锐进传动 GEAR UNITS 2020

中空旋转平台

动力传动专业制造商

PROFESSIONAL MANUFACTURER OF POWER TRANSMISSION

设计理念: 遵循规律，总是超越

DESIGN PHILOSOPHY: To follow the law, but always beyond.

经营理念: 为客户需求而设计，为客户满意而执着

BUSINESS PHILOSOPHY: Design for customer demand , dedication for customer satisfaction

Contents

目录索引

中空旋转平台

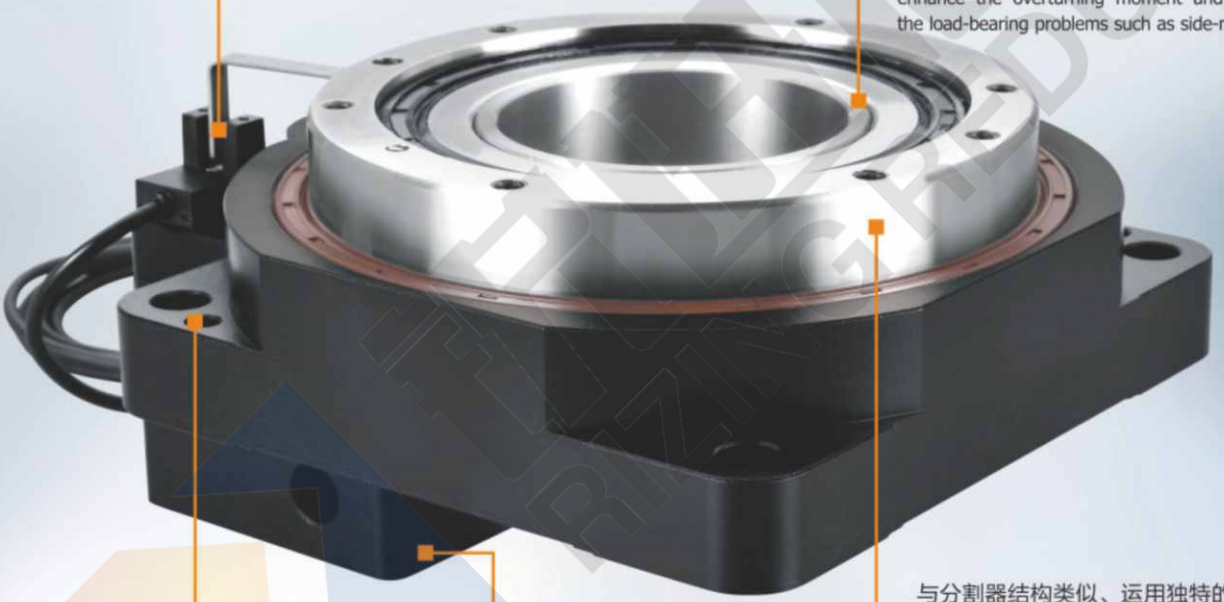
圆周定位的最佳选择
The Best Choice For Circumferential Positioning

通过运用高精度的齿轮传动，能够实现任意角度位置的定位，让您不在为旋转定位时固定的工位位置而烦恼。两个小孔是连接光电开关，方便电气中的零点控制。

Through the use of high-precision gear transmission, it can realize the positioning at any angle position, so that you are no longer worried about the fixed position of the rotating positioning. The two small holes are connected to the photoelectric switch, which is convenient for zero point control in the electric.

RJTJ/RJTZ系列中间设有防倾覆稳定环，能大大增强倾覆力矩，有效解决侧装吊装等承载问题。

The RJTJ/RJTZ series is equipped with an anti-overturning stability ring in the middle, which can greatly enhance the overturning moment and effectively solve the load-bearing problems such as side-mounted hoisting.



与分割器结构类似、运用独特的轴承结构，不需要增加额外的支撑系统。即可将负载直接放置在中空旋转平台盘面上传动，并且较大的中孔结构设计能够使您的布线更加便捷。

Similar to the splitter structure, it uses a unique bearing structure and does not require additional support systems. The load can be directly placed on the hollow rotating platform for transmission, and the larger hole structure design can make your wiring more convenient.

水平的结构与定位销钉的设计，让您的安装更加方便、精准。

The horizontal structure and the design of positioning pins make your installation more convenient and accurate.

底部与伺服电机或步进电机的安装设计完美匹配，并且可以按照你的要求定制安装设计，使您在选择伺服电机或步进电机时更加任意。

The bottom is perfectly matched with the installation design of the servo motor or stepper motor, and the installation design can be customized according to your requirements, allowing you to be more arbitrary when choosing a servo motor or stepper motor.

产品特点 FEATURES

中空结构 Hollow structure

中空旋转平台的转盘为中空结构，电机连接在侧边，方便治具中的气管、电线安装。与分割器和DD马达相同，可将重物直接固定在平台上传动。且我司成功研发RJMD系列直角中空旋转平台，有效解决了由之前高度空间受限导致安装空间不够等问题。

The turntable of the hollow rotating platform is a hollow structure, and the motor is connected to the side, which is convenient for the installation of the gas pipe and the wire in the jig. Same as the divider and the DD motor, the heavy objects can be directly fixed on the platform for transmission. In addition, our company successfully developed the RJMD series of right-angle hollow rotating platforms, which effectively solved the problem of insufficient installation space caused by the previous limited height and space.

马达任意配置，速比任意选择
The motor of any configuration,arbitrarily selectde ratio

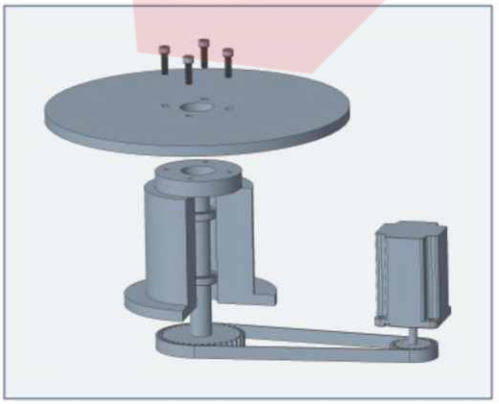
锐进中空旋转平台通过定制法兰及输入轴孔的方式灵活变换接口尺寸大小，适合连接任意品牌的伺服电机、步进电机。市场标准速比很单一，由输入齿轮跟输出齿轮比例产生速比，我司通过设计采用多级齿轮传动方式，实现了同一转台多个速比，相同速比下我司承载扭矩更大等特点。

RIZING hollow rotating platform can flexibly change the size of the interface by customizing the flange and input shaft hole, which is suitable for connecting servo motors and stepping motors of any brand. The market standard speed ratio is very single. The ratio is produced by the ratio of the input gear to the output gear. Through the design of multi-stage gear transmission, our company has achieved multiple speed ratios on the same turntable, and our company has the characteristics of greater torque capacity under the same speed ratio. .

适用于多工况 Suitable for multiple working conditions

考虑到产品使用时的侧向力等问题，我们锐进设计采用交叉滚子轴承，并且中间设有防倾覆稳定环。以便更好地承受使用过程中的侧向力负载。根据侧装、吊装以及倾覆力较大的工况，我公司单独设计了一款RJTZ系列重载型中空旋转平台减速机。

Taking into account the lateral force when the product is in use, our RIZING design adopts cross-roller bearings, and there is an anti-overturning stability ring in the middle. In order to better bear the lateral load during use. According to the working conditions of side mounting, hoisting and large overturning force, our company separately designed a RJTZ series heavy-duty hollow rotating platform reducer.



皮带轮+机构部件再连接电机
Pulley + mechanism parts and then connected to the motor

加工工艺 Processing technology

锐进中空旋转平台本体采用铝合金材料，经高精密CNC加工，以确保各部位的精度。齿轮采用渗碳热处理及研磨的工艺，加工后可达到5级齿轮精度，并且其表面硬度可达到58-62HRC。产品组装完成后，会再进行一道研磨工序，以确保端面的平行度和垂直度达到一丝以内的跳动。

The main body of RIZING hollow rotating platform is made of aluminum alloy and processed by high-precision CNC to ensure the accuracy of each part. The gear adopts the process of carburizing heat treatment and grinding. After processing, it can reach the gear accuracy of grade 5, and its surface hardness can reach 58-62HRC. After the product is assembled, another grinding process will be carried out to ensure that the parallelism and perpendicularity of the end face reaches within a trace of runout.

重复定位精度高 High repeat positioning accuracy

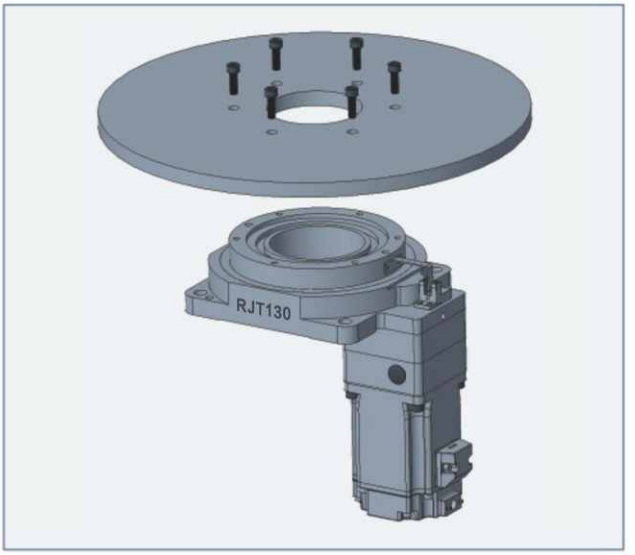
锐进中空旋转平台部分齿轮精度等级达4级，使得中空旋转平台的空回极小，并且我司通过可调节齿轮中心距的设计，弥补装配时产生的误差，重复定位精度可达到10弧秒以下。

The precision level of some gears of RIZING hollow rotating platform reaches level 4, which makes the hollow return of the hollow rotating platform extremely small, and our company uses the design of adjustable gear center distance to compensate for the error generated during assembly. The repeat positioning accuracy can reach 10 arc seconds. the following.

直接连接--节省设计工时
Direct connection-save design time

可直接将装置的工作台及机械手臂安装在中空旋转平台转盘上。与使用皮带轮等机构零件时相比，可减少机构设计、零件调配、皮带状态调节等的工时与费用。

The working table and mechanical arm of the device can be directly installed on the hollow rotating platform turntable. Compared with the use of belt pulleys and other mechanical parts, it can reduce the man-hours and costs of mechanism design, parts allocation, and belt state adjustment.



中空旋转平台直接连电机
The hollow rotating platform is directly connected to the motor

RJM Series

Right-angle Hollow Rotating Platform

直角型中空旋转平台

订货型号标示 ORDERING REPRESENTATION

RJM - 130 - 30 - 14 - 50 - 70

系列	型号规格	速比	电机轴径	电机定位凸台	电机安装孔距
RJT RJTJ RJTZ RJM RJMD RJN	130 180	L1: 15/21/30 L2: 60/75/105/120/150/210/300			注: (伺服电机安装面对角孔距) (步进电机安装面单边孔距)

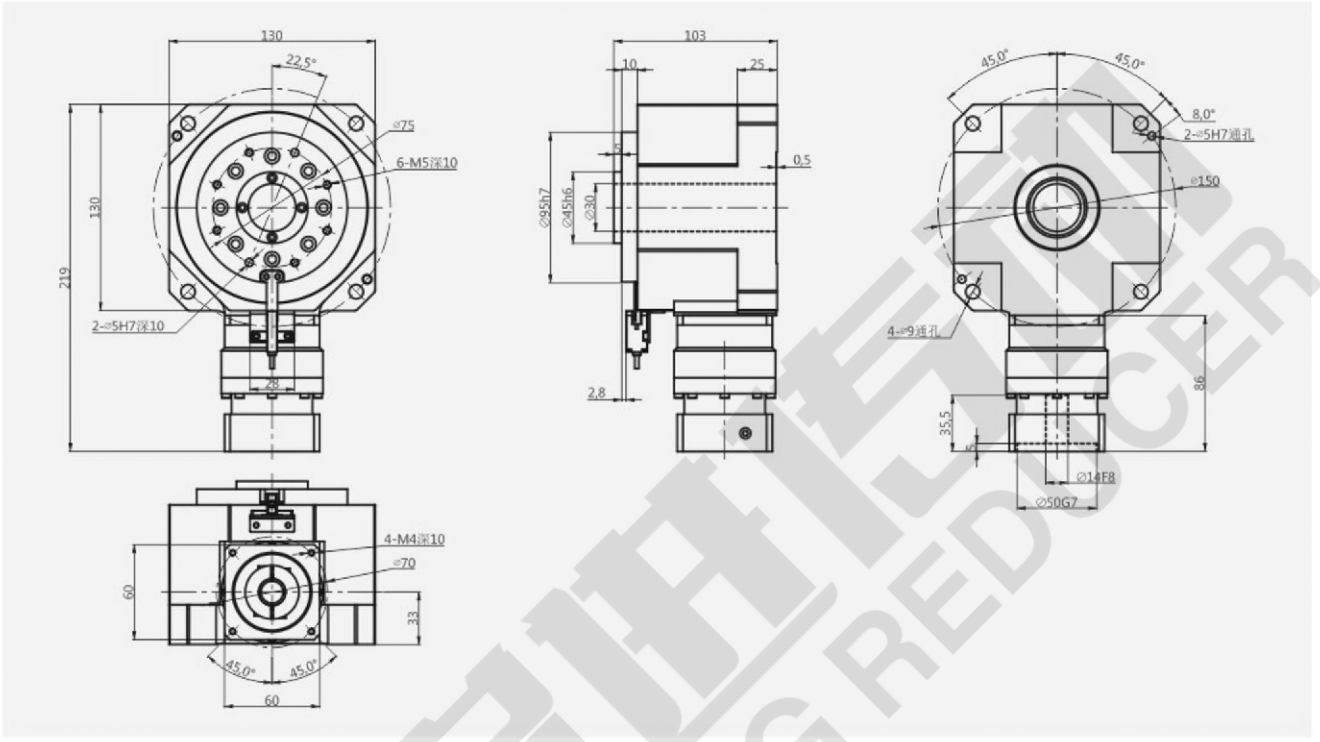
技术参数
Technical Parameter

型号 Model			RJM130-L1			RJM130-L2						
轴承结构	Bearing structure		交叉滚子轴承 Cross roller bearing									
减速比	Reduction ratio	i	15	21	30	60	75	105	120	150	210	300
额定输出扭矩	Rated output torque	N.m	50	40	30	50	50	50	50	50	40	30
最大输出扭矩	Output torque	N.m	3倍额定扭矩 3 Times rated torque									
定位精度	Positioning accuracy	arc-min	≤1			≤3						
反复定位精度	Repeated positioning accuracy	arc-sec	≤30			≤60						
容许盘面转速	Allowable disk speed	rpm	200 (间歇运转) Intermittent operation									
适配伺服马达	Adapt to servo motor	W	200-400									
适配步进马达	Suitable for stepping motor		57 步进 Stepper									
容许轴向负载	Allowable axial load	N	5300									
容许径向负载	Allowable radial load	N	5300									
设计承重	Design load	Kg	30									
容许惯性力矩	Allowable moment of inertia	N.m	30									
扭转刚性	Torsional rigidity	N.m/arcmin	28									
倾覆力矩	Overturning moment	N.m	520									
精度寿命	Accuracy life	h	20000h (间歇运转) Intermittent operation									
防护等级	Protection level	IP	54									
润滑方式	Lubrication method		长效润滑 Long-term lubrication									
安装方式	Installation method		任意 Arbitrary									
旋转平台同心度	Concentricity of rotating platform	mm	≤0.01									
旋转平台平行度	Parallelism of rotating platform	mm	≤0.01									
传动效率	Transmission efficiency	%	95			90						
噪音	Noise	db	≤57			≤57						
重量	Weight	kg	6.2			6.8						

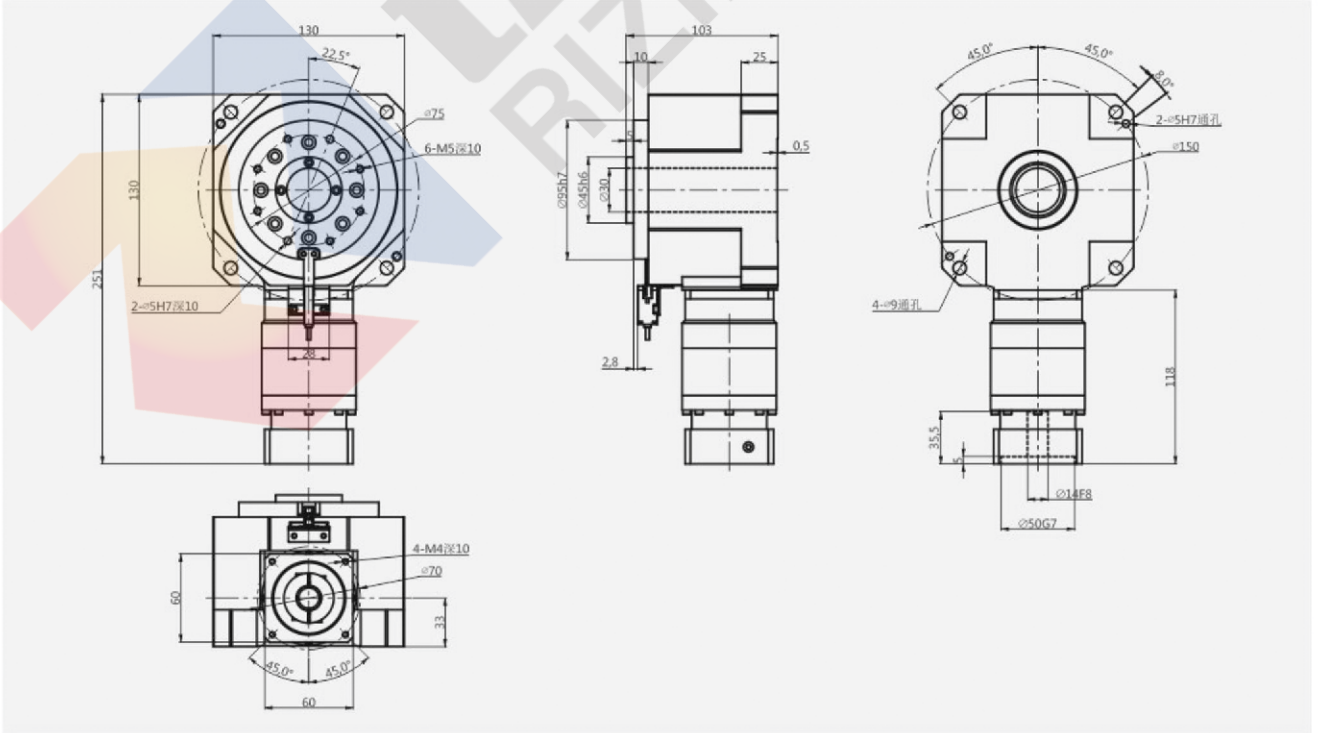
注 旋转平台平行度有更高要求请联系我司销售人员
If the parallelism of the rotating platform has higher requirements, please contact our sales staff

外形尺寸图表 OUTLINE DIMENSIONAL

RJM130-L1 配400W伺服接口



RJM130-L2 配400W伺服接口



* 以上技术参数仅供参考，实际根据客户提供的数据，会出具相关的技术参数及尺寸。

订货型号标示 ORDERING REPRESENTATION

RJM - 180 - 30 - 19 - 70 - 90

系列	型号规格	速比	电机轴径	电机定位凸台	电机安装孔距
RJT RJTJ RJTZ RJM RJMD RJN	130 180	L1: 15/21/30 L2: 60/75/105/120/150/210/300			注: (伺服电机安装面对角孔距) (步进电机安装面单边孔距)

技术参数
Technical Parameter

型号 Model			RJM180-L1			RJM180-L2						
轴承结构	Bearing structure		交叉滚子轴承 Cross roller bearing									
减速比	Reduction ratio	i	15	21	30	60	75	105	120	150	210	300
额定输出扭矩	Rated output torque	N.m	130	110	60	130	130	130	130	130	110	60
最大输出扭矩	Output torque	N.m	3倍额定扭矩 3 Times rated torque									
定位精度	Positioning accuracy	arc-min	≤1			≤3						
反复定位精度	Repeated positioning accuracy	arc-sec	≤30			≤60						
容许盘面转速	Allowable disk speed	rpm	200 (间歇运转) Intermittent operation									
适配伺服马达	Adapt to servo motor	W	750									
适配步进马达	Suitable for stepping motor		86 步进 Stepper									
容许轴向负载	Allowable axial load	N	8500									
容许径向负载	Allowable radial load	N	8500									
设计承重	Design load	Kg	60									
容许惯性力矩	Allowable moment of inertia	N.m	60									
扭转刚性	Torsional rigidity	N.m/arcmin	50									
倾覆力矩	Overturning moment	N.m	1230									
精度寿命	Accuracy life	h	20000h (间歇运转) Intermittent operation									
防护等级	Protection level	IP	54									
润滑方式	Lubrication method		长效润滑 Long-term lubrication									
安装方式	Installation method		任意 Arbitrary									
旋转平台同心度	Concentricity of rotating platform	mm	≤0.01									
旋转平台平行度	Parallelism of rotating platform	mm	≤0.01									
传动效率	Transmission efficiency	%	95			90						
噪音	Noise	db	≤63			≤63						
重量	Weight	kg	16			17.6						

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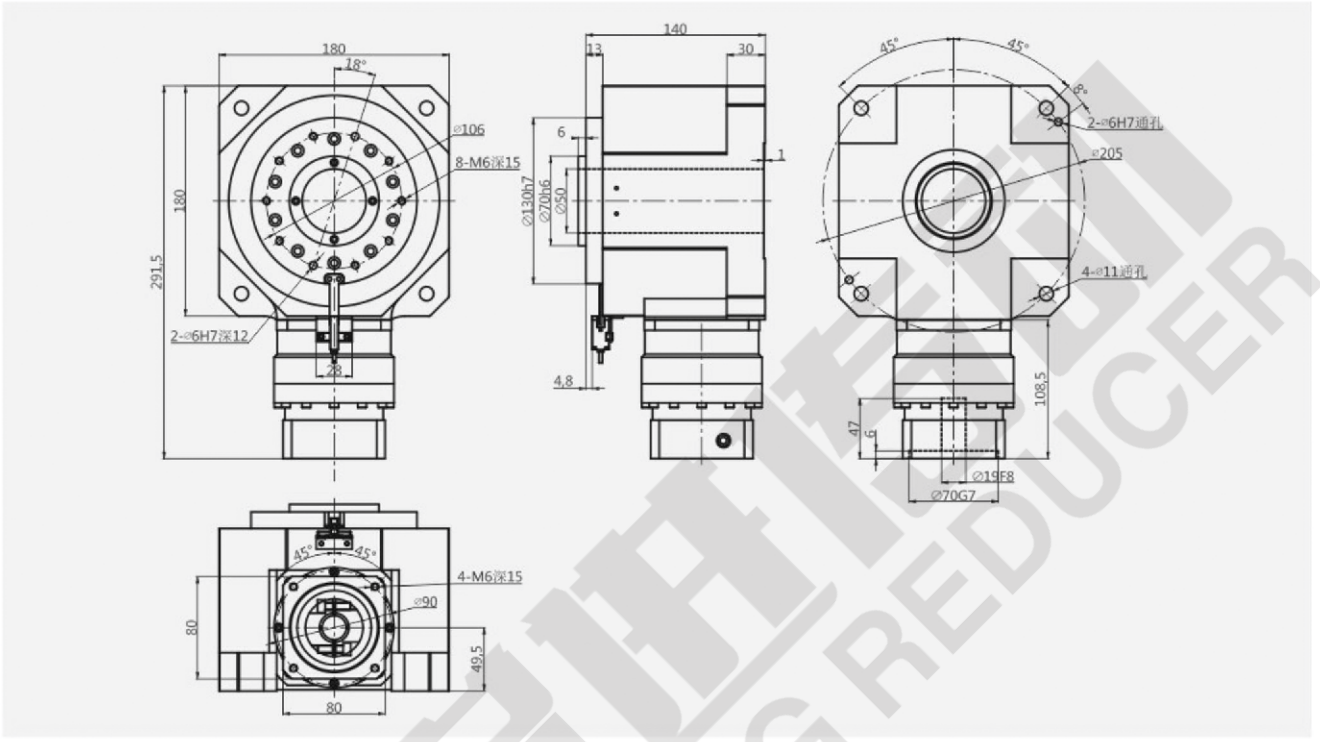
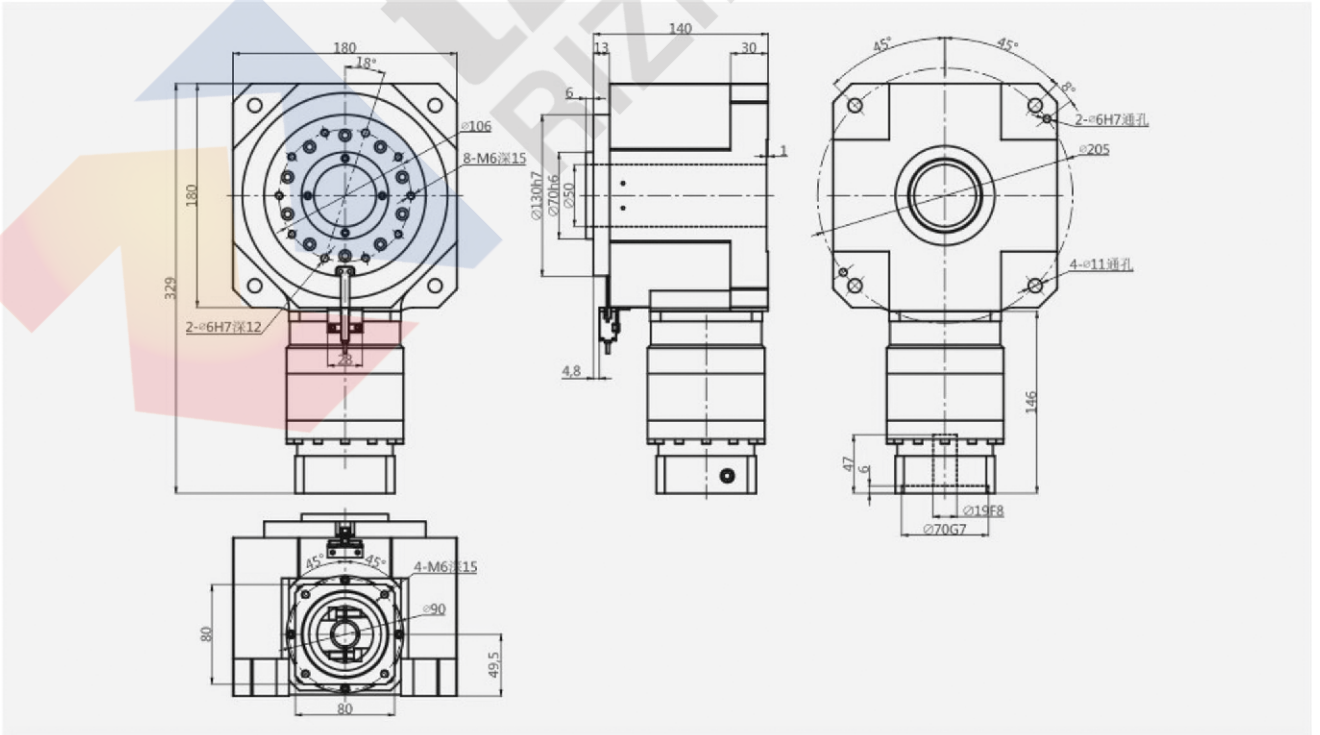
外形尺寸图表 OUTLINE DIMENSIONAL

RJM180-L1 配750W伺服接口



RJM180-L2 配750W伺服接口



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RJMD Series

Right-angle Hollow Rotating Platform

直角型中空旋转平台

05

订货型号标示 ORDERING REPRESENTATION

RJMD - 180 - 30 - 19 - 70 - 90

系列	型号规格	速比	电机轴径	电机定位凸台	电机安装孔距
RJT RJTJ RJTZ RJM RJMD RJN	180 225	L1:15/21/30 L2:60/75/105/120/150/210/300			注: (伺服电机安装面对角孔距) (步进电机安装面单边孔距)

技术参数 Technical Parameter

型号 Model			RJMD180-L1			RJMD180-L2						
轴承结构	Bearing structure		交叉滚子轴承 Cross roller bearing									
减速比	Reduction ratio	i	15	21	30	60	75	105	120	150	210	300
额定输出扭矩	Rated output torque	N.m	190	160	90	190	190	190	190	190	160	90
最大输出扭矩	Output torque	N.m	3倍额定扭矩 3 Times rated torque									
定位精度	Positioning accuracy	arc-min	≤1			≤3						
反复定位精度	Repeated positioning accuracy	arc-sec	≤30			≤60						
容许盘面转速	Allowable disk speed	rpm	200 (间歇运转) Intermittent operation									
适配伺服马达	Adapt to servo motor	W	750-1500									
适配步进马达	Suitable for stepping motor		86-110 步进 Stepper									
容许轴向负载	Allowable axial load	N	13000									
容许径向负载	Allowable radial load	N	13000									
设计承重	Design load	Kg	120									
容许惯性力矩	Allowable moment of inertia	N.m	90									
扭转刚性	Torsional rigidity	N.m/arcmin	60									
倾覆力矩	Overturning moment	N.m	1420									
精度寿命	Accuracy life	h	20000h (间歇运转) Intermittent operation									
防护等级	Protection level	IP	54									
润滑方式	Lubrication method		长效润滑 Long-term lubrication									
安装方式	Installation method		任意 Arbitrary									
旋转平台同心度	Concentricity of rotating platform	mm	≤0.01									
旋转平台平行度	Parallelism of rotating platform	mm	≤0.01									
传动效率	Transmission efficiency	%	95			90						
噪音	Noise	db	≤63			≤63						
重量	Weight	kg	17.5			19.1						

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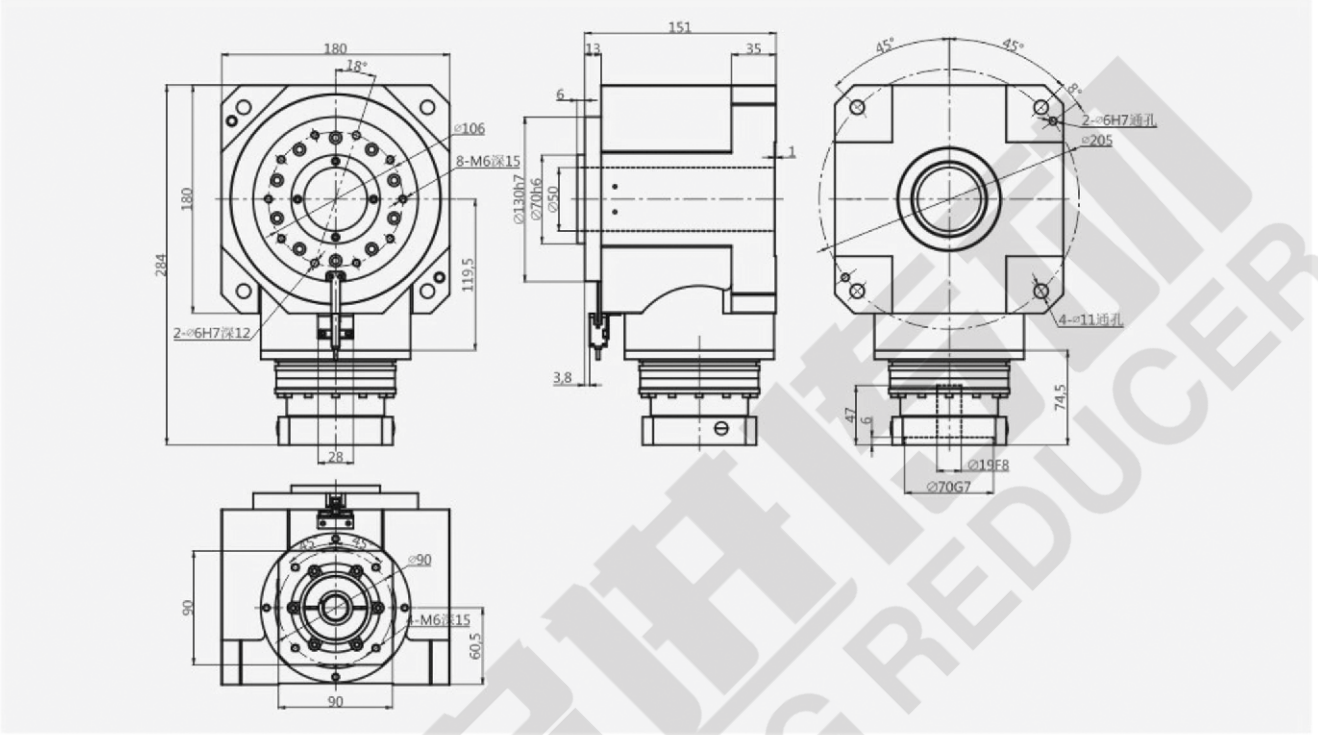
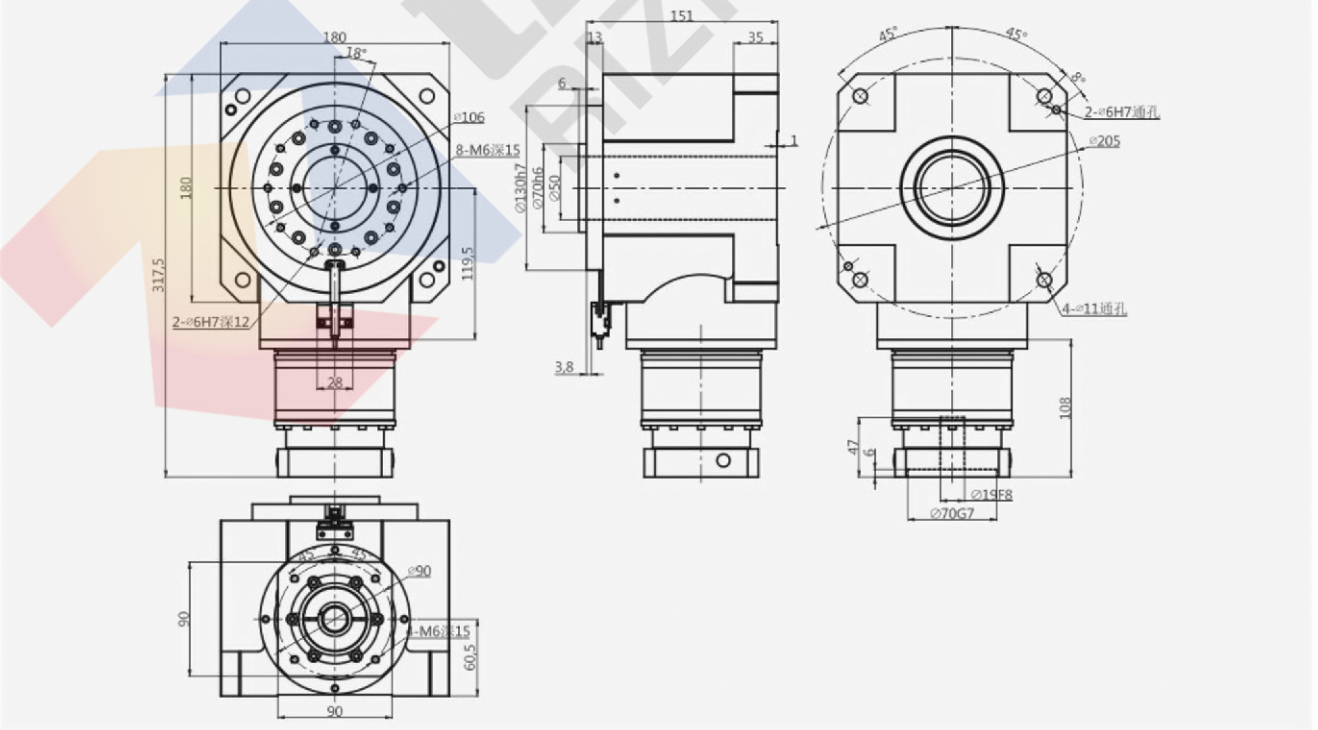
外形尺寸图表 OUTLINE DIMENSIONAL

RJMD180-L1 配750W伺服接口



RJMD180-L2 配750W伺服接口



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订货型号标示 ORDERING REPRESENTATION

RJMD - 225 - 30 - 22 - 110 - 145

系列	型号规格	速比	电机轴径	电机定位凸台	电机安装孔距
RJT RJTJ RJTZ RJM RJMD RJN	180 225	L1:15/21/30 L2:60/75/105/120/150/210/300			注: (伺服电机安装面对角孔距) (步进电机安装面单边孔距)

技术参数
Technical Parameter

型号 Model			RJMD225-L1			RJMD225-L2						
轴承结构	Bearing structure		交叉滚子轴承 Cross roller bearing									
减速比	Reduction ratio	i	15	21	30	60	75	105	120	150	210	300
额定输出扭矩	Rated output torque	N.m	420	380	300	420	420	420	420	420	380	300
最大输出扭矩	Output torque	N.m	3倍额定扭矩 3 Times rated torque									
定位精度	Positioning accuracy	arc-min	≤1			≤3						
反复定位精度	Repeated positioning accuracy	arc-sec	≤30			≤60						
容许盘面转速	Allowable disk speed	rpm	200 (间歇运转) Intermittent operation									
适配伺服马达	Adapt to servo motor	W	1000-3000									
适配步进马达	Suitable for stepping motor		110-130 步进 Stepper									
容许轴向负载	Allowable axial load	N	13000									
容许径向负载	Allowable radial load	N	13000									
设计承重	Design load	Kg	270									
容许惯性力矩	Allowable moment of inertia	N.m	220									
扭转刚性	Torsional rigidity	N.m/arcmin	150									
倾覆力矩	Overturning moment	N.m	2530									
精度寿命	Accuracy life	h	20000h (间歇运转) Intermittent operation									
防护等级	Protection level	IP	54									
润滑方式	Lubrication method		长效润滑 Long-term lubrication									
安装方式	Installation method		任意 Arbitrary									
旋转平台同心度	Concentricity of rotating platform	mm	≤0.01									
旋转平台平行度	Parallelism of rotating platform	mm	≤0.01									
传动效率	Transmission efficiency	%	95			90						
噪音	Noise	db	≤67			≤67						
重量	Weight	kg	36			39.2						

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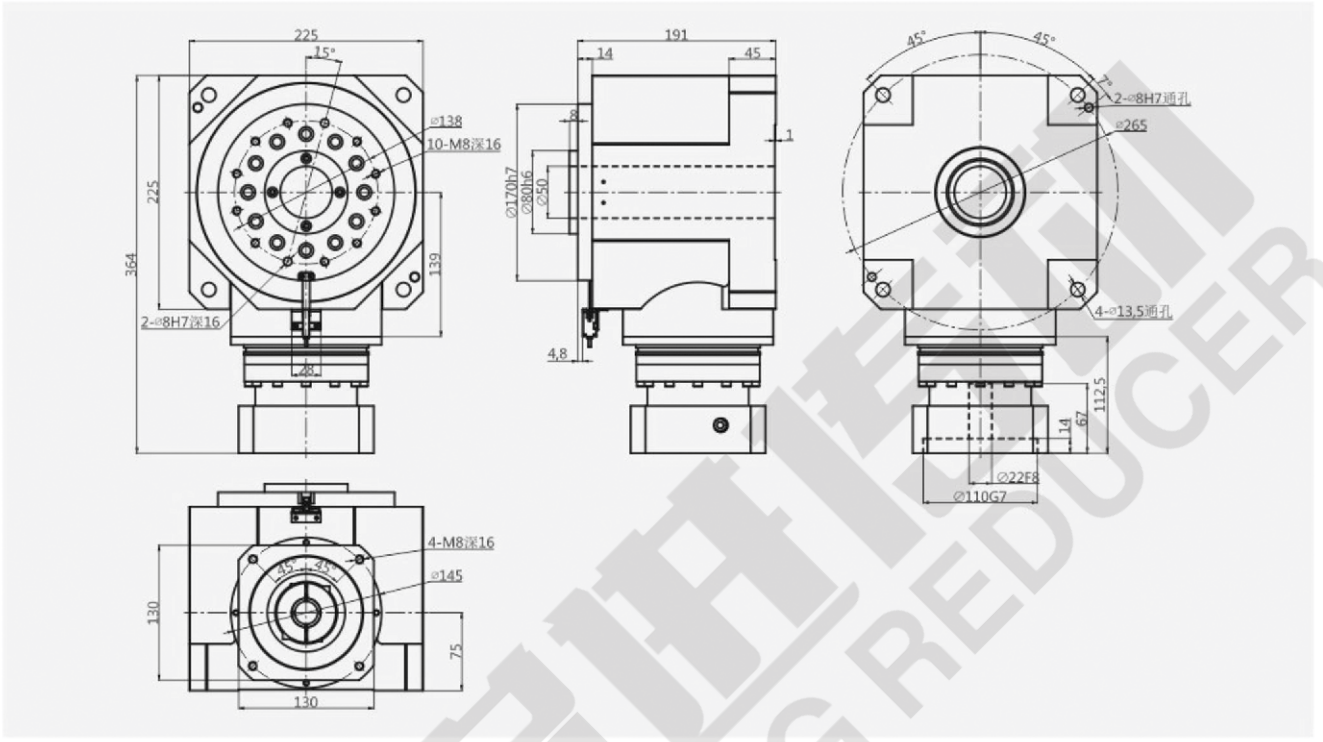
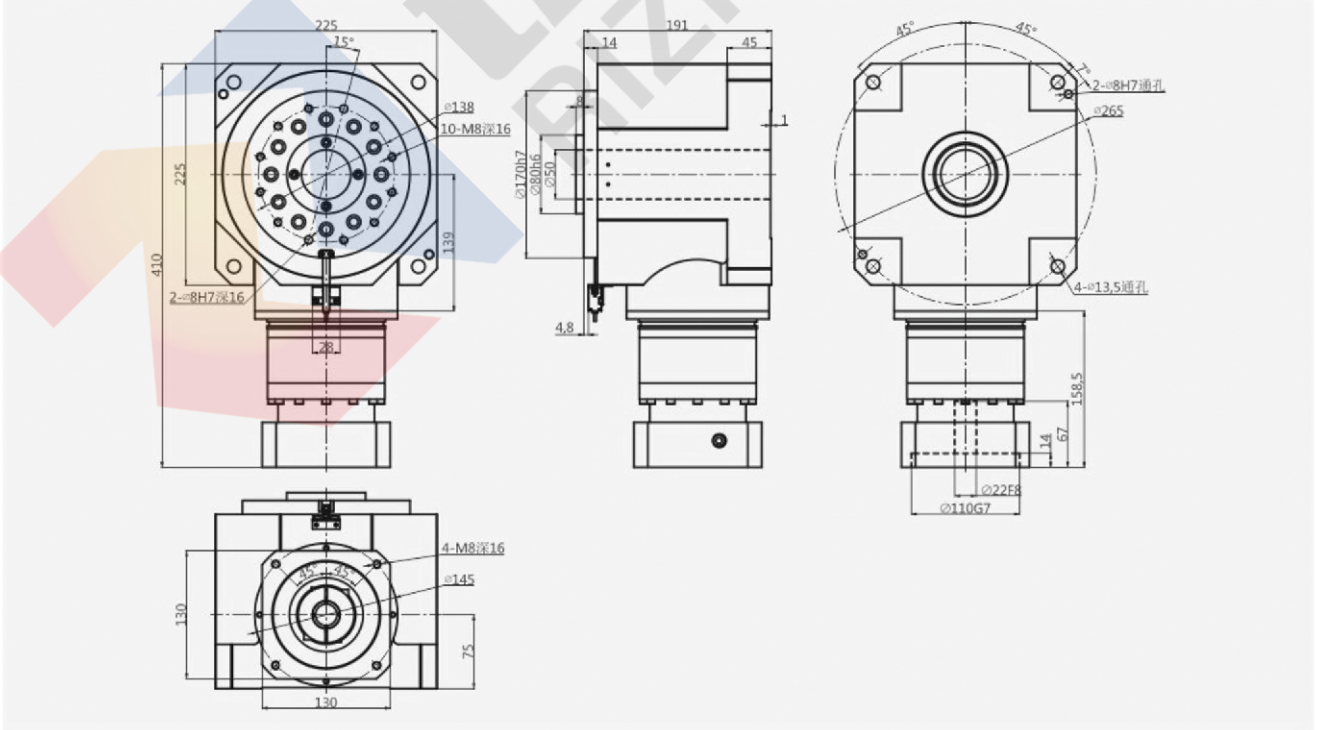
外形尺寸图表 OUTLINE DIMENSIONAL

RJMD225-L1 配1KW伺服接口



RJMD225-L2 配1KW伺服接口



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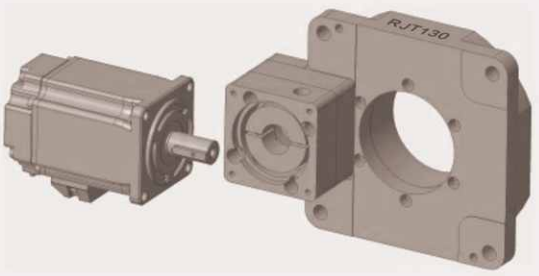
中空旋转平台连接马达说明 DESCRIPTION OF CONNECTING MOTOR TO HOLLW ROTATING PLATFORM

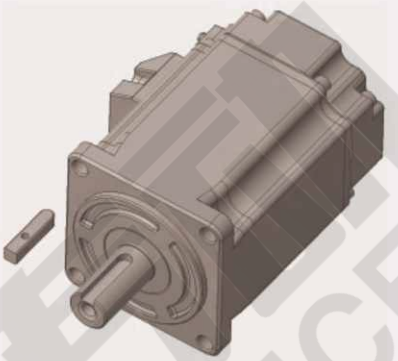
01



先确认马达和旋转平台是否完好。核对马达与旋转平台连接尺寸是否正确，并将两者配合面擦拭干净。

First confirm whether the motor and rotating platform are in good condition. Check whether the connection size between the motor and the rotating platform is correct, and wipe the mating surfaces of the two clean.

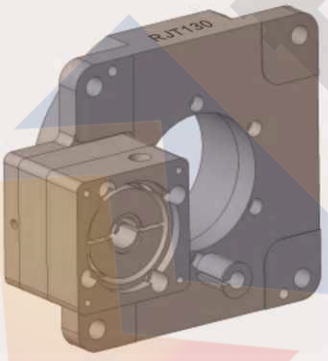
02



取下马达上原有的平键。

Remove the original flat key on the motor.

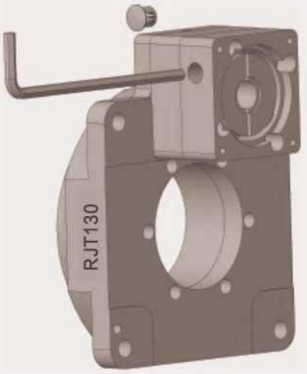
03



确定马达轴径，如需轴套，请先装进入力孔内，并与锁紧环的开槽口对齐。

Determine the motor shaft diameter. If a shaft sleeve is required, please install it into the force hole first and align it with the notch of the locking ring.

04

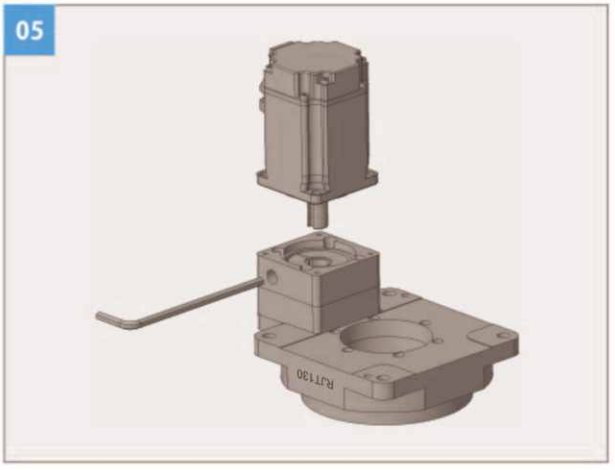


取出塞头，调整输入轴锁紧环使其紧固螺丝与塞头孔对齐，插入内六角扳手。

Take out the plug, adjust the input shaft locking ring so that the tightening screw is aligned with the plug hole, and insert an Allen key.

中空旋转平台连接马达说明 DESCRIPTION OF CONNECTING MOTOR TO HOLLW ROTATING PLATFORM

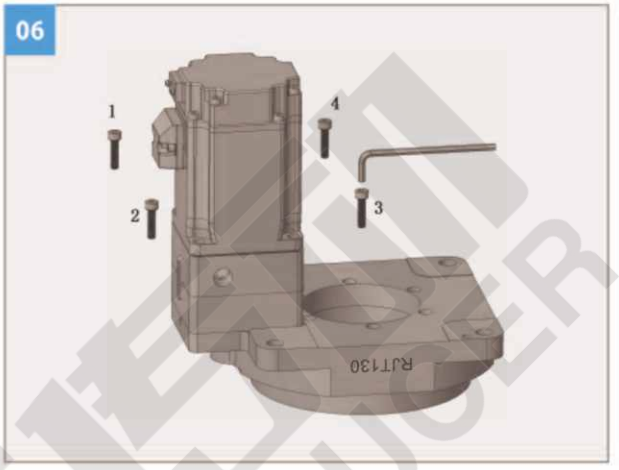
05



将马达垂直与旋转平台自然连接，严禁敲打。防止轴向力过大损坏轴承或齿轮。

Connect the motor vertically to the rotating platform naturally, and no beating is allowed. To prevent excessive axial force from damaging bearings or gears.

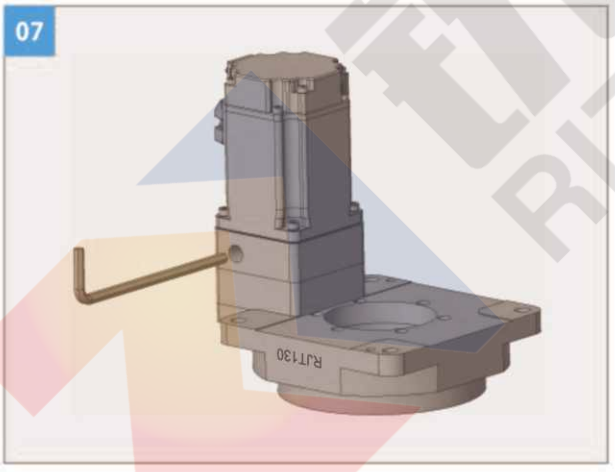
06



为保证受力均匀，请先将1，3对角位置的安装螺丝拧上，但不要拧紧；再拧2，4两个对角的安装螺丝。最后逐个拧紧四个安装螺丝。

In order to ensure uniform force, please screw up the installation screws at the diagonal position 1, 3 first, but do not tighten; then screw the two diagonal installation screws 2, 4. Finally, tighten the four mounting screws one by one.

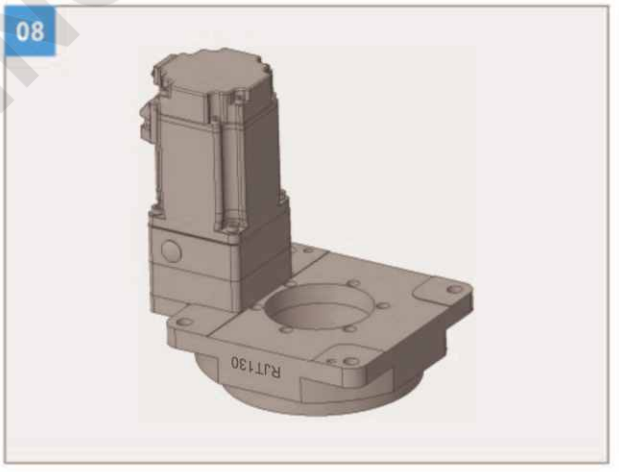
07



锁紧抱紧螺丝。如抱紧螺丝有两颗，请一定要对称均匀锁紧。

Tighten the screws tightly. If there are two holding screws, please tighten them evenly and symmetrically.

08



装回塞头。

Replace the plug.

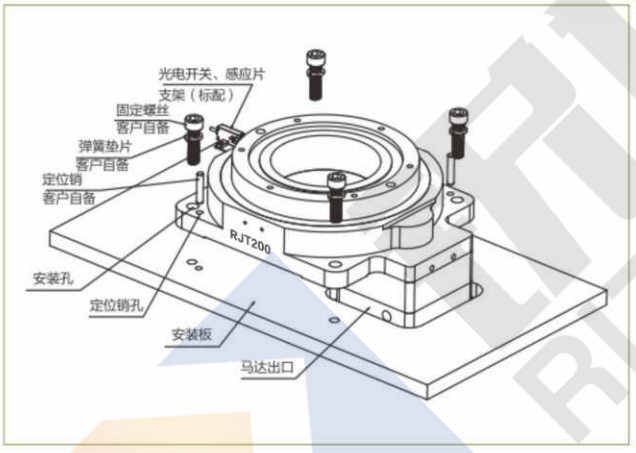
型号	RJT62	RJT85	RJT130	RJT200	RJT280
	/	/	RJJ130	RJJ200	RJJ280
	/	/	/	RJTZ200	RJTZ280
	RJM130	/	RJM180	/	/
	/	/	RJMD180	/	RJMD225
	/	/	/	/	RJN230
抱紧螺丝规格	M4	M5	M6	M8	M8
锁紧扭矩(Nm)	6	10	16.3	41	41

中空旋转平台安装说明 HOLLW ROTATING PLATFORM INSTALLATION INSTRUCTIONS

如何安装中空旋转平台 How to install hollow rotating platform

首先在定制机械设备安装板时需在安装板上预留出马达出口及安装孔位，以便露出中空旋转平台的马达部分。然后利用 2 个定位销孔（RJT62 中定位销孔与安装孔是共享的），将中空旋转平台如下图安装到机械设备安装板上。再用螺丝将中空旋转平台牢牢固定在安装板上。（如下图）

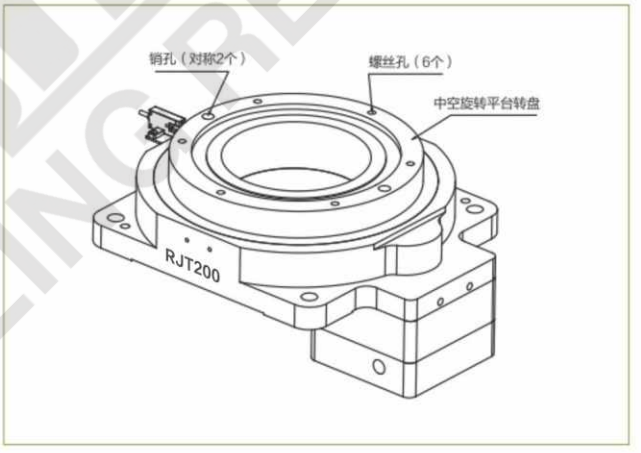
First, when customizing the mechanical equipment mounting plate, it is necessary to reserve a motor outlet and mounting hole on the mounting plate to expose the motor part of the hollow rotating platform. Then use the two positioning pin holes (the positioning pin holes and the mounting holes in RJT62 are shared) to install the hollow rotating platform on the mechanical equipment mounting plate as shown below. Then use screws to firmly fix the hollow rotating platform on the mounting plate. (As shown below)



如何在中空旋转平台上安装负载 How to install a load on a hollow rotating platform

使用中空旋转平台转盘上的6个安装螺丝孔安装负载。中空旋转平台转盘上有2个安装负载用的销孔，可用于确定负载的位置，务必将定位销牢牢固定在负载上。

Use the 6 mounting screw holes on the turntable of the hollow rotating platform to install the load. There are two pin holes for load installation on the turntable of the hollow rotating platform, which can be used to determine the position of the load. The positioning pins must be firmly fixed on the load.

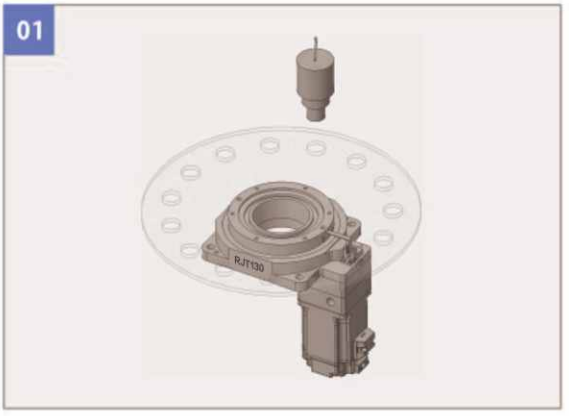


定位销孔尺寸 Locating pin hole size

平台型号 Platform model	销孔直径 Pin hole diameter mm	销孔深度 Pin hole depth mm	销孔数量 Number of pin holes
RJT85	Φ4(H7)	6(穿孔)	2
RJT130	Φ5(H7)	7(穿孔)	2
RJTJ130			
RJT200	Φ8(H7)	8(穿孔)	2
RJTJ200			
RJTZ200			
RJT280	Φ8(H7)	12(穿孔)	2
RJTJ280			
RJTZ280			
RJM130	Φ5(H7)	10(穿孔)	2
RJM/RJMD180	Φ6(H7)	12(穿孔)	2
RJMD225	Φ8(H7)	16(穿孔)	2

应用案例 APPLICATIONS

01

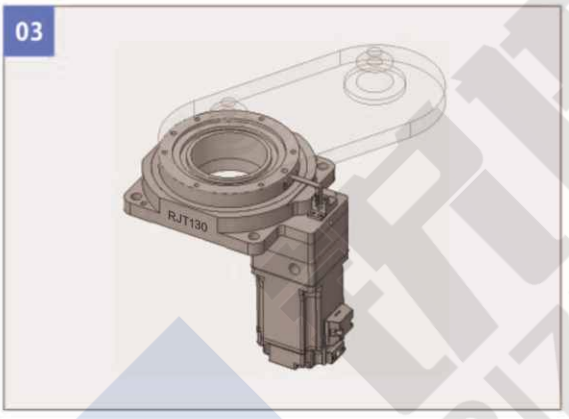


高精度定位的应用
High-precision positioning applications

02

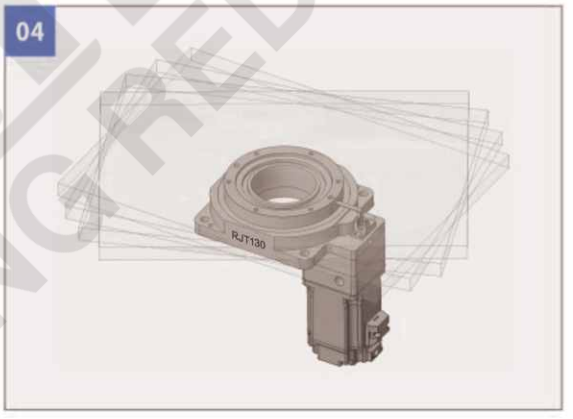
使用中空孔的应用
Applications using hollow holes

03



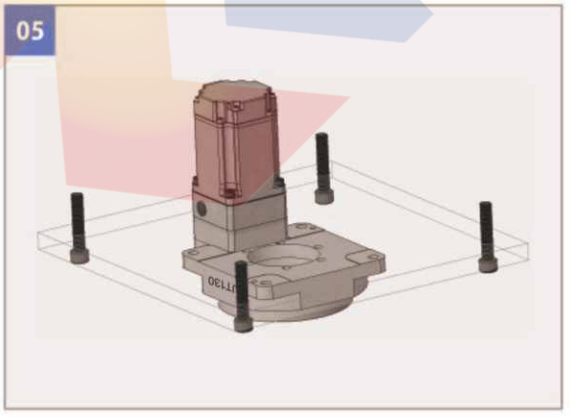
施加力矩负载的应用
Application of applied moment load

04



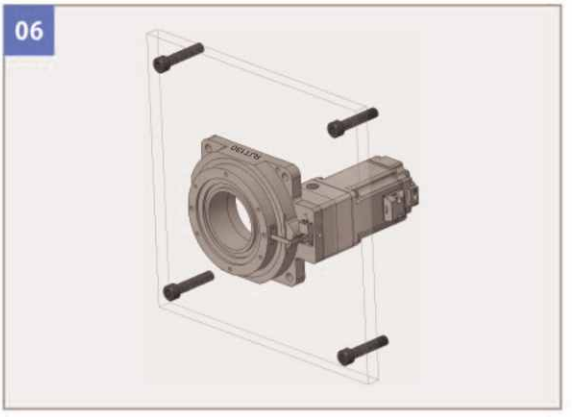
大惯量载具做任意角度旋转的应用
Application of large inertia vehicle to rotate at any angle

05



吊装
Hoisting

06



侧装
Side loading

QUALITY DERIVE

FROM RIZING

REPUTATION COME ALONG

品质源锐进 口碑自然来

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