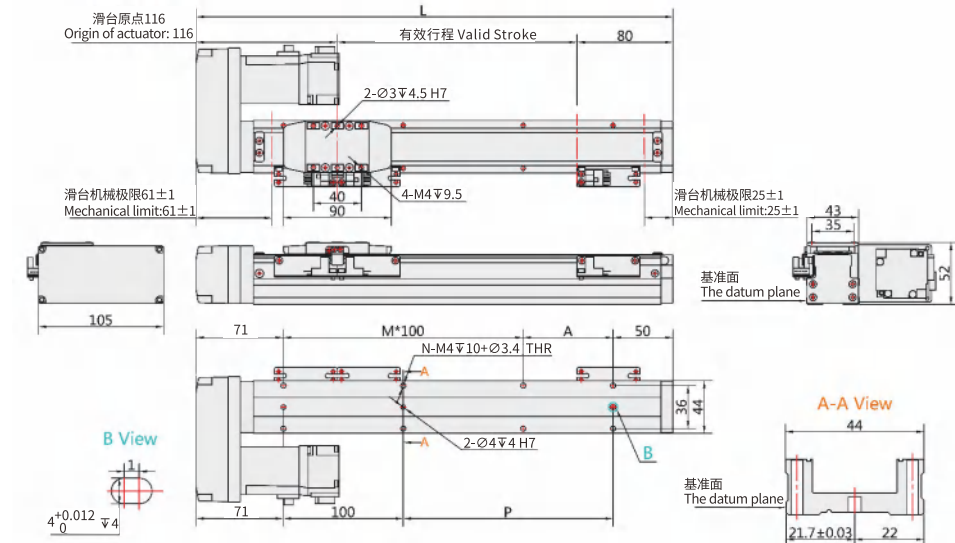
MP 电机外置下方 Motor external under below



单位:Unit: mm

有效行程 Valid Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	246	296	346	396	446	496	546	596	646	696	746	796	846	896	946	996
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7
N	4	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.66	1.91	2.16	2.4	2.65	2.9	3.14	3.39	3.64	3.89	4.14	4.39	4.64	4.89	5.14	5.39

MR 电机外置右侧 Motor external right side



单位:Unit: mm

有效行程 Valid Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	246	296	346	396	446	496	546	596	646	696	746	796	846	896	946	996
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.66	1.91	2.16	2.4	2.65	2.9	3.14	3.39	3.64	3.89	4.14	4.39	4.64	4.89	5.14	5.39



重复精度
Repeat Accuracy
±0.005 mm

此图仅供参考,出货规格详见尺寸图面
This picture for reference only, specs details according with the drawing.

最大行程
Max Stroke 800mm

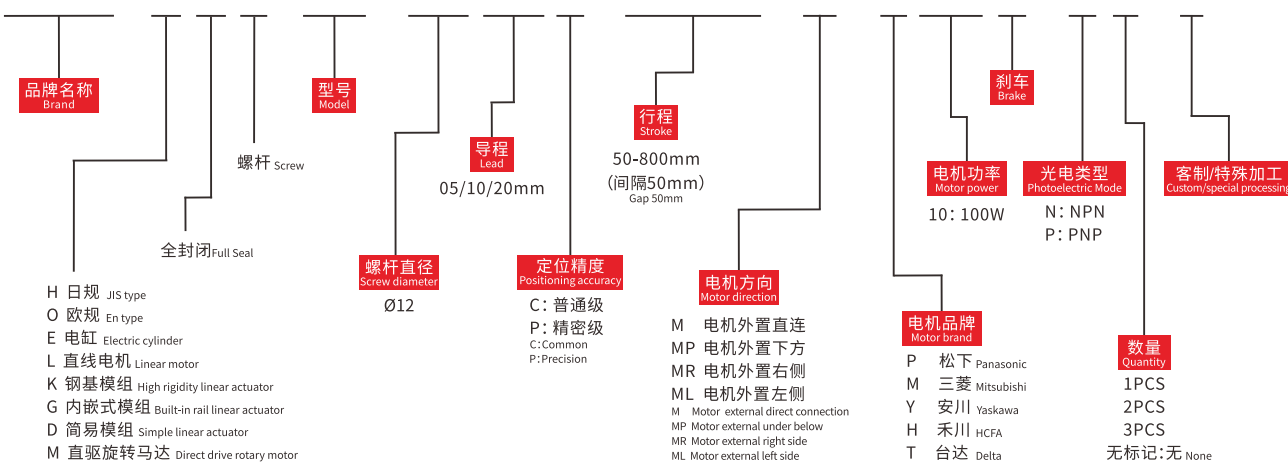
最高速度
Max Speed 1000mm/s

马达容量
Motor Output 100W

滚珠螺杆
Ball Screw Ø12mm

型号表达方式 Ordering method

TPA-GCR-40-1210C-L800-M-P10B-N3-F

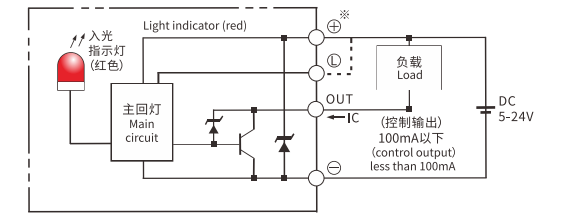


产品性能参数如下 Product performance parameters are as follows

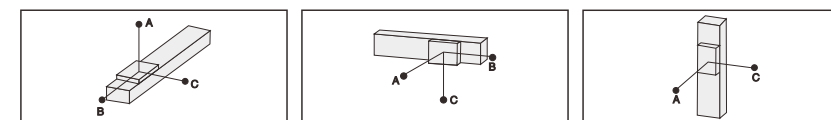
规格 Spec	重复定位精度 (mm) Repeated positioning accuracy (mm)	±0.005			
	螺杆导程 (mm) Ball screw lead (mm)	5	10	20	
	最高速度 (mm/s) ^{※2} Maximum speed (mm/s)	250	500	1000	
	最大可搬重量 Maximum Payload	水平使用 (kg) Horizontal (kg)	25	20	12
		垂直使用 (kg) Vertical (kg)	10	8	3.5
定额定力 (N) Rated thrust (N)	341 170 85				
部品 Parts	标准行程 (mm) Stroke pitch (mm) ^{※1}	50-800mm/50 间隔 50mm Pitch			
	AC伺服马达容量 (W) AC servo motor output (w)	100			
	滚珠螺杆外径 (mm) Ball screw Ø (mm)	C7Ø12			
	联轴器 (mm) Coupling (mm)	7X8			
	原点感应器 Original Sense	外挂 Outside	TPA-N674-WR		

※1 行程超过550mm时,会产生螺杆偏摆,此时请将速度调降。
※1 When the stroke exceeds 550mm, the screw deflection will occur. Please reduce the speed at this time.
※2 马达加减速设定0.2秒。
※2 Acceleration and deceleration value is set 0.2 second.

感应器连接图<原点及端点> Sensor layout

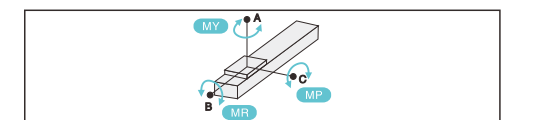


容许负载力矩表 N.m Allowable overhang



水平安装 Horizontal installation				侧面安装 Side mounting				垂直安装 Vertical installation			
导程 Lead	A	B	C	导程 Lead	A	B	C	导程 Lead	A	B	C
5	9.5kg	618	71	95	9.5kg	95	71	618	5kg	138	138
10	19kg	418	31	45	19kg	43	31	399	7kg	105	105
20	28kg	257	12	25	28kg	24	12	247	9.5kg	86	86
5	4.5kg	570	138	185	4.5kg	171	138	570	0.9kg	760	760
10	9.5kg	335	67	85	9.5kg	81	65	335	2.8kg	247	247
20	14kg	238	40	52	14kg	50	40	226	4kg	147	147
5	4.5kg	304	114	130	4.5kg	124	114	304	0.8kg	570	570
10	7.5kg	209	67	80	7.5kg	71	67	209	1.5kg	285	285
20	9.5kg	166	52	60	9.5kg	57	52	162	2kg	238	238

静态容许负载惯量 Static loading moment



点	惯量 (N.m)
MY	79
MP	79
MR	116

*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.

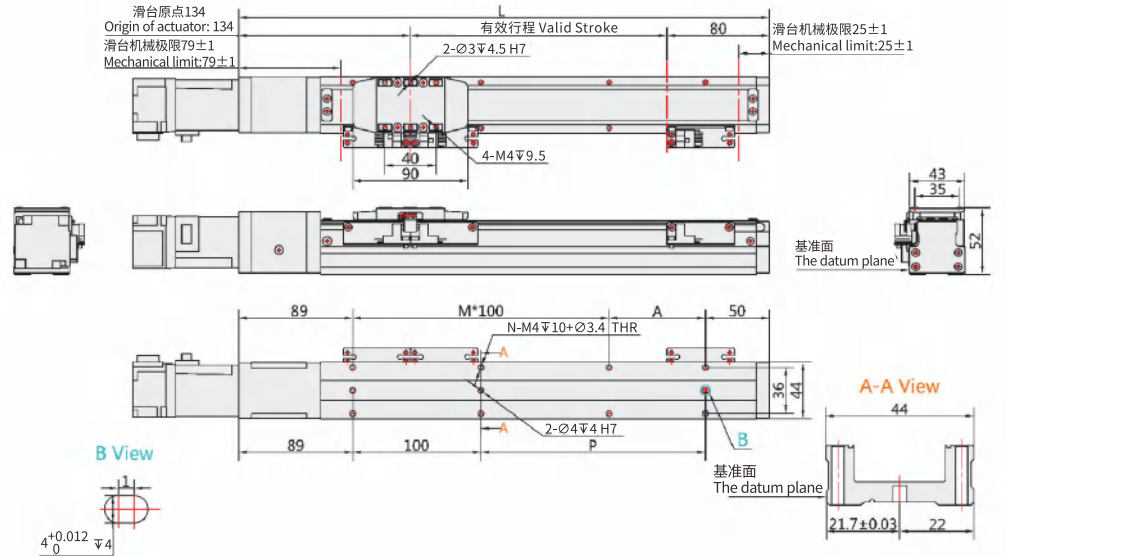
搭配伺服马达一览表 Suitable motor brand

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)	50	220	HG-KR13	MR-J4-10A
		有刹车(垂直式样) With brakes (vertical type)	50	220	HG-KR13B	MR-J4-10A
松下 Panasonic	P	无刹车(水平式样) No brake (horizontal type)	50	220	MHMDD012G1U	MADHT1505
		有刹车(垂直式样) With brakes (vertical type)	50	220	MHMD012G1V	MADHT1505
台达 Delta	T	无刹车(水平式样) No brake (horizontal type)	50	220	ECMA-C20401ES	ASD-B20121-B
		有刹车(垂直式样) With brakes (vertical type)	50	220	ECMA-C20401FS	ASD-B20121-B



电机外置直连/电机外置下方
Motor external direct connection/Motor external under below

M 电机外置直连 Motor external direct connection

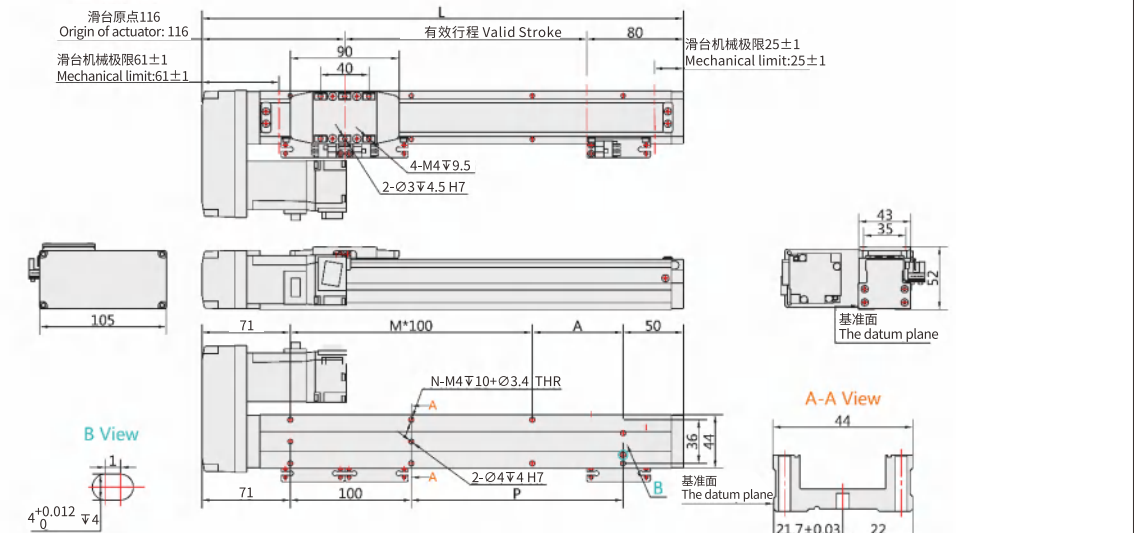


单位:Unit: mm

有效行程 Valid Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	264	314	364	414	464	514	564	614	664	714	764	814	864	914	964	1014
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.36	1.61	1.86	2.11	2.36	2.6	2.85	3.1	3.34	3.59	3.84	4.09	4.34	4.59	4.84	5.09

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

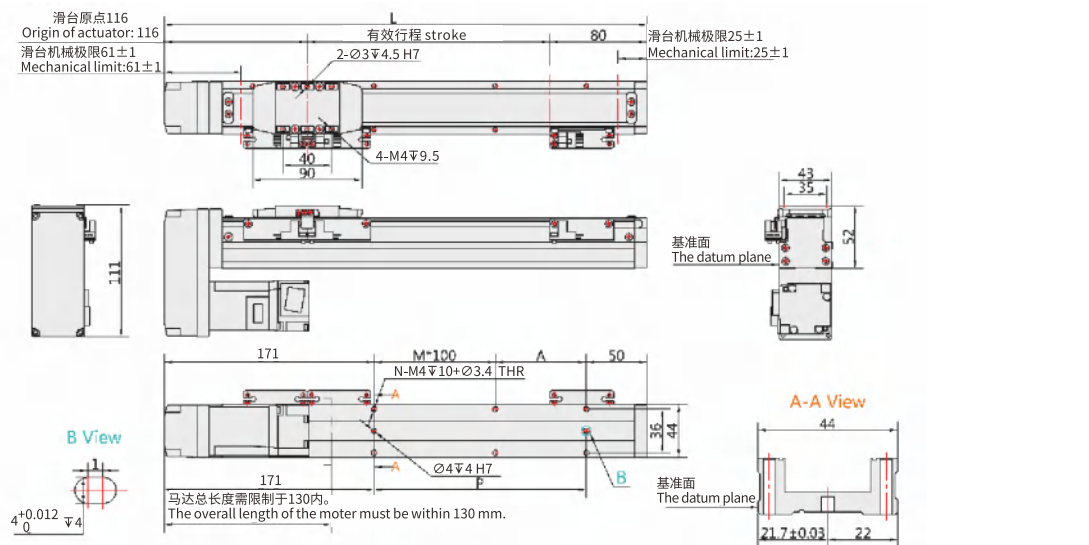
ML 电机外置左侧 Motor external left side



单位:Unit: mm

有效行程 Valid Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	246	296	346	396	446	496	546	596	646	696	746	796	846	896	946	996
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.66	1.91	2.16	2.4	2.65	2.9	3.14	3.39	3.64	3.89	4.14	4.39	4.64	4.89	5.14	5.39

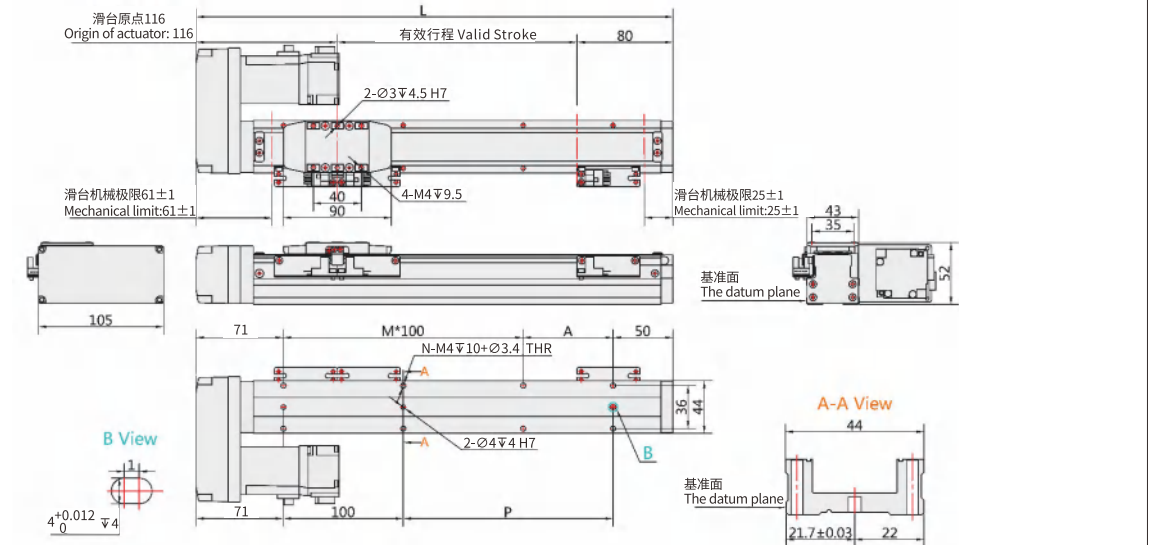
MP 电机外置下方 Motor external under below



单位:Unit: mm

有效行程 Valid Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	246	296	346	396	446	496	546	596	646	696	746	796	846	896	946	996
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7
N	4	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.66	1.91	2.16	2.4	2.65	2.9	3.14	3.39	3.64	3.89	4.14	4.39	4.64	4.89	5.14	5.39

MR 电机外置右侧 Motor external right side



单位:Unit: mm

有效行程 Valid Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	246	296	346	396	446	496	546	596	646	696	746	796	846	896	946	996
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.66	1.91	2.16	2.4	2.65	2.9	3.14	3.39	3.64	3.89	4.14	4.39	4.64	4.89	5.14	5.39



重复精度
Repeat Accuracy
±0.005 mm

此图仅供参考,出货规格详见尺寸图面
This picture for reference only, specs details according with the drawing.

最大行程
Max Stroke 800mm

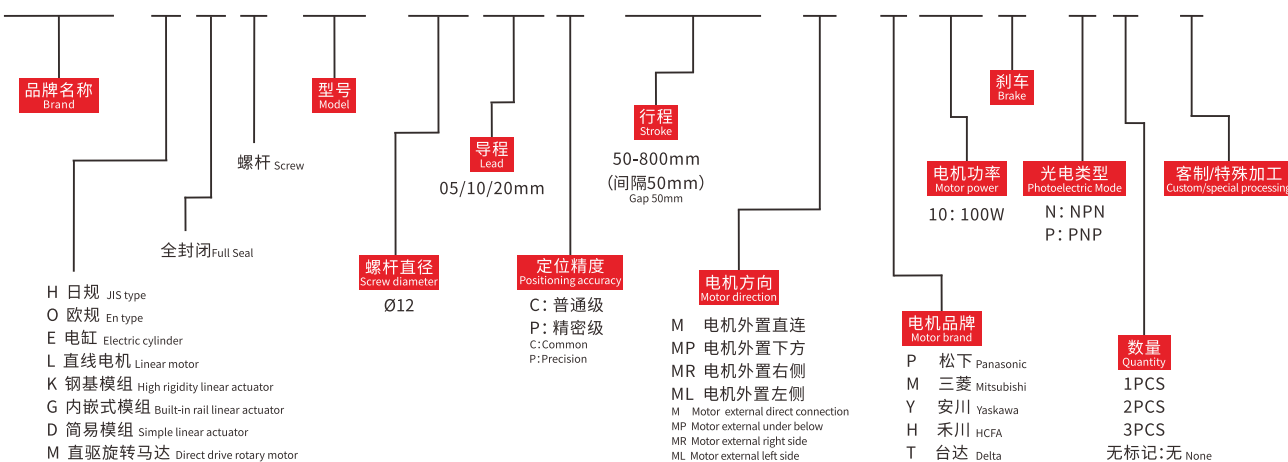
最高速度
Max Speed 1000mm/s

马达容量
Motor Output 100W

滚珠螺杆
Ball Screw Ø12mm

型号表达方式 Ordering method

TPA-GCR-50-1210C-L800-M-P10B-N3-F

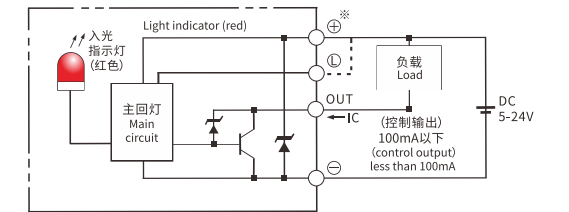


产品性能参数如下 Product performance parameters are as follows

规格 Spec	重复定位精度 (mm) Repeated positioning accuracy (mm)	±0.005			
	螺杆导程 (mm) Ball screw lead (mm)	5	10	20	
	最高速度 (mm/s) ^{※2} Maximum speed (mm/s)	250	500	1000	
	最大可搬重量 Maximum Payload	水平使用 (kg) Horizontal (kg)	30	15	10
		垂直使用 (kg) Vertical (kg)	10	5	2.5
定额定力 (N) Rated thrust (N)	341 170 85				
部品 Parts	标准行程 (mm) Stroke pitch (mm) ^{※1}	50-800mm/50 间隔 50mm Pitch			
	AC伺服马达容量 (W) AC servo motor output (w)	100			
	滚珠螺杆外径 (mm) Ball screw Ø (mm)	C7Ø12			
	联轴器 (mm) Coupling (mm)	7X8			
	原点感应器 Original Sense	外挂 Outside	TPA-N674-WR		

※1 行程超过600mm时,会产生螺杆偏摆,此时请将速度调降。
※1 When the stroke exceeds 600mm, the screw deflection will occur. Please reduce the speed at this time.
※2 马达加减速设定0.2秒。
※2 Acceleration and deceleration value is set 0.2 second.

感应器连接图<原点及端点> Sensor layout



容许负载力矩表 N.m Allowable overhang

导程 Lead	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	
5	10kg	650	75	100	75	650	6kg	145	145
10	20kg	440	32	45	32	420	8kg	110	110
	30kg	270	19	25	19	260	10kg	90	90
20	5kg	600	145	180	145	600	1kg	800	800
	10kg	370	70	85	68	370	3kg	260	260
10	15kg	250	42	52	42	250	5kg	155	155
	5kg	320	120	130	120	320	1kg	600	600
20	8kg	220	70	80	70	220	2kg	300	300
	10kg	175	55	60	55	170	2.5kg	250	250

静态容许负载惯量 Static loading moment

惯量	值 (N.m)
MY	103
MP	103
MR	144

*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

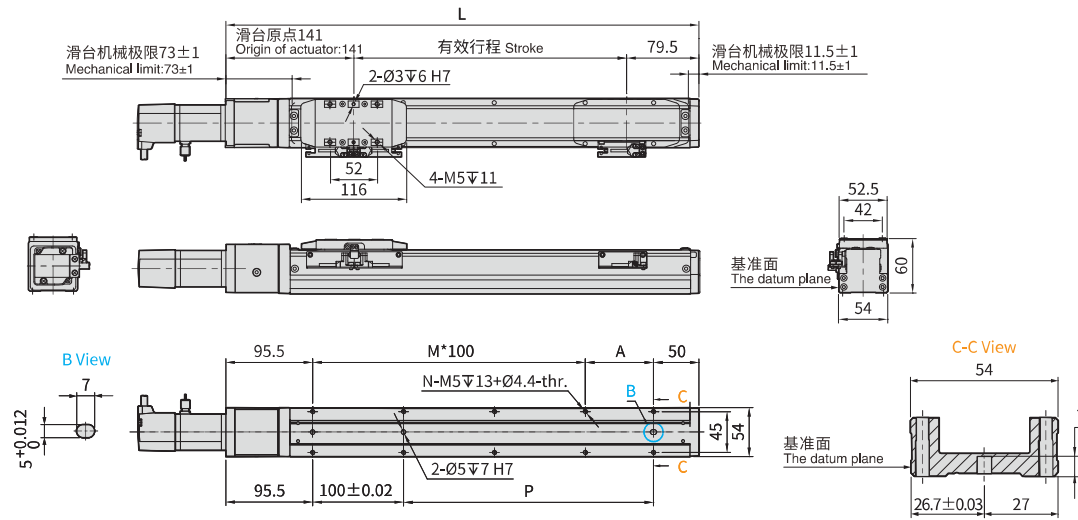
品牌 Brand	马达记号 Mark	刹车有无 Brake	马达容量 Motor capacity	电源电压 AC-Voltage	伺服马达型号 Servo motor model	驱动器型号 Driver Model
三菱 Mitsubishi	M	无刹车(水平式样) No brake (horizontal type)	100	220	HG-KR13	MR-J4-10A
		有刹车(垂直式样) With brakes (vertical type)	100	220	HG-KR13B	MR-J4-10A
松下 Panasonic	P	无刹车(水平式样) No brake (horizontal type)	100	220	MHMD012G1U	MADHT1505
		有刹车(垂直式样) With brakes (vertical type)	100	220	MHMD012G1V	MADHT1505
台达 Delta	T	无刹车(水平式样) No brake (horizontal type)	100	220	ECMA-C20401ES	ASD-B20121-B
		有刹车(垂直式样) With brakes (vertical type)	100	220	ECMA-C20401FS	ASD-B20121-B



电机外置直连/电机外置下方
Motor external direct connection/Motor external under below

M 电机外置直连 Motor external direct connection

单位:Unit: mm

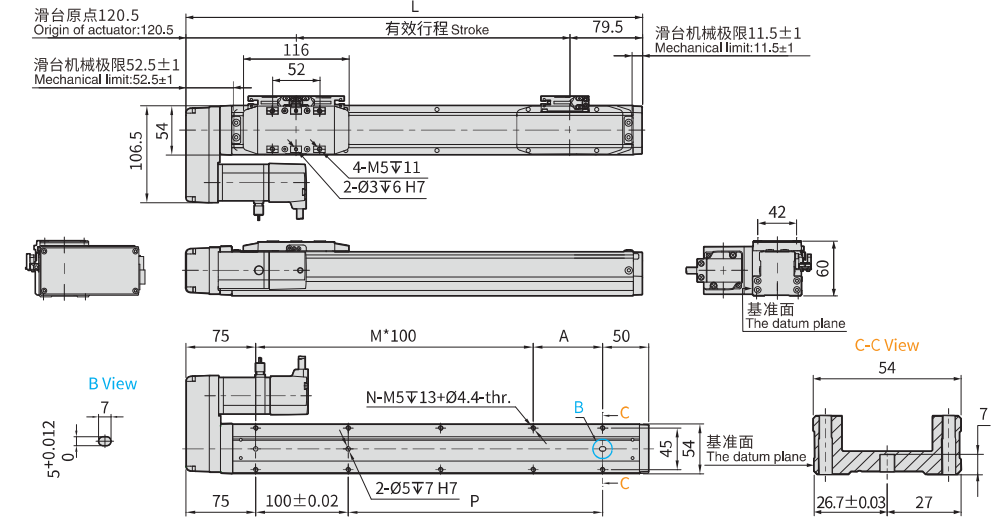


有效行程 Valid Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	270.5	320.5	370.5	420.5	470.5	520.5	570.5	620.5	670.5	720.5	770.5	820.5	870.5	920.5	970.5	1020.5
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	2.23	2.42	2.62	2.82	3.01	3.21	3.41	3.6	3.8	4	4.19	4.39	4.59	4.78	4.98	5.18

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

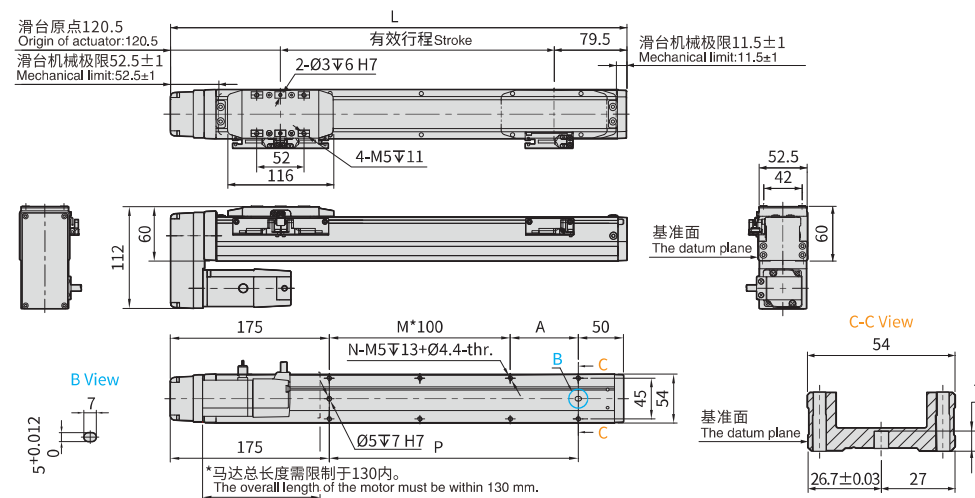
单位:Unit: mm



有效行程 Valid Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	2.4	2.59	2.79	2.99	3.18	3.38	3.58	3.77	3.97	4.17	4.36	4.56	4.76	4.95	5.15	5.35

MP 电机外置下方 Motor external under below

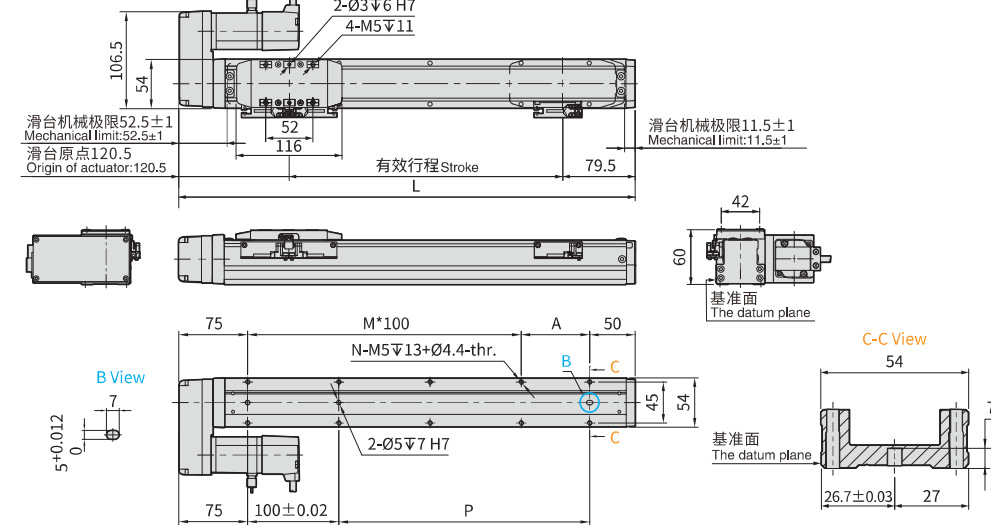
单位:Unit: mm



有效行程 Valid Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7
N	4	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	2.4	2.59	2.79	2.99	3.18	3.38	3.58	3.77	3.97	4.17	4.36	4.56	4.76	4.95	5.15	5.35

MR 电机外置右侧 Motor external right side

单位:Unit: mm



有效行程 Valid Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	2.4	2.59	2.79	2.99	3.18	3.38	3.58	3.77	3.97	4.17	4.36	4.56	4.76	4.95	5.15	5.35



重复精度
Repeat Accuracy
±0.005 mm

此图仅供参考,出货规格详见尺寸图面
This picture for reference only, specs details according with the drawing.

最大行程
Max Stroke **1100mm**

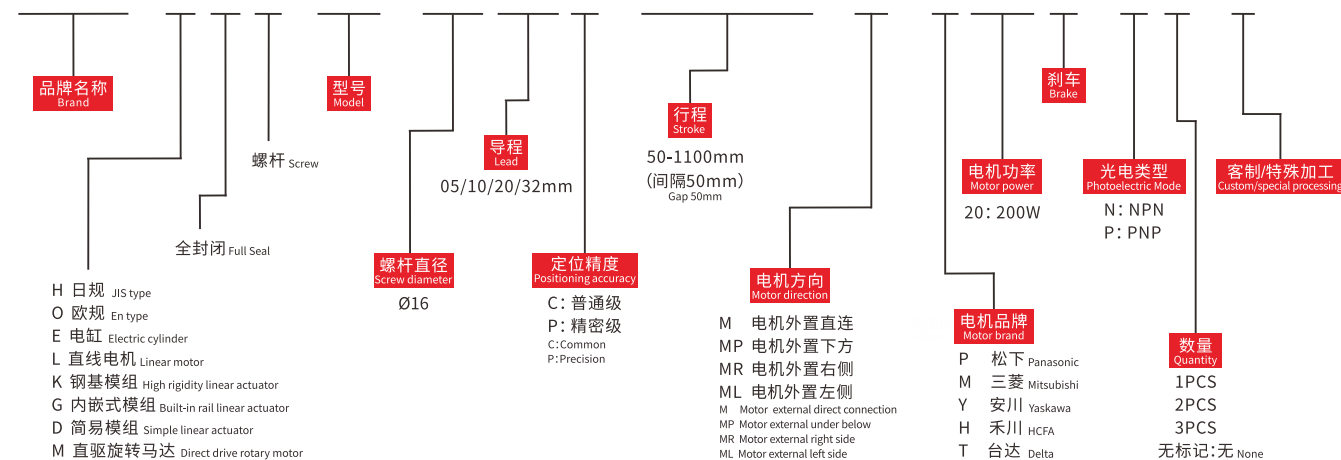
最高速度
Max Speed **1000mm/s**

马达容量
Motor Output **200W**

滚珠螺杆
Ball Screw **Ø16mm**

型号表达方式 Ordering method

TPA-GCR-80-1610C-L1100-M-P20B-N3-F

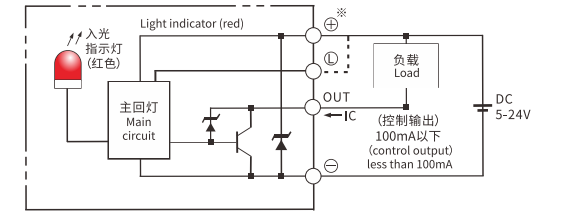


产品性能参数如下 Product performance parameters are as follows

规格 Spec	重复定位精度 (mm) Repeated positioning accuracy (mm)	±0.005			
	螺杆导程 (mm) Ball screw lead (mm)	5	10	20	
	最高速度 (mm/s) ^{※2} Maximum speed (mm/s)	250	500	1000	
	最大可搬重量 Maximum Payload	水平使用 (kg) Horizontal (kg)	50	30	18
		垂直使用 (kg) Vertical (kg)	15	8	3
定格推力 (N) Rated thrust (N)	683 341 174				
部品 Parts	标准行程 (mm) Stroke pitch (mm) ^{※1}	50~1100mm/50 间隔 50mm Pitch			
	AC伺服马达容量 (W) AC servo motor output (w)	200			
	滚珠螺杆外径 (mm) Ball screw Ø (mm)	C7Ø16			
	联轴器 (mm) Coupling (mm) ^(注1)	10X14/11			
	原点感应器 Original Sense	外挂 Outside	TPA-N674-WR		

※1 行程超过750mm时,会产生螺杆偏摆,此时请将速度调降。
※1 When the stroke exceeds 750mm, the screw deflection will occur. Please reduce the speed at this time.
※2 马达加速设定0.2秒。
※2 Acceleration and deceleration value is set 0.2 second.
*注1:使用Panasonic 200W马达时,马达轴心为Ø11,其他品牌,马达轴心为Ø14。
*注1: Motor(200W) Shaft Diameter: Panasonic:11mm;Other:14mm.

感应器连接图<原点及端点> Sensor layout



容许负载力矩表 N.m Allowable overhang

水平安装 Horizontal installation				侧面安装 Side mounting				垂直安装 Vertical installation			
导程 Lead	A	B	C	导程 Lead	A	B	C	导程 Lead	A	B	C
5	20kg	1560	153	237	20kg	214	153	1435	10kg	331	331
	35kg	890	81	126	35kg	113	81	845	15kg	220	220
	50kg	550	53	82	50kg	74	53	506	-	-	-
10	10kg	1730	286	412	10kg	370	286	1400	5kg	589	589
	20kg	839	136	196	20kg	176	136	800	8kg	368	368
	30kg	541	86	124	30kg	112	86	495	-	-	-
20	6kg	1213	403	493	6kg	444	403	760	3kg	935	935
	9kg	800	264	323	9kg	292	264	277	-	-	-
	18kg	592	194	238	18kg	214	194	544	-	-	-

静态容许负载惯量 Static loading moment

MY	MP	MR
318	318	626

*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

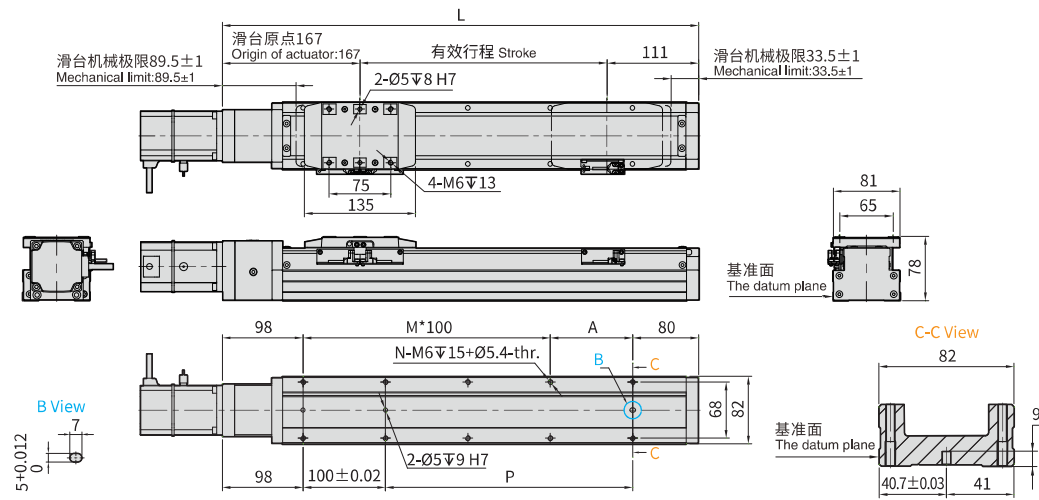
品牌 Brand	马达记号 Mark	刹车有无 Brake	马达容量 Motor capacity	电源电压 AC-Voltage	伺服马达型号 Servo motor model	驱动器型号 Driver Model
三菱 Mitsubishi	M	无刹车(水平式样) No brake (horizontal type)	200	220	HG-KR23	MR-J4-20A
		有刹车(垂直式样) With brakes (vertical type)	200	220	HG-KR23B	MR-J4-20A
松下 Panasonic	P	无刹车(水平式样) No brake (horizontal type)	200	220	MHMD022G1U	MADHT1507
		有刹车(垂直式样) With brakes (vertical type)	200	220	MHMD022G1V	MADHT1507
台达 Delta	T	无刹车(水平式样) No brake (horizontal type)	200	220	ECMA-C20602ES	ASD-B20221
		有刹车(垂直式样) With brakes (vertical type)	200	220	ECMA-C20602FS	ASD-B20221



电机外置直连/电机外置下方
Motor external direct connection/Motor external under below

M 电机外置直连 Motor external direct connection

单位:Unit: mm

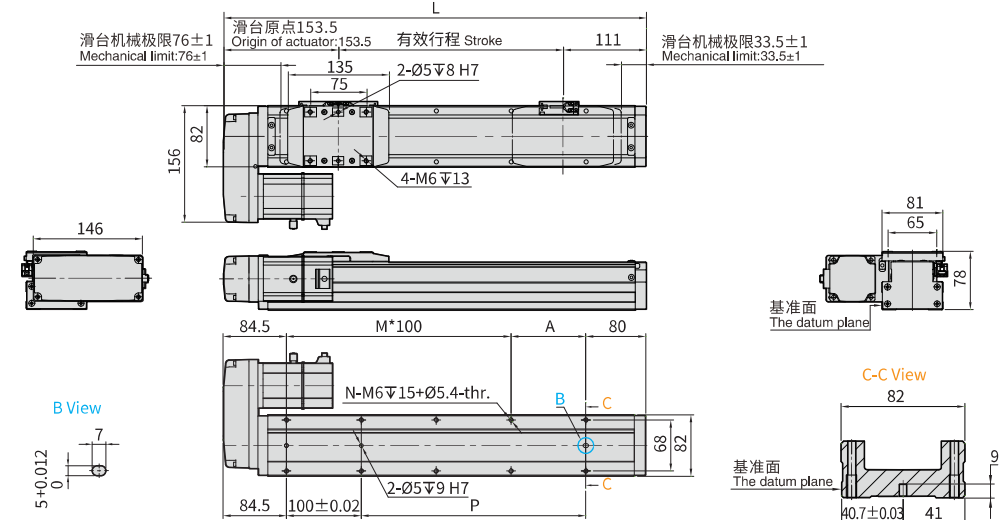


有效行程 Valid Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	328	378	428	478	528	578	628	678	728	778	828	878	928	978	1028	1078	1128	1178	1228	1278	1328	1378
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	5.18	5.54	5.91	6.27	6.64	7	7.37	7.73	8.1	8.46	8.83	9.19	9.56	9.92	10.29	10.65	11.02	11.38	11.75	12.11	12.48	12.85

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

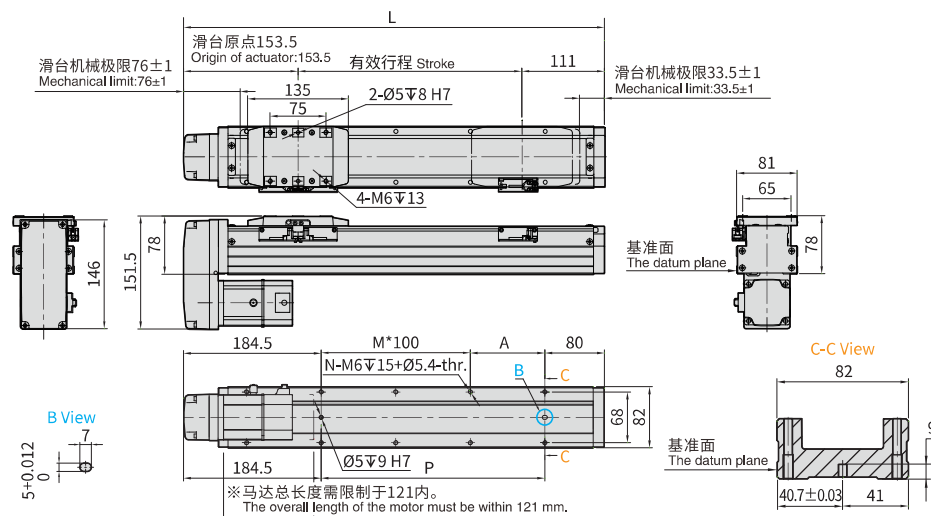
单位:Unit: mm



有效行程 Valid Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
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	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	5.19	5.6	6.12	6.64	7.16	7.68	8.2	8.72	9.24	9.76	10.28	10.8	11.32	11.84	12.36	12.88	13.4	13.92	14.44	14.96	15.48	16

MP 电机外置下方 Motor external under below

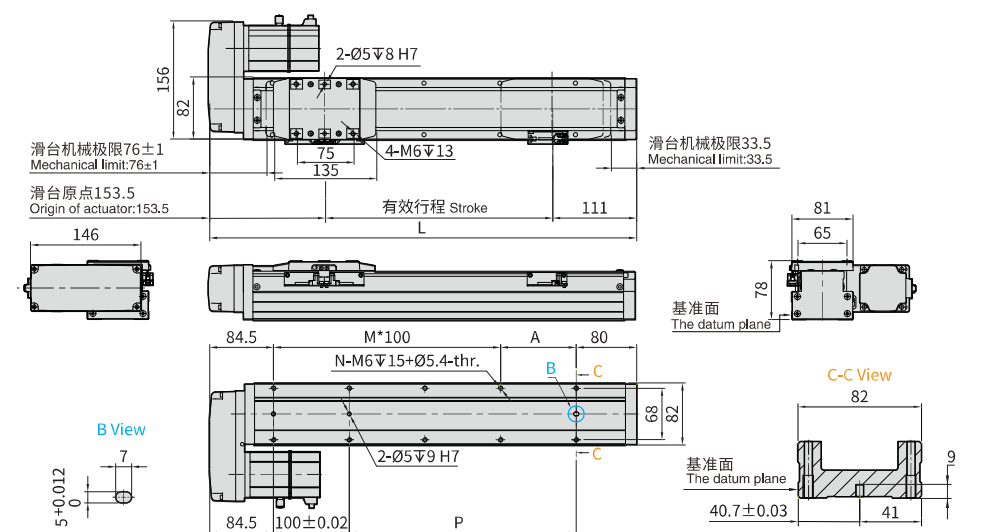
单位:Unit: mm



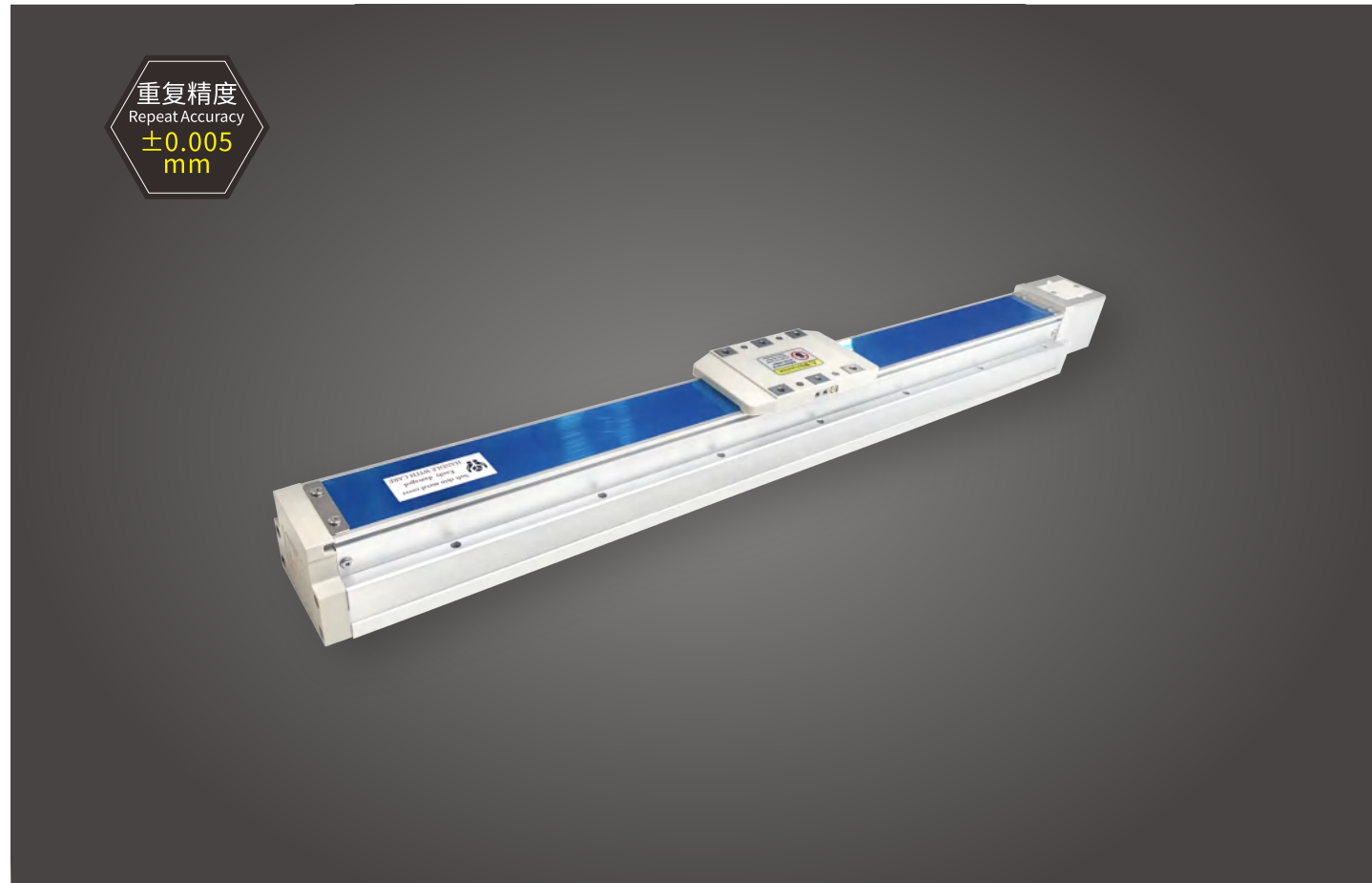
有效行程 Valid Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	314.5	364.5	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10
N	4	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	5.19	5.6	6.12	6.64	7.16	7.68	8.2	8.72	9.24	9.76	10.28	10.8	11.32	11.84	12.36	12.88	13.4	13.92	14.44	14.96	15.48	16

MR 电机外置右侧 Motor external right side

单位:Unit: mm



有效行程 Valid Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
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	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	5.19	5.6	6.12	6.64	7.16	7.68	8.2	8.72	9.24	9.76	10.28	10.8	11.32	11.84	12.36	12.88	13.4	13.92	14.44	14.96	15.48	16



重复精度
Repeat Accuracy
±0.005 mm

此图仅供参考,出货规格详见尺寸图面
This picture for reference only, specs details according with the drawing.

最大行程
Max Stroke **1100mm**

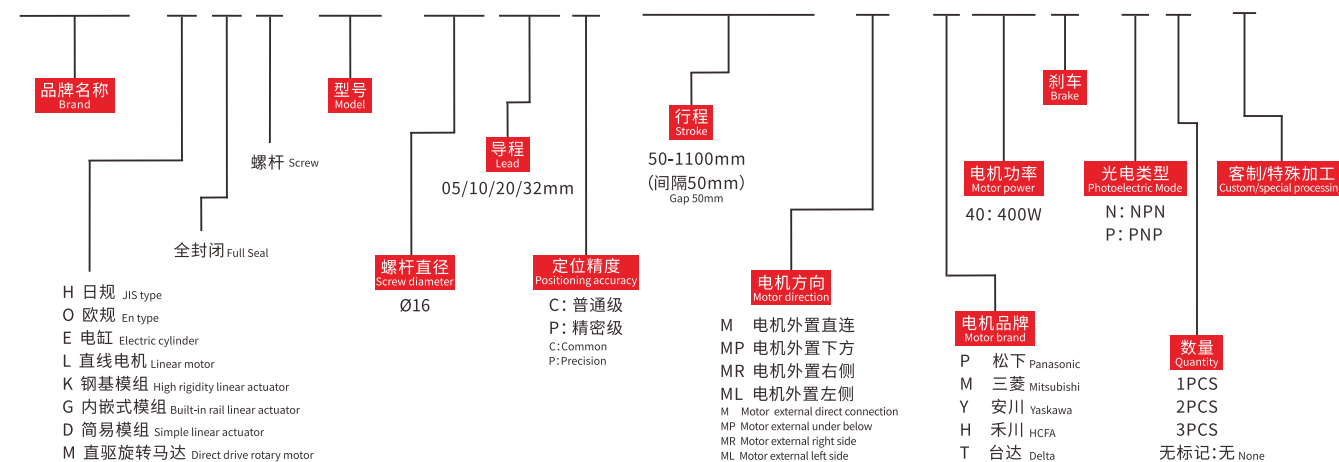
最高速度
Max Speed **1000mm/s**

马达容量
Motor Output **400W**

滚珠螺杆
Ball Screw **Ø16mm**

型号表达方式 Ordering method

TPA-GCR-80-1610C-L1100-M-P40B-N3-F

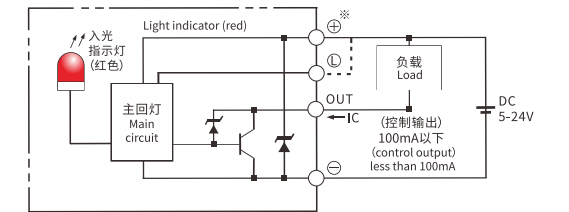


产品性能参数如下 Product performance parameters are as follows

规格 Spec	重复定位精度 (mm) Repeated positioning accuracy (mm)	±0.005			
	螺杆导程 (mm) Ball screw lead (mm)	5	10	20	
	最高速度 (mm/s) ^{※2} Maximum speed (mm/s)	250	500	1000	
	最大可搬重量 Maximum Payload	水平使用 (kg) Horizontal (kg)	50	30	18
		垂直使用 (kg) Vertical (kg)	15	8	3
定额定力 (N) Rated thrust (N)	1388	694	347		
部品 Parts	标准行程 (mm) Stroke pitch (mm) ^{※1}	50~1100mm/50 间隔 50mm Pitch			
	AC伺服马达容量 (W) AC servo motor output (w)	400			
	滚珠螺杆外径 (mm) Ball screw Ø (mm)	C7Ø16			
	联轴器 (mm) Coupling (mm)	10X14			
	原点感应器 Original Sense	外挂 Outside	TPA-N674-WR		

※1 行程超过750mm时,会产生螺杆偏摆,此时请降低速度。
※1 When the stroke exceeds 750mm, the screw deflection will occur. Please reduce the speed at this time.
※2 马达加速设定0.2秒。
※2 Acceleration and deceleration value is set 0.2 second.

感应器连接图<原点及端点> Sensor layout



容许负载力矩表 N.m Allowable overhang

水平安装 Horizontal installation				侧面安装 Side mounting				垂直安装 Vertical installation			
导程 Lead	A	B	C	导程 Lead	A	B	C	导程 Lead	A	C	
5	20kg	1560	153	237	20kg	214	153	1435	10kg	331	331
	35kg	890	81	126	35kg	113	81	845	15kg	220	220
	50kg	550	53	82	50kg	74	53	506	-	-	-
10	10kg	1730	286	412	10kg	370	286	1400	5kg	589	589
	20kg	839	136	196	20kg	176	136	800	8kg	368	368
	30kg	541	86	124	30kg	112	86	495	-	-	-
20	6kg	1213	403	493	6kg	444	403	760	2.5kg	935	935
	9kg	800	264	323	9kg	292	264	277	-	-	-
	18kg	592	194	238	18kg	214	194	544	-	-	-

静态容许负载惯量 Static loading moment

MY	MP	MR
318	318	626

*力矩表所表示的数据,代表重心。
The torque value in the chart indicate the center of gravity.
*符合规格的正常试用下,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

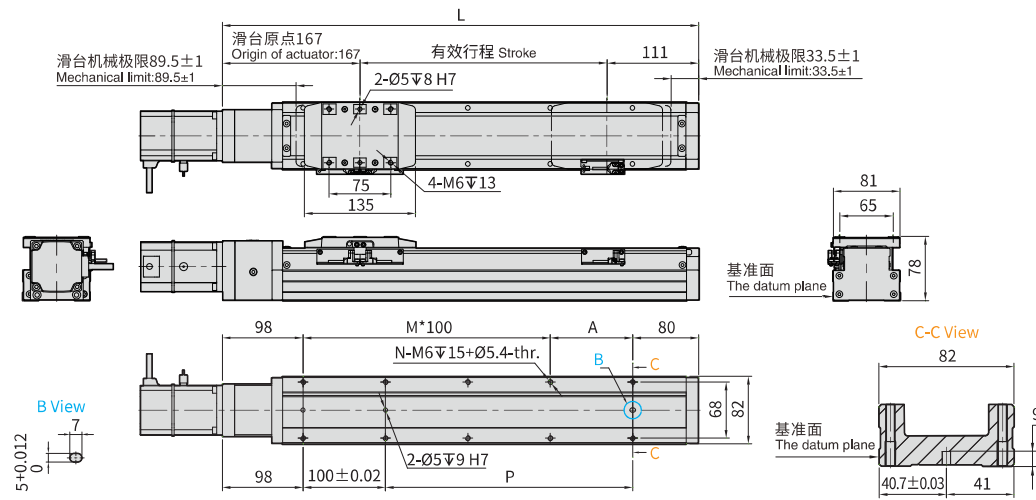
品牌 Brand	马达记号 Mark	刹车有无 Brake	马达容量 Motor capacity	电源电压 AC-Voltage	伺服马达型号 Servo motor model	驱动器型号 Driver Model
三菱 Mitsubishi	M	无刹车(水平式样) No brake (horizontal type)	200/400	220	HG-KR23/43	MR-J4-20A/40A
		有刹车(垂直式样) With brakes (vertical type)	200/400	220	HG-KR23B/43B	MR-J4-20A/40A
松下 Panasonic	P	无刹车(水平式样) No brake (horizontal type)	200/400	220	MHMD022G1U/D042G1U	MADHT1507/T2510
		有刹车(垂直式样) With brakes (vertical type)	200/400	220	MHMD022G1V/D042G1V	MADHT1507/T2510
台达 Delta	T	无刹车(水平式样) No brake (horizontal type)	200/400	220	ECMA-C20602ES/C20604ES	ASD-B20221/B20421-B
		有刹车(垂直式样) With brakes (vertical type)	200/400	220	ECMA-C20602FS/C20604FS	ASD-B20221/B20421-B



电机外置直连/电机外置下方
Motor external direct connection/Motor external below

M 电机外置直连 Motor external direct connection

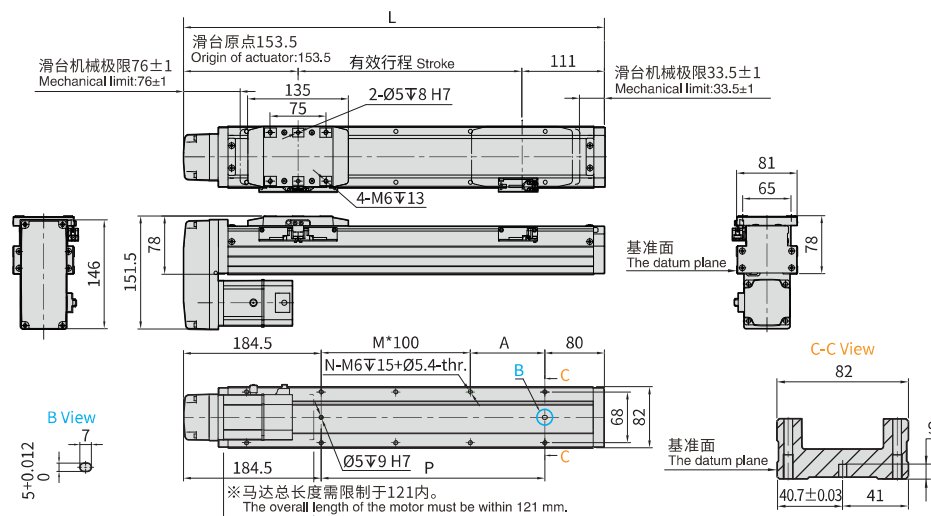
单位:Unit: mm



有效行程 Valid Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	328	378	428	478	528	578	628	678	728	778	828	878	928	978	1028	1078	1128	1178	1228	1278	1328	1378
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	5.18	5.54	5.91	6.27	6.64	7	7.37	7.73	8.1	8.46	8.83	9.19	9.56	9.92	10.29	10.65	11.02	11.38	11.75	12.11	12.48	12.85

MP 电机外置下方 Motor external under below

单位:Unit: mm

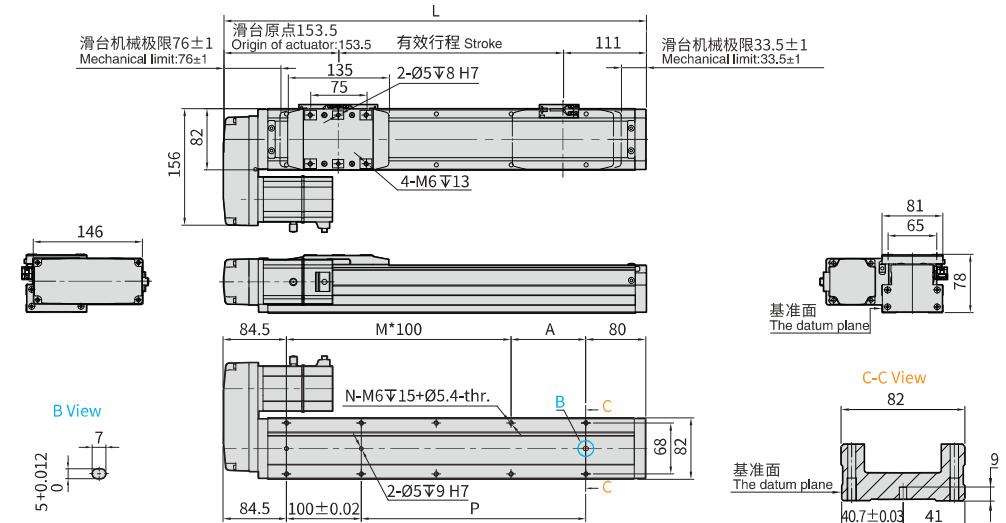


有效行程 Valid Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	314.5	364.5	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10
N	4	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	5.19	5.6	6.12	6.64	7.16	7.68	8.2	8.72	9.24	9.76	10.28	10.8	11.32	11.84	12.36	12.88	13.4	13.92	14.44	14.96	15.48	16

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

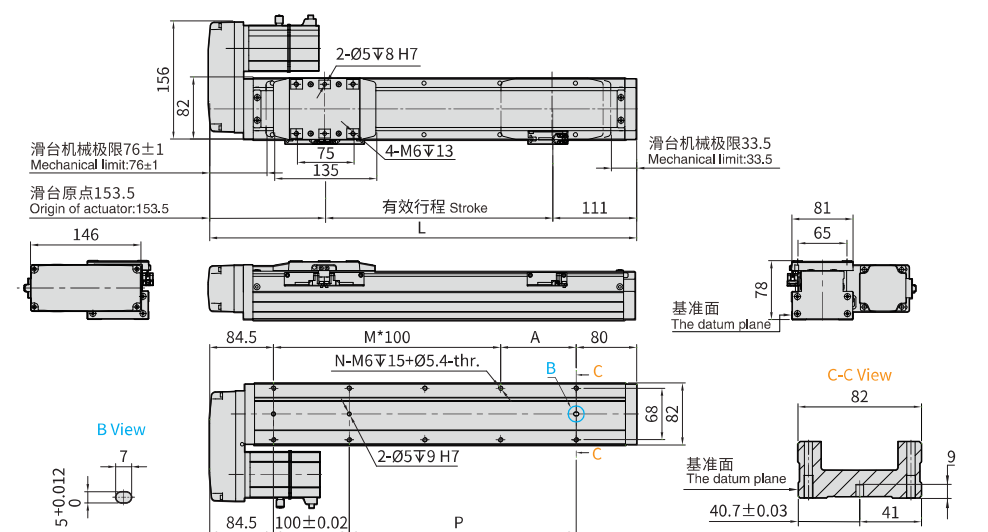
单位:Unit: mm



有效行程 Valid Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
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	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	5.19	5.6	6.12	6.64	7.16	7.68	8.2	8.72	9.24	9.76	10.28	10.8	11.32	11.84	12.36	12.88	13.4	13.92	14.44	14.96	15.48	16

MR 电机外置右侧 Motor external right side

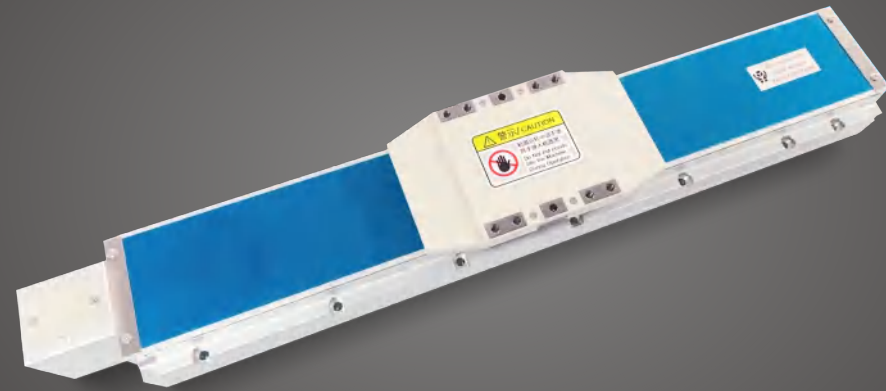
单位:Unit: mm



有效行程 Valid Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
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	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	5.19	5.6	6.12	6.64	7.16	7.68	8.2	8.72	9.24	9.76	10.28	10.8	11.32	11.84	12.36	12.88	13.4	13.92	14.44	14.96	15.48	16



重复精度
Repeat Accuracy
±0.005 mm



此图仅供参考,出货规格详见尺寸图
This picture for reference only, specs details according with the drawing.

最大行程
Max Stroke 1250mm

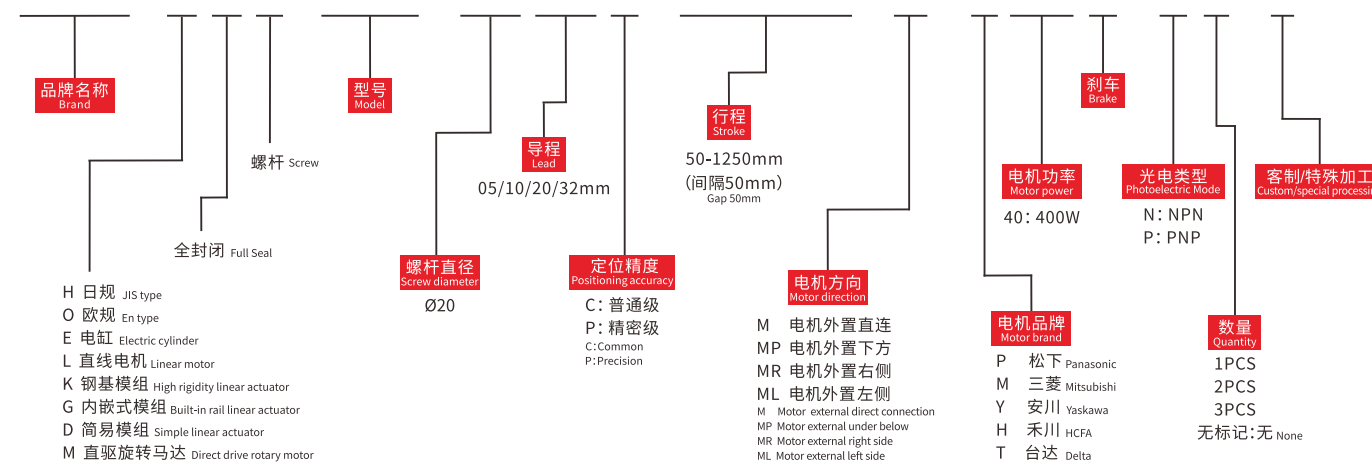
最高速度
Max Speed 1600mm/s

马达容量
Motor Output 400W

滚珠螺杆
Ball Screw Ø16mm

型号表达方式 Ordering method

TPA-GCR-120-1610C-L1250-M-P40B-N3-F

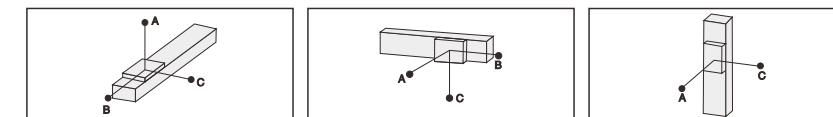


产品性能参数如下 Product performance parameters are as follows

规格 Spec	重复定位精度 (mm) Repeated positioning accuracy (mm)	±0.005				
	螺杆导程 (mm) Ball screw lead (mm)	5	10	20	32	
	最高速度 (mm/s) ^{※2} Maximum speed (mm/s)	250	500	1000	1600	
	最大可搬重量 Maximum Payload	水平使用 (kg) Horizontal (kg)	110	88	40	30
		垂直使用 (kg) Vertical (kg)	33	22	10	8
	定额定力 (N) Rated thrust (N)	1388 694 347 218				
部品 Parts	标准行程 (mm) ^{※1} Stroke pitch (mm)	50~1250mm/50 间隔 50 mm Pitch				
	AC伺服马达容量 (W) AC servo motor output (w)	400				
	滚珠螺杆外径 (mm) Ball screw Ø (mm)	C7Ø16				
	联轴器 (mm) Coupling (mm)	10X14				
	原点感应器 Original Sense	外挂 Outside	TPA-N674-WR			

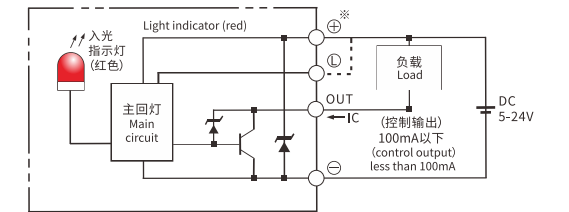
※1 行程超过750mm时,会产生螺杆偏摆,此时请将速度调降。
※1 When the stroke exceeds 750mm, the screw deflection will occur. Please reduce the speed at this time.
※2 马达加速减速设定0.2秒。
※2 Acceleration and deceleration value is set 0.2 second.

容许负载力矩表 N.m Allowable overhang

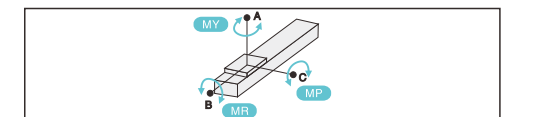


(单位Unit:mm)				(单位Unit:mm)				(单位Unit:mm)					
水平安装 Horizontal installation		A	B	C	侧面安装 Side mounting		A	B	C	垂直安装 Vertical installation		A	C
导程 5 Lead	60kg	2850	250	340	导程 5 Lead	55kg	280	280	3300	导程 5 Lead	15kg	1200	1200
	80kg	2100	180	250		75kg	200	195	2400		22kg	820	820
	110kg	1500	120	170		110kg	130	125	1550		33kg	550	550
导程 10 Lead	30kg	2850	490	600	导程 10 Lead	35kg	400	420	2500	导程 10 Lead	10kg	1600	1600
	50kg	1700	280	350		55kg	245	250	1550		14kg	1150	1150
	88kg	950	140	190		88kg	150	150	950		22kg	730	730
导程 20 Lead	10kg	3400	1250	1400	导程 20 Lead	12kg	900	1070	3000	导程 20 Lead	7kg	1800	1800
	22kg	1650	550	620		20kg	550	630	1800		10kg	1250	1250
	40kg	900	290	330		40kg	260	300	900		-	-	-
导程 32 Lead	15kg	1100	570	550	导程 32 Lead	15kg	440	570	1050	导程 32 Lead	5kg	1600	1600
	25kg	620	330	320		30kg	210	270	520		8kg	1000	1000
	30kg	520	270	260		-	-	-	-		-	-	-

感应器连接图<原点及端点> Sensor layout



静态容许负载惯量 Static loading moment



(单位Unit:N.m)	
MY	1168
MP	606
MR	606

*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.
*侧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

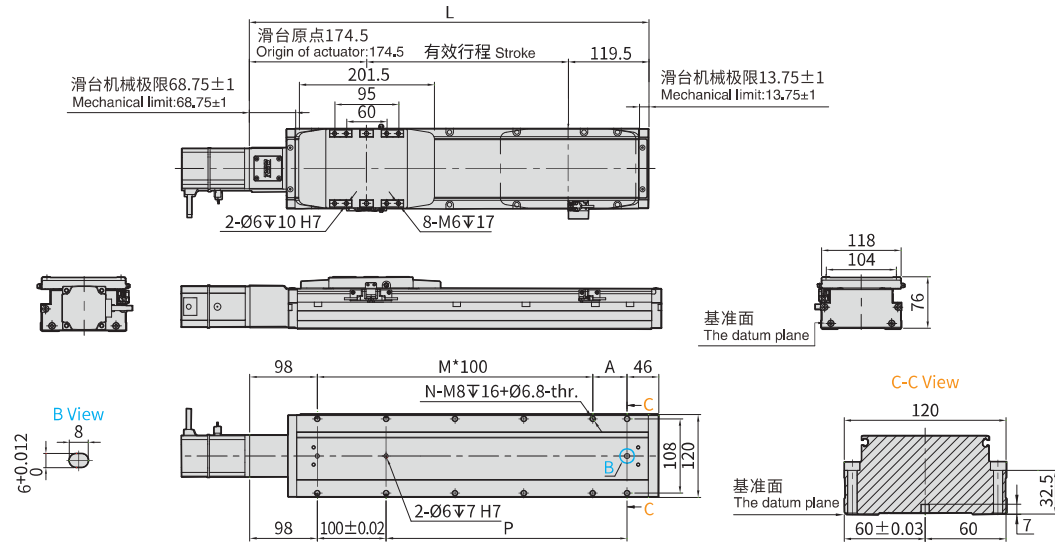
品牌 Brand	马达记号 Mark	刹车有无 Brake	马达容量 Motor capacity	电源电压 AC-Voltage	伺服马达型号 Servo motor model	驱动器型号 Driver Model
三菱 Mitsubishi	M	无刹车(水平式样) No brake (horizontal type)	400	220	HG-KR43	MR-J4-40A
		有刹车(垂直式样) With brakes (vertical type)	400	220	HG-KR43B	MR-J4-40A
松下 Panasonic	P	无刹车(水平式样) No brake (horizontal type)	400	220	MHMD042G1U	MADHT2510
		有刹车(垂直式样) With brakes (vertical type)	400	220	MHMD042G1V	MADHT2510
台达 Delta	T	无刹车(水平式样) No brake (horizontal type)	400	220	ECMA-C20604ES	ASD-B20421-B
		有刹车(垂直式样) With brakes (vertical type)	400	220	ECMA-C20604FS	ASD-B20421-B



电机外置直连/电机外置下方
Motor external direct connection/Motor external under below

M 电机外置直连 Motor external direct connection

单位:Unit: mm

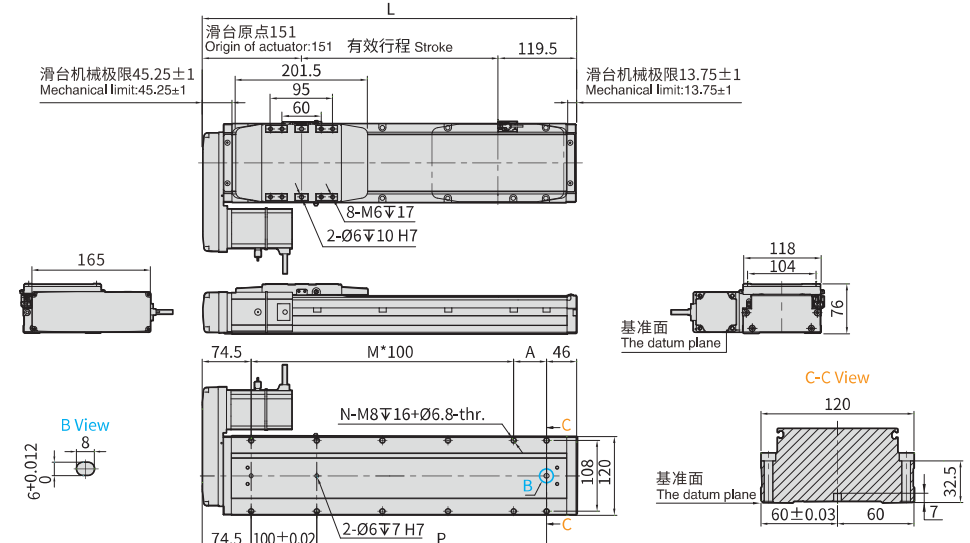


有效行程 Valid Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	344	394	444	494	544	594	644	694	744	794	844	894	944	994	1044	1094	1144	1194	1244	1294	1344	1394	1444	1494	1544
A	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13
N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
P	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
KG	7.9	8.44	8.9	9.37	9.84	10.3	10.77	11.23	11.7	12.16	12.73	13.19	13.66	14.12	14.59	15.05	15.6	16	16.45	17	17.6	18.2	18.8	19.4	20

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

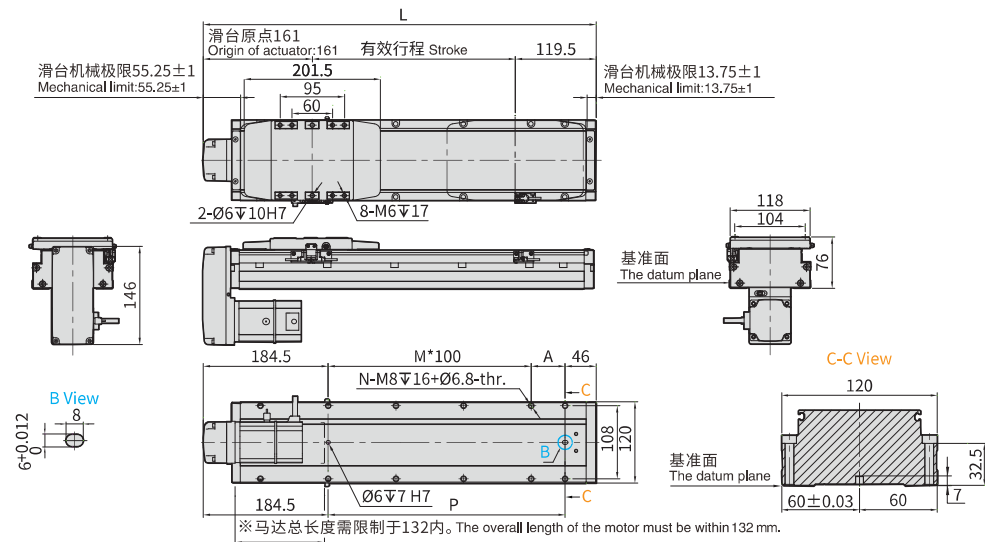
单位:Unit: mm



有效行程 Valid 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	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13
N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
P	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
KG	7.99	8.5	9.12	9.74	10.36	10.98	11.6	12.22	12.94	13.56	14.18	14.8	15.42	16	16.66	17.28	17.9	18.62	19.24	19.86	20.48	21.1	21.72	22.34	22.96

MP 电机外置下方 Motor external under below

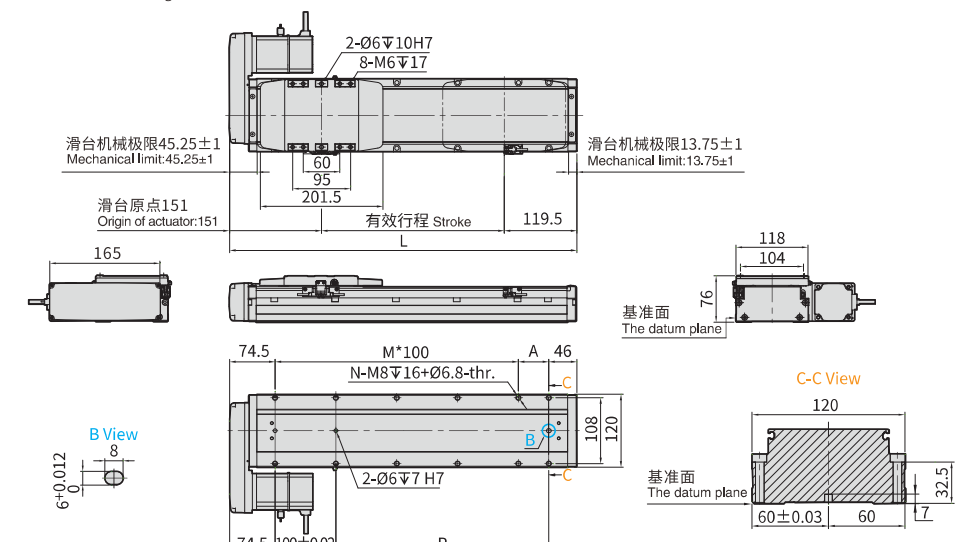
单位:Unit: mm



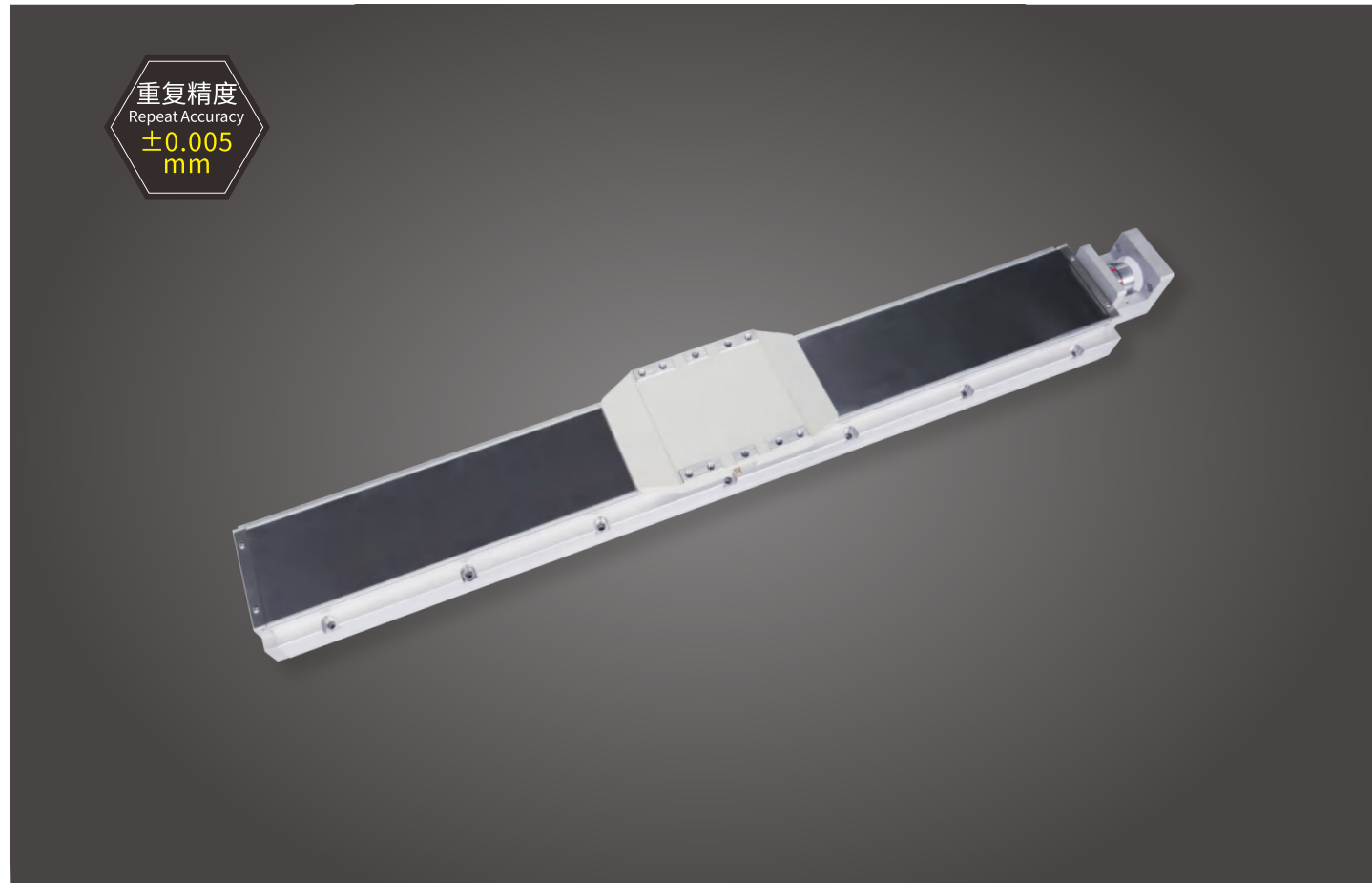
有效行程 Valid Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	330.5	380.5	430.5	480.5	530.5	580.5	630.5	680.5	730.5	780.5	830.5	880.5	930.5	980.5	1030.5	1080.5	1130.5	1180.5	1230.5	1280.5	1330.5	1380.5	1430.5	1480.5	1530.5
A	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12
N	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28
P	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
KG	7.79	8.3	8.92	9.54	10.16	10.78	11.4	12.02	12.74	13.36	13.98	14.6	15.22	15.84	16.46	17.08	17.7	18.42	19.04	19.66	20.28	20.9	21.52	22.14	22.76

MR 电机外置右侧 Motor external right side

单位:Unit: mm



有效行程 Valid 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	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13
N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
P	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
KG	7.99	8.5	9.12	9.74	10.36	10.98	11.6	12.22	12.94	13.56	14.18	14.8	15.42	16	16.66	17.28	17.9	18.62	19.24	19.86	20.48	21.1	21.72	22.34	22.96



重复精度
Repeat Accuracy
±0.005 mm

此图仅供参考,出货规格详见尺寸图面
This picture for reference only, specs details according with the drawing.

最大行程
Max Stroke 1350mm

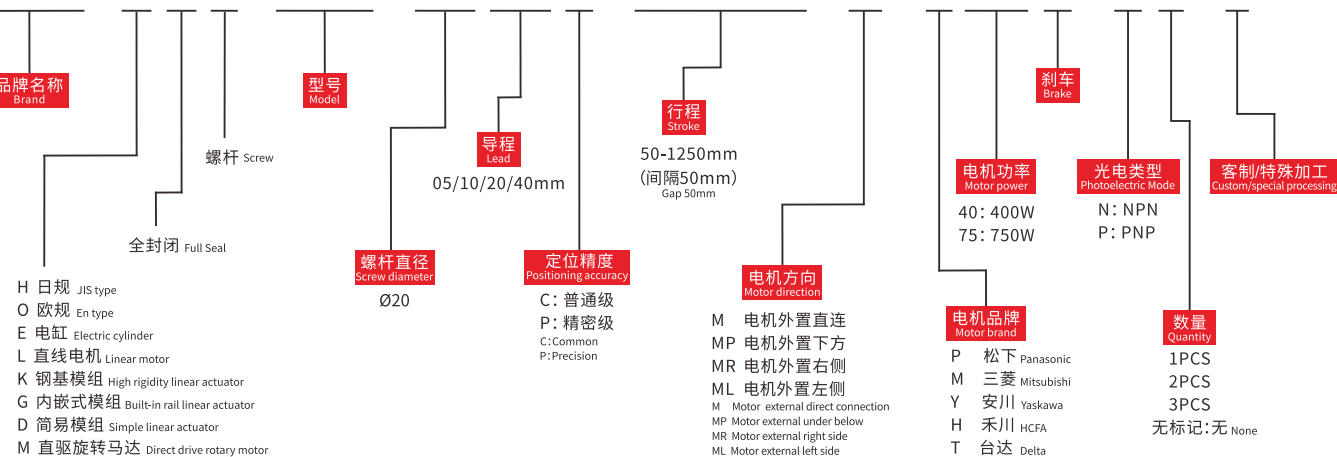
最高速度
Max Speed 2000mm/s

马达容量
Motor Output 750W

滚珠螺杆
Ball Screw Ø20mm

型号表达方式 Ordering method

TPA-GCR-150-2010C-L1250-M-P75B-N3-F

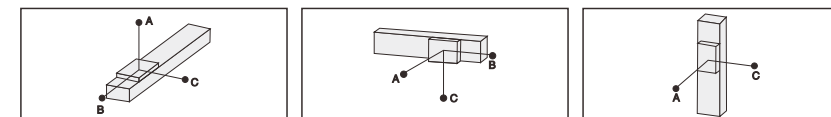


产品性能参数如下 Product performance parameters are as follows

规格 Spec	重复定位精度 (mm) Repeated positioning accuracy (mm)	±0.005				
	螺杆导程 (mm) Ball screw lead (mm)	5	10	20	40	
	最高速度 (mm/s) ^{※2} Maximum speed (mm/s)	250	500	1000	2000	
	最大可搬重量 Maximum Payload	水平使用 (kg) Horizontal (kg)	120	120	83	43
		垂直使用 (kg) Vertical (kg)	50	40	25	12
定额定力 (N) Rated thrust (N)	2563 1281 640 320					
部品 Parts	标准行程 (mm) ^{※1} Stroke pitch (mm)	100~1250mm/50 间隔 50mm Pitch				
	AC伺服马达容量 (W) AC servo motor output (w)	750				
	滚珠螺杆外径 (mm) Ball screw Ø (mm)	C7Ø20				
	联轴器 (mm) Coupling (mm)	12X19				
	原点感应器 Original Sense	外挂 Outside	TPA-N674-WR			

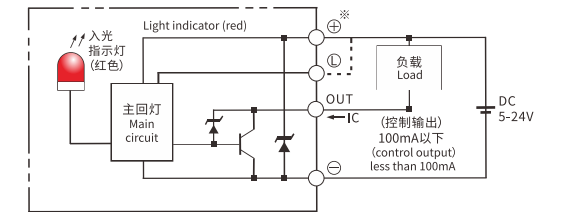
※1 行程超过850mm时,会产生螺杆偏摆,此时请将速度调降。
※1 When the stroke exceeds 850mm, the screw deflection will occur. Please reduce the speed at this time.
※2 马达加速/减速设定0.2秒。
※2 Acceleration and deceleration value is set 0.2 second.

容许负载力矩表 N.m Allowable overhang

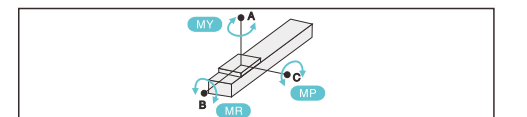


(单位Unit:mm)				(单位Unit:mm)				(单位Unit:mm)									
水平安装 Horizontal installation		A	B	C	侧面安装 Side mounting		A	B	C	垂直安装 Vertical installation		A	C				
导程 5 Lead	70kg	3235	349	408	75kg	377	322	2988	20kg	1368	1368	导程 5 Lead	30kg	911	911		
	90kg	2482	263	306	95kg	288	246	2333	50kg	546	546		15kg	1618	1618		
	120kg	1861	187	218	120kg	218	187	1850	25kg	970	970		40kg	607	607		
导程 10 Lead	65kg	1911	338	373	60kg	408	368	2092	10kg	1922	1922	导程 10 Lead	14kg	1377	1377		
	85kg	1445	248	276	80kg	296	266	1554	25kg	970	970		7kg	1356	1356		
	120kg	1000	164	182	120kg	182	182	1102	25kg	769	769		12kg	790	790		
导程 20 Lead	35kg	1666	547	538	30kg	633	644	1961	15kg	1126	740	导程 20 Lead	22kg	755	491	384	
	55kg	1030	331	328	50kg	365	369	1143	83kg	654	206		204	43kg	366	231	183
	83kg	654	206	204	83kg	230	231	656	12kg	729	936		1417	22kg	384	491	755
导程 40 Lead	15kg	1126	740	577	12kg	729	936	1417	12kg	729	936	导程 40 Lead	7kg	1356	1356		
	22kg	755	491	384	22kg	384	491	755	7kg	1356	1356		12kg	790	790		
	43kg	366	231	183	43kg	183	231	366	-	-	-						

感应器连接图<原点及端点> Sensor layout



静态容许负载惯量 Static loading moment



(单位Unit:N.m)	
MY	886
MP	826
MR	1500

*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

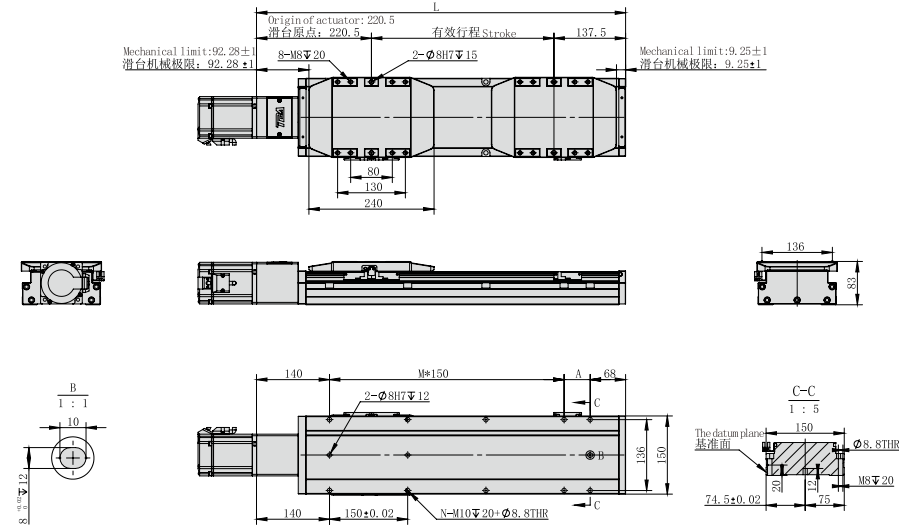
品牌 Brand	马达记号 Mark	刹车有无 Brake	马达容量 Motor capacity	电源电压 AC-Voltage	伺服马达型号 Servo motor model	驱动器型号 Driver Model
三菱 Mitsubishi	M	无刹车(水平式样) No brake (horizontal type)	750	220	HG-KR73	MR-J4-70A
		有刹车(垂直式样) With brakes (vertical type)	750	220	HG-KR73B	MR-J4-70A
松下 Panasonic	P	无刹车(水平式样) No brake (horizontal type)	750	220	MHMD082G1U	MADHT3520
		有刹车(垂直式样) With brakes (vertical type)	750	220	MHMD082G1V	MADHT3520
台达 Delta	T	无刹车(水平式样) No brake (horizontal type)	750	220	ECMA-C20807ES	ASD-B20721-B
		有刹车(垂直式样) With brakes (vertical type)	750	220	ECMA-C20807FS	ASD-B20721-B



电机外置直连/电机外置下方
Motor external direct connection/Motor external under below

M 电机外置直连 Motor external direct connection

单位:Unit:mm

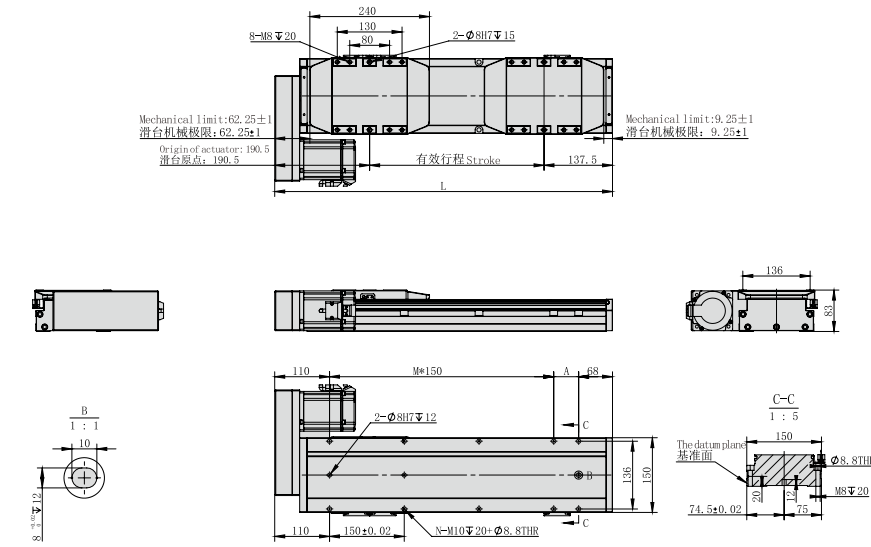


有效行程 Valid Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350
L	458	508	558	608	658	708	758	808	858	908	958	1008	1058	1108	1158	1208	1258	1308	1358	1408	1458	1508	1558	1608	1658	1708
A	100	150	50	100	150	50	100	150	50	100	150	50	100	150	50	100	150	50	100	150	50	100	150	50	100	150
M	1	1	2	2	2	3	3	3	4	4	4	5	5	5	6	6	6	7	7	7	8	8	8	9	9	9
N	6	6	8	8	8	10	10	10	12	12	12	14	14	14	16	16	16	18	18	18	20	20	20	22	22	22
KG	10.02	10.79	11.57	12.34	13.11	13.88	14.65	15.42	16.19	16.96	17.73	18.50	19.28	20.05	20.82	21.59	22.36	23.13	23.90	24.67	25.44	26.21	26.98	27.75	28.52	29.29

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

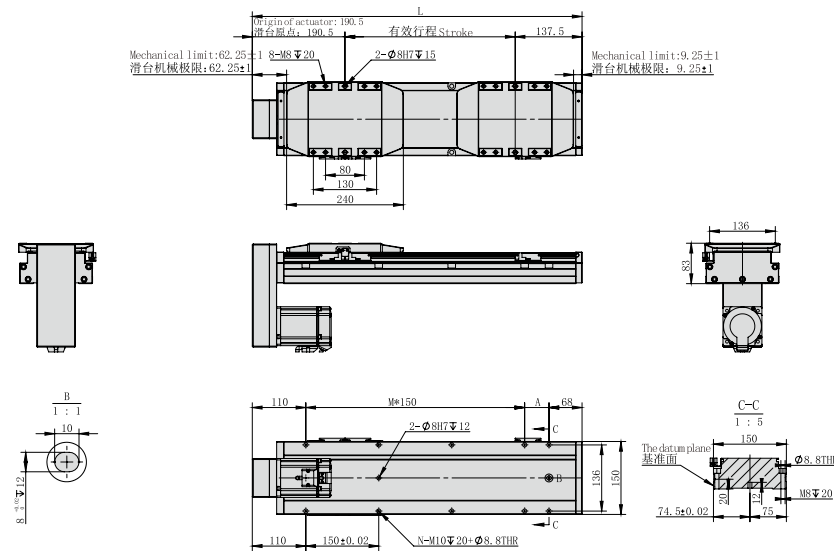
单位:Unit:mm



有效行程 Valid Stroke	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
L	428	478	528	578	628	678	728	778	828	878	928	978	1028	1078	1128	1178	1228	1278	1328	1378	1428	1478	1528	1578	1628	1678
A	100	150	50	100	150	50	100	150	50	100	150	50	100	150	50	100	150	50	100	150	50	100	150	50	100	150
M	1	1	2	2	2	3	3	3	4	4	4	5	5	5	6	6	6	7	7	7	8	8	8	9	9	9
N	6	6	8	8	8	10	10	10	12	12	12	14	14	14	16	16	16	18	18	18	20	20	20	22	22	22
KG	10.30	11.07	11.84	12.61	13.38	14.15	14.92	15.69	16.47	17.24	18.01	18.78	19.55	20.32	21.09	21.86	22.63	23.40	24.18	24.95	25.72	26.49	27.26	28.03	28.80	29.57

MP 电机外置下方 Motor external under below

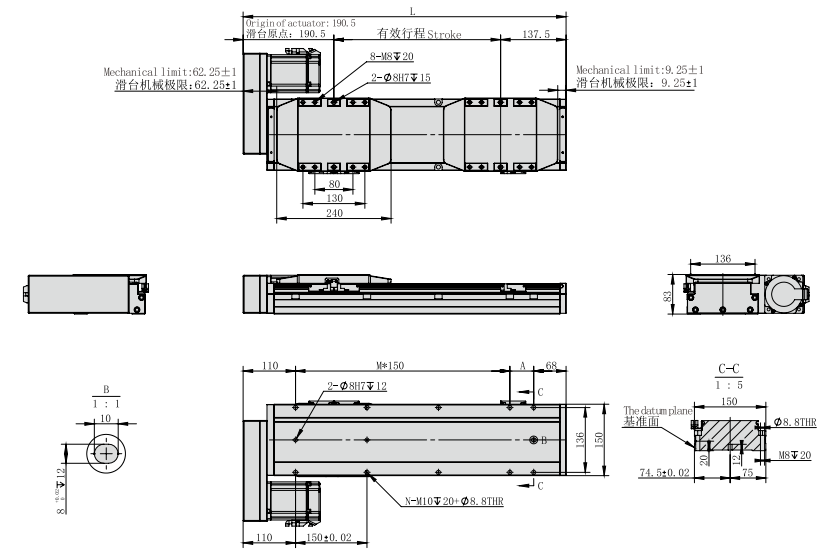
单位:Unit:mm



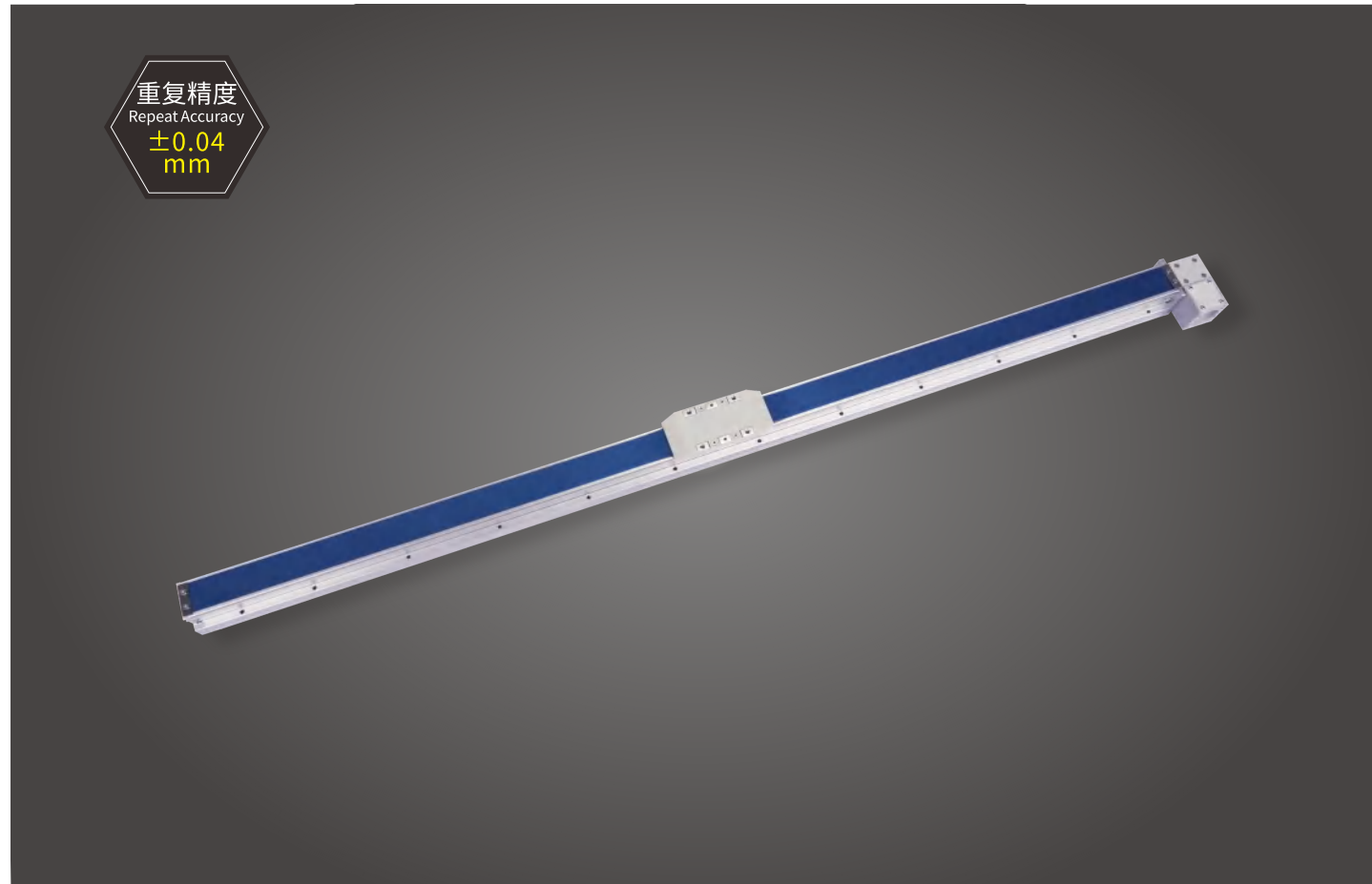
有效行程 Valid Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350
L	428	478	528	578	628	678	728	778	828	878	928	978	1028	1078	1128	1178	1228	1278	1328	1378	1428	1478	1528	1578	1628	1678
A	100	150	50	100	150	50	100	150	50	100	150	50	100	150	50	100	150	50	100	150	50	100	150	50	100	150
M	1	1	2	2	2	3	3	3	4	4	4	5	5	5	6	6	6	7	7	7	8	8	8	9	9	9
N	6	6	8	8	8	10	10	10	12	12	12	14	14	14	16	16	16	18	18	18	20	20	20	22	22	22
KG	10.30	11.07	11.84	12.61	13.38	14.15	14.92	15.69	16.47	17.24	18.01	18.78	19.55	20.32	21.09	21.86	22.63	23.40	24.18	24.95	25.72	26.49	27.26	28.03	28.80	29.57

MR 电机外置右侧 Motor external right side

单位:Unit:mm



有效行程 Valid Stroke	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
L	428	478	528	578	628	678	728	778	828	878	928	978	1028	1078	1128	1178	1228	1278	1328	1378	1428	1478	1528	1578	1628	1678
A	100	150	50	100	150	50	100	150	50	100	150	50	100	150	50	100	150	50	100	150	50	100	150	50	100	150
M	1	1	2	2	2	3	3	3	4	4	4	5	5	5	6	6	6	7	7	7	8	8	8	9	9	9
N	6	6	8	8	8	10	10	10	12	12	12	14	14	14	16	16	16	18	18	18	20	20	20	22	22	22
KG	10.30	11.07	11.84	12.61	13.38	14.15	14.92	15.69	16.47	17.24	18.01	18.78	19.55	20.32	21.09	21.86	22.63	23.40	24.18	24.95	25.72	26.49	27.26	28.03	28.80	29.57



重复精度
Repeat Accuracy
±0.04
mm

此图仅供参考, 出货规格详见尺寸图
This picture for reference only, specs details according with the drawing.

最大行程
Max Stroke 1700mm

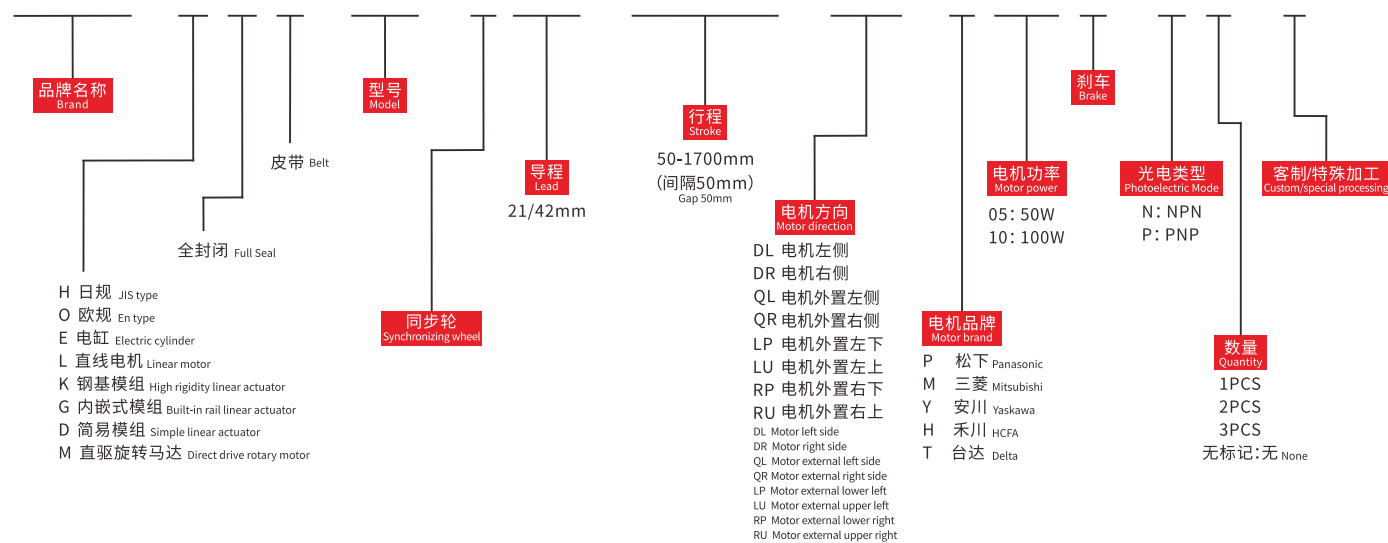
最高速度
Max Speed 2100mm/s

马达容量
Motor Output 100W

皮带宽度
Belt width 9mm

型号表达方式 Ordering method

TPA-GCB-50-P42-L100-DL-P10B-N3-F

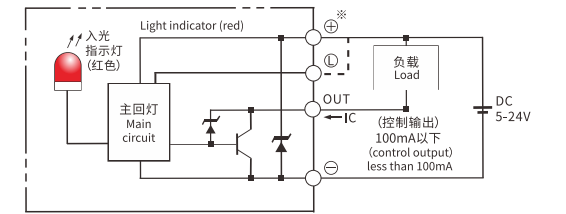


产品性能参数如下 Product performance parameters are as follows

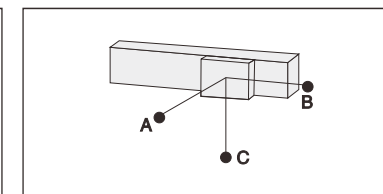
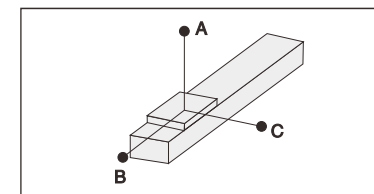
规格 Spec	重复定位精度 (mm) Repeated positioning accuracy (mm)	±0.04		
	导程 (mm) Lead (mm)	21	42	
	最高速度 (mm/s) Maximum speed (mm/s)	1050	2100	
	最大可搬重量 Maximum Payload	水平使用 (kg) Horizontal (kg)	5	
		垂直使用 (kg) Vertical (kg)	-	
定格推力 (N) Rated thrust (N)	35			
部品 Parts	标准行程 (mm) Stroke pitch (mm)	50~1700mm/50 间隔 50 mm Pitch		
	AC伺服马达容量 (W) AC servo motor output (w)	100		
	皮带宽度 (mm) Belt width (mm)	9		
	原点感应器 Original Sense	外挂 Outside	TPA-N674-WR	

*1 马达加速设定0.4秒。
*1 Acceleration and deceleration value is set 0.4 second.

感应器连接图<原点及端点> Sensor layout

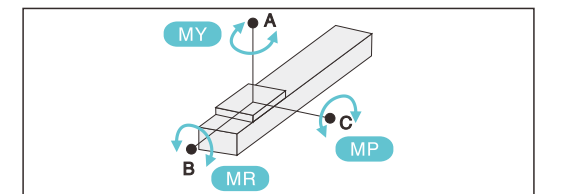


容许负载力矩表 N.m Allowable overhang



水平安装 Horizontal installation				侧面安装 Side mounting			
导程 Lead	3kg	5kg	5kg	3kg	5kg	5kg	3kg
21	520	250	254	238	85	254	488
42	150	80	65	140	100	310	-

静态容许负载惯量 Static loading moment



惯量点	惯量 (N.m)
MY	103
MP	103
MR	144

*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)	100	220	HG-KR13	MR-J4-40A
松下 Panasonic	P	无刹车(水平式样) No brake (horizontal type)	100	220	MHMD042G1U	MADHT1505
台达 Delta	T	无刹车(水平式样) No brake (horizontal type)	100	220	ECMA-C20604ES	ASD-B20121-B



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 picture for reference only, specs details according with the drawing.

最大行程
Max Stroke 1700mm

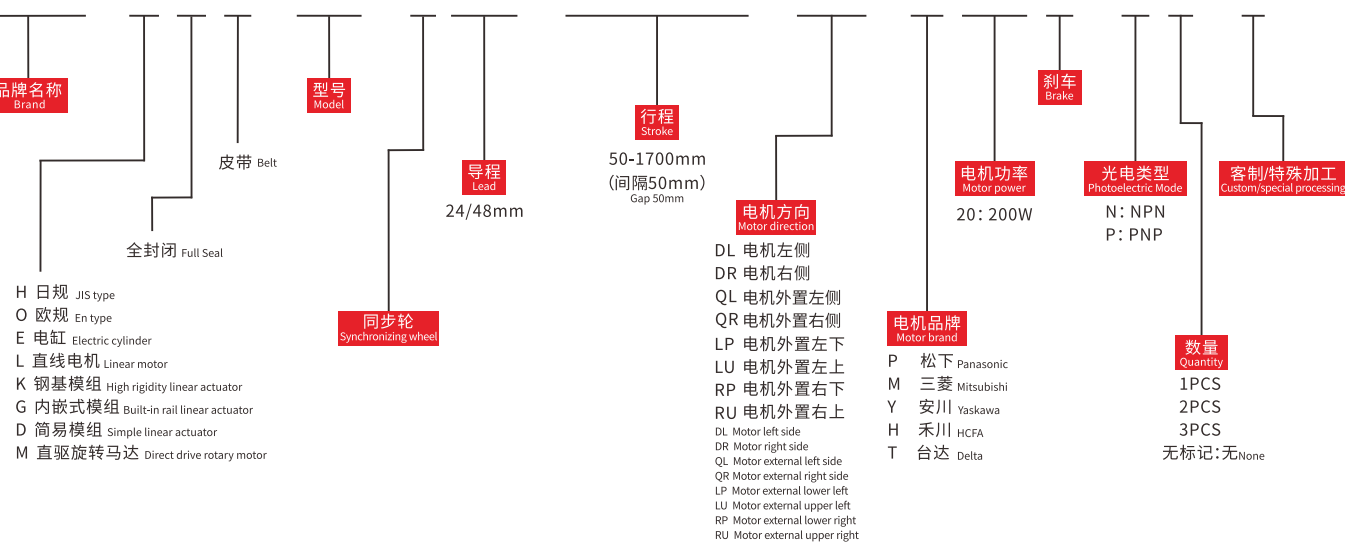
最高速度
Max Speed 2400mm/s

马达容量
Motor Output 200W

皮带宽度
Belt width 15mm

型号表达方式 Ordering method

TPA-GCB-80-P48-L1400-DL-M20B-N3-F

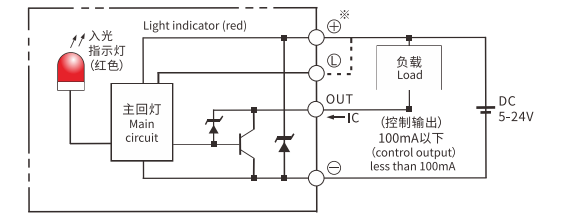


产品性能参数如下 Product performance parameters are as follows

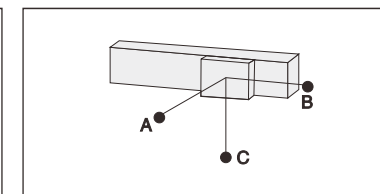
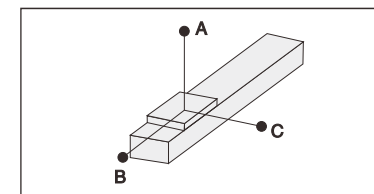
规格 Spec	重复定位精度 (mm) Repeated positioning accuracy (mm)	±0.04		
	导程 (mm) Lead (mm)	24	48	
	最高速度 (mm/s) Maximum speed (mm/s)	1200	2400	
	最大可搬重量 Maximum Payload	水平使用 (kg) Horizontal (kg)	15	
		垂直使用 (kg) Vertical (kg)	-	
定格推力 (N) Rated thrust (N)	65			
部品 Parts	标准行程 (mm) Stroke pitch (mm)	50~1700mm/50 间隔 50 mm Pitch		
	AC伺服马达容量 (W) AC servo motor output (w)	200		
	皮带宽度 (mm) Belt width (mm)	15		
	原点感应器 Original Sense	外挂 Outside	TPA-N674-WR	

*1 马达加速设定0.4秒。
*1 Acceleration and deceleration value is set 0.4 second.

感应器连接图<原点及端点> Sensor layout

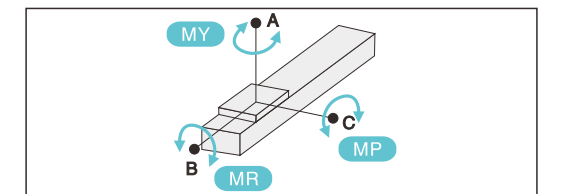


容许负载力矩表 N.m Allowable overhang



水平安装 Horizontal installation				侧面安装 Side mounting			
重量 Weight	A	B	C	重量 Weight	A	B	C
5kg	1794	688	538	5kg	348	446	1170
10kg	858	324	253	10kg	285	365	961
15kg	670	251	197	15kg	197	251	670

静态容许负载惯量 Static loading moment



惯量 Inertia	容许值 Allowable Value
MY	318
MP	318
MR	626

*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.

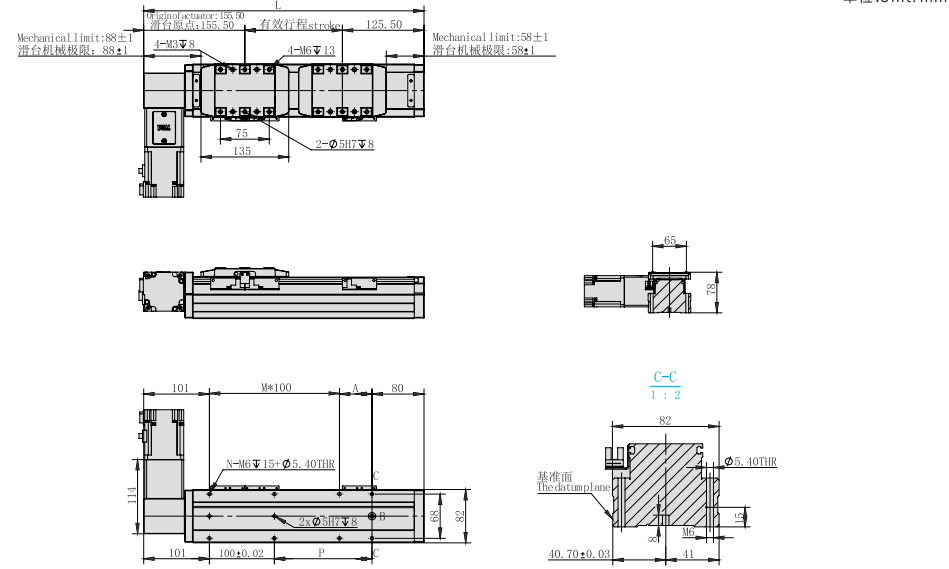
搭配伺服马达一览表 Suitable motor brand

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)	200	220	HG-KR23	MR-J4-20A
松下 Panasonic	P	无刹车(水平式样) No brake (horizontal type)	200	220	MHMD022P1S	MADHT1207
台达 Delta	T	无刹车(水平式样) No brake (horizontal type)	200	220	ECMA-C20602ES	ASD-B20221-B



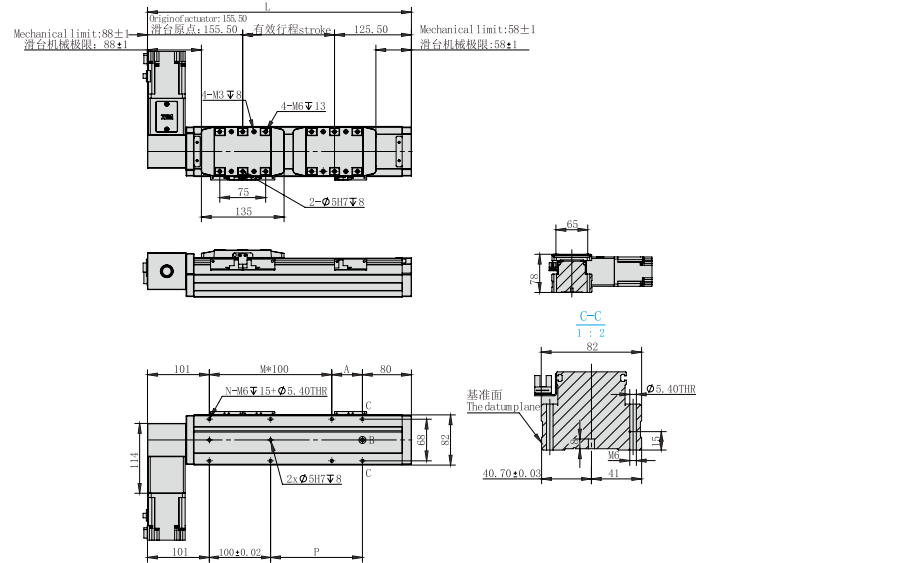
电机左侧/电机右侧
Motor left side/Motor right side

DL 电机左侧 Motor left side



有效行程 Valid 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	1600	1650	1700
L	331	381	431	481	531	581	631	681	731	781	831	881	931	981	1031	1081	1131	1181	1231	1281	1331	1381	1431	1481	1531	1581	1631	1681	1731	1781	1831	1881	1931	1981
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15	16	16	17	17
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38
P	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	1600	1650	1700
KG	3.15	3.42	3.69	3.96	4.23	4.5	4.77	5.04	5.31	5.58	5.85	6.12	6.39	6.66	6.93	7.2	7.47	7.74	8.01	8.28	8.55	8.82	9.09	9.36	9.63	9.9	10.2	10.4	10.7	11	11.3	11.5	11.8	12.1

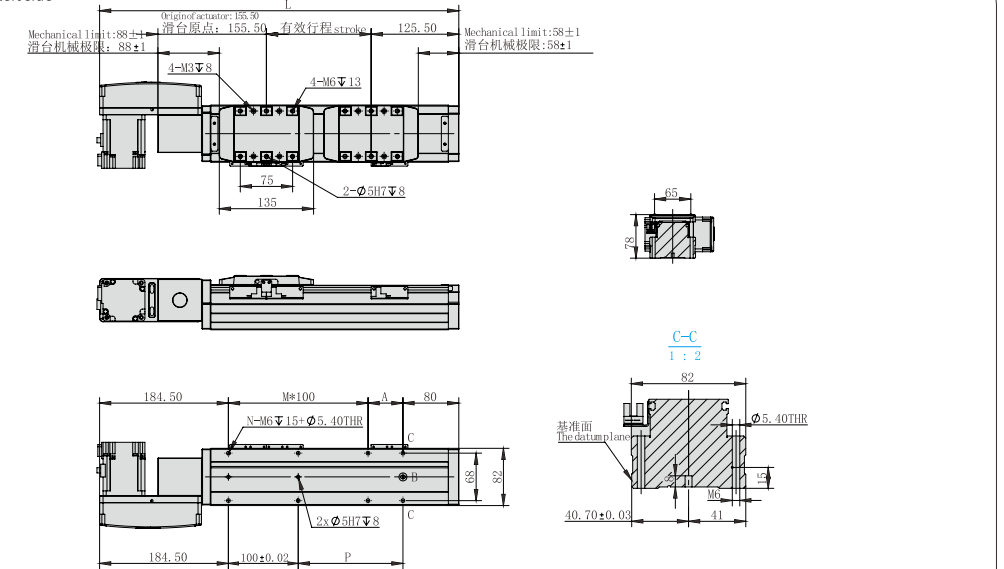
DR 电机右侧 Motor right side



有效行程 Valid 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	1600	1650	1700
L	331	381	431	481	531	581	631	681	731	781	831	881	931	981	1031	1081	1131	1181	1231	1281	1331	1381	1431	1481	1531	1581	1631	1681	1731	1781	1831	1881	1931	1981
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15	16	16	17	17
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38
P	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	1600	1650	1700
KG	3.15	3.42	3.69	3.96	4.23	4.5	4.77	5.04	5.31	5.58	5.85	6.12	6.39	6.66	6.93	7.2	7.47	7.74	8.01	8.28	8.55	8.82	9.09	9.36	9.63	9.9	10.2	10.4	10.7	11	11.3	11.5	11.8	12.1

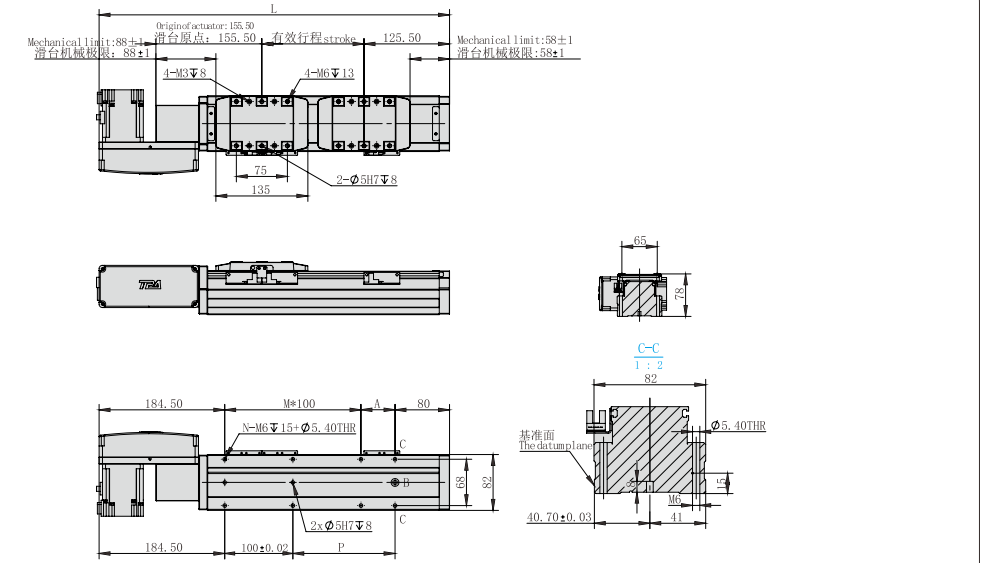
电机外置左侧/电机外置右侧
Motor external left side/Motor external right side

QL 电机外置左侧 Motor external left side



有效行程 Valid 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	1600	1650	1700
L	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	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5	1414.5	1464.5	1514.5	1564.5	1614.5	1664.5	1714.5	1764.5	1814.5	1864.5	1914.5	1964.5	2014.5	2064.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15	16	16	17	17
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38
P	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	1600	1650	1700
KG	3.15	3.42	3.69	3.96	4.23	4.5	4.77	5.04	5.31	5.58	5.85	6.12	6.39	6.66	6.93	7.2	7.47	7.74	8.01	8.28	8.55	8.82	9.09	9.36	9.63	9.9	10.2	10.4	10.7	11	11.3	11.5	11.8	12.1

QR 电机外置右侧 Motor external right side

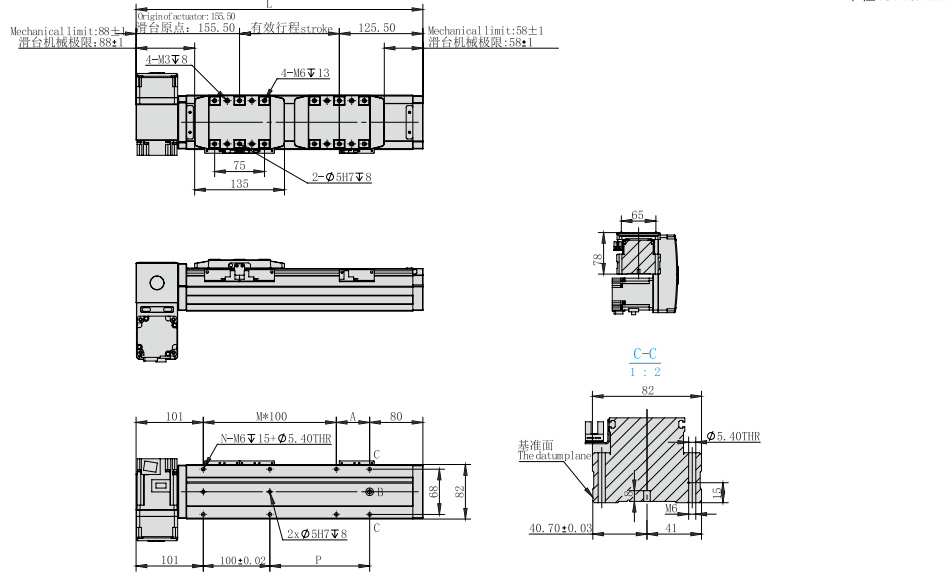


有效行程 Valid Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700
L	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5	1414.5	1464.5	1514.5	1564.5	1614.5	1664.5	1714.5	1764.5	1814.5	1864.5	1914.5	1964.5	2014.5	2064.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15	16	16	17	17
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38
P	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	1600	1650	1700
KG	3.15	3.42	3.69	3.96	4.23	4.5	4.77	5.04	5.31	5.58	5.85	6.12	6.39	6.66	6.93	7.2	7.47	7.74	8.01	8.28	8.55	8.82	9.09	9.36	9.63	9.9	10.2	10.4	10.7	11	11.3	11.5	11.8	12.1



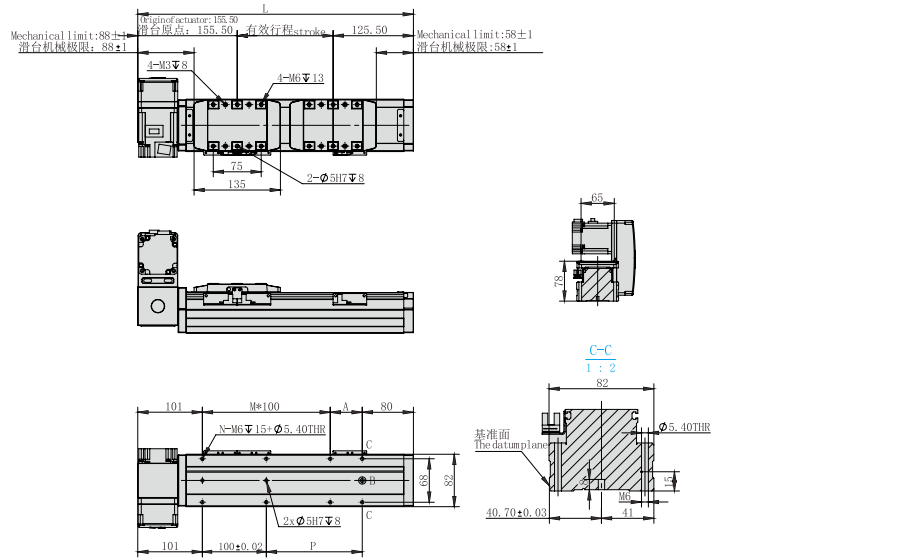
电机外置左下/电机外置左上
Motor external lower left/Motor external upper left

LP 电机外置左下 Motor external lower left



有效行程 Valid 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	1600	1650	1700
L	331	381	431	481	531	581	631	681	731	781	831	881	931	981	1031	1081	1131	1181	1231	1281	1331	1381	1431	1481	1531	1581	1631	1681	1731	1781	1831	1881	1931	1981
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15	16	16	17	17
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38
P	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	1600	1650	1700
KG	3.15	3.42	3.69	3.96	4.23	4.5	4.77	5.04	5.31	5.58	5.85	6.12	6.39	6.66	6.93	7.2	7.47	7.74	8.01	8.28	8.55	8.82	9.09	9.36	9.63	9.9	10.2	10.4	10.7	11	11.3	11.5	11.8	12.1

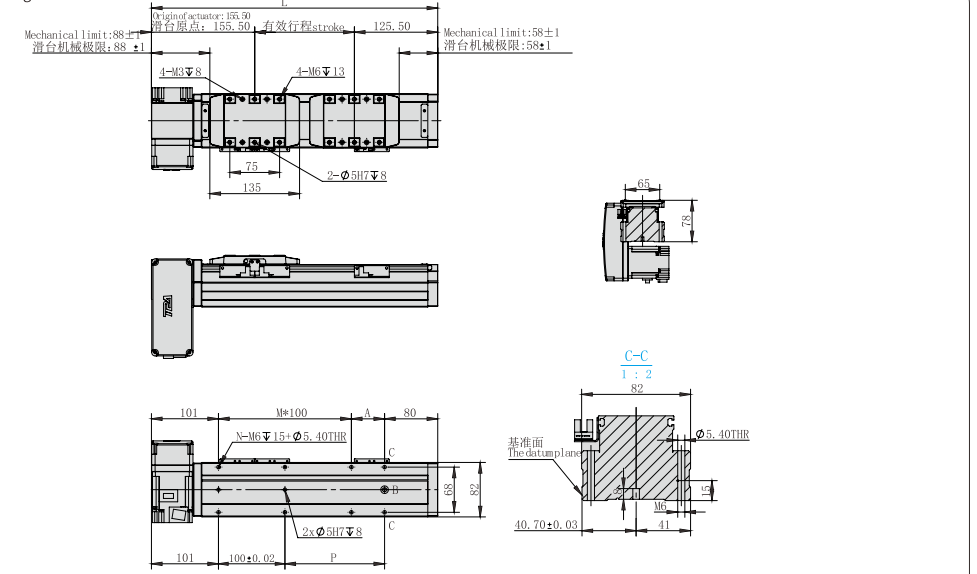
LU 电机外置左上 Motor external upper left



有效行程 Valid 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	1600	1650	1700
L	331	381	431	481	531	581	631	681	731	781	831	881	931	981	1031	1081	1131	1181	1231	1281	1331	1381	1431	1481	1531	1581	1631	1681	1731	1781	1831	1881	1931	1981
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15	16	16	17	17
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38
P	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	1600	1650	1700
KG	3.15	3.42	3.69	3.96	4.23	4.5	4.77	5.04	5.31	5.58	5.85	6.12	6.39	6.66	6.93	7.2	7.47	7.74	8.01	8.28	8.55	8.82	9.09	9.36	9.63	9.9	10.2	10.4	10.7	11	11.3	11.5	11.8	12.1

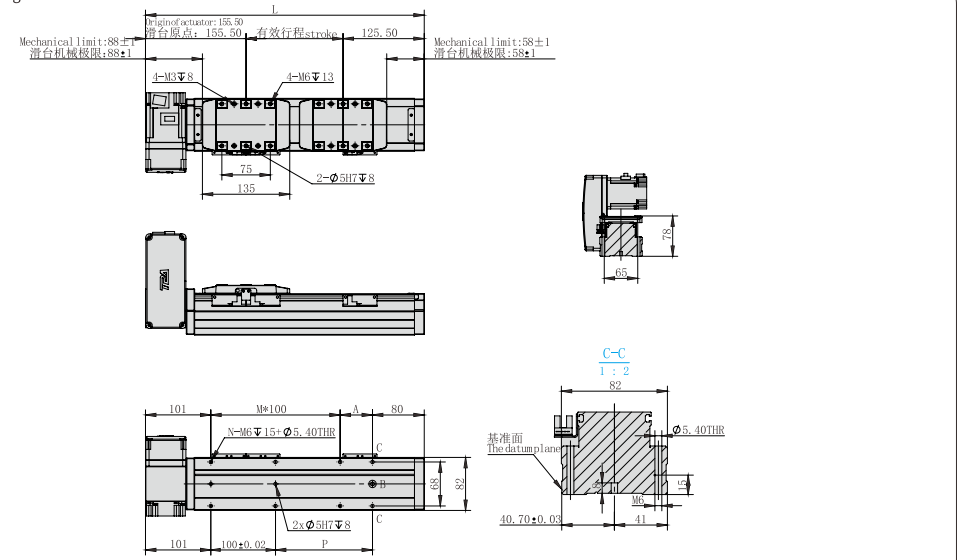
电机外置右下/电机外置右上
Motor external lower right/Motor external upper right

RP 电机外置右下 Motor external lower right

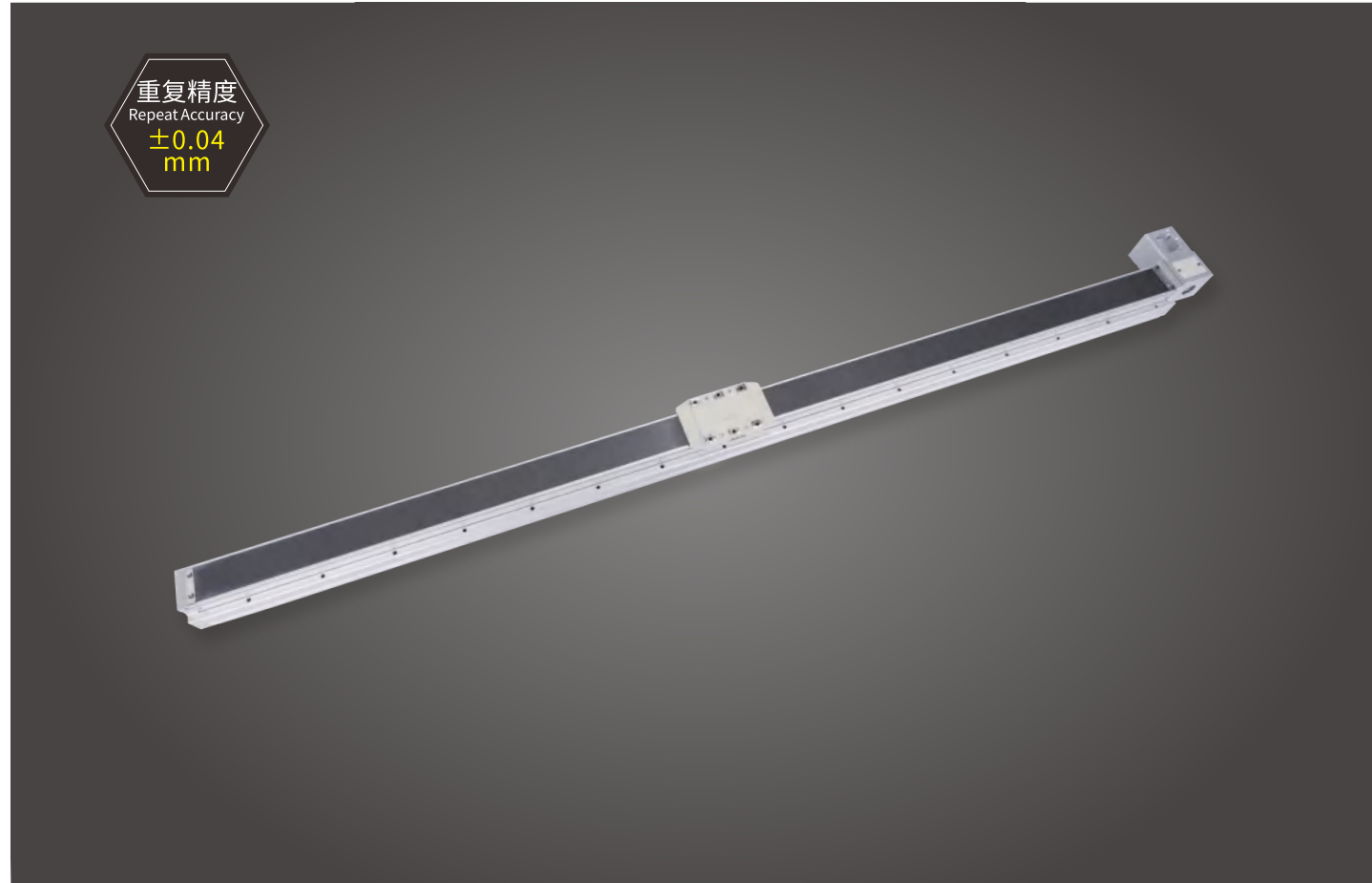


有效行程 Valid Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700
L	331	381	431	481	531	581	631	681	731	781	831	881	931	981	1031	1081	1131	1181	1231	1281	1331	1381	1431	1481	1531	1581	1631	1681	1731	1781	1831	1881	1931	1981
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15	16	16	17	17
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38
P	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	1600	1650	1700
KG	3.15	3.42	3.69	3.96	4.23	4.5	4.77	5.04	5.31	5.58	5.85	6.12	6.39	6.66	6.93	7.2	7.47	7.74	8.01	8.28	8.55	8.82	9.09	9.36	9.63	9.9	10.2	10.4	10.7	11	11.3	11.5	11.8	12.1

RU 电机外置右上 Motor external upper right



有效行程 Valid 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	1600	1650	1700
L	331	381	431	481	531	581	631	681	731	781	831	881	931	981	1031	1081	1131	1181	1231	1281	1331	1381	1431	1481	1531	1581	1631	1681	1731	1781	1831	1881	1931	1981
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15	16	16	17	17
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38
P	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	1600	1650	1700
KG	3.15	3.42	3.69	3.96	4.23	4.5	4.77	5.04	5.31	5.58	5.85	6.12	6.39	6.66	6.93	7.2	7.47	7.74	8.01	8.28	8.55	8.82	9.09	9.36	9.63	9.9	10.2	10.4	10.7	11	11.3	11.5	11.8	12.1



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 picture for reference only, specs details according with the drawing.

最大行程
Max Stroke 1700mm

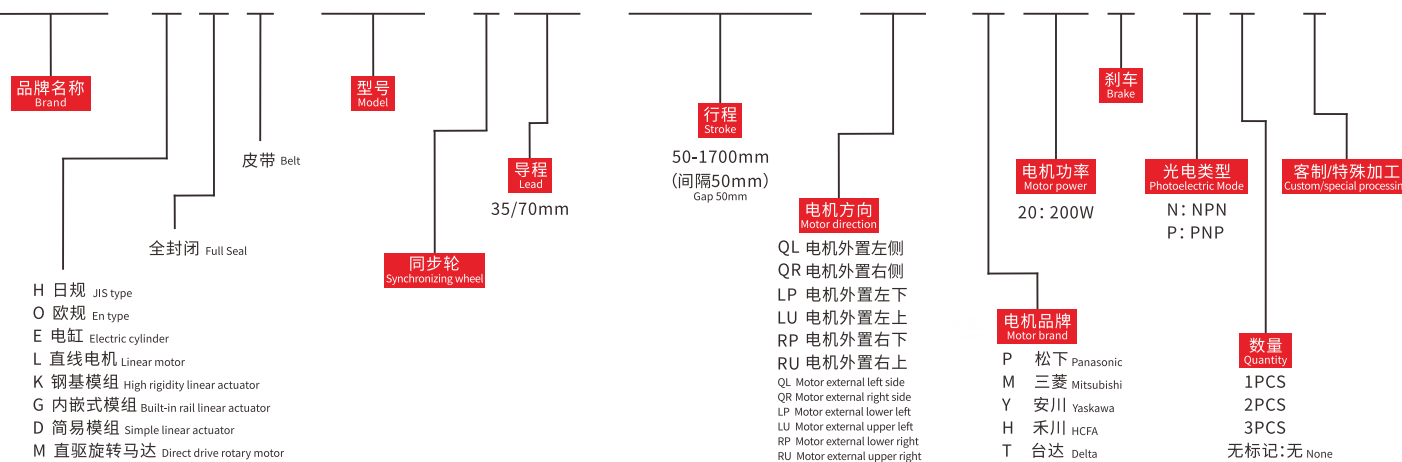
最高速度
Max Speed 3600mm/s

马达容量
Motor Output 200W

皮带宽度
Belt width 25mm

型号表达方式 Ordering method

TPA-GCB-120-P70-L1700-LP-M20B-N3-F

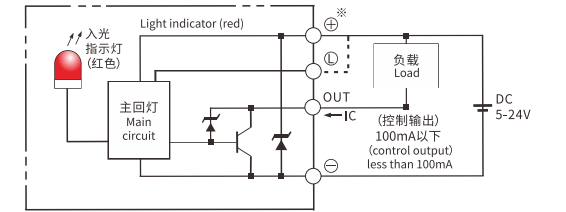


产品性能参数如下 Product performance parameters are as follows

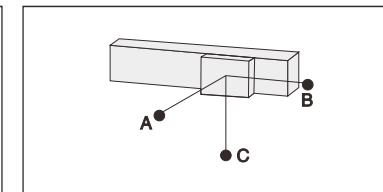
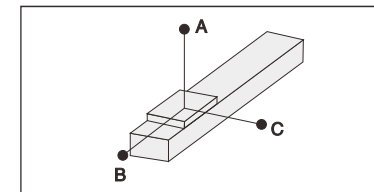
规格 Spec	重复定位精度 (mm) Repeated positioning accuracy (mm)	±0.04		
	导程 (mm) Lead (mm)	35	70	
	最高速度 (mm/s) Maximum speed (mm/s)	1750	3500	
	最大可搬重量 Maximum Payload	水平使用 (kg) Horizontal (kg)	25	
		垂直使用 (kg) Vertical (kg)	-	
定格推力 (N) Rated thrust (N)	100			
部品 Parts	标准行程 (mm) Stroke pitch (mm)	50~1700mm/50 间隔 50 mm Pitch		
	AC伺服马达容量 (W) AC servo motor output (w)	200		
	皮带宽度 (mm) Belt width (mm)	25		
	原点感应器 Original Sense	外挂 Outside	TPA-N674-WR	

※1 马达加速减速设定0.4秒。
※1 Acceleration and deceleration value is set 0.4 second.

感应器连接图<原点及端点> Sensor layout

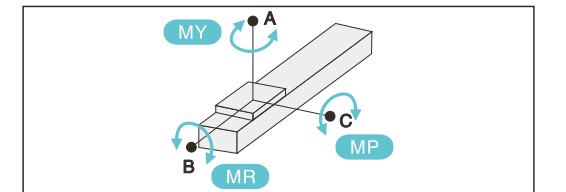


容许负载力矩表 N.m Allowable overhang



水平安装 Horizontal installation				侧面安装 Side mounting					
		A	B	A	B	C			
容许 行程 36/72 Lead	10kg	1794	688	538	容许 行程 36/72 Lead	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



	静态容许负载惯量 (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

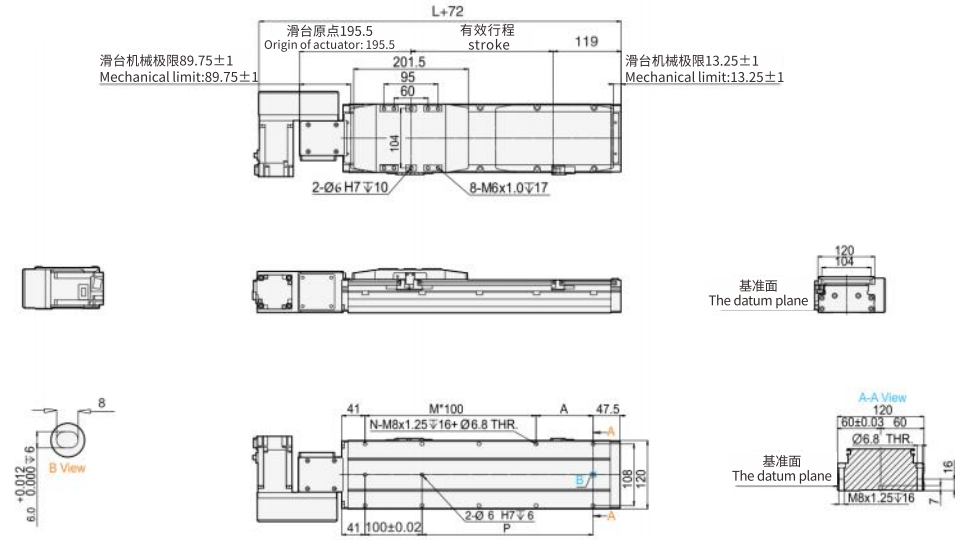
品牌 Brand	马达记号 Mark	刹车有无 Brake	马达容量 Motor capacity	电源电压 AC-Voltage	伺服马达型号 Servo motor model	驱动器型号 Driver Model
三菱 Mitsubishi	M	无刹车(水平式样) No brake (horizontal type)	200	220	HG-KR23	MR-J4-20A
松下 Panasonic	P	无刹车(水平式样) No brake (horizontal type)	200	220	MHMD022P1S	MADHT1207
台达 Delta	T	无刹车(水平式样) No brake (horizontal type)	200	220	ECMA-C20602ES	ASD-B20221-B



电机左侧/电机右侧
Motor left side/Motor right side

QL 电机外置左侧 Motor external left side

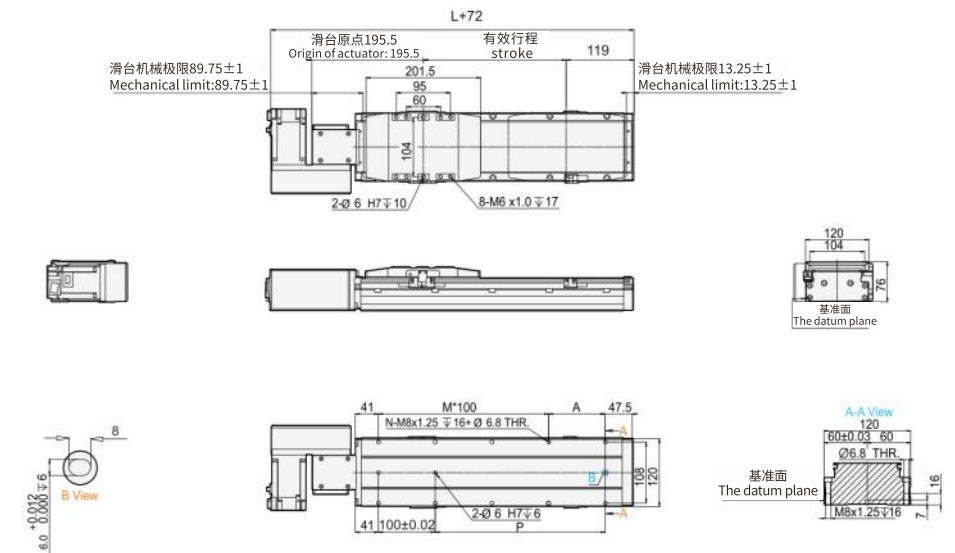
单位:Unit: mm



有效行程 Valid 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	1600	1650	1700
L	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	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5	1414.5	1464.5	1514.5	1564.5	1614.5	1664.5	1714.5	1764.5	1814.5	1864.5	1914.5	1964.5	2014.5	2064.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15	16	16	17	17
N	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38	40	40
P	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	1600	1650	1700	1750	1800
KG	5.99	6.35	6.71	7.07	7.43	7.79	8.15	8.51	8.87	9.23	9.59	9.95	10.3	10.7	11	11.4	11.8	12.1	12.5	12.8	13.2	13.6	13.9	14.3	14.6	15	15.4	15.7	16.1	16.4	16.8	17.2	17.5	17.9

QR 电机外置右侧 Motor external right side

单位:Unit: mm

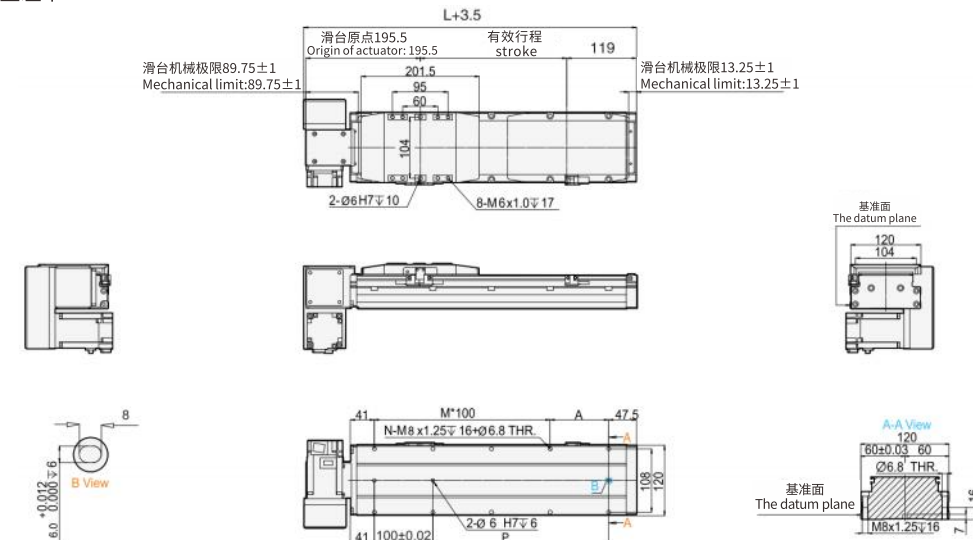


有效行程 Valid Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700
L	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5	1414.5	1464.5	1514.5	1564.5	1614.5	1664.5	1714.5	1764.5	1814.5	1864.5	1914.5	1964.5	2014.5	2064.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15	16	16	17	17
N	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38	40	40
P	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	1600	1650	1700	1750	1800
KG	5.99	6.35	6.71	7.07	7.43	7.79	8.15	8.51	8.87	9.23	9.59	9.95	10.3	10.7	11	11.4	11.8	12.1	12.5	12.8	13.2	13.6	13.9	14.3	14.6	15	15.4	15.7	16.1	16.4	16.8	17.2	17.5	17.9

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

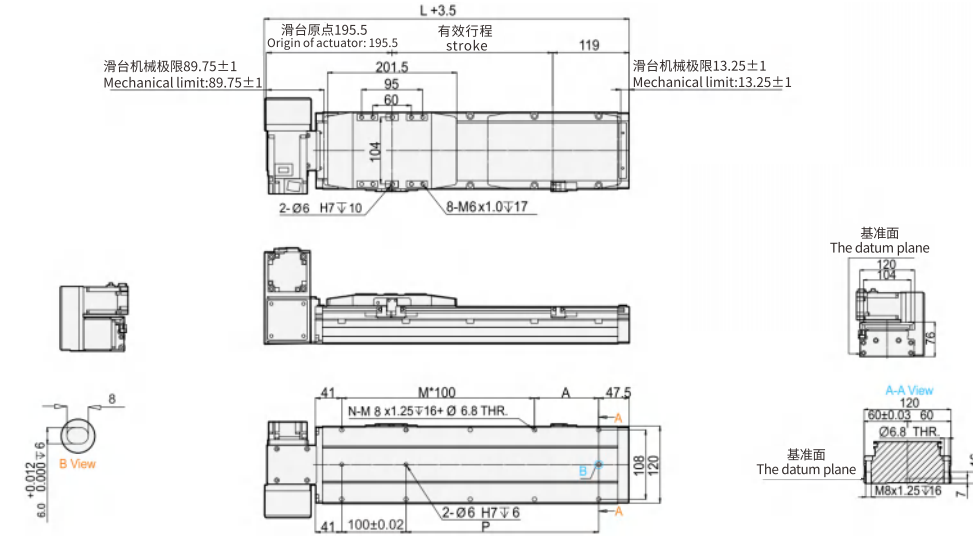
单位:Unit: mm



有效行程 Valid 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	1600	1650	1700
L	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	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5	1414.5	1464.5	1514.5	1564.5	1614.5	1664.5	1714.5	1764.5	1814.5	1864.5	1914.5	1964.5	2014.5	2064.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15	16	16	17	17
N	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38	40	40
P	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	1600	1650	1700	1750	1800
KG	5.99	6.35	6.71	7.07	7.43	7.79	8.15	8.51	8.87	9.23	9.59	9.95	10.3	10.7	11	11.4	11.8	12.1	12.5	12.8	13.2	13.6	13.9	14.3	14.6	15	15.4	15.7	16.1	16.4	16.8	17.2	17.5	17.9

LU 电机外置左上 Motor external upper left

单位:Unit: mm



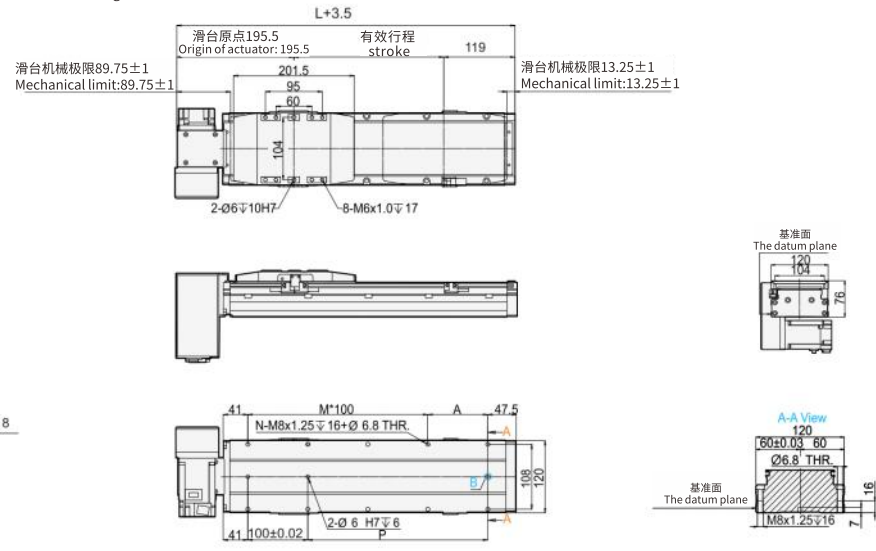
有效行程 Valid Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700
L	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5	1414.5	1464.5	1514.5	1564.5	1614.5	1664.5	1714.5	1764.5	1814.5	1864.5	1914.5	1964.5	2014.5	2064.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15	16	16	17	17
N	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38	40	40
P	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	1600	1650	1700	1750	1800
KG	5.99	6.35	6.71	7.07	7.43	7.79	8.15	8.51	8.87	9.23	9.59	9.95	10.3	10.7	11	11.4	11.8	12.1	12.5	12.8	13.2	13.6	13.9	14.3	14.6	15	15.4	15.7	16.1	16.4	16.8	17.2	17.5	17.9



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

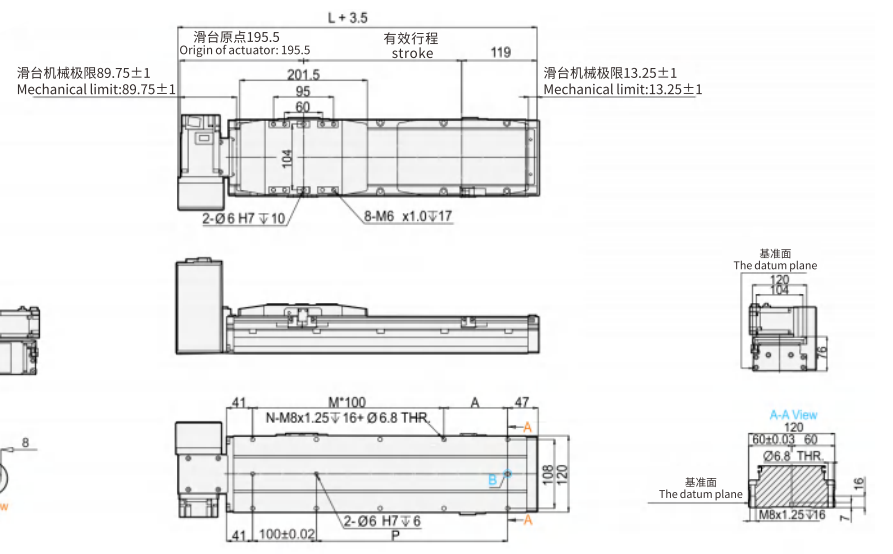
单位:Unit: mm



有效行程 Valid 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	1600	1650	1700
L	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	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5	1414.5	1464.5	1514.5	1564.5	1614.5	1664.5	1714.5	1764.5	1814.5	1864.5	1914.5	1964.5	2014.5	2064.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15	16	16	17	17
N	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38	40	40
P	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	1600	1650	1700	1750	1800
KG	5.99	6.35	6.71	7.07	7.43	7.79	8.15	8.51	8.87	9.23	9.59	9.95	10.3	10.7	11	11.4	11.8	12.1	12.5	12.8	13.2	13.6	13.9	14.3	14.6	15	15.4	15.7	16.1	16.4	16.8	17.2	17.5	17.9

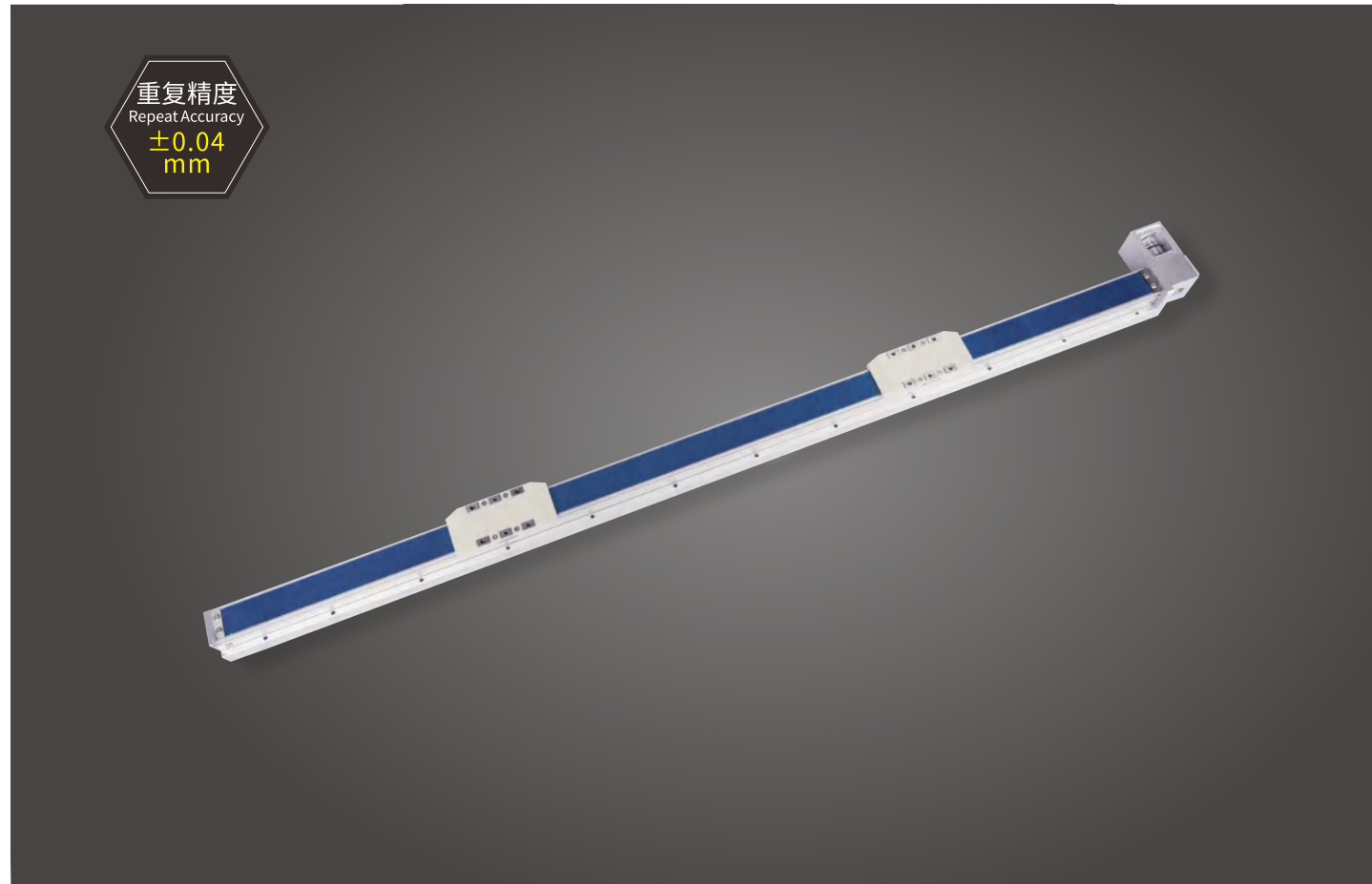
RU 电机外置右上 Motor external upper right

单位:Unit: mm



有效行程 Valid 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	1600	1650	1700
L	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	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5	1414.5	1464.5	1514.5	1564.5	1614.5	1664.5	1714.5	1764.5	1814.5	1864.5	1914.5	1964.5	2014.5	2064.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15	16	16	17	17
N	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38	40	40
P	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	1600	1650	1700	1750	1800
KG	5.99	6.35	6.71	7.07	7.43	7.79	8.15	8.51	8.87	9.23	9.59	9.95	10.3	10.7	11	11.4	11.8	12.1	12.5	12.8	13.2	13.6	13.9	14.3	14.6	15	15.4	15.7	16.1	16.4	16.8	17.2	17.5	17.9

MEMO



重复精度
Repeat Accuracy
±0.04
mm

此图仅供参考, 出货规格详见尺寸图
This picture for reference only, specs details according with the drawing.

最大行程
Max Stroke 650mm

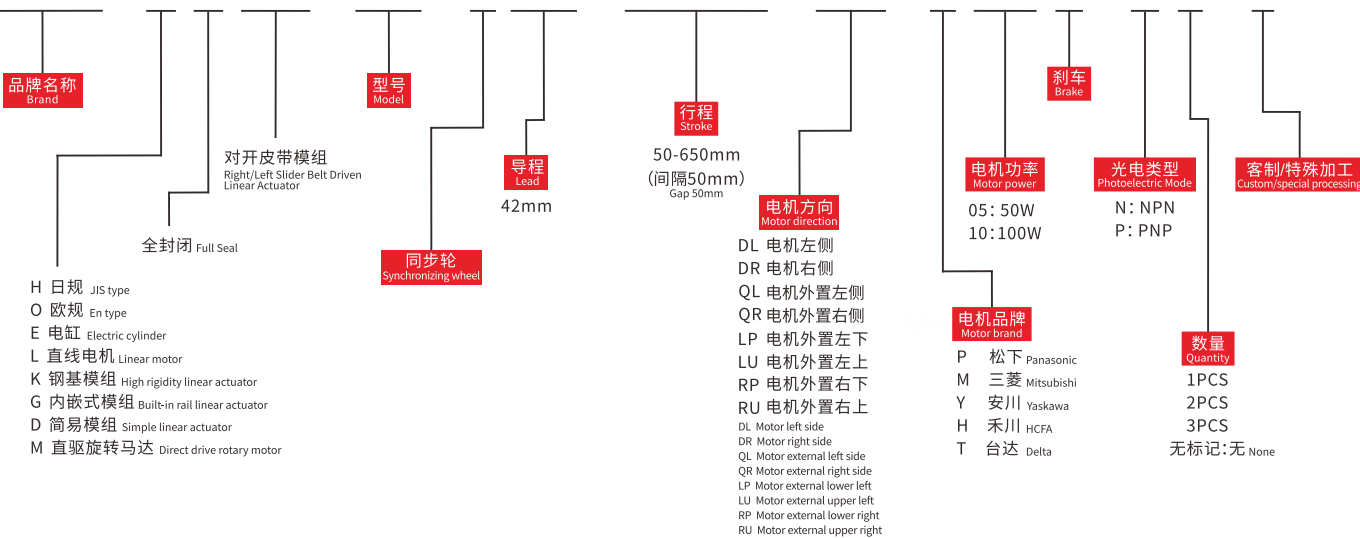
最高速度
Max Speed 2100mm/s

马达容量
Motor Output 100W

皮带宽度
Belt width 9mm

型号表达方式 Ordering method

TPA-GCBS-50-P42-L100-DL-P10B-N3-F

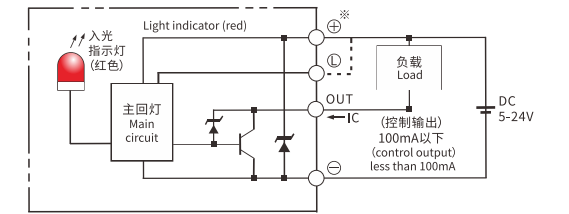


产品性能参数如下 Product performance parameters are as follows

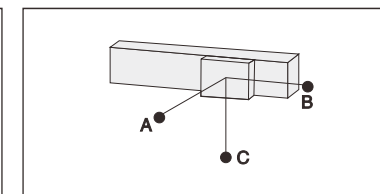
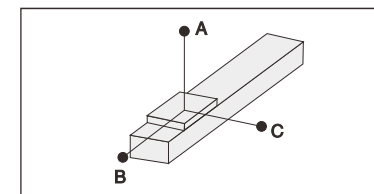
规格 Spec	重复定位精度 (mm) Repeated positioning accuracy (mm)	±0.04	
	导程 (mm) Lead (mm)	42	
	最高速度 (mm/s) Maximum speed (mm/s)	2100	
	最大可搬重量 Maximum Payload	水平使用 (kg) Horizontal (kg)	5 (双滑座)
		垂直使用 (kg) Vertical (kg)	-
定格推力 (N) Rated thrust (N)	48		
部品 Parts	标准行程 (mm) Stroke pitch (mm)	50~650mm/25 间隔 25mm Pitch	
	AC伺服马达容量 (W) AC servo motor output (w)	100	
	皮带宽度 (mm) Belt width (mm)	9	
	原点感应器 Original Sense	外挂 Outside	TPA-N674-WR

*1 马达加速/减速设定0.4秒。
*1 Acceleration and deceleration value is set 0.4 second.

感应器连接图<原点及端点> Sensor layout

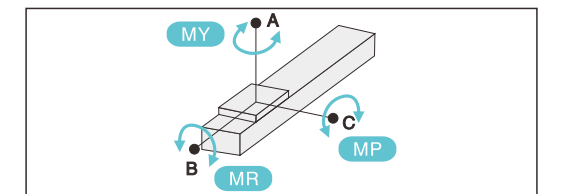


容许负载力矩表 N.m Allowable overhang



		(单位Unit:mm)			(单位Unit:mm)				
		水平安装 Horizontal installation			侧面安装 Side mounting				
导程 40 Lead	重量	A	B	C	重量	A	B	C	
40	2kg	320	120	130	40	2kg	130	120	320
	3.5kg	220	70	80		3.5kg	75	70	320
	5kg	175	55	60		5kg	65	55	170

静态容许负载惯量 Static loading moment



惯量点	惯量值 (单位Unit:N.m)
MY	103
MP	103
MR	144

*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

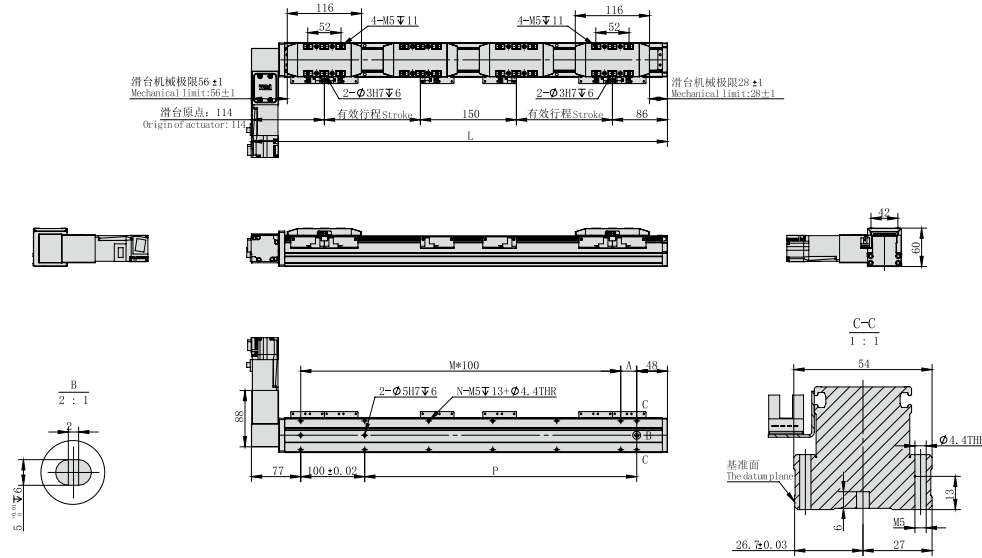
品牌 Brand	马达记号 Mark	刹车有无 Brake	马达容量 Motor capacity	电源电压 AC-Voltage	伺服马达型号 Servo motor model	驱动器型号 Driver Model
三菱 Mitsubishi	M	无刹车(水平式样) No brake (horizontal type)	100	220	HG-KR13	MR-J4-10A
松下 Panasonic	P	无刹车(水平式样) No brake (horizontal type)	100	220	MSMD012G1U	MADHT1505
台达 Delta	T	无刹车(水平式样) No brake (horizontal type)	100	220	ECMA-C20401ES	ASD-B20121-B



电机左侧/电机右侧
Motor left side/Motor right side

DL 电机左侧 Motor left side

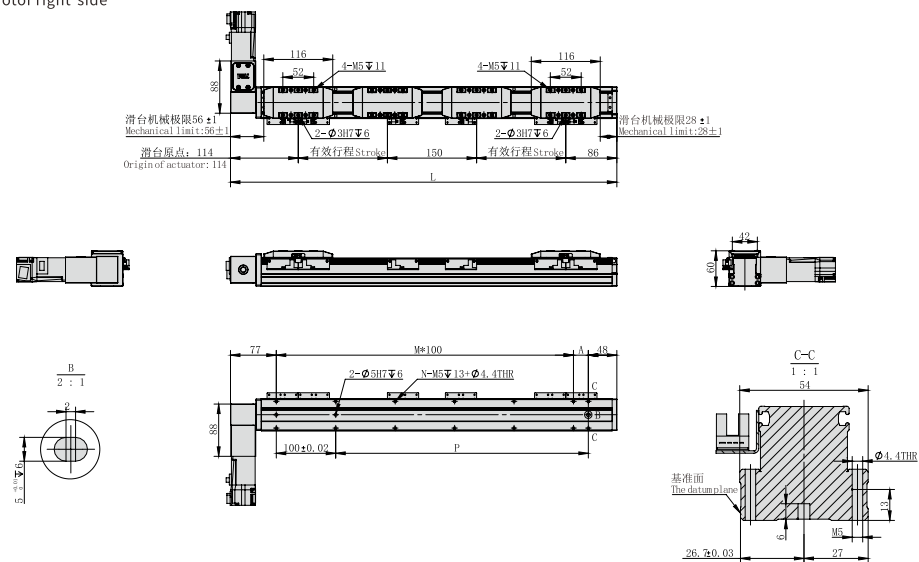
单位:Unit: mm



有效行程 Valid Stroke	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550	570	600	625	650
L	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25
M	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15
N	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34
P	225	275	325	375	425	475	525	575	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375	1425
KG	1.71	1.82	1.93	2.04	2.15	2.26	2.37	2.48	2.59	2.7	2.81	2.92	3.03	3.14	3.25	3.36	3.47	3.58	3.69	3.8	3.91	4.02	4.13	4.24	4.35

DR 电机右侧 Motor right side

单位:Unit: mm

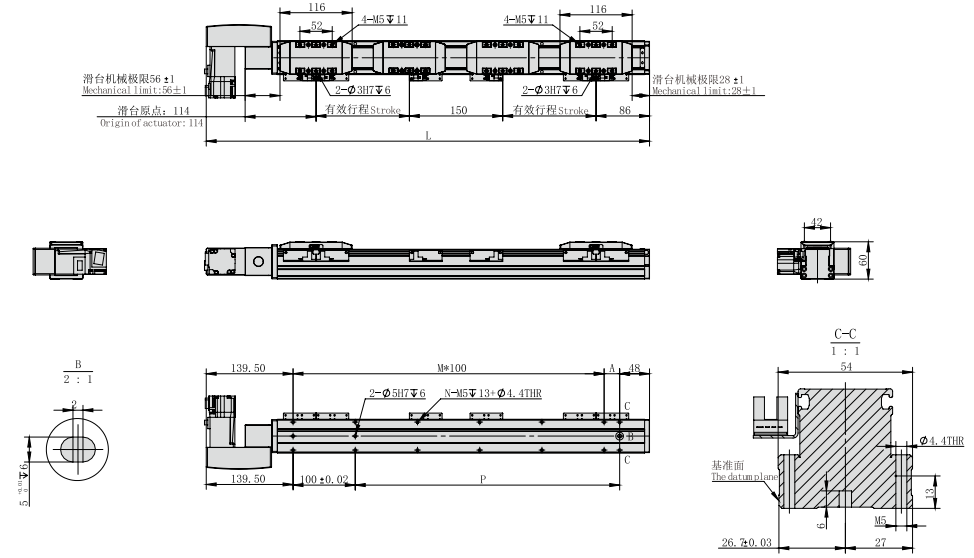


有效行程 Valid Stroke	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550	570	600	625	650
L	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25
M	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15
N	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34
P	225	275	325	375	425	475	525	575	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375	1425
KG	1.71	1.82	1.93	2.04	2.15	2.26	2.37	2.48	2.59	2.7	2.81	2.92	3.03	3.14	3.25	3.36	3.47	3.58	3.69	3.8	3.91	4.02	4.13	4.24	4.35

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

QL 电机外置左侧 Motor external left side

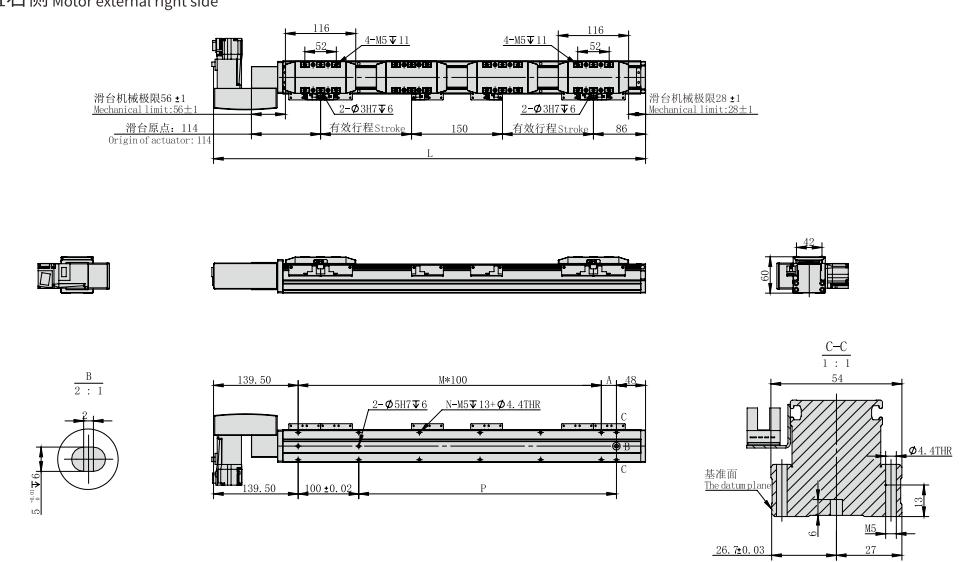
单位:Unit: mm



有效行程 Valid Stroke	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550	570	600	625	650
L	512.5	562.5	612.5	662.5	712.5	762.5	812.5	862.5	912.5	962.5	1012.5	1062.5	1112.5	1162.5	1212.5	1262.5	1312.5	1362.5	1412.5	1462.5	1512.5	1562.5	1612.5	1662.5	1712.5
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25
M	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15
N	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34
P	225	275	325	375	425	475	525	575	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375	1425
KG	1.71	1.82	1.93	2.04	2.15	2.26	2.37	2.48	2.59	2.7	2.81	2.92	3.03	3.14	3.25	3.36	3.47	3.58	3.69	3.8	3.91	4.02	4.13	4.24	4.35

QR 电机外置右侧 Motor external right side

单位:Unit: mm



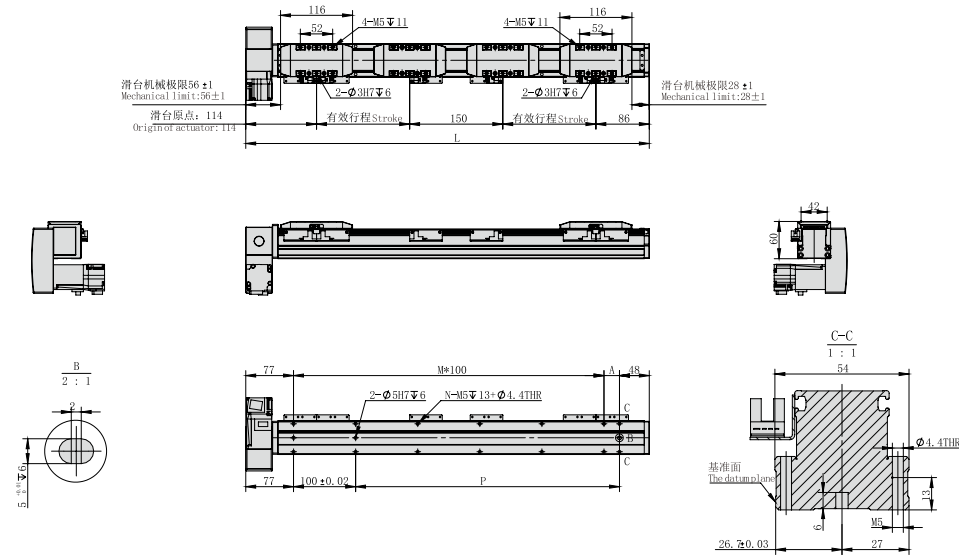
有效行程 Valid Stroke	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550	570	600	625	650
L	512.5	562.5	612.5	662.5	712.5	762.5	812.5	862.5	912.5	962.5	1012.5	1062.5	1112.5	1162.5	1212.5	1262.5	1312.5	1362.5	1412.5	1462.5	1512.5	1562.5	1612.5	1662.5	1712.5
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25
M	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15
N	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34
P	225	275	325	375	425	475	525	575	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375	1425
KG	1.71	1.82	1.93	2.04	2.15	2.26	2.37	2.48	2.59	2.7	2.81	2.92	3.03	3.14	3.25	3.36	3.47	3.58	3.69	3.8	3.91	4.02	4.13	4.24	4.35



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

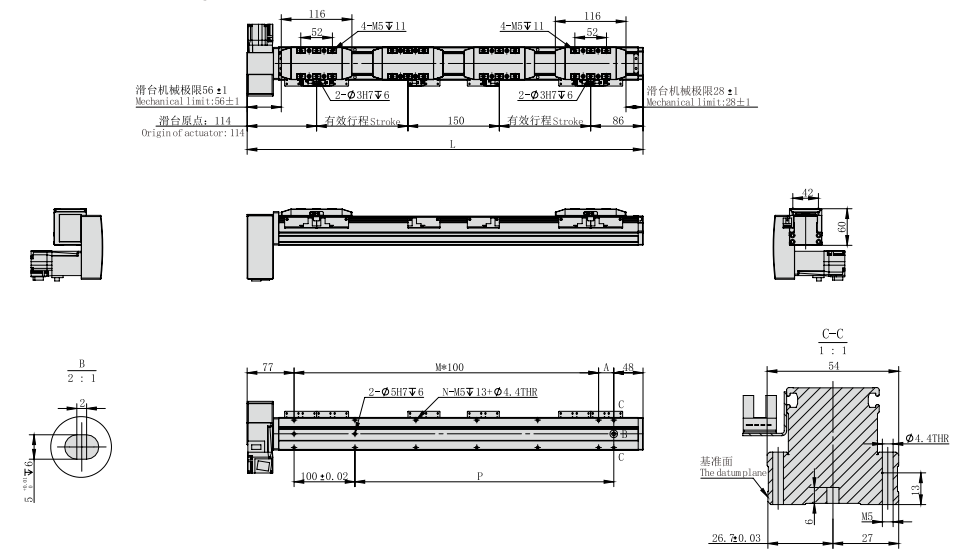


有效行程 Valid Stroke	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550	570	600	625	650
L	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25
M	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15
N	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34
P	225	275	325	375	425	475	525	575	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375	1425
KG	1.71	1.82	1.93	2.04	2.15	2.26	2.37	2.48	2.59	2.7	2.81	2.92	3.03	3.14	3.25	3.36	3.47	3.58	3.69	3.8	3.91	4.02	4.13	4.24	4.35

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

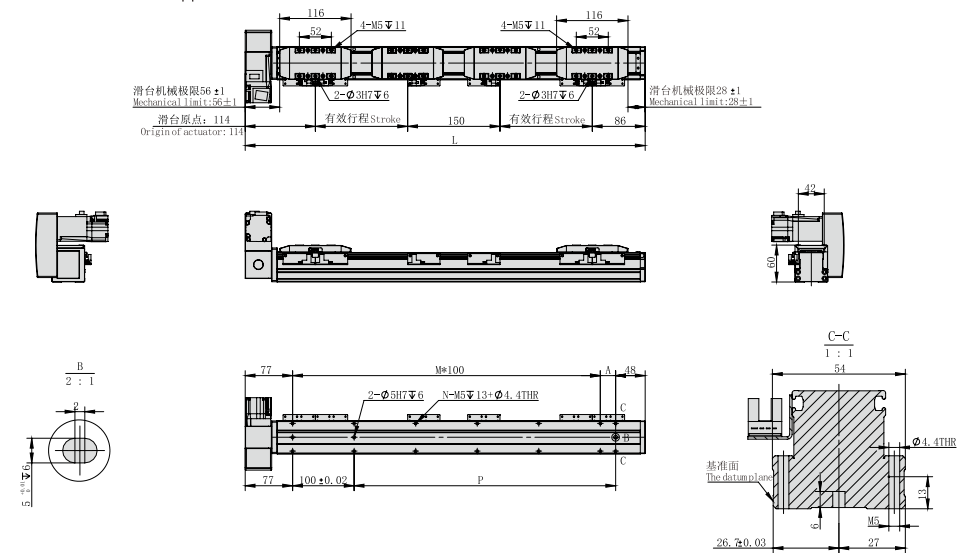
单位:Unit: mm



有效行程 Valid Stroke	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550	570	600	625	650
L	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25
M	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15
N	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34
P	225	275	325	375	425	475	525	575	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375	1425
KG	1.71	1.82	1.93	2.04	2.15	2.26	2.37	2.48	2.59	2.7	2.81	2.92	3.03	3.14	3.25	3.36	3.47	3.58	3.69	3.8	3.91	4.02	4.13	4.24	4.35

LU 电机外置左上 Motor external upper left

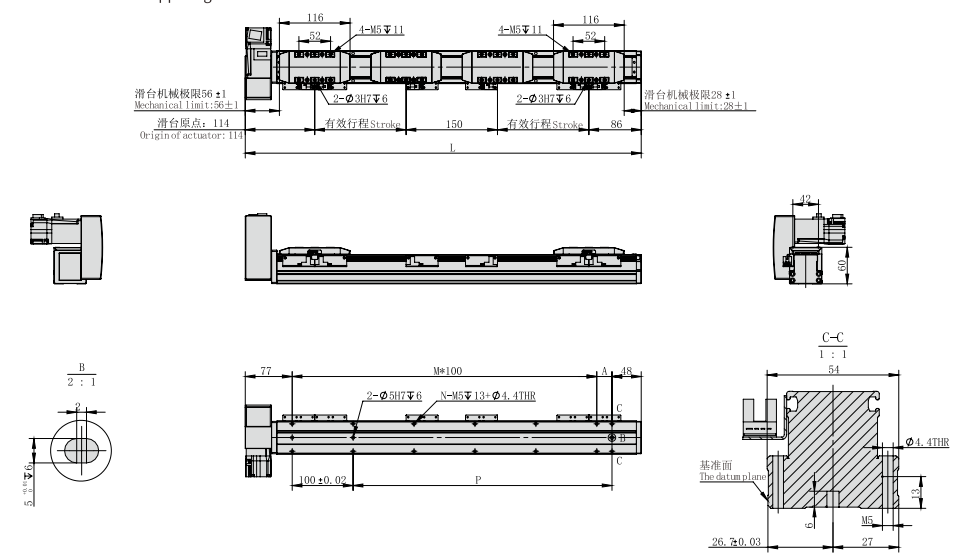
单位:Unit: mm



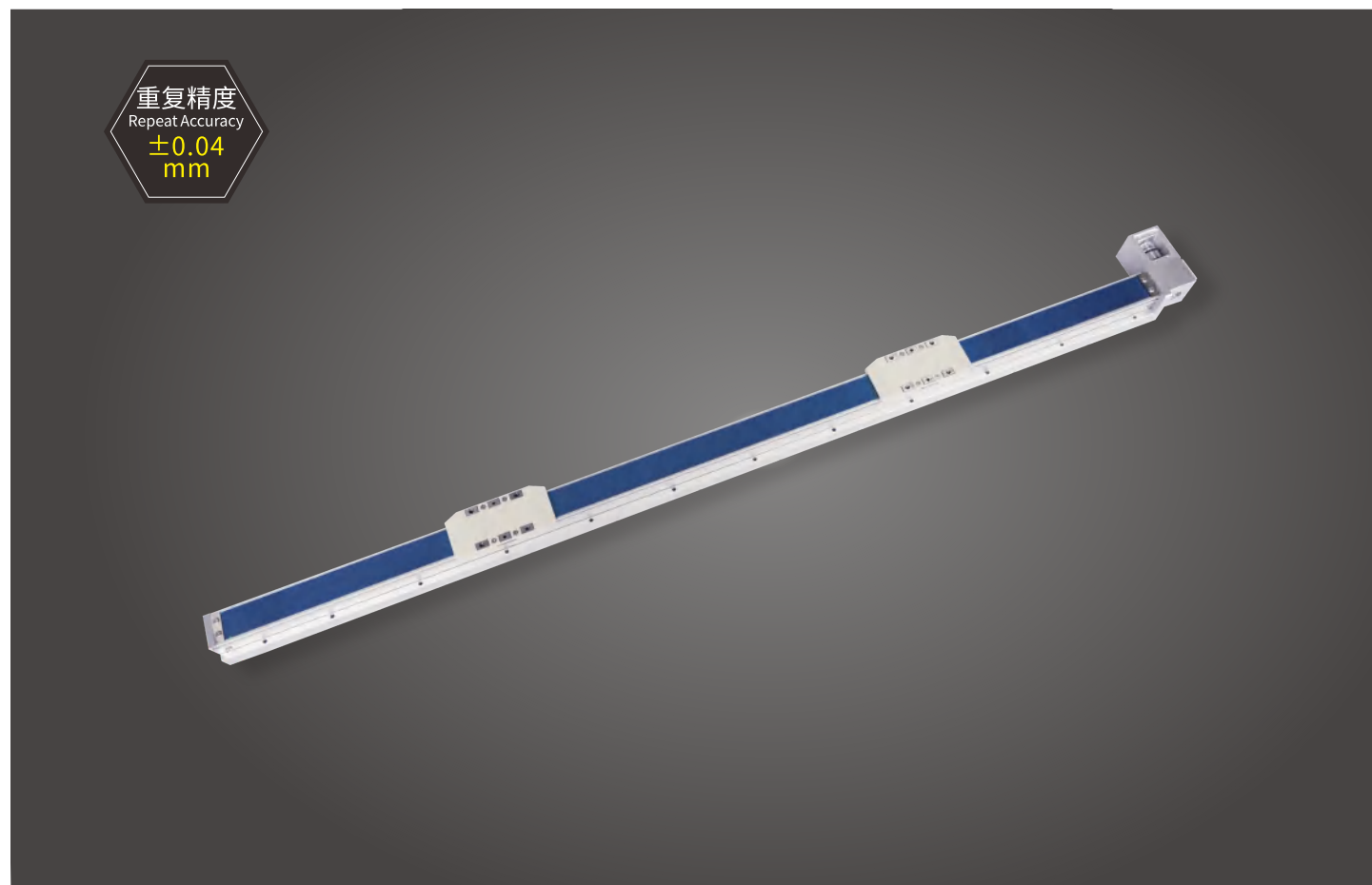
有效行程 Valid Stroke	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550	570	600	625	650
L	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25
M	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15
N	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34
P	225	275	325	375	425	475	525	575	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375	1425
KG	1.71	1.82	1.93	2.04	2.15	2.26	2.37	2.48	2.59	2.7	2.81	2.92	3.03	3.14	3.25	3.36	3.47	3.58	3.69	3.8	3.91	4.02	4.13	4.24	4.35

RU 电机外置右上 Motor external upper right

单位:Unit: mm



有效行程 Valid Stroke	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550	570	600	625	650
L	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25
M	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15
N	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34
P	225	275	325	375	425	475	525	575	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375	1425
KG	1.71	1.82	1.93	2.04	2.15	2.26	2.37	2.48	2.59	2.7	2.81	2.92	3.03	3.14	3.25	3.36	3.47	3.58	3.69	3.8	3.91	4.02	4.13	4.24	4.35



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 picture for reference only, specs details according with the drawing.

最大行程
Max Stroke 600mm

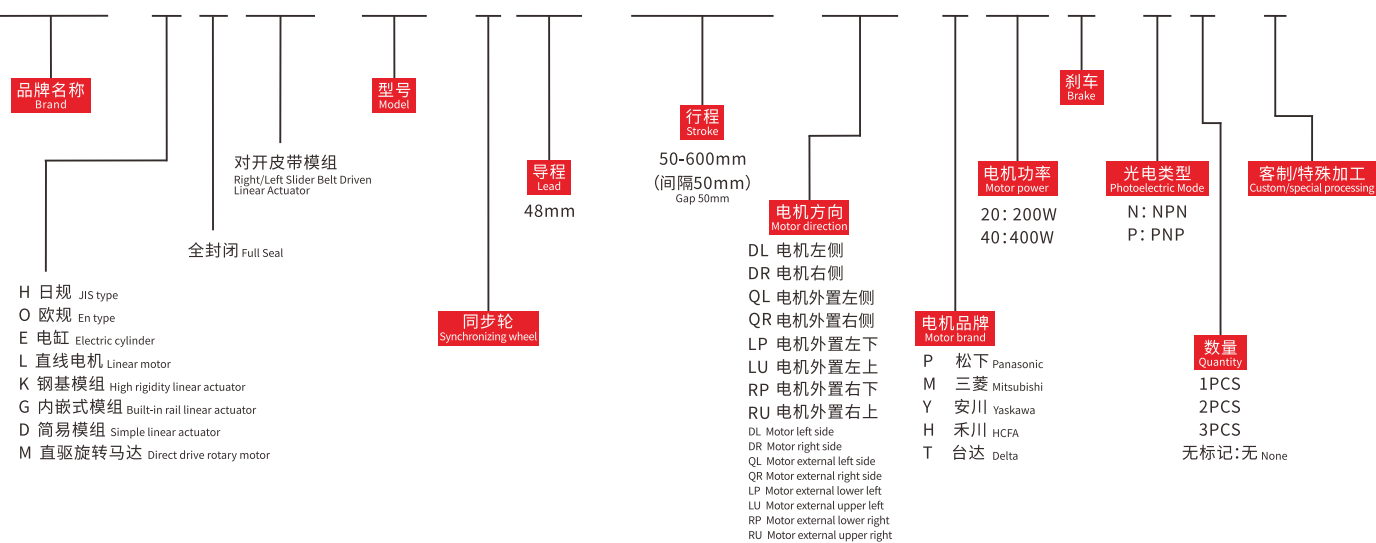
最高速度
Max Speed 2400mm/s

马达容量
Motor Output 200W

皮带宽度
Belt width 15mm

型号表达方式 Ordering method

TPA-GCBS-80-P48-L100-ML-P20B-N3-F

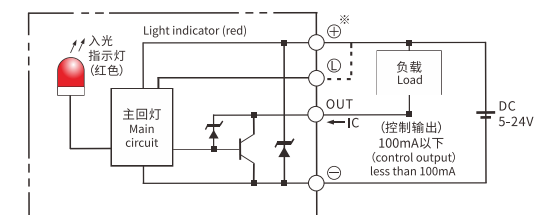


产品性能参数如下 Product performance parameters are as follows

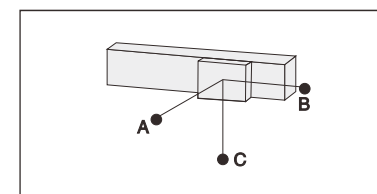
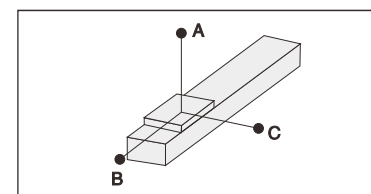
规格 Spec	重复定位精度 (mm) Repeated positioning accuracy (mm)	±0.04	
	导程 (mm) Lead (mm)	48	
	最高速度 (mm/s) Maximum speed (mm/s)	2400	
	最大可搬重量 Maximum Payload	水平使用 (kg) Horizontal (kg)	15 (双滑座)
		垂直使用 (kg) Vertical (kg)	-
定格推力 (N) Rated thrust (N)	80		
部品 Parts	标准行程 (mm) Stroke pitch (mm)	50~600mm/50 间隔 50 mm Pitch	
	AC伺服马达容量 (W) AC servo motor output (w)	200/400	
	皮带宽度 (mm) Belt width (mm)	15	
	原点感应器 Home sensor	外挂 Outside	TPA-N674-WR

*1 马达加速设定0.4秒。
*1 Acceleration and deceleration value is set 0.4 second.

感应器连接图<原点及端点> Sensor layout

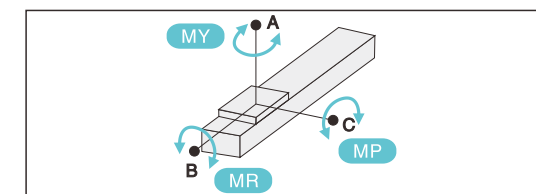


容许负载力矩表 N.m Allowable overhang



水平安装 Horizontal installation				侧面安装 Side mounting				
导程 Lead	重量 Weight	A	B	A	B	C		
48	5kg	850	322	395	5kg	355	310	532
	10kg	560	185	226	10kg	210	196	455
	15kg	473	135	156	15kg	171	155	435

静态容许负载惯量 Static loading moment



惯量 Inertia	容许值 Allowable Value
MY	318
MP	318
MR	626

*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.

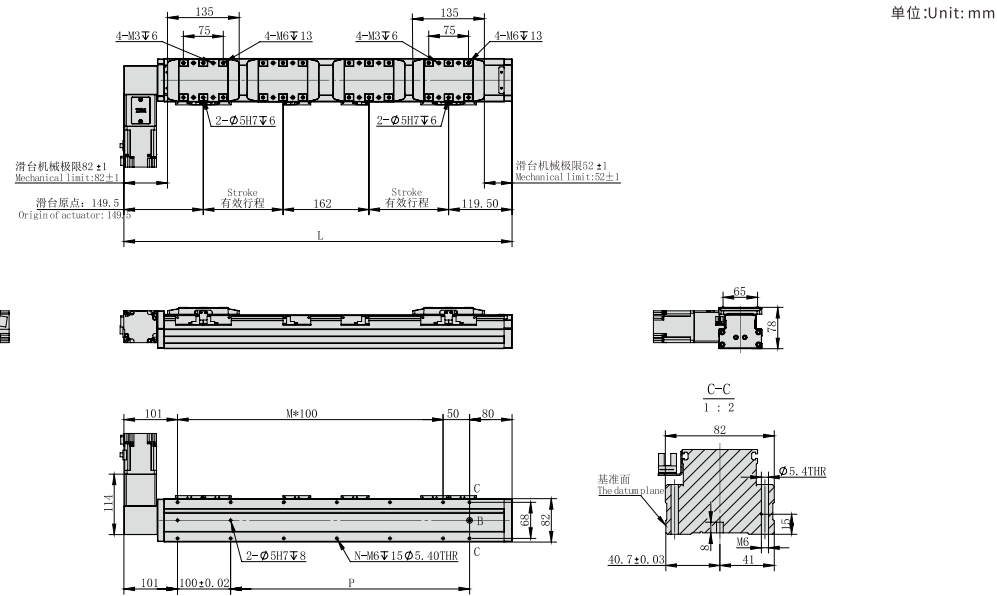
搭配伺服马达一览表 Suitable motor brand

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)	200	220	HG-KR23	MR-J4-20A
松下 Panasonic	P	无刹车(水平式样) No brake (horizontal type)	200	220	MSMD022G1U	MADHT1507
台达 Delta	T	无刹车(水平式样) No brake (horizontal type)	200	220	ECMA-C20602ES	ASD-B20221-B



电机左侧/电机右侧
Motor left side/Motor right side

DL 电机左侧 Motor left side

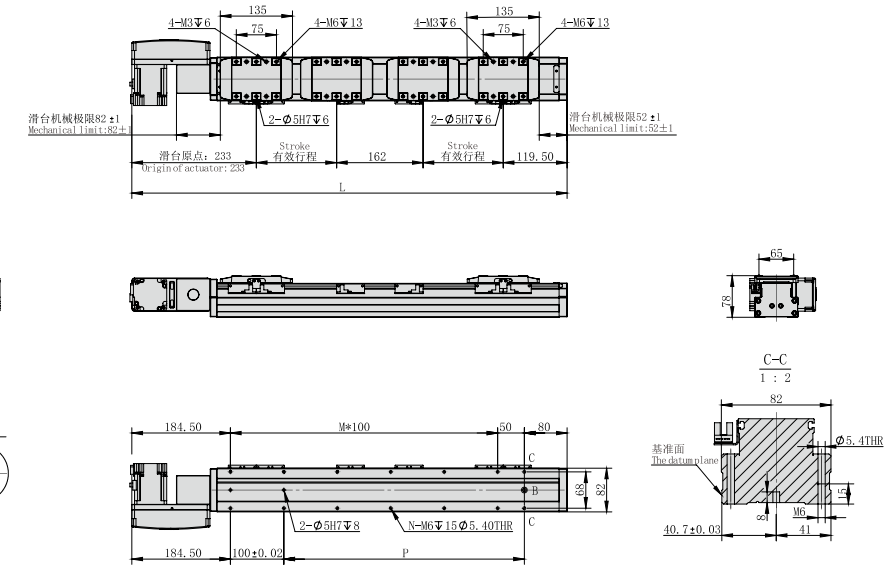


单位:Unit: mm

有效行程 Valid Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	531	631	731	831	931	1031	1131	1231	1331	1431	1531	1631
M	3	4	5	6	7	8	9	10	11	12	13	14
N	10	12	14	16	18	20	22	24	26	28	30	32
P	250	350	450	550	650	750	850	950	1050	1150	1250	1350
KG	4.58	5.11	5.64	6.17	6.7	7.23	7.76	8.29	8.82	9.35	9.88	10.41

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

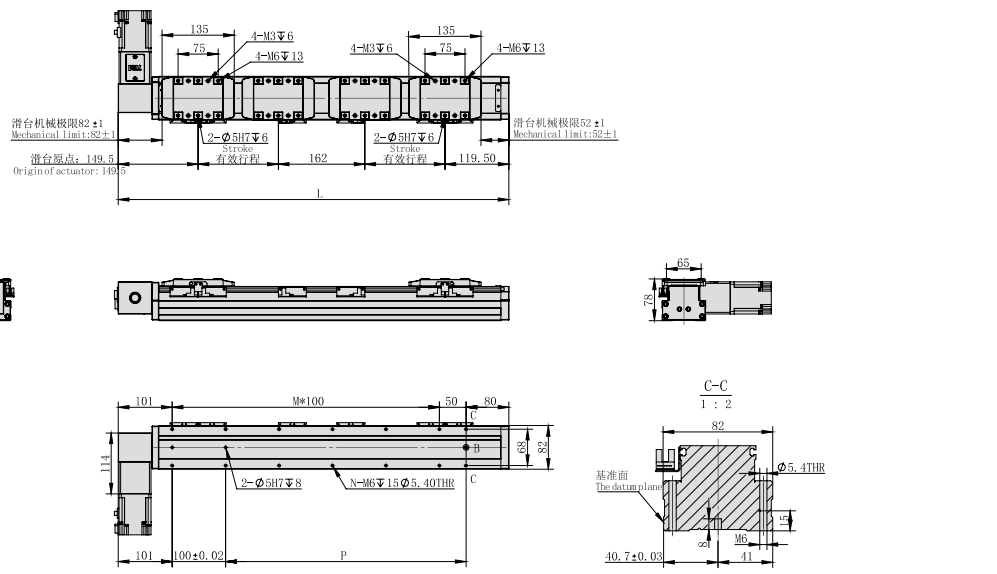
QL 电机外置左侧 Motor external left side



单位:Unit: mm

有效行程 Valid Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	614.5	714.5	814.5	914.5	1014.5	1114.5	1214.5	1314.5	1414.5	1514.5	1614.5	1714.5
M	3	4	5	6	7	8	9	10	11	12	13	14
N	10	12	14	16	18	20	22	24	26	28	30	32
P	250	350	450	550	650	750	850	950	1050	1150	1250	1350
KG	4.58	5.11	5.64	6.17	6.7	7.23	7.76	8.29	8.82	9.35	9.88	10.41

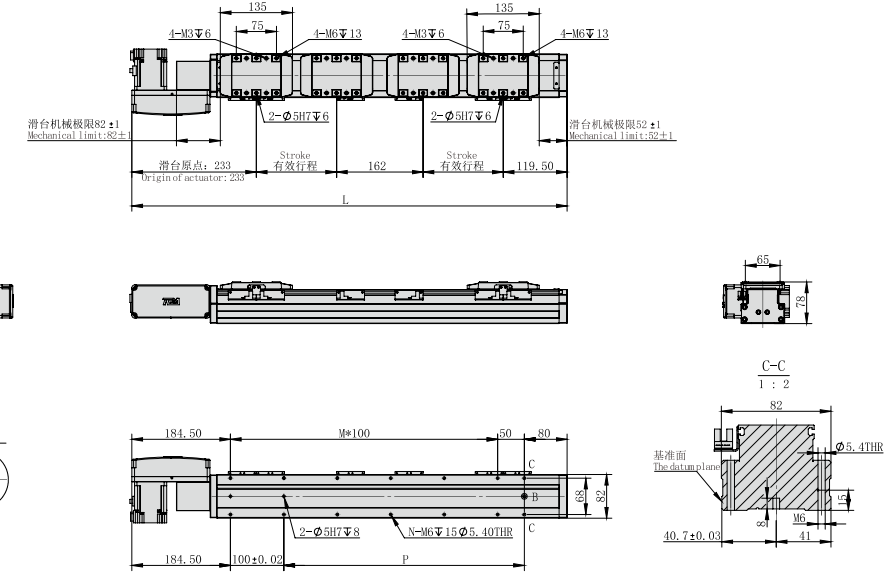
DR 电机右侧 Motor right side



单位:Unit: mm

有效行程 Valid Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	531	631	731	831	931	1031	1131	1231	1331	1431	1531	1631
M	3	4	5	6	7	8	9	10	11	12	13	14
N	10	12	14	16	18	20	22	24	26	28	30	32
P	250	350	450	550	650	750	850	950	1050	1150	1250	1350
KG	4.58	5.11	5.64	6.17	6.7	7.23	7.76	8.29	8.82	9.35	9.88	10.41

QR 电机外置右侧 Motor external right side



单位:Unit: mm

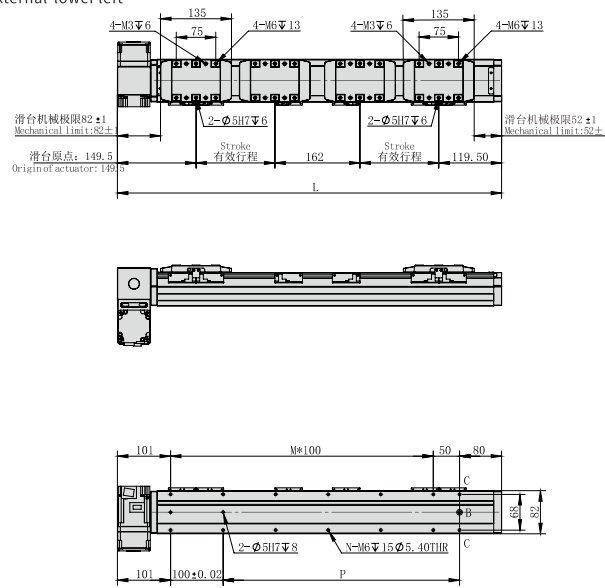
有效行程 Valid Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	614.5	714.5	814.5	914.5	1014.5	1114.5	1214.5	1314.5	1414.5	1514.5	1614.5	1714.5
M	3	4	5	6	7	8	9	10	11	12	13	14
N	10	12	14	16	18	20	22	24	26	28	30	32
P	250	350	450	550	650	750	850	950	1050	1150	1250	1350
KG	4.58	5.11	5.64	6.17	6.7	7.23	7.76	8.29	8.82	9.35	9.88	10.41



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

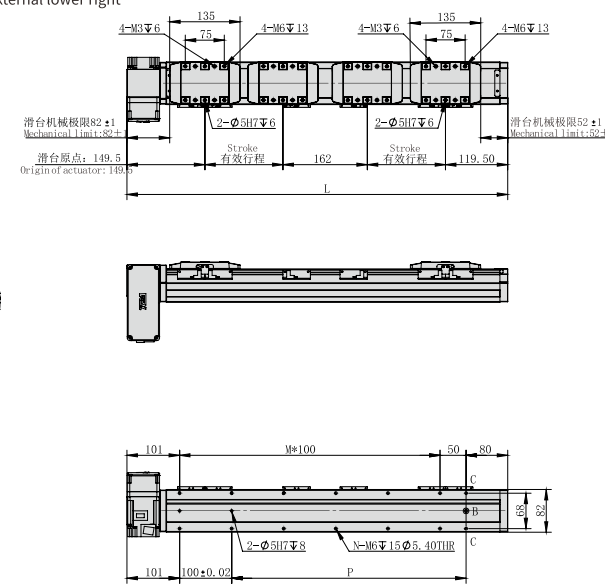


有效行程 Valid Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	531	631	731	831	931	1031	1131	1231	1331	1431	1531	1631
M	3	4	5	6	7	8	9	10	11	12	13	14
N	10	12	14	16	18	20	22	24	26	28	30	32
P	250	350	450	550	650	750	850	950	1050	1150	1250	1350
KG	4.58	5.11	5.64	6.17	6.7	7.23	7.76	8.29	8.82	9.35	9.88	10.41

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

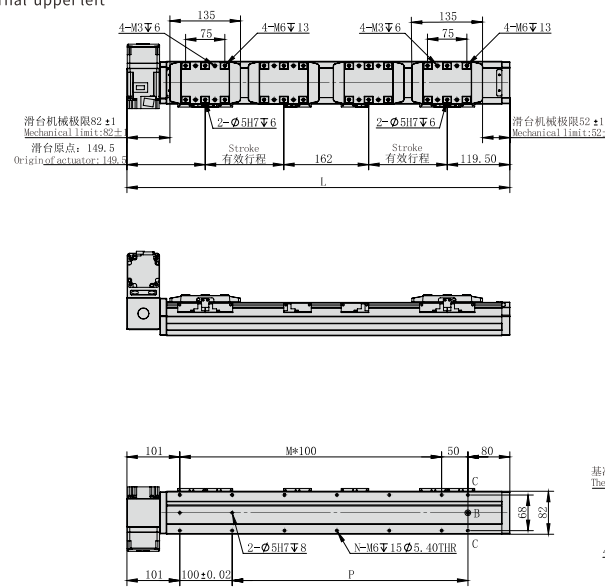
单位:Unit: mm



有效行程 Valid Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	531	631	731	831	931	1031	1131	1231	1331	1431	1531	1631
M	3	4	5	6	7	8	9	10	11	12	13	14
N	10	12	14	16	18	20	22	24	26	28	30	32
P	250	350	450	550	650	750	850	950	1050	1150	1250	1350
KG	4.58	5.11	5.64	6.17	6.7	7.23	7.76	8.29	8.82	9.35	9.88	10.41

LU 电机外置左上 Motor external upper left

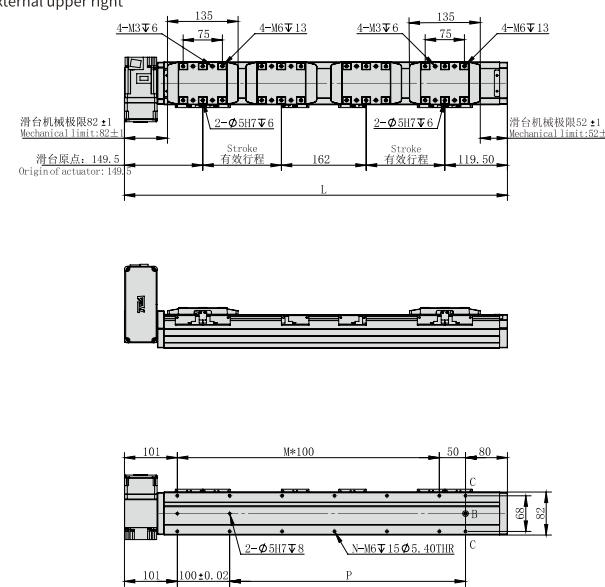
单位:Unit: mm



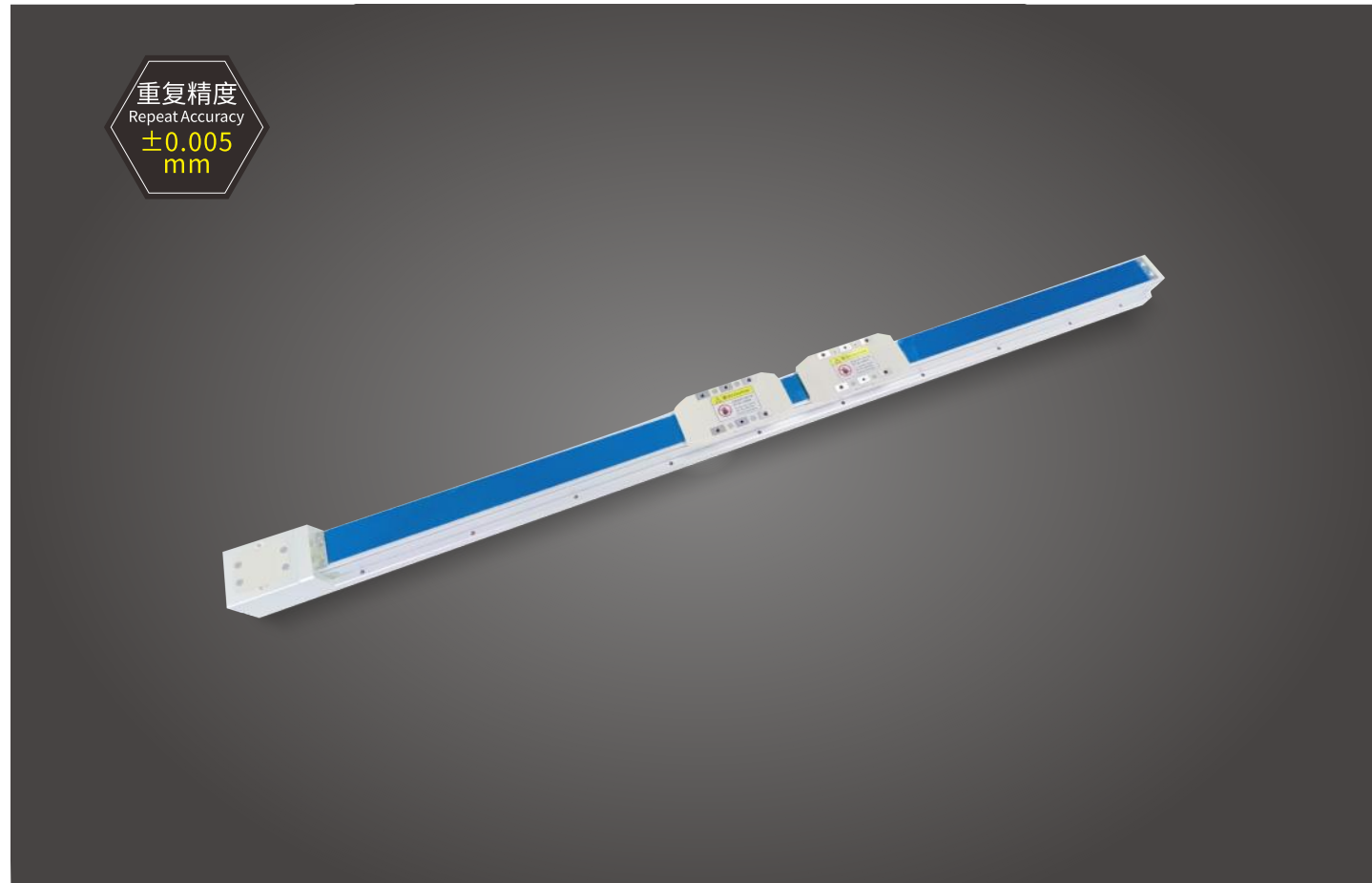
有效行程 Valid Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	531	631	731	831	931	1031	1131	1231	1331	1431	1531	1631
M	3	4	5	6	7	8	9	10	11	12	13	14
N	10	12	14	16	18	20	22	24	26	28	30	32
P	250	350	450	550	650	750	850	950	1050	1150	1250	1350
KG	4.58	5.11	5.64	6.17	6.7	7.23	7.76	8.29	8.82	9.35	9.88	10.41

RU 电机外置右上 Motor external upper right

单位:Unit: mm



有效行程 Valid Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	531	631	731	831	931	1031	1131	1231	1331	1431	1531	1631
M	3	4	5	6	7	8	9	10	11	12	13	14
N	10	12	14	16	18	20	22	24	26	28	30	32
P	250	350	450	550	650	750	850	950	1050	1150	1250	1350
KG	4.58	5.11	5.64	6.17	6.7	7.23	7.76	8.29	8.82	9.35	9.88	10.41



重复精度
Repeat Accuracy
±0.005 mm

此图仅供参考, 出货规格详见尺寸图面
This picture for reference only, specs details according with the drawing.

最大行程
Max Stroke 325mm

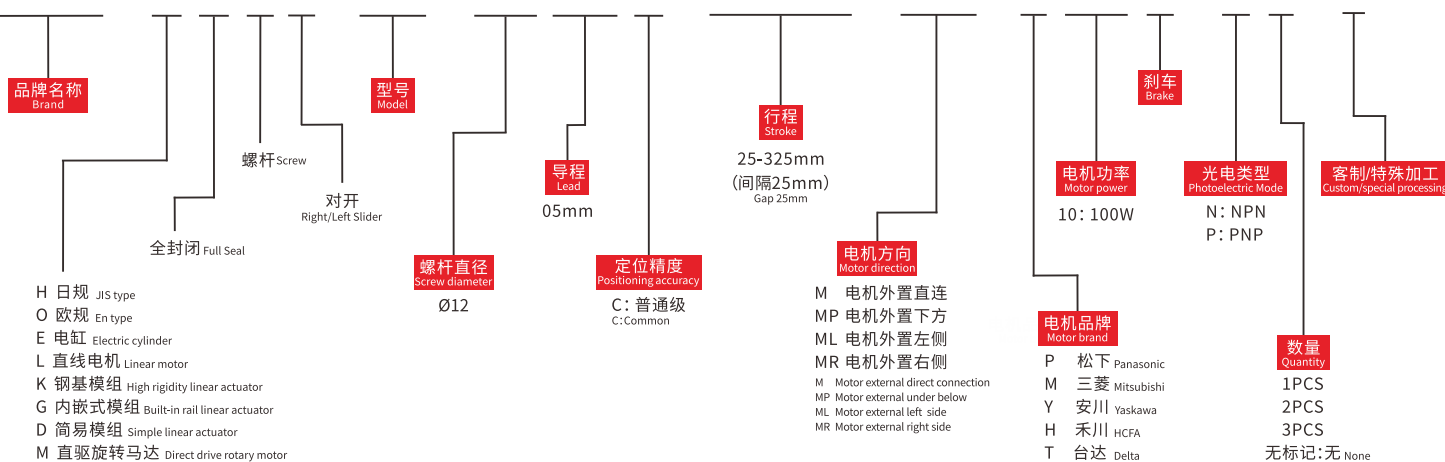
最高速度
Max Speed 250mm/s

马达容量
Motor Output 100W

滚珠螺杆
Ball Screw Ø12mm

型号表达方式 Ordering method

TPA-GCRS-50-1205C-L325-ML-P10B-N3-F

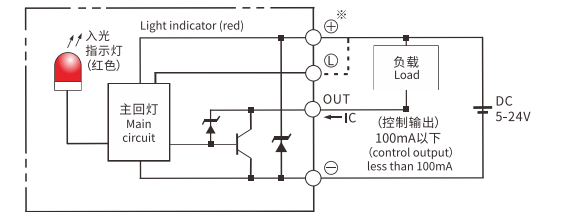


产品性能参数如下 Product performance parameters are as follows

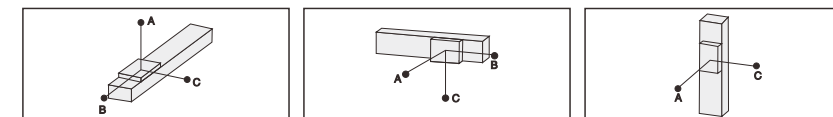
规格 Spec	重复定位精度 (mm) Repeated positioning accuracy (mm)	±0.005	
	螺杆导程 (mm) Ball screw lead (mm)	05	
	最高速度 (mm/s) ^{※2} Maximum speed (mm/s)	250	
	最大可搬重量 Maximum Payload	水平使用 (kg) Horizontal (kg)	30 (双滑座 Dual carriage)
		垂直使用 (kg) Vertical (kg)	10 (双滑座 Dual carriage)
定格推力 (N) Rated thrust (N)	854		
部品 Parts	标准行程 (mm) ^{※1} Stroke pitch (mm)	25~325mm/25mm间隔 25mm Pitch	
	AC伺服马达容量 (W) AC servo motor output (w)	100	
	滚珠螺杆外径 (mm) Ball screw Ø (mm)	Ø12	
	联轴器 (mm) Coupling (mm)	7X8	
	原点感应器 Original Sense	外挂 Outside	TPA-N674-WR

※1 反向同动只能对应导程2。
※1 Dual carriage synchronous movement in reverse direction can only fit at lead of 2mm.
※2 马达加速设定0.2秒。
※2 Acceleration and deceleration value is set 0.2 second.

感应器连接图<原点及端点> Sensor layout

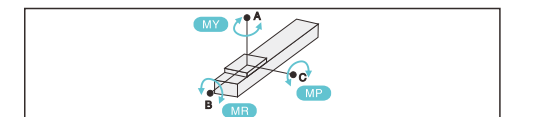


容许负载力矩表 N.m Allowable overhang



水平安装 Horizontal installation	(单位Unit:mm)			侧面安装 Side mounting	(单位Unit:mm)			垂直安装 Vertical installation	(单位Unit:mm)		
	A	B	C		A	B	C		A	B	C
导程 05 Lead	10kg	900	100	10kg	135	100	900	6kg	180	180	
	20kg	700	45	20kg	60	45	700	8kg	135	135	
	30kg	550	25	30kg	37	27	550	10kg	110	110	

静态容许负载惯量 Static loading moment



	(单位Unit:N.m)
MY	103
MP	103
MR	144

*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

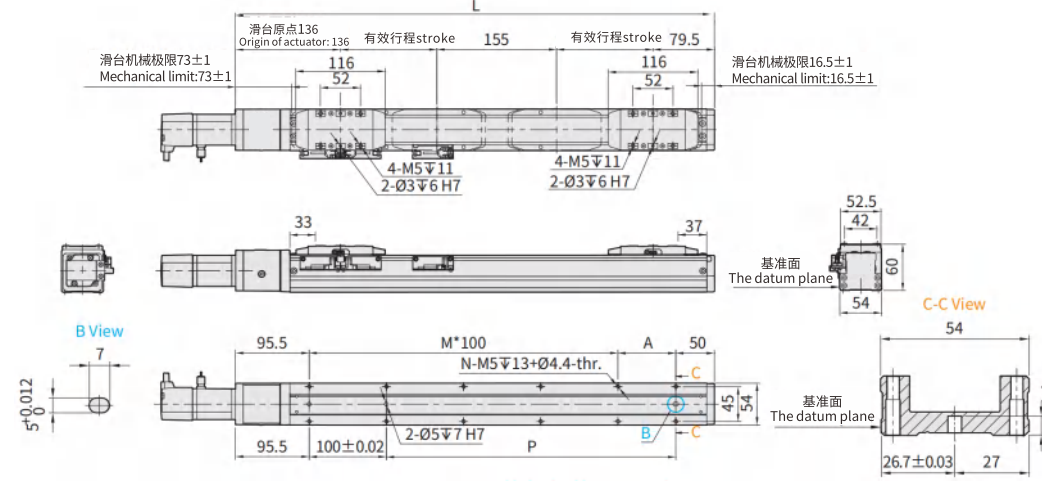
品牌 Brand	马达记号 Mark	刹车有无 Brake	马达容量 Motor capacity	电源电压 AC-Voltage	伺服马达型号 Servo motor model	驱动器型号 Driver Model
三菱 Mitsubishi	M	无刹车(水平式样) No brake (horizontal type)	100	220	HG-KR13	MR-J4-10A
		有刹车(垂直式样) With brakes (vertical type)	100	220	HG-KR13B	MR-J4-10A
松下 Panasonic	P	无刹车(水平式样) No brake (horizontal type)	100	220	MHMD012G1U	MADHT1505
		有刹车(垂直式样) With brakes (vertical type)	100	220	MHMD012G1V	MADHT1505
台达 Delta	T	无刹车(水平式样) No brake (horizontal type)	100	220	ECMA-C20401ES	ASD-B20121-B
		有刹车(垂直式样) With brakes (vertical type)	100	220	ECMA-C20401FS	ASD-B20121-B



电机外置直连/电机外置下方
Motor external direct connection/Motor external under below

M 电机外置直连 Motor external direct connection

单位:Unit: mm

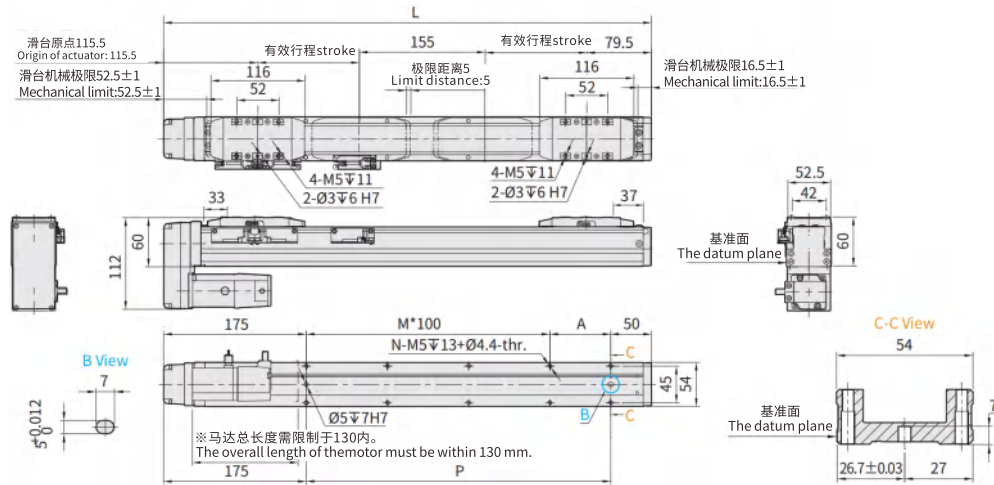


有效行程 Valid Stroke	25	50*	75	100	125	150	175	200	225	250	275	300	325
L	420.5	470.5	520.5	570.5	620.5	670.5	720.5	770.5	820.5	870.5	920.5	970.5	1020.5
A	75	25	75	25	75	25	75	25	75	25	75	25	75
M	2	3	3	4	4	5	5	6	6	7	7	8	8
N	8	10	10	12	12	14	14	16	16	18	18	20	20
P	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	2.82	3.01	3.21	3.41	3.6	3.8	4	4.19	4.39	4.59	4.78	4.98	5.18

※行程50时,因本体上锁式固定孔会被滑座遮住,仅能用4支螺丝固定,建议客户本体使用下锁式固定孔锁附。
※When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

MP 电机外置下方 Motor external under below

单位:Unit: mm



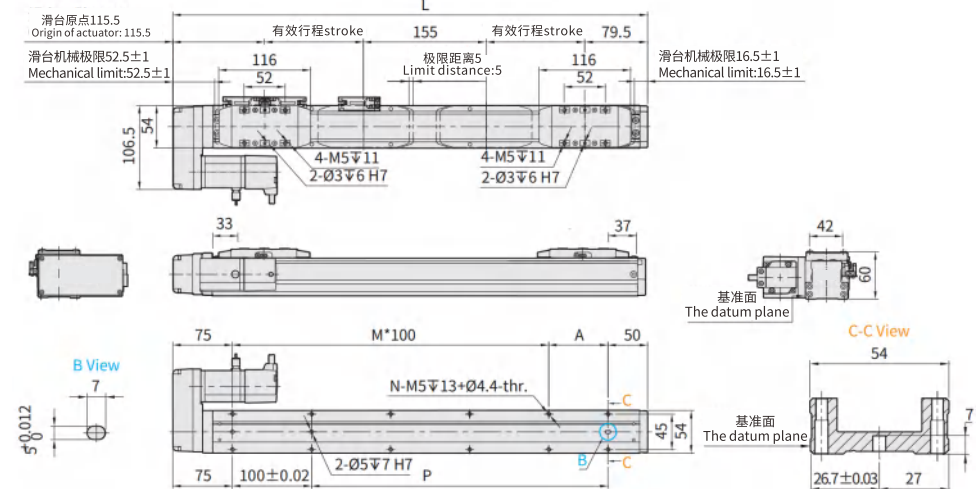
有效行程 Valid Stroke	25	50*	75	100	125	150	175	200	225	250	275	300	325
L	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	2	2	3	3	4	4	5	5	6	6	7	7
N	6	8	8	10	10	12	12	14	14	16	16	18	18
P	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	2.99	3.18	3.38	3.58	3.77	3.97	4.17	4.36	4.56	4.76	4.95	5.15	5.35

※行程50时,因本体上锁式固定孔会被滑座遮住,仅能用4支螺丝固定,建议客户本体使用下锁式固定孔锁附。
※When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.
※马达下折时,若选用刹车马达,或是超出马达总长度限制时无法套用标准PIN孔,如有需求请洽我业务。
※When motor with brake assembled on lower side, or the total length over than spec limit, it may not use standard pinhole. Please contact our sales department if you need more information & requirement.

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

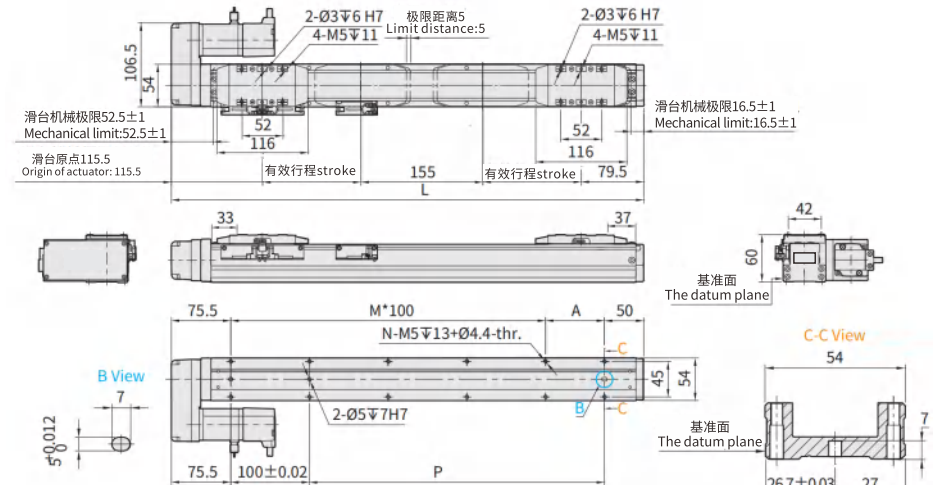


有效行程 Valid Stroke	25	50*	75	100	125	150	175	200	225	250	275	300	325
L	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	75	25	75	25	75	25	75	25	75	25	75	25	75
M	2	3	3	4	4	5	5	6	6	7	7	8	8
N	8	10	10	12	12	14	14	16	16	18	18	20	20
P	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	2.99	3.18	3.38	3.58	3.77	3.97	4.17	4.36	4.56	4.76	4.95	5.15	5.35

※行程50时,因本体上锁式固定孔会被滑座遮住,仅能用4支螺丝固定,建议客户本体使用下锁式固定孔锁附。
※When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

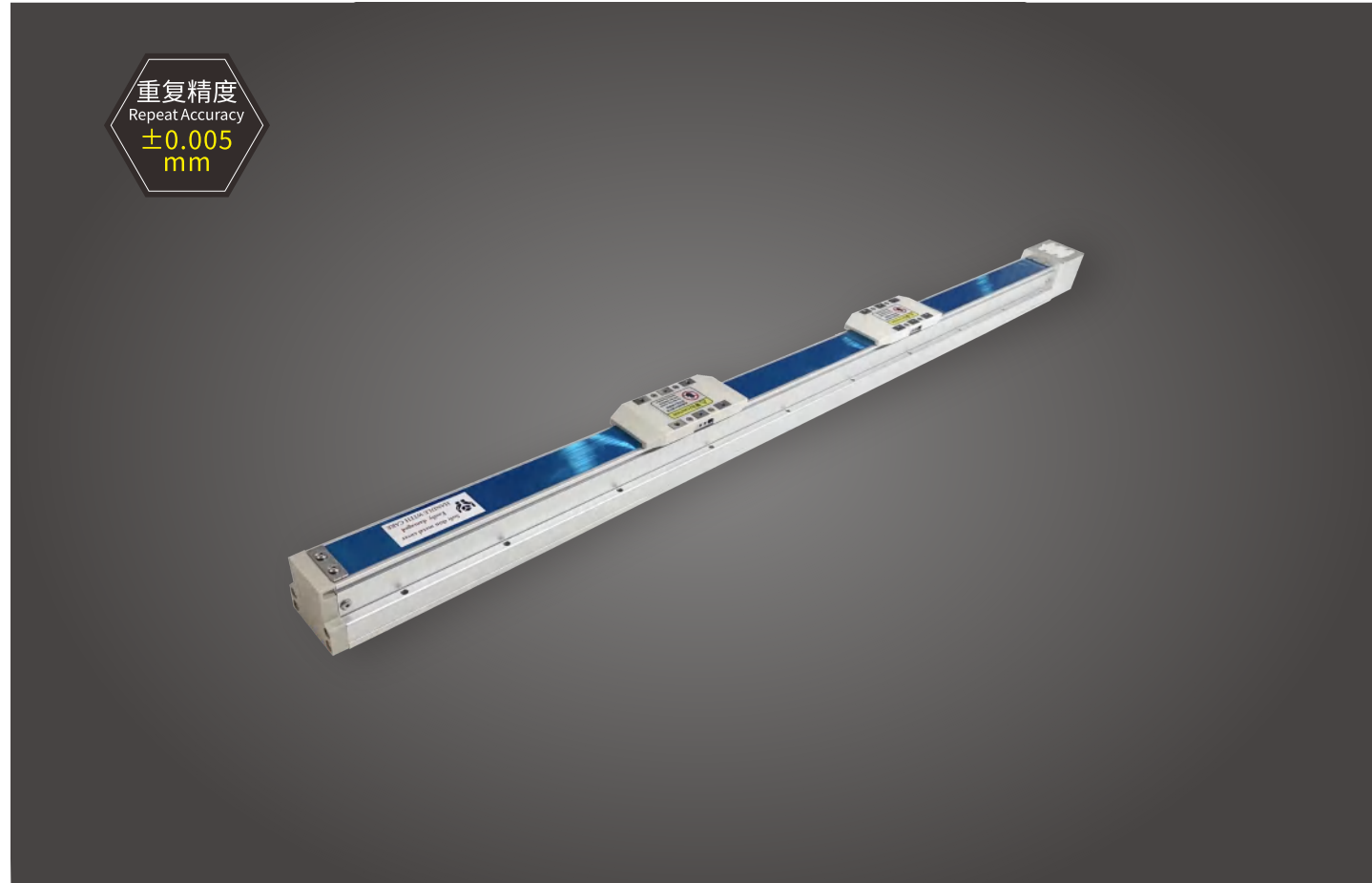
MR 电机外置右侧 Motor external right side

单位:Unit: mm



有效行程 Valid Stroke	25	50*	75	100	125	150	175	200	225	250	275	300	325
L	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	75	25	75	25	75	25	75	25	75	25	75	25	75
M	2	3	3	4	4	5	5	6	6	7	7	8	8
N	8	10	10	12	12	14	14	16	16	18	18	20	20
P	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	2.99	3.18	3.38	3.58	3.77	3.97	4.17	4.36	4.56	4.76	4.95	5.15	5.35

※行程50时,因本体上锁式固定孔会被滑座遮住,仅能用4支螺丝固定,建议客户本体使用下锁式固定孔锁附。
※When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.



重复精度
Repeat Accuracy
±0.005 mm

此图仅供参考, 出货规格详见尺寸图面
This picture for reference only, specs details according with the drawing.

最大行程
Max Stroke 450mm

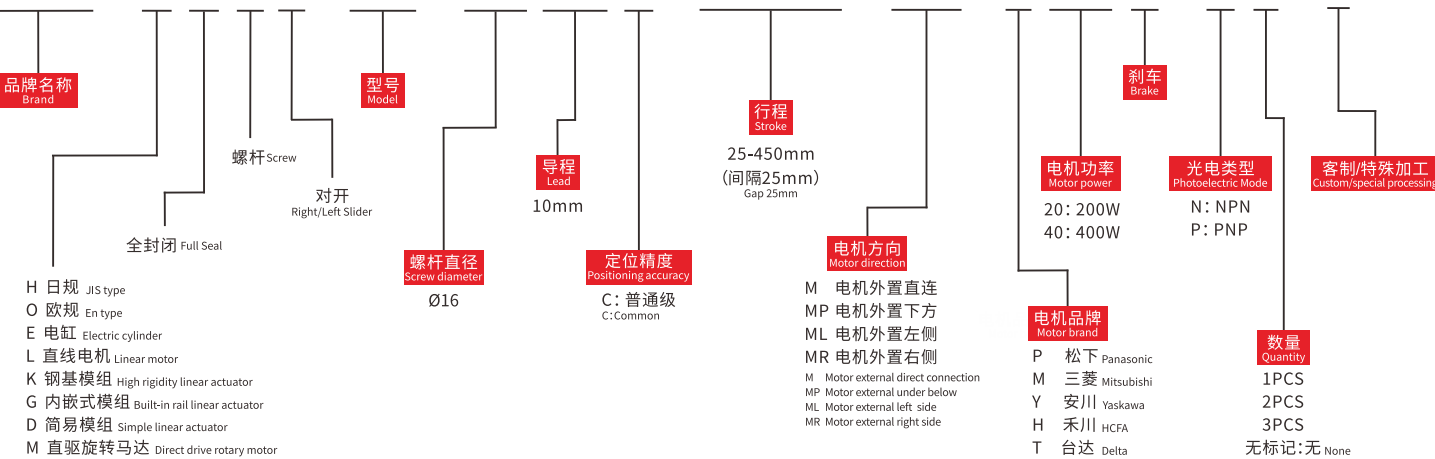
最高速度
Max Speed 500mm/s

马达容量
Motor Output 200W

滚珠螺杆
Ball Screw Ø16mm

型号表达方式 Ordering method

TPA-GCRS-80-1610C-L450-ML-P20B-N3-F

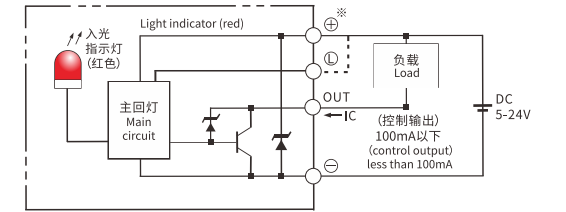


产品性能参数如下 Product performance parameters are as follows

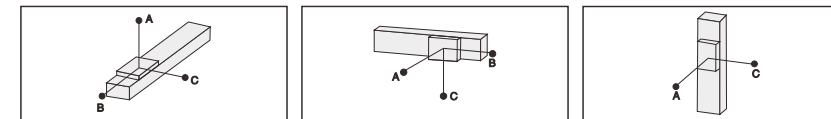
规格 Spec	重复定位精度 (mm) Repeated positioning accuracy (mm)	±0.005
	螺距 (mm) Ball screw lead (mm)	10
	最高速度 (mm/s) ^{※2} Maximum speed (mm/s)	500
	最大可搬重量 Maximum Payload	水平使用 (kg) Horizontal (kg): 30 (双滑座 Dual carriage) 垂直使用 (kg) Vertical (kg): 10 (双滑座 Dual carriage)
部品 Parts	定格推力 (N) Rated thrust (N)	683
	标准行程 (mm) Stroke pitch (mm)	25~450mm/25mm间隔 25mm Pitch
	AC伺服马达容量 (W) AC servo motor output (w)	200
	滚珠螺杆外径 (mm) Ball screw Ø (mm)	Ø16
	联轴器 (mm) Coupling (mm)	10X14/11 (注1)
	原点感应器 Original Sense	外挂 Outside
		TPA-N674-WR

※1 反向同动只能对应导程5。
※2 马达加速减速设定0.2秒。
※1 Dual carriage synchronous movement in reverse direction can only fit at lead of 5mm. ※2 Acceleration and deceleration value is set 0.2 second.
*注1: 使用Panasonic 200W马达时, 马达轴心为Ø11, 其他品牌, 马达轴心为Ø14。
*注1: Motor(200W) Shaft Diameter: Panasonic: 11mm; Other: 14mm.

感应器连接图<原点及端点> Sensor layout

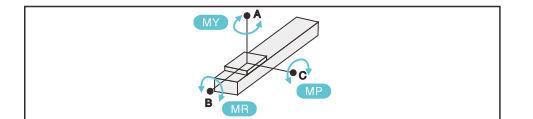


容许负载力矩表 N.m Allowable overhang



水平安装 Horizontal installation	(单位Unit:mm)			侧面安装 Side mounting	(单位Unit:mm)			垂直安装 Vertical installation	(单位Unit:mm)		
	A	B	C		A	B	C		A	B	C
导程 05 Lead	20kg	1560	153	20kg	214	153	1435	10kg	331	331	
	35kg	890	81	35kg	113	81	845	15kg	220	220	
	50kg	550	53	50kg	74	53	506	-	-	-	

静态容许负载惯量 Static loading moment



	(单位Unit:N.m)
MY	318
MP	318
MR	626

*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.
*侧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

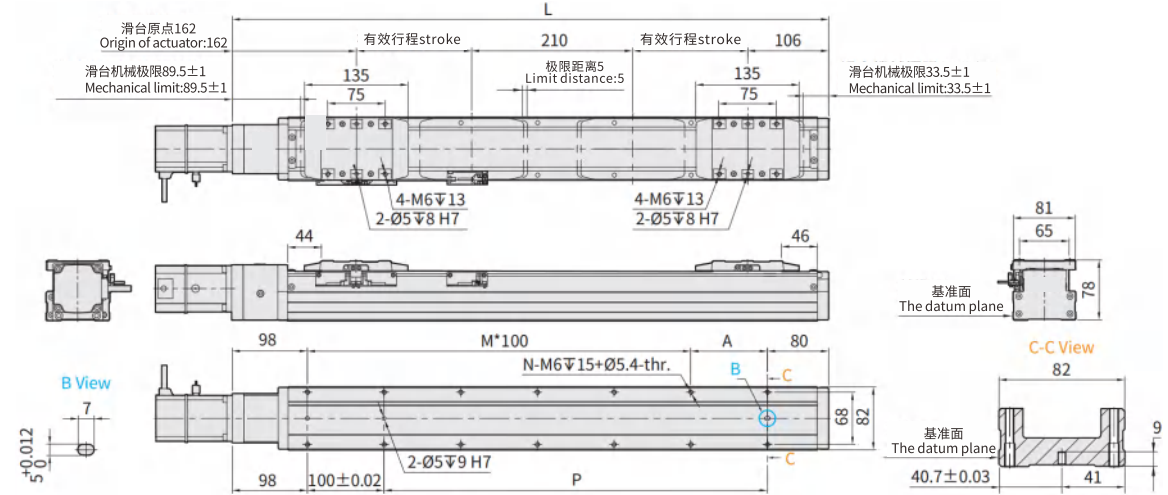
品牌 Brand	马达记号 Mark	刹车有无 Brake	马达容量 Motor capacity	电源电压 AC-Voltage	伺服马达型号 Servo motor model	驱动器型号 Driver Model
三菱 Mitsubishi	M	无刹车(水平式样) No brake (horizontal type)	200	220	HG-KR23	MR-J4-20A
		有刹车(垂直式样) With brakes (vertical type)	200	220	HG-KR23B	MR-J4-20A
松下 Panasonic	P	无刹车(水平式样) No brake (horizontal type)	200	220	MHMD022G1U	MADHT1507
		有刹车(垂直式样) With brakes (vertical type)	200	220	MHMD022G1V	MADHT1507
台达 Delta	T	无刹车(水平式样) No brake (horizontal type)	200	220	ECMA-C20602ES	ASD-B20221-B
		有刹车(垂直式样) With brakes (vertical type)	200	220	ECMA-C20602FS	ASD-B20221-B



电机外置直连/电机外置下方
Motor external direct connection/Motor external under below

M 电机外置直连 Motor external direct connection

单位:Unit: mm



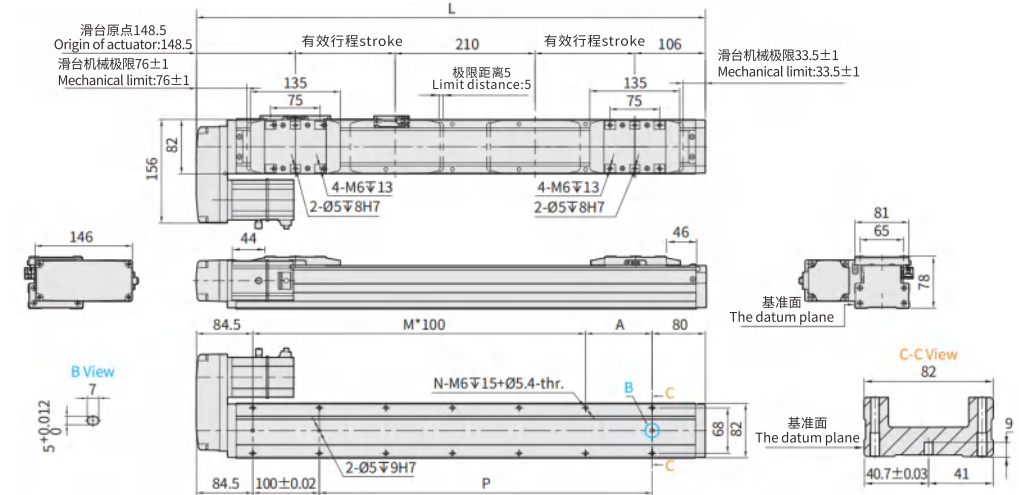
有效行程 Valid Stroke	25	50 [※]	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450
L	528	578	628	678	728	778	828	878	928	978	1028	1078	1128	1178	1228	1278	1328	1378
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	6.64	7	7.37	7.73	8.10	8.46	8.83	9.19	9.56	9.92	10.29	10.65	11.02	11.38	11.75	12.11	12.48	12.85

※行程50时,因本体上锁式固定孔会被滑座遮住,仅能使用4支螺丝固定,建议客户本体使用下锁式固定孔锁附。
※When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

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

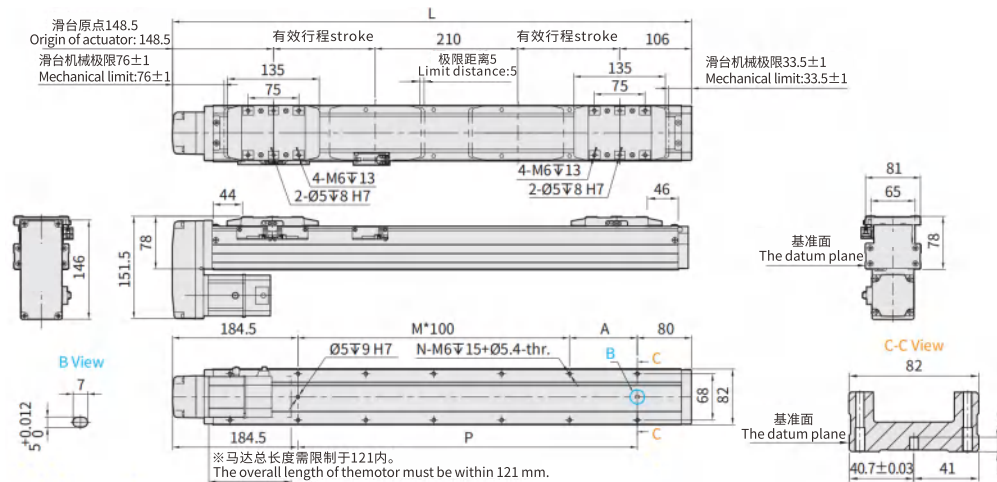


有效行程 Valid Stroke	25	50 [※]	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450
L	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	7.16	7.68	8.2	8.72	9.24	9.76	10.28	10.8	11.32	11.84	12.36	12.88	13.4	13.92	14.44	14.96	15.48	16

※行程50时,因本体上锁式固定孔会被滑座遮住,仅能使用4支螺丝固定,建议客户本体使用下锁式固定孔锁附。
※When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

MP 电机外置下方 Motor external under below

单位:Unit: mm

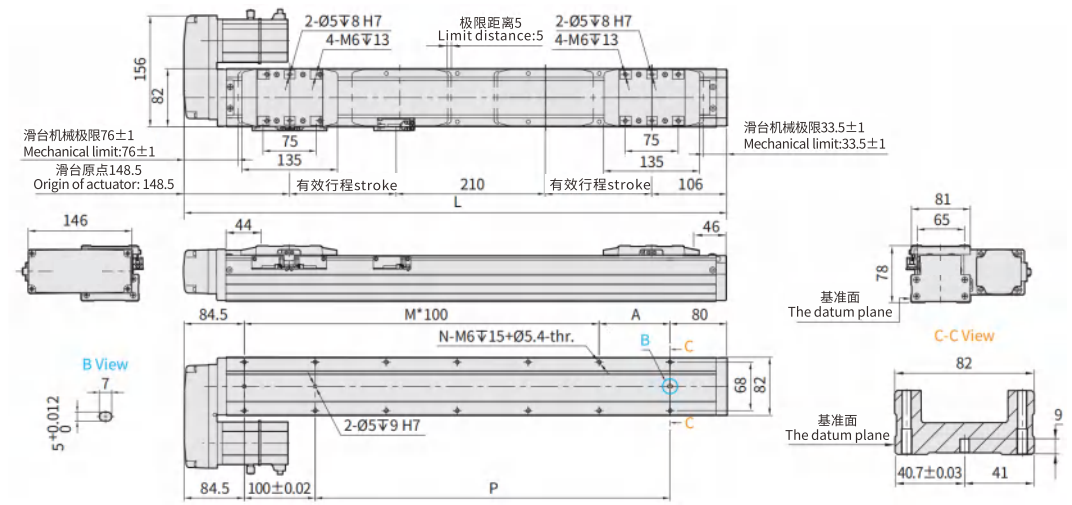


有效行程 Valid Stroke	25	50 [※]	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450
L	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10
N	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24
P	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	7.16	7.68	8.2	8.72	9.24	9.76	10.28	10.8	11.32	11.84	12.36	12.88	13.4	13.92	14.44	14.96	15.48	16

※行程50时,因本体上锁式固定孔会被滑座遮住,仅能使用4支螺丝固定,建议客户本体使用下锁式固定孔锁附。
※When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.
※马达下折时,若选用刹车马达,或是超出马达总长度限制时无法套用标准PIN孔,如有需求请洽我司业务。
※When motor with brake assembled on lower side, or the total length over than spec limit, it may not use standard pinhole. Please contact our sales department if you need more information & requirement.

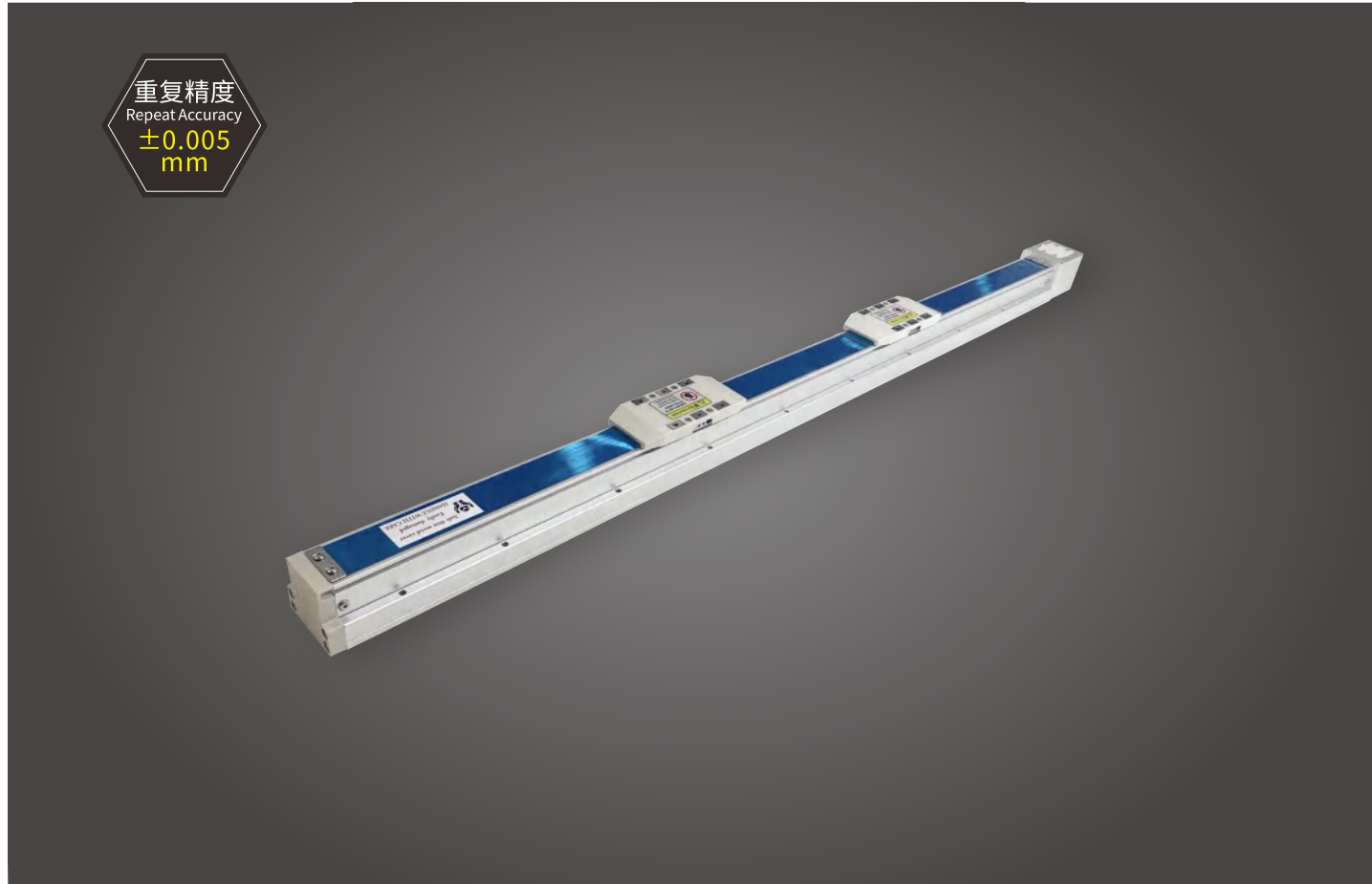
MR 电机外置右侧 Motor external right side

单位:Unit: mm



有效行程 Valid Stroke	25	50 [※]	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450
L	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	7.16	7.68	8.2	8.72	9.24	9.76	10.28	10.8	11.32	11.84	12.36	12.88	13.4	13.92	14.44	14.96	15.48	16

※行程50时,因本体上锁式固定孔会被滑座遮住,仅能使用4支螺丝固定,建议客户本体使用下锁式固定孔锁附。
※When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.



重复精度
Repeat Accuracy
±0.005 mm

此图仅供参考, 出货规格详见尺寸图面
This picture for reference only, specs details according with the drawing.

最大行程
Max Stroke 450mm

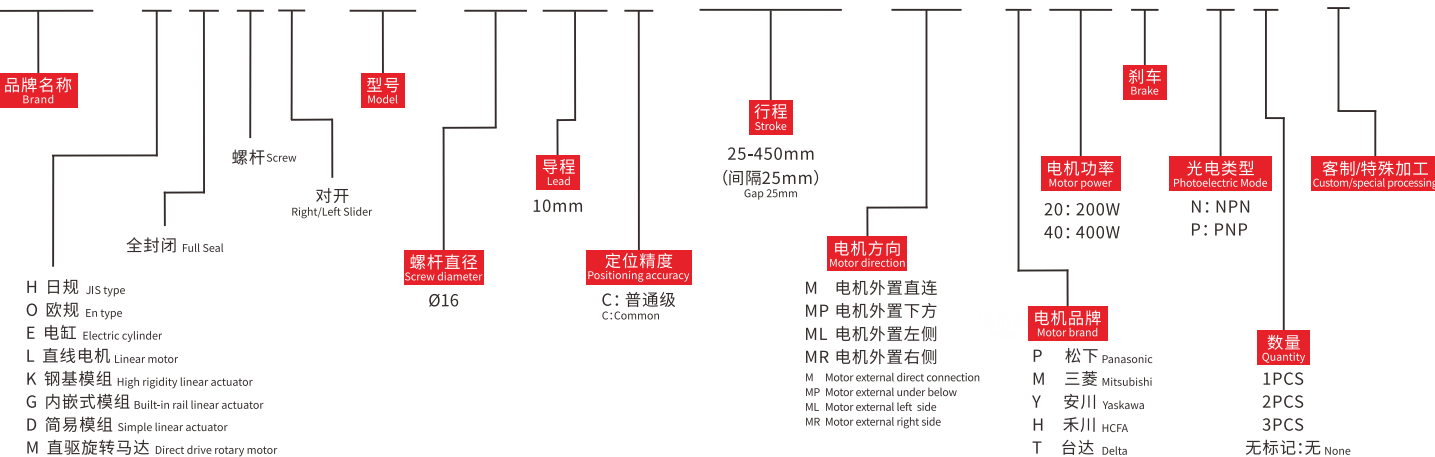
最高速度
Max Speed 500mm/s

马达容量
Motor Output 400W

滚珠螺杆
Ball Screw Ø16mm

型号表达方式 Ordering method

TPA-GCRS-80-1610C-L450-ML-P40B-N3-F

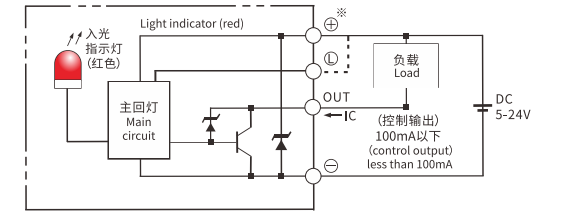


产品性能参数如下 Product performance parameters are as follows

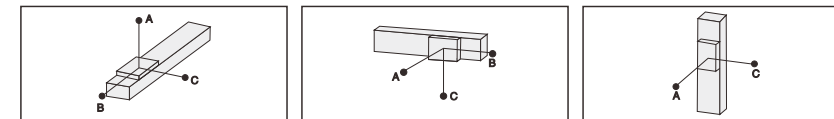
规格 Spec	重复定位精度 (mm) Repeated positioning accuracy (mm)	±0.005
	螺距 (mm) Ball screw lead (mm)	10
	最高速度 (mm/s) ^{※2} Maximum speed (mm/s)	500
	最大可搬重量 Maximum Payload	水平使用 (kg) Horizontal (kg): 30 (双滑座 Dual carriage) 垂直使用 (kg) Vertical (kg): 10 (双滑座 Dual carriage)
部品 Parts	定格推力 (N) Rated thrust (N)	1388
	标准行程 (mm) Stroke pitch (mm)	25~450mm/25mm间隔 25mm Pitch
	AC伺服马达容量 (W) AC servo motor output (w)	400
	滚珠螺杆外径 (mm) Ball screw Ø (mm)	Ø16
	联轴器 (mm) Coupling (mm)	10X14
	原点感应器 Original Sense	外挂 Outside
		TPA-N674-WR

※1 反向同步只能对应导程5。
※1 Dual carriage synchronous movement in reverse direction can only fit at lead of 5mm.
※2 马达加速减速设定0.2秒。
※2 Acceleration and deceleration value is set 0.2 second.

感应器连接图<原点及端点> Sensor layout

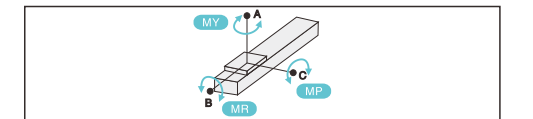


容许负载力矩表 N.m Allowable overhang



导程 Lead	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		
20kg	1560	153	237	20kg	214	153	1435	10kg	331	331
35kg	890	81	126	35kg	113	81	845	15kg	220	220
50kg	550	53	82	50kg	74	53	506	-	-	-

静态容许负载惯量 Static loading moment



	MY	MP	MR
惯量 (Unit: N.m)	318	318	626

*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

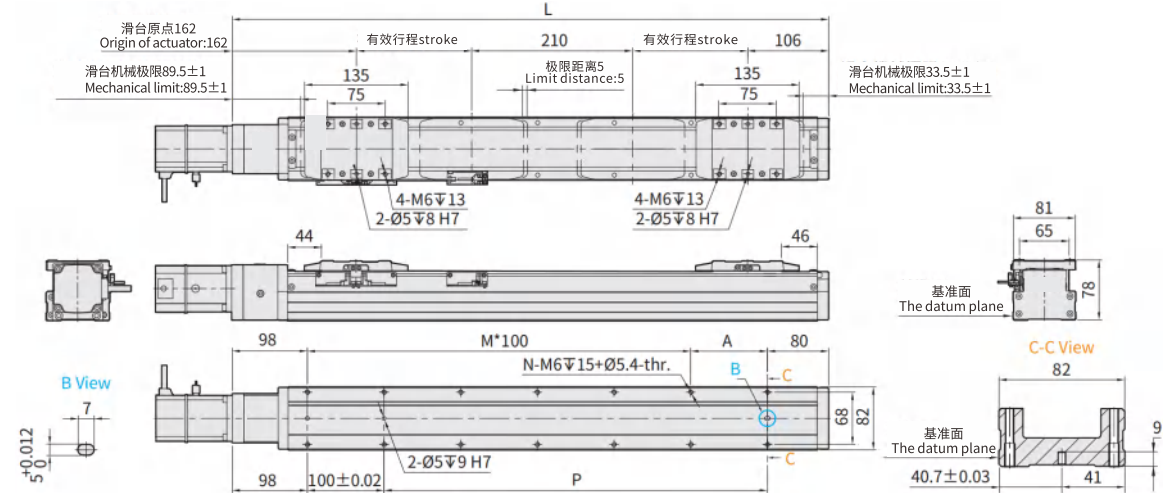
品牌 Brand	马达记号 Mark	刹车有无 Brake	马达容量 Motor capacity	电源电压 AC-Voltage	伺服马达型号 Servo motor model	驱动器型号 Driver Model
三菱 Mitsubishi	M	无刹车(水平式样) No brake (horizontal type)	400	220	HG-KR43	MR-J4-40A
		有刹车(垂直式样) With brakes (vertical type)	400	220	HG-KR43B	MR-J4-40A
松下 Panasonic	P	无刹车(水平式样) No brake (horizontal type)	400	220	MHMD042G1U	MADHT2510
		有刹车(垂直式样) With brakes (vertical type)	400	220	MHMD042G1V	MADHT2510
台达 Delta	T	无刹车(水平式样) No brake (horizontal type)	400	220	ECMA-C20604ES	ASD-B20421-B
		有刹车(垂直式样) With brakes (vertical type)	400	220	ECMA-C20604FS	ASD-B20421-B



电机外置直连/电机外置下方
Motor external direct connection/Motor external under below

M 电机外置直连 Motor external direct connection

单位:Unit:mm

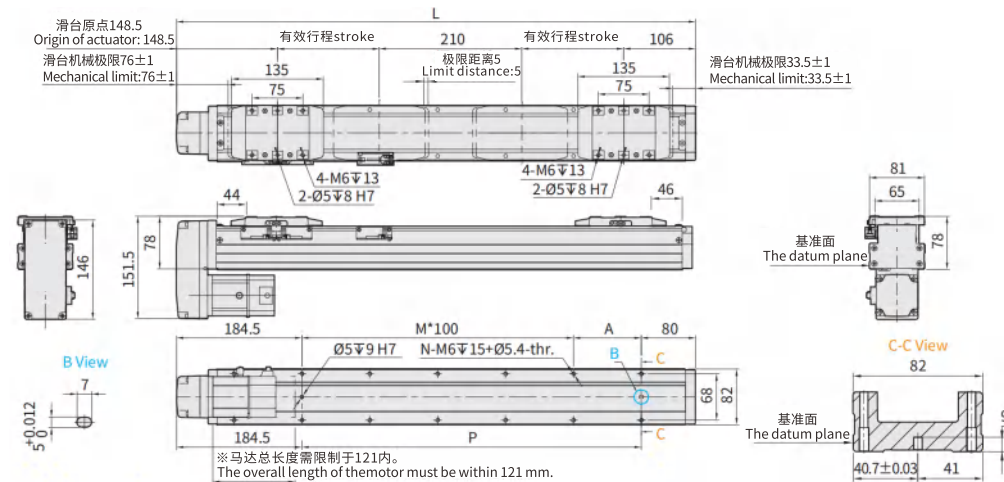


有效行程 Valid Stroke	25	50 [※]	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450
L	528	578	628	678	728	778	828	878	928	978	1028	1078	1128	1178	1228	1278	1328	1378
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	6.64	7	7.37	7.73	8.10	8.46	8.83	9.19	9.56	9.92	10.29	10.65	11.02	11.38	11.75	12.11	12.48	12.85

※行程50时,因本体上锁式固定孔会被滑座遮住,仅能使用4支螺丝固定,建议客户本体使用下锁式固定孔锁附。
※When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

MP 电机外置下方 Motor external under below

单位:Unit:mm



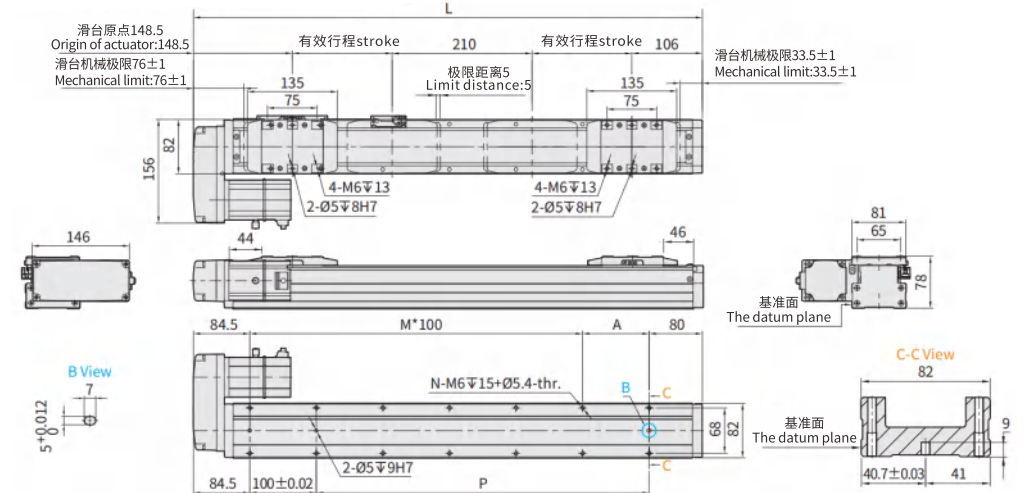
有效行程 Valid Stroke	25	50 [※]	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450
L	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10
N	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24
P	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	7.16	7.68	8.2	8.72	9.24	9.76	10.28	10.8	11.32	11.84	12.36	12.88	13.4	13.92	14.44	14.96	15.48	16

※行程50时,因本体上锁式固定孔会被滑座遮住,仅能使用4支螺丝固定,建议客户本体使用下锁式固定孔锁附。
※When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.
※马达下折时,若选用刹车马达,或是超出马达总长度限制时无法套用标准PIN孔,如有需求请洽我司业务。
※When motor with brake assembled on lower side, or the total length over than spec limit, it may not use standard pinhole. Please contact our sales department if you need more information & requirement.

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

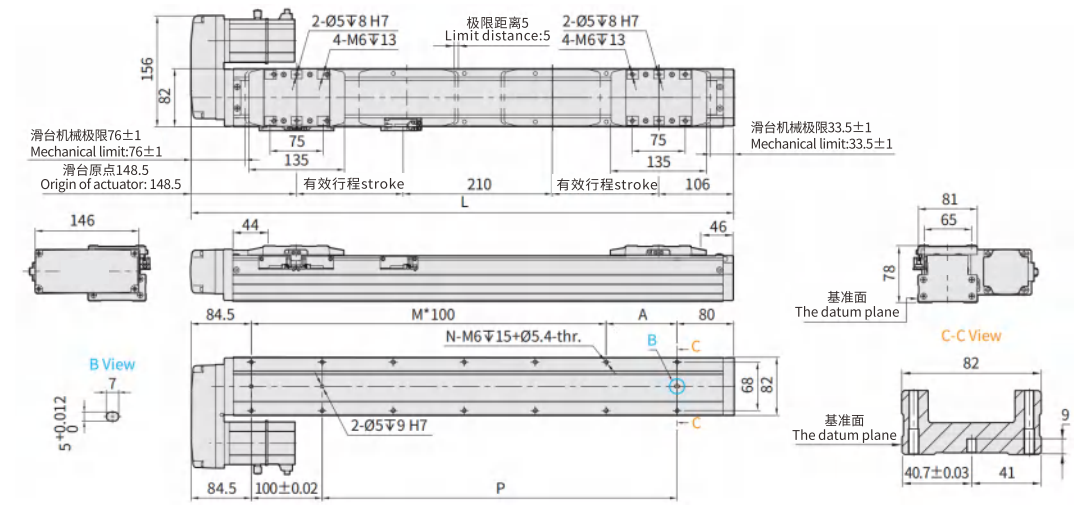


有效行程 Valid Stroke	25	50 [※]	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450
L	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	7.16	7.68	8.2	8.72	9.24	9.76	10.28	10.8	11.32	11.84	12.36	12.88	13.4	13.92	14.44	14.96	15.48	16

※行程50时,因本体上锁式固定孔会被滑座遮住,仅能使用4支螺丝固定,建议客户本体使用下锁式固定孔锁附。
※When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.

MR 电机外置右侧 Motor external right side

单位:Unit:mm



有效行程 Valid Stroke	25	50 [※]	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450
L	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	7.16	7.68	8.2	8.72	9.24	9.76	10.28	10.8	11.32	11.84	12.36	12.88	13.4	13.92	14.44	14.96	15.48	16

※行程50时,因本体上锁式固定孔会被滑座遮住,仅能使用4支螺丝固定,建议客户本体使用下锁式固定孔锁附。
※When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix; as a result, suggest that fixing actuator body from the bottom to the top.



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 screw

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 user 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轴度(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).

两个轴的同轴度若差异太大时,将产生异响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.

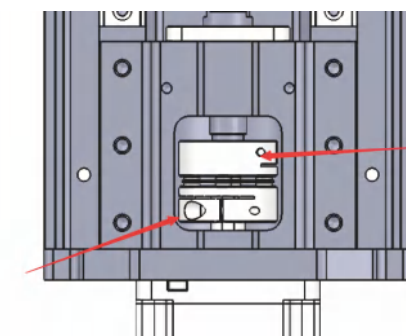
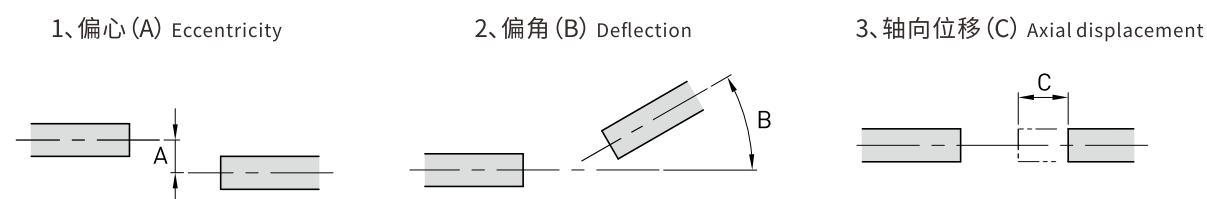


图1 Figure 1

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, 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 deviations should be paid attention to. The illustration is as follows:





联轴器

Coupling

若自行购买马达安装, 安装联轴器时需特别注意以下几点:

- ◆ 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, 请确认联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个轴的同轴度(马达锁固螺丝)。
- ◆ 2个轴的同轴度若差异太大时, 将产生异响或是造成联轴器损坏。

※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	0.109
								29.53x10 ⁻⁶	0.105
SFC-050SA2	25	0.02	1	±0.4	10000	32000	48	54.88x10 ⁻⁶	0.185
								77.10x10 ⁻⁶	0.214
								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数值仅为元件部分之值。

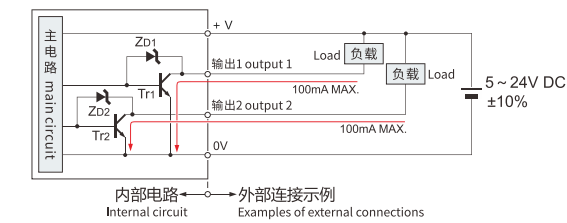
※The moment of inertia and mass in the table are the values at the maximum aperture; The values of torsional elasticity constants in the table are only the values of components.

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

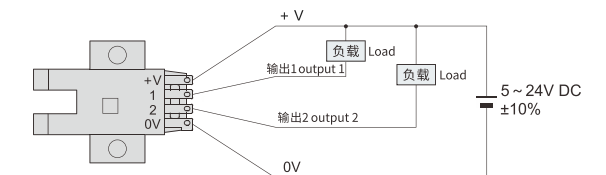
输入、输出电路 Input and output circuits



(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

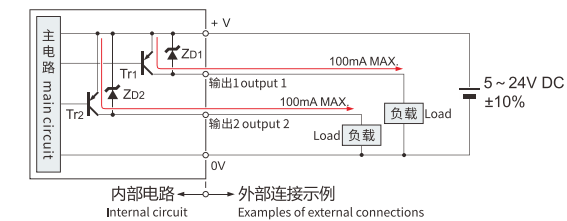


输出动作 Output action

	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

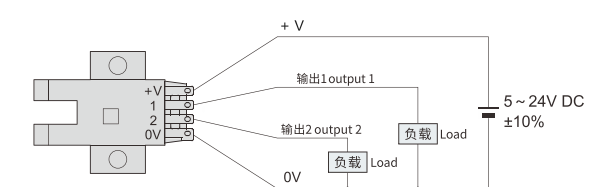
输入、输出电路 Input and output circuits



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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度等原因,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

Assemble Method of belt wheel

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).



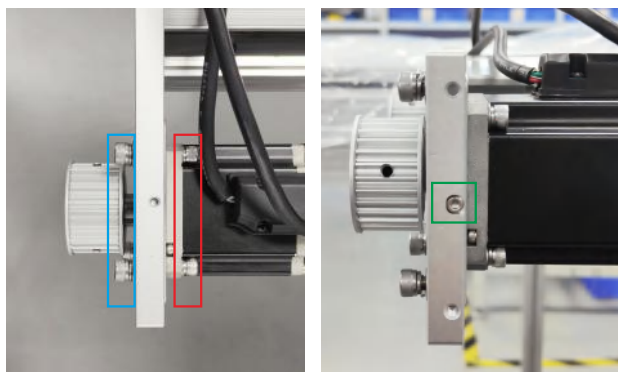
2、拆卸固定钣金的螺丝后，即可看到螺杆端同步轮我厂已安装好。只需要客户安装电机/减速机端的同步轮。

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.



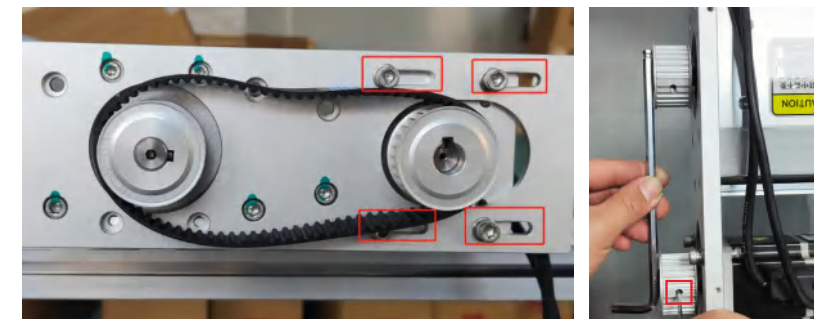
3、安装电机（一般电机包装内有螺丝提供），并锁紧固定电机的4颗螺丝（红色区域）之后拧松固定拉板的固定螺丝（蓝色和绿色区域）。

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.



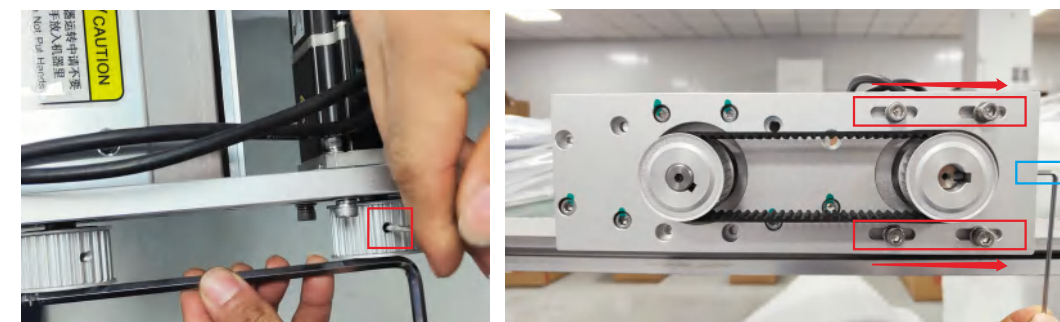
4、因拧松固定拉板的螺丝。电机端同步轮可左右来回活动。借助6MM六角扳手（不限于扳手）。

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.





维护保养手册

一、日常检查项目

线性模组是一种常见的传动机构,在实际操作中,被广泛应用到各种各样的设备中,因使用环境和使用工况不同,需要及时检查和维护。

日常检查项目	
1. 检查部件表面是否有损伤,压痕和摩擦情况。	2. 滚珠螺杆、轨道、轴承是否有异常震动或噪音。
3. 电机、联轴器是否有异常震动或噪音。	4. 所见部位是否有不明粉尘、油渍、痕迹等。

二、周期维护项目

配件	维护方案	维护周期	具体操作
滚珠螺杆	增加润滑脂(粘度:30-40cts) 清理旧油污,注入新润滑脂。	每月一次或每行走100KM的距离	用无尘布直接擦拭干净螺杆珠槽和螺母两端,将新润滑脂直接注入油孔或涂抹螺杆表面。
线性滑轨	增加润滑脂(粘度:30-150cts) 清理旧油污,注入新润滑脂。	每月一次或每行走100KM的距离	用无尘布直接擦拭干净轨道表面及轨道珠槽,将新润滑脂直接注入油孔。

三、异常问题以及解决方法

线性模组异常情况	维修、排除方法
电源接入时产生异响	1. 调整伺服驱动器内参数“机械共振抑制”数值。 2. 调整伺服驱动器内参数“自动调谐”数值。
马达转动时产生异响	1. 调整伺服驱动器内参数“机械共振抑制”数值。 2. 调整伺服驱动器内参数“自动调谐”数值。 3. 检查马达刹车是否释放。 4. 检查机构是否因超载产生变形。
马达运转时滑台不顺畅	1. 检查刹车是否释放。 2. 将马达与线性模组分离,手推滑动座,判断问题点原因。 3. 检查联轴器固定螺丝是否松动。 4. 检查线性模组移动区域是否有异物掉落。
线性模组行走距离与实际距离不符	1. 检查输入行走数值是否正确。 2. 检查导程输入数值是否正确。
马达运动ON,滑台没有移动	1. 检查刹车是否释放。 2. 检查联轴器固定螺丝是否松动。 3. 将马达与线性模组分离,判断问题点、原因。

另本公司负责自身商品的故障维修,并不负责因产品故障引起的其他损失。

Maintenance manual

一、Daily inspection items

Linear module is a common transmission mechanism, which is widely used in all kinds of equipment in actual operation. It needs to be checked and maintained in time because of the different environment and working conditions.

Daily inspection items	
1. Check the surface of parts for damage, indentation and friction.	2. Is there any abnormal vibration or noise in the screw, track and bearing.
3. Whether the motor and coupling have abnormal vibration or noise.	4. See if there are any unknown dust, oil stains, traces, etc.

二、Periodic maintenance project

Parts	Maintenance scheme	Maintenance cycle	Specific operation
Ball screw	Add grease (viscosity: 30-40cts) Clean up old grease and inject new grease.	Once a month or every 100KM distance.	Clean the screw bead groove and both ends of the nut directly with a dust-free cloth, and directly inject new grease into the oil hole or coat the screw surface.
Linear slide rail	Add grease (viscosity: 30-150cts) Clean up old grease and inject new grease.	Once a month or every 100KM distance.	Clean the track surface and track bead groove directly with a dust-free cloth, and directly inject new grease into the oil hole.

三、Exceptions and solutions

Linear module abnormal situation	Maintenance and troubleshooting methods
Abnormal sound is produced when the power supply is connected.	1. Adjust the value of the servo drive parameter "mechanical resonance suppression". 2. Adjust the value of Auto tuning in the servo driver.
Abnormal sound is produced when the motor rotates.	1. Adjust the value of the servo drive parameter "mechanical resonance suppression". 2. Adjust the value of Auto tuning in the servo driver. 3. Check whether the motor brake release. 4. Check whether the mechanism is deformed due to overload.
The sliding table is not smooth when the motor is running.	1. Check the brake release. 2. Separate the motor from the linear module and push the sliding seat to determine the cause of the problem. 3. Check the coupling setting screws for loosening. 4. Check whether foreign objects have fallen from the moving area of the linear module.
The linear walking distance of the module is inconsistent with the actual distance.	1. Check whether the input walking value is correct. 2. Check whether the lead input value is correct.
The motor is ON, and the slide table does not move.	1. Check the brake release. 2. Check whether the coupling fixing screw is loose. 3. Separate the motor from the linear module to determine the cause of the problem.

In addition, the company is responsible for the fault maintenance of its own goods, and is not responsible for other losses caused by product failure.



伺服滑台需求规格调查表

客户名称:			邮箱:				
电话:			地址:				
接洽人:			职称:				
使用需求	行程(mm):		最大速度(mm/s):				
	负载(kg):		重复定位精度(mm):				
	停留时间(s):		加减速时间(s):				
	安装方式:						
	工件力矩 (mm)						
A		B	C	A	B	C	
组合形式	A系列	A1 <input type="checkbox"/>	A2 <input type="checkbox"/>	A3 <input type="checkbox"/>	A4 <input type="checkbox"/>	A: _____	
	G系列	G1 <input type="checkbox"/>	G2 <input type="checkbox"/>	G3 <input type="checkbox"/>	G4 <input type="checkbox"/>	G: _____	
	F系列	F1 <input type="checkbox"/>	F2 <input type="checkbox"/>	F3 <input type="checkbox"/>	F4 <input type="checkbox"/>	F: _____	
	P系列	P1 <input type="checkbox"/>	P2 <input type="checkbox"/>	P3 <input type="checkbox"/>	P4 <input type="checkbox"/>	P: _____	
Y轴悬臂过长, 建议跨距0-500以内使用辅助轨, 500-800使用辅助轴, 800-1200使用双驱。							
电机连接方式	X轴	M <input type="checkbox"/>	MP <input type="checkbox"/>	MR <input type="checkbox"/>	LP <input type="checkbox"/>	RP <input type="checkbox"/>	DL <input type="checkbox"/>
		MD <input type="checkbox"/>	MU <input type="checkbox"/>	ML <input type="checkbox"/>	LU <input type="checkbox"/>	RU <input type="checkbox"/>	DR <input type="checkbox"/>
	Y轴	M <input type="checkbox"/>	MP <input type="checkbox"/>	MR <input type="checkbox"/>	LP <input type="checkbox"/>	RP <input type="checkbox"/>	DL <input type="checkbox"/>
		MD <input type="checkbox"/>	MU <input type="checkbox"/>	ML <input type="checkbox"/>	LU <input type="checkbox"/>	RU <input type="checkbox"/>	DR <input type="checkbox"/>
Z轴	M <input type="checkbox"/>	MP <input type="checkbox"/>	MR <input type="checkbox"/>	LP <input type="checkbox"/>	RP <input type="checkbox"/>	DL <input type="checkbox"/>	
	MD <input type="checkbox"/>	MU <input type="checkbox"/>	ML <input type="checkbox"/>	LU <input type="checkbox"/>	RU <input type="checkbox"/>	DR <input type="checkbox"/>	
单轴 <input type="checkbox"/>	M <input type="checkbox"/>	MP <input type="checkbox"/>	MR <input type="checkbox"/>	LP <input type="checkbox"/>	RP <input type="checkbox"/>	DL <input type="checkbox"/>	
多轴 <input type="checkbox"/>	MD <input type="checkbox"/>	MU <input type="checkbox"/>	ML <input type="checkbox"/>	LU <input type="checkbox"/>	RU <input type="checkbox"/>	DR <input type="checkbox"/>	
伺服电机	品牌: _____		型号: _____				
传感器位置	内置 <input type="checkbox"/>	外挂 <input type="checkbox"/>	类型: NPN <input type="checkbox"/>			PNP <input type="checkbox"/>	数目: _____个
应用方式	取放物料 <input type="checkbox"/>		CCD检测 <input type="checkbox"/>		加工物件 <input type="checkbox"/>		涂胶 <input type="checkbox"/> 搬运 <input type="checkbox"/>
	定点检测 <input type="checkbox"/>		位移检测 <input type="checkbox"/>		锁螺丝 <input type="checkbox"/>		其他: _____
应用环境	无尘环境 <input type="checkbox"/>		传动方式	螺杆 <input type="checkbox"/>		皮带 <input type="checkbox"/> 齿轮齿条 <input type="checkbox"/>	
	一般环境 <input type="checkbox"/>						
模组噪音要求	不要求 <input type="checkbox"/>		70~80db <input type="checkbox"/>	60~70db <input type="checkbox"/> (分贝等级会影响单价)			
滚珠螺杆厂牌	螺杆 <input type="checkbox"/>		指定厂牌: _____ (滚珠螺杆品牌会影响单价)				
设备设计模式	量产机:		开发机:				
因组合形式较多, 实际细节请和设计部门详细讨论。							
备注:							
客户名称:	客户确认签名:		日期:				

Linear Servo Actuator Demand Specification Survey

Customer name:			Email:				
Telephone:			Address:				
Contact person:			Title:				
Usage requirement	Stroke(mm):		maximum speed(mm/s):				
	Load(kg):		Repetition positioning accuracy(mm):				
	Residence time(s):		Acceleration and deceleration time(s):				
	Installation method:						
	Load and Cantilever Length(mm)						
A		B	C	A	B	C	
Combination form	A Series	A1 <input type="checkbox"/>	A2 <input type="checkbox"/>	A3 <input type="checkbox"/>	A4 <input type="checkbox"/>	A: _____	
	G Series	G1 <input type="checkbox"/>	G2 <input type="checkbox"/>	G3 <input type="checkbox"/>	G4 <input type="checkbox"/>	G: _____	
	F Series	F1 <input type="checkbox"/>	F2 <input type="checkbox"/>	F3 <input type="checkbox"/>	F4 <input type="checkbox"/>	F: _____	
	P Series	P1 <input type="checkbox"/>	P2 <input type="checkbox"/>	P3 <input type="checkbox"/>	P4 <input type="checkbox"/>	P: _____	
The Y-axis cantilever is too long. It is recommended to use auxiliary rails within the span of 0-500, auxiliary shafts for 500-800 and double drives for 800-1200.							
Motor connection mode	X axis	M <input type="checkbox"/>	MP <input type="checkbox"/>	MR <input type="checkbox"/>	LP <input type="checkbox"/>	RP <input type="checkbox"/>	DL <input type="checkbox"/>
		MD <input type="checkbox"/>	MU <input type="checkbox"/>	ML <input type="checkbox"/>	LU <input type="checkbox"/>	RU <input type="checkbox"/>	DR <input type="checkbox"/>
	Y axis	M <input type="checkbox"/>	MP <input type="checkbox"/>	MR <input type="checkbox"/>	LP <input type="checkbox"/>	RP <input type="checkbox"/>	DL <input type="checkbox"/>
		MD <input type="checkbox"/>	MU <input type="checkbox"/>	ML <input type="checkbox"/>	LU <input type="checkbox"/>	RU <input type="checkbox"/>	DR <input type="checkbox"/>
Z axis	M <input type="checkbox"/>	MP <input type="checkbox"/>	MR <input type="checkbox"/>	LP <input type="checkbox"/>	RP <input type="checkbox"/>	DL <input type="checkbox"/>	
	MD <input type="checkbox"/>	MU <input type="checkbox"/>	ML <input type="checkbox"/>	LU <input type="checkbox"/>	RU <input type="checkbox"/>	DR <input type="checkbox"/>	
single axis <input type="checkbox"/>	M <input type="checkbox"/>	MP <input type="checkbox"/>	MR <input type="checkbox"/>	LP <input type="checkbox"/>	RP <input type="checkbox"/>	DL <input type="checkbox"/>	
multi axis <input type="checkbox"/>	MD <input type="checkbox"/>	MU <input type="checkbox"/>	ML <input type="checkbox"/>	LU <input type="checkbox"/>	RU <input type="checkbox"/>	DR <input type="checkbox"/>	
Servo motor	Brand: _____		Model: _____				
Sensor position	Inside <input type="checkbox"/>	Outside <input type="checkbox"/>	Type: NPN <input type="checkbox"/>			PNP <input type="checkbox"/>	Quantity: _____ Pcs
Application mode	Take and place materials <input type="checkbox"/>		CCD detection <input type="checkbox"/>		Machining material <input type="checkbox"/>		Dispense <input type="checkbox"/> Handling <input type="checkbox"/>
	Fixed-point detection <input type="checkbox"/>		Displacement detection <input type="checkbox"/>		Lock screw <input type="checkbox"/>		Other: _____
Application environment	Dust free environment <input type="checkbox"/>		Drive Method	Screw <input type="checkbox"/>		Belt <input type="checkbox"/> Gear rack <input type="checkbox"/>	
	General environment <input type="checkbox"/>						
Module noise requirements	Does not require <input type="checkbox"/>		70~80db <input type="checkbox"/>	60~70db <input type="checkbox"/> (decibel level will affect the unit price)			
Ball screw brand	Screw <input type="checkbox"/>		Designated brand: _____ (Ball screw brand will affect unit price)				
Equipment design mode	Mass production machine:		Development machine:				
As there are many combinations, please discuss the actual details with the design department in detail.							
Remarks:							
Customer name:	Signature:		Date:				