JunsRise®

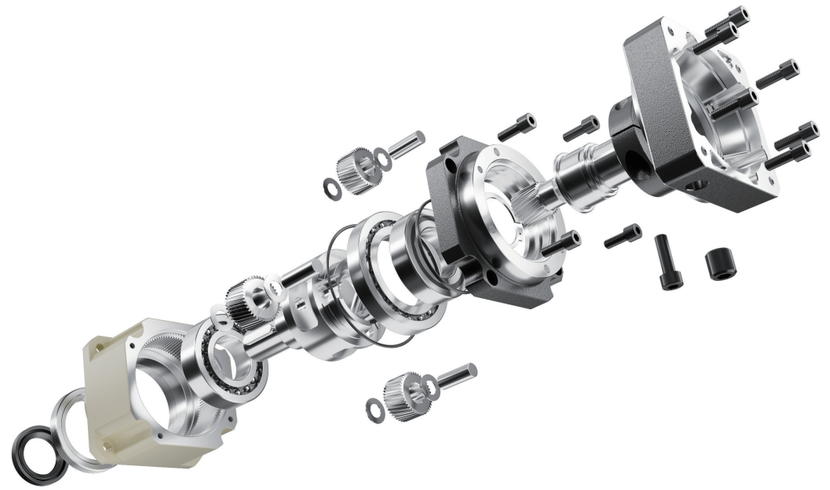
精密减速机

解决方案供应商

最终解释权归本公司所有。

钧晟动力·精密行星减速机

JunsRise®



高精度行星减速机产品手册

High precision planetary reducer sample booklet

全国行星减速机供应服务商

National planetary reducer supply service provider

2025 version

钧晟动力科技（嘉兴）有限公司
Junsheng Power Technology (Jiaxing) Co., Ltd

企业愿景

成为世界级减速机传动方案服务平台！

To become a world-class service platform for reducer and transmission solutions!

企业使命

精准匹配，让企业更智能！

Precise matching, making enterprises smarter!

企业口号

创新，让未来更美好！

Innovation makes the future better!

企业精神

齐心协力，互帮互助，实现美好生活！

Teamwork, mutual help, for a better life!

企业理念

“我们”也包括您在内，我们希望与您找到精准的传动解决方案！

"We" includes you as well. We hope to find the precise transmission solutions for you!

企业价值

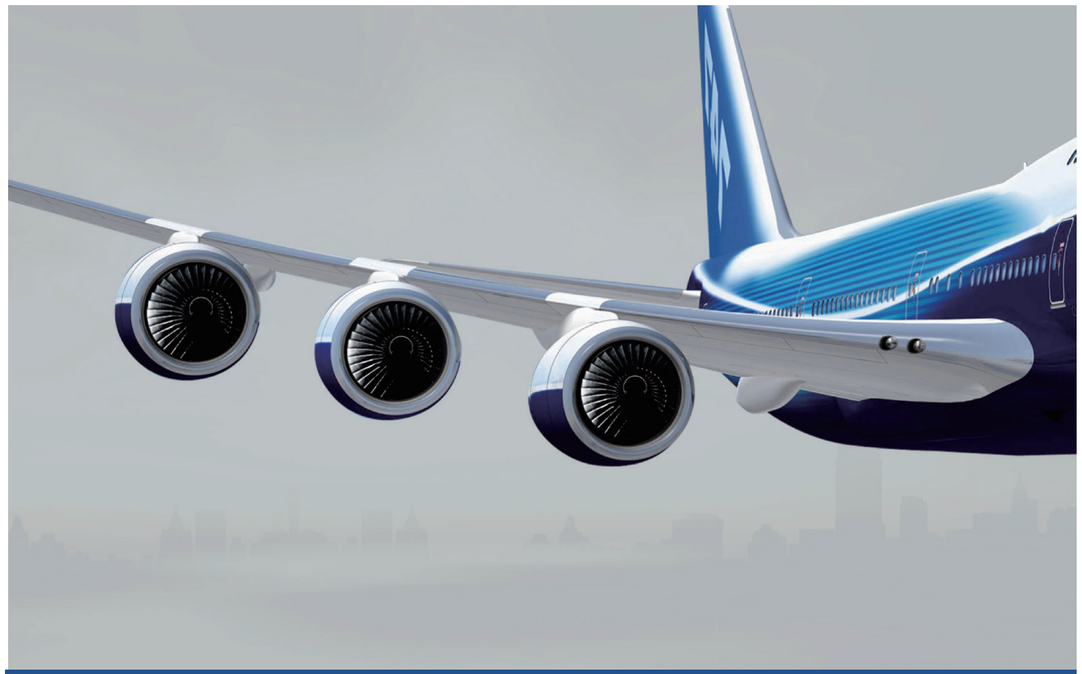
用心倾听，精心服务，高效协作，共创价值！

Listen attentively, serve meticulously, collaborate efficiently, create value together!



企业介绍

COMPANY PROFILE



使命
MISSION **精准匹配，让企业更智能**

愿景
VISION **成为世界级减速机传动方案服务平台**

钧晟动力科技（嘉兴）有限公司是一家集研发、生产、销售为一体的高精密行星减速机品牌；我们在齿轮的生产与制造已有20多年的历史经验；并在2009年开始研发生产高精密行星减速机，我们拥有数台日本三菱插齿机、日本HAMAI滚齿机、德国德玛吉（CMX800Vc）、卡斯夫基铣齿机等以及台湾友佳加工中心和日本北一大隅数车；我们不断改进、创新、以提高品质，满足您的需求为己任，在直齿和高精度斜齿领域都取得重大成果，并在欧美亚市场得到广泛认可！

Junsheng Power Technology (Jiaxing) Co., Ltd. is a high-precision planetary gear reducer brand integrating R&D, production, and sales. With over 20 years of experience in gear production and manufacturing, we began developing and producing high-precision planetary gear reducers in 2009. Our facilities include several Japanese Mitsubishi gear-hobbing machines, Japanese Hamai gear-shaping machines, German DMG (CMX800Vc) and Kasvsky milling machines, as well as Taiwan's Yashica machining centers and Japanese Kitasuyo screw-cutting machines. We continuously improve and innovate to enhance quality, dedicating ourselves to meeting your needs. Significant achievements have been made in both spur and high-precision helical gear technologies, earning widespread recognition in European, American, and Asian markets!









生产智造

PRODUCTION INTELLIGENCE

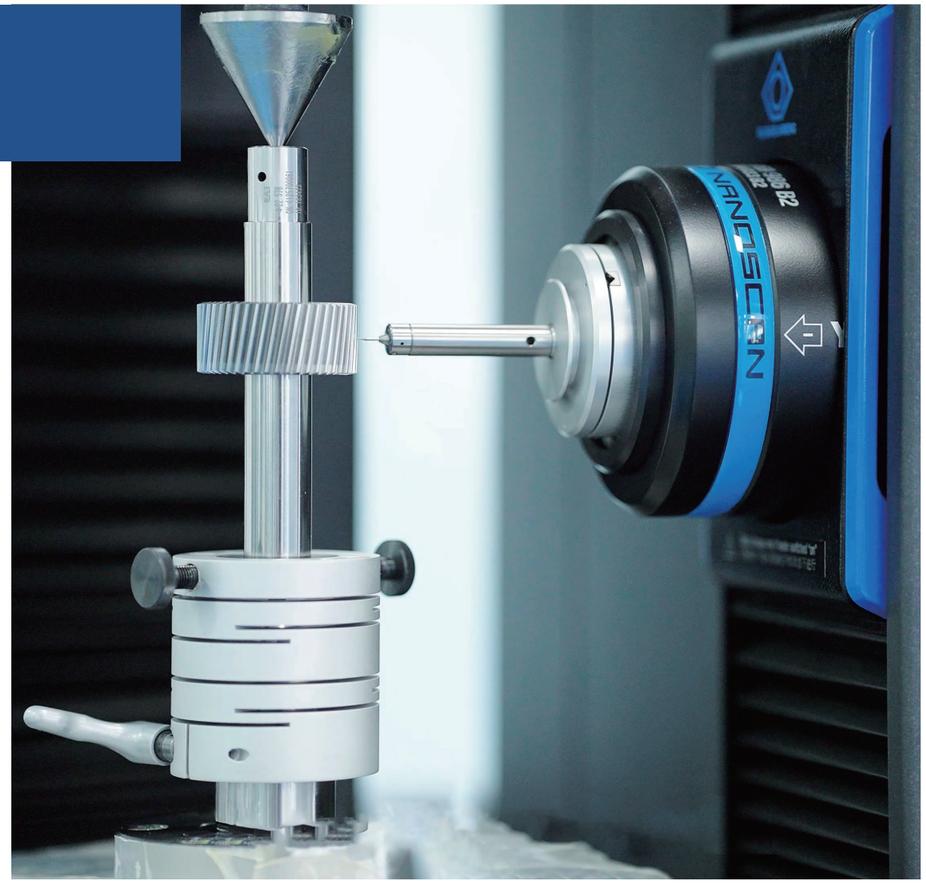
把握每个环节,力求精进完善。

Grasp Each Link And Strive For Refinement And Improvement.

严格把控原料采购,
Strictly control the procurement of raw materials,

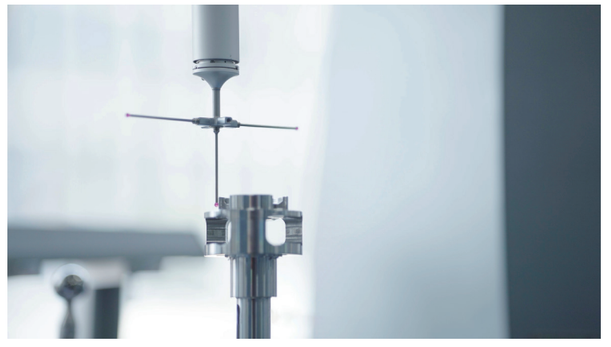
精细管理生产流程,
Fine management of production processes,

确保产品质量安全。
Ensure product quality and safety.











精密检测

PRECISION TESTING

把关每个细节，品质源于严格。

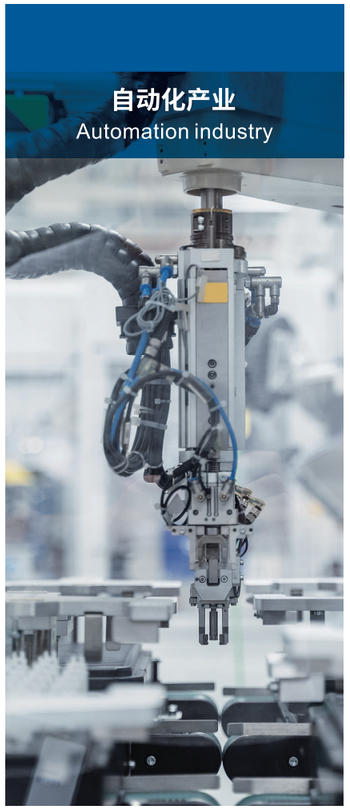
Check Every Detail, Quality Comes From Strictness.

对产品严格质量控制、
Strict quality control of products、

高标准要求，
High standard requirements,

为客户提供安全可靠的优质产品。
Provide customers with safe and reliable high-quality products.













应用领域

APPLICATION AREA

辐射多个行业，助力产业升级。

The vision radiates across multiple industries and assists in industrial upgrading.

帮助企业实现工业设备升级，
Assist enterprises in upgrading industrial equipment,

提高生产效率和产品质量。
improving production efficiency and product quality.

CONTENTS 目录

产品

产品概述 / Product overview 01

选型说明 / Selection guide 02

JS



型号说明 / Model description 08

技术参数 / Technical specification 09

减速机输出轴之容许径向力及轴向力
Allowable radial and axial forces on the output shaft of the gearbox 10

产品尺寸 / Product dimension 11

JSR



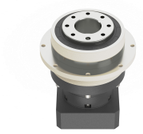
型号说明 / Model description 18

技术参数 / Technical specification 19

减速机输出轴之容许径向力及轴向力
Allowable radial and axial forces on the output shaft of the gearbox 20

产品尺寸 / Product dimension 21

JD



型号说明 / Model description 28

技术参数 / Technical specification 29

产品尺寸 / Product dimension 30

JDR



型号说明 / Model description 37

技术参数 / Technical specification 38

产品尺寸 / Product dimension 39

JF/JL



型号说明 / Model illuminate 46

技术参数 / Technical specification 47

减速机输出轴之容许径向力及轴向力
Allowable radial and axial forces on the output shaft of the gearbox 48

产品尺寸 / Product dimension 49

JFR/JLR



型号说明 / Model illuminate 62

技术参数 / Technical specification 63

减速机输出轴之容许径向力及轴向力
Allowable radial and axial forces on the output shaft of the gearbox 64

产品尺寸 / Product dimension 65

JAF



型号说明 / Model description 77

技术参数 / Technical specification 78

减速机输出轴之容许径向力及轴向力
Allowable radial and axial forces on the output shaft of the gearbox 79

产品尺寸 / Product dimension 80

JAR



型号说明 / Model description 94

技术参数 / Technical specification 95/96

产品尺寸 / Product dimension 97

SL



型号说明 / Model description 94

技术参数 / Technical specification 95/96

产品尺寸 / Product dimension 97

SF



型号说明 / Model description 107

技术参数 / Technical specification 108/109

产品尺寸 / Product dimension 110

CONTENTS 目录

SFK



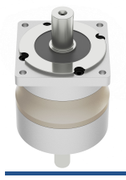
型号说明 / Model description 107
技术参数 / Technical specification 108/109
产品尺寸 / Product dimension 110

SSE



型号说明 / Model description 115
技术参数 / Technical specification
产品尺寸 / Product dimension 116

SSF



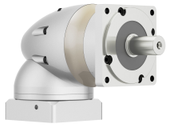
型号说明 / Model description 120
技术参数 / Technical specification 108/109
产品尺寸 / Product dimension 121

SLR



型号说明 / Model description 126
技术参数 / Technical specification 127/128
产品尺寸 / Product dimension 129

SFR



型号说明 / Model description 133
技术参数 / Technical specification 127/128
产品尺寸 / Product dimension 134

SFKR



型号说明 / Model description 139
技术参数 / Technical specification 127/128
产品尺寸 / Product dimension 140

AT



型号说明 / Model illuminate 145
技术参数 / Technical specification 146
产品尺寸 / Product dimension 147

产品概述 / product overview

产品特点/Product feature

精密行星减速机是我公司自主研发的新一代实用性产品，融合了国内外先进的技术，具有以下一些主要特点:
1.低噪音: 低于65db。
2 低背隙: 单级可达1弧分内，双级可达3弧分内。
3.高效率: 单段式在95%以上，双段式在92%以上。
4.高输入转速: 可达8000RPM。
5.高扭矩: 比一般标准行星减速机扭矩高。
6.高稳定性: 采用高强度合金钢材，整颗齿轮经硬化处理，非只有表面硬化，确保使用寿命及长期使用仍保持最初的精密度。
7.高减速比: 采用模组化设计，行星齿箱可相互连结，速比可达1:1000以上。

Precision planetary gearbox is a new-generation of product developed by SKGR, with a compromise of advanced technology both at home and abroad, its main features are as follows:
1.Low Noise: Under 65db.
2.Low Backlash: Single-stage≤1arcmin; Dual-stage≤3 arcmin.
3.High Efficiency: Single-stage≥95%; Dual-stage≥92%.
4.High Input Speed: Up to 8000 RPM.
5.High Torque: High output torque density.
6.High Stability: Employs high tensile strength alloy steel.Gear hardening is made for the entire gear instead of only surface hardening,which extends gear service life and maintain high accuracy as new after a long period ofoperation.
7.High Speed Reduction Ratio:The gear reducer is a modular design. The planetary gear box can be connected. Speed reduction ratio is over 1:1000.

产品用途/Precision usage

精密行星减速机被广泛应用于以下领域：
1.航空航天、军事产业。
2.医疗卫生、电子信息技术产业。
3.工业机器人、生产自动化、数控机床制造产业。
4.汽车制造、纺织、印刷、食品、冶金、环保工程、仓储物流等产业。

Precision planetary gearbox is widely used in the following industries.
1. Aerospace, military industry.
2. Medical health, electronic information industry.
3. Industrial robots, production automation,CNC manufacturing industry.
4. Motor, textile, printing, food, metallurgy, environmental engineering, warehouse logistics industry.

JunsRise®
传动装置专业制造商
PROFESSIONAL MANUFACTURER OF TRANSMISSION DEVICE
行星系列

选型说明/ selection guide

行星减速机的选型/Planetary gearbox selection

选配行星减速机应该遵循适用性和经济性相结合的原则，就是说行星减速机的各项技术指标，既能满足设备的要求又能节约成本。“过”与“不及”都会带来成本浪费。选型不当是减速机出现故障的主要原因，因此正确选用行星减速机非常重要。
选用减速机应考虑其结构类型、承载能力、减速比、输出转速、轴向力、径向力、扭转刚性、背隙等内在性能指标，也应充分考虑安装形式、工况条件、工作环境等外部因素。为方便起见，请参考以下步骤，实现准确快速选型。

The selection of planetary gearbox should follow the principle of combining applicability and economy, that is, the technical indicators of the planetary gearbox can not only meet the requirements of the equipment but also save costs. "Passing" and "failing" will bring waste of costs. Improper selection is the main reason for the failure of the gearbox, so it is very important to choose the planetary gearbox correctly.
The selection of gearbox should consider its internal performance indicators such as structural type, bearing capacity, reduction ratio, output speed, axial force, radial force, torsional rigidity, backlash, etc., and should also fully consider external factors such as installation form, working conditions, and working environment. For your convenience, please refer to the following steps to achieve accurate and fast selection.

Step1：减速机规格的确定/Determination of gearbox specifications

步骤 Step	说明 Instruction	代号 Code	参数计算 Parameter calculation						
1	设备使用系数 Service factor of the equipment	f_1	负载类型 Loading classification	每小时启动次数Z Running per hour Z	使用系数fs Using fs 每日运行时间（h） Running per day(h)				
					h<4	4<h<8	8<h<12	12<h<16	16<h<24
			均匀负载 Uniform	Z<10	0.85	0.95	1.00	1.20	1.60
				10<Z<30	0.90	1.10	1.15	1.40	1.80
				30<Z<100	1.00	1.20	1.30	1.60	2.00
			中等冲击负载 Medium shock	Z<10	1.00	1.20	1.30	1.60	2.00
				10<Z<30	1.10	1.35	1.45	1.80	2.20
				30<Z<100	1.20	1.45	1.60	2.00	2.40
			重冲击负载 Heavy shock	Z<10	1.20	1.45	1.60	2.00	2.40
				10<Z<30	1.30	1.55	1.75	2.20	2.50
				30<Z<100	1.40	1.65	1.90	2.40	2.80
2	扭矩的确定 Determination of torque	T_{2N}	$T_{2N}>T_{C2}$所选减速机的额定扭矩T_{2n}必须大于计算扭矩T_{C2}。$T_{C2}=T_{r2}\times f_s$（T_{C2}-计算扭矩 T_{r2}-实际所需扭矩f_s-使用系数） $T_{2N}>T_{C2}$（Rated torque of selected gearbox $T_{2N}>$Calculated torque T_{C2}） $T_{C2}=T_{r2}\times f_s$（T_{C2} - Calculated torque，T_{r2} - Actual required torque，fs - Service factor）						
3	额定输入转速 Rated input speed	n_1	允许最大输出转速请参照减速机性能资料 Please refer to the performance data of the gearbox for the maximum allowable output speed.						
4	确定减速比 Determine the ratio	i	$i=n_1/n_2$						
5	减速机效率 Efficiency of the gearbox	η	L1≥95%、L2≥92%						
6	以被驱动设备所需的扭矩或功率，计算减速机的输入功率 The input power of the gearbox is calculated based on the torqueor power required by the driven equipment	P_1	$P_1=(T_2\times n_1)/(9550\times i\times\eta)$ 或 $P_1=P_2\div\eta$						
7	根据计算传动力表确定减速机的规格 The specifications of the gearbox are determined according to the calculated transmission torque	T_{2N}、P_{1N}	$T_{2N}\geq T_3\times f_1\times f_2$ $P_{1N}\geq P_1\times f_1\times f_2$						
8	输出轴径向力、轴向力校核 Output shaft radial force and axial force check	Fr、Fa	查《产品手册》性能资料表。对比应小于减速机最大径向力、轴向力。频繁起动-停止运转工况应选择加强型 Check the performance data table in the product manual. The comparison should be less than the maximum radial force and axial force of the gearbox. For frequent start-stop operation, the enhanced type should be selected.						
9	确认使用环境 Confirm the application environment		防护等级、工作温度、化学环境等 Protection level, operating temperature, chemical environment, etc						
10	根据空间确认安装方式 Check the installation method according to the space		同轴安装、90°直角安装 Inline type or with right angle type						
11	确认减速机型号 Confirm the model of the gearbox		根据性能资料表、输入、输出方式等确定具体系列、型号、规格及附件 According to the performance data sheet, input and output mode, etc., determine the specific series, model, specification and accessories						

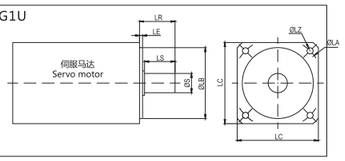
说明：n_2、P_2为被驱动设备的转速和功率；$P_1=P_2$为被驱动设备所需的功率和扭矩；P_{1N}、T_{2N}为实际减速机所需功率和扭矩。
Instruction: n_2、P_2 is the ratio and power for equipment which has been driven ; $P_1=P_2$ is the needed power and torque for equipment which has been driven; P_{1N}、T_{2N} is the actual needed power and torque which has been driven.

Step2：确定电机。电机生产厂商、规格型号、性能指标及外形尺寸确定

Determine the motor, motor manufacturer, specification model, performance and external dimension.

马达型号 Motor Model:MHMD-082G1U

输出功率	Output Power	0.75	kW
额定力矩	Rated Torque	2.4	NM
最大力矩	Max.Torque	7.1	NM
额定转速	Rated Speed	3000	RPM
最大转速	Max.Speed	4500	RPM
转动惯量	Inertia	6.6Kg/cm2	
轴径	Shaft Dia	Ø19	mm
外径	Diameter	Ø80	mm
凸缘	Lug boss	Ø70	mm
中心距	Center distance	Ø90	mm



订货须知 Notice for ordering

配用电机品牌及端面尺寸 Motor's type & measurement

行星减速机系列及规格型号：Planetary gearbox's type:

扭 矩 : Torque:

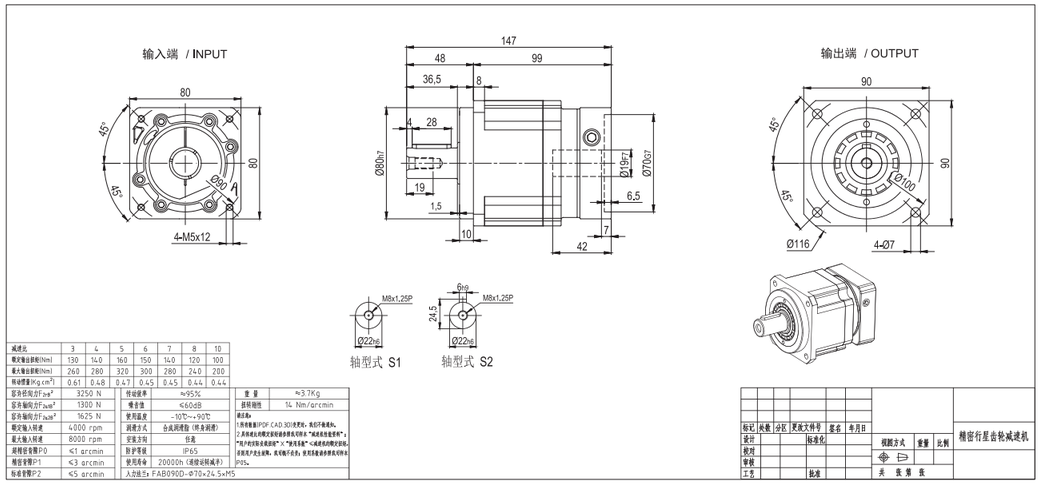
减速比 : Ratio:

背隙 : Backlash:

外形及安装方式方面特殊要求 : Mounting position&others requir:

Step3:确定所订行星减速机规格型号及工厂给出的CAD或PDF图纸，正确书写型号 例如：JS090-L1-5-S2-P2-RS017

Determine the specifications and models of the planetary gearbox and the CAD and PDF drawings given by the factory, and write the model correctly, for example: JS090-L1-5-S2-P2-RS017



减速比	3	4	5	6	7	8	10
额定输出扭矩(Nm)	130	140	160	150	140	120	100
最大输出扭矩(Nm)	260	280	320	300	280	240	200
转动惯量(Kg.cm²)	0.61	0.48	0.47	0.45	0.45	0.44	0.44

径向许用力F$_{r\max}$	3250 N
轴向许用力F$_{a\max}$	1300 N
径向输向力F$_{a\max}$	1625 N
额定输入转速	4000 rpm
最大输入转速	8000 rpm
周期误差精度P0	≤1 arcmin
精度等级P1	≤3 arcmin
标准等级P2	≤5 arcmin

传动效率	≈95%
噪音值	≤60dB
使用温度	-10℃~+90℃
润滑方式	合成润滑脂（终身润滑）
安装方向	任意
防护等级	IP65
使用寿命	20000h（视使运转减半）
入功端S	FAB090D-Ø70×24.5×M5

重 量	≈3.7Kg
扭转刚性	14 Nm/arcmin

备注事项：
1.所有数据(PDF CAD 3D)供参考，有后不做通知。
2.具体减速机规格型号的特点与"减速机选型说明"，"用户的实际选择"及"减速机的额定扭矩"有关，请用户在实际选择时，其可能不适合，使用前请确保其可符合您的要求。

标记	处数	分区	更改文件号	签名	年月日			
设计			标准化			视图方向	重量	比例
校对								
审核								
工艺			批准			共 张 第 张		

精密行星齿轮减速机

选型说明/ selection guide

与选型有关的基本概念/Base concepts of precision planetary gear box

减速比Ratio

输出转速比上输入转速 Input speed/Output speed

额定输入转速 n_1[rpm]
Rated input speed

减速机的驱动速度，若减速机与电机直接相连，则转速值与电机转速相同，本书中的额定输入转速是在环境温度为20℃的条件下测得的，环境温度较高时请降低转速

The driving speed of the gearbox, if the gearbox is directly connected to the motor, the speed value is the same as the motor speed, the rated input speed in this book is measured under the condition that the ambient temperature is 20 °C, please reduce the speed n1 when the ambient temperature is higher.

输出转速 n_2[rpm]
Output speed

输出转速按照下列公式通过输入转速n_1和传动比i计算出来： $n_2=n_1/i$

The output speed is calculated by the following formula from the input speed n_1 and the gear ratio i: $n_2=n_1/i$

段/级数
Stages

行星齿轮的套数。由于一套行星齿轮无法满足较大的传动比，有时需要两套或三套来满足用户对较大传动比的需求，也就是说，减速比越大，级数越多。由于增加了行星齿轮的数量，所以二级或三集减速机的长度会有所增加，效率会有所下降。

Number of sets of planetary gears. Since one set of planetary gears cannot meet the larger transmission ratio, sometimes two or three sets are needed to meet the user's demand for a larger transmission ratio, that is, the larger the reduction ratio, the more stages. Due to the increase in the number of planetary gears, the length of the two- or three-stage gearbox will increase and the efficiency will decrease.

传动效率
Efficiency

指在额定负载情况下，减速机的传输效率。减速比越大，级数越多，效率越低。

Refers to the transmission efficiency of the gearbox under the condition of rated load. The larger the reduction ratio, the more stages, and the lower the efficiency.

平均寿命
Average lifetime

指减速机在额定负载下，额定输入转速是减速机的连续工作时间。

It refers to the gearbox under the rated load, and the rated input speed is the continuous working time of the gearbox.

定位精度
Precise positioning

在高速机械往复运动中做到精确定位的关键在于尽量减小通过运动产生的角偏差。定位精度取决于两个值，一个是与加载有关的偏转角，涉及到回程间隙和扭转刚度；另一个是与运动控制有关的偏转角，涉及到同步偏差问题。

The key to achieving precise positioning in high-speed mechanical reciprocating motion is to minimize the angular deviation caused by the movement. Positioning accuracy depends on two values, one is the loading related deflection angle, which involves the return clearance and torsional stiffness; The other is the deflection angle related to motion control, which involves the problem of synchronization deviation.

回程间隙背隙
Backlash

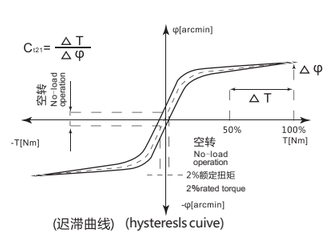
减速机输出轴与输入轴的最大偏差角，测量时先将齿轮输入轴固定住，然后在输出装用力矩仪加载一定力矩（2%T_{2N}），以克服减速机内的摩擦力。

The maximum deviation angle between the output shaft of the gearbox and the input shaft is fixed when measuring, and then a certain torque (2%T_{2N}) is loaded with a torque meter in the output device to overcome the friction force in the gearbox.



迟滞曲线
Hysteresis curve

迟滞曲线是为了得出减速机的扭转刚度，通过检测得到迟滞曲线。检测时，先将减速机输入端固定住，然后在输出端的两个旋转方向分别持续地加载到T_{2B}最大输出力矩，继而逐步卸载，用仪器记录下力矩的仿差角，得到的曲线是一条闭合曲线，从中可以计算出减速机回程间隙(jt)和扭转刚度(C_{t21})。



(迟滞曲线) (hysteresls cuive)

The hysteresis curve is to obtain the torsional stiffness of the gearbox, and the hysteresis curve is obtained by detection. During the detection, the input end of the gearbox is fixed first, and then the maximum output torque of T_{2B} is continuously loaded in the two rotation directions of the output end, and then gradually unloaded, and the aberration angle of the torque is recorded by the instrument, and the curve obtained is a closed curve, from which the return clearance (jt) and torsional stiffness (C_{t21})of the gearbox can be calculated.

行星系列

转动惯性
Inertia

本说明书中的该值均指输入端。表示一个物体尽力保持自己转动状态（或静止或转动）特征的一个值。

The values in this catalogue refer to the input terminals. A value that represents the feature of an object's efforts to keep itself in a state of rotation (or stationary or rotation).

惯量比
The proportion of inertia

是指负载惯量与传动系统惯量（电机加上减速机）之间的比值。这个比值决定了系统的可控性。λ值越大，也就是各转动惯量差值越大，高动态的动作过程就越难精确控制，建议尽可能将λ值控制在＜5。齿轮箱可以将负载惯量降低$1/i^2$。

It refers to the ratio between the load inertia and the inertia of the transmission system(motor plus gearbox). This ratio determines the controllability of the system. The larger the λ value, that is, the greater the difference between the moment of inertia, the more difficult it is to accurately control the highly dynamic action process, so it is recommended to control the λvalue at <5 as much as possible. The gearbox can reduce the load inertia by $1/i^2$.

噪音
Noise

单位是分贝（dB）。此数值是在输入转速为3000转/分时，不带负载，距离减速机一米距离时测量的。
The unit is decibel(dB).The value is measured when the input rev is 3000r/m without load and at the distance of one meter from the gearboxes.

工作条件
Operating conditions

工作温度/Operating temp	-10℃~+90℃
防护等级/Degree of protection	IP54/IP65
润滑/Lubrication	长效润滑，整个试用期内无需添加润滑剂/Life time lubrication
安装方式/Mounting position	任意/Any

额定输出扭矩
T_{2N}[Nm]
Rated output torque

减速机长时间(连续工作制)可以加载的力矩(无磨损)，条件应满足负载均匀，安全系数S=1，JL160 / JS142 以下机型，理论寿命为20000小时： JS180 以上机型理论寿命为10000小时:T_N值遵守ISODP6336齿轮标准与ISO281轴承标准。

The torque (no wear) that can be loaded on the gearbox for a long time (continuous duty system), the conditions should meet the uniform load, the safety factor S=1, the following specifications of JL160 / JS142 , and the theoretical life is 20,000 hours: The theoretical life of JS180 and above is 10,000 hours: the T_N value complies with the ISODP6336 gear standard and ISO281 bearing standard.

加速扭矩
[Nm]
Acceleration torque

指工作周期每小时少于1000次时允许短时间加载到输出端的最大力矩。工作周期每小时大于1000次时，须考虑冲击因素。加速扭转是周期工作制选型时的一个最大值，实际使用中的加速力矩必须小于T_{2B}，否则会缩短减速机的寿命。

Refers to the maximum torque allowed to be loaded to the output in a short time when the duty cycle is less than 1000 times per hour. When the duty cycle is more than 1000 times per hour, the impact factor must be considered. The acceleration torque is a maximum value in the selection of the cyclic working system, and the acceleration torque in actual use must be less than T_{2B}, otherwise the life of the gearbox will be shortened.

紧急制动扭矩
[Nm]
Emergency braking torque

指减速机输出端所能加载的最大力矩，这个力矩可在减速机寿命期内加载1000次，绝对不能超过1000次

It refers to the maximum torque that can be loaded at the output end of the gearbox, which can be loaded 1000 times during the life of the reducer, and must not exceed 1000 times.

空载扭矩
T_{012}[Nm]
No-load torque

指加载到减速机上的以克服减速机内摩擦力的力矩。

Refers to the moment loaded onto the gearbox to overcome the friction in the gearbox.

最大输出扭矩
T_{2B}
Maximum output torque

指减速机在静态条件或频繁启动条件下所能承受的输出扭矩，通常指峰值负载或启动负载。

Rit refers to the output torque that the gearbox can withstand under static conditions or frequent start-up conditions, usually referring to peak load or starting load.

实际所需扭矩
T_2[Nm]
Actual torque required

所需扭矩取决于应用场合的实际工况，拟选减速机的额定扭矩T_{2N}必须大于这个扭矩。

The required torque depends on the actual working conditions of the application, and the rated torque T_{2N} of the proposed gearbox must be greater than this torque.

计算用扭矩
T_{C2}[Nm]
Torque for calculation

会在选择减速机时被用到，可以由实际所需转矩T_2和系数f_s，按以下公式得出 $T_{C2}=T_2*f_s\leq T_N$

It will be used in the selection of the gearbox, which can be obtained from the actual required torque T_2 and the coefficient f_s, according to the following formula: $T_{C2}=T_2*f_s\leq T_N$

JunsRise®
传动装置专业制造商
PROFESSIONAL MANUFACTURER OF TRANSMISSION DEVICE

行星系列

侧倾扭矩
[Nm]
Roll torque

指轴向力和径向力作用于输出端轴承上径向受力点的力矩。其计算公式为：$M_{2kmax}=[Fa*y_2+Fr*(X_2+Z_2)]/1000$

Refers to the moment of axial and radial force acting on the radial force point on the bearing at the output end. It is calculated as follows: $M_{2kmax}=[Fa*y_2+Fr*(X_2+Z_2)]/1000$

轴向力
Fa[N]
Axial force

是指平行于轴心的一个力，它的作用点与输出轴端有一定的轴向偏差（Y_2）时，会形成一个额外的弯挠力矩。轴向力超过样本所示的额定值时，须用联轴节来抵消这种弯挠力。

It refers to a force parallel to the axis, and when its application point has a certain axial deviation (Y_2) from the output shaft end, an additional bending moment will be formed, and when the axial force exceeds the rated value shown in the catalog, this bending force must be offset by a coupling.

径向力
Fr[N]
Radial force

指垂直作用于轴向力的一个力，它平行于输出轴，它的作用点与轴端有一定的轴向距离（X_2）。这个点成一个杠杆点，横向力形成一个弯挠力矩。

Refers to a force acting perpendicular to an axial force, which is parallel to the output shaft, and its point of action is at an axial distance (X_2) from the shaft end. This point becomes a lever point, and the transverse force forms a bending moment.

轴伸径向载荷、轴向载荷
Axial extension radial load, axial load

选择减速机的附加依据是输出轴伸出端上的径向载荷和轴向载荷。轴的强度和轴承的承载能力决定了许用轴伸的径向载荷。产品样本中给出的最大允许值是指在最不利的方向作用在 轴伸出端中点（即1/2L处）的力。当作用力不在中点时，越接近轴肩，允许的径向载荷就越大；相反，作用点离轴肩越远，允许的径向载荷就越小。

The additional basis for the selection of the gearbox is the radial load and the axial load on the protruding end of the output shaft. The strength of the shaft and the load-bearing capacity determine the radial load of the allowable shaft extension. The maximum permissible value given in the product catalogue refers to the force acting at the midpoint of the shaft extension (i.e. at 1/2L) in the most unfavorable direction. When the force is not at the midpoint, the closer to the shoulder is, the greater the allowable radial load; Conversely, the farther the application point is from the shoulder, the less radial load is allowed.

安全系数
f_s
Safety factor

安全系数等于减速机的额定输入功率与电机功率的比值。

The safety factor is equal to the ratio of the rated input power of the gearbox to the power of the motor.

使用系数
f_1
Use factor

使用系数表现减速机的应用特征，它考虑到减速机的负载类型和每日工作时间。

The use factor represents the application characteristics of the gearbox, which takes into account the type of load of the gearbox and the daily operating hours.

扭转刚度C_{t21}
[Nm/Arcmin]
Torsional stiffness

由加载力矩和所产生的扭转角之间的比率来定义。$C_{t21}=\triangle T/\triangle$它说明需要用多大的力矩才能把输出轴转动一弧分。扭转刚度是从迟滞曲线得出的。在曲线图上只需要关注T_{2B}的50%到100%这个范围，在这个范围内，曲线可看成是一条直线。

It is defined by the ratio between the loading moment and the resulting torsion angle. $C_{t21}=\triangle T/\triangle$ It indicates how much torque is needed to rotate the output shaft by an arc. The torsional stiffness is derived from the hysteresis curve. On the graph, you only need to focus on the range of 50% to 100% of T_{2B}, where the curve can be seen as a straight line.

安装力矩
[Nm]
Installation torque

减速机的组装以及电机与减速机连接安装（输入轴采用弹性联轴器要求），都是有力矩要求。建议使用力矩扳手来完成安装步骤。

The assembly of the gearbox and the connection and installation of the motor and the gearbox (the input shaft adopts the requirement of elastic coupling), there are torque requirements. It is recommended to use a torque wrench to complete the installation steps.

特别注意
Pay special attention

本样本给出的所有减速机输入端尺寸仅供参考, 具体尺寸由适配电机的轴伸端尺寸决定, 因此实物外形尺寸与本样本有所差异，应以订购货品的标准图纸为准，在没有特殊指定状态下减速机的输出端尺寸以本样本为准。

本样本给出的所有减速机重量为近似值，实际重量以实物为准。

The size of all the input ends of the gearbox given in this catalogue is for reference only, and the specific size is determined by the size of the shaft extension end of the adapted motor, so the physical dimensions are different from the catalogue, and the standard drawings of the ordered goods shall prevail, and the output size of the gearbox in the absence of special designation shall prevail in this catalogue. The weights of all gearboxes given in this catalogue are approximate, and the actual weight is subject to the actual product.

JS

JunsRise®

产品特性 / PRODUCTS FEATURES



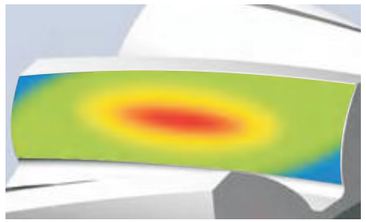
行星齿轮的传动介面采用**不含保持架之满滚针设计**，增加接触面积以提高结构刚性及输出扭矩。



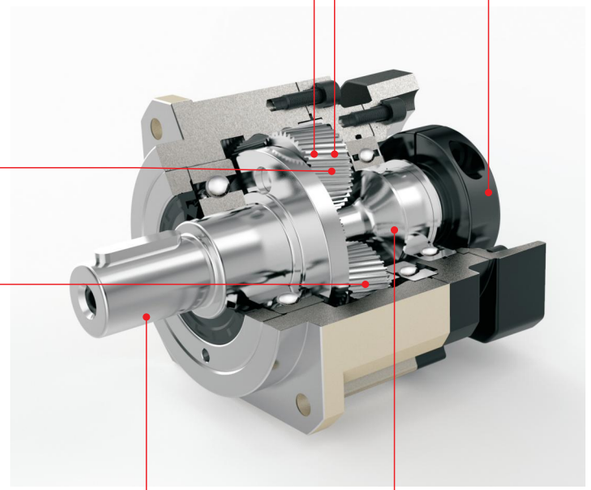
减速机构采用螺旋齿轮设计，其齿形啮合率为一般正齿轮的两倍以上，具有运转平顺、低噪音、高输出扭矩和低背隙的特性。



输入轴与马达的连接采用筒夹式的锁紧机构并经动平衡分析，以确保在高输入转速下接口的同心度和零背隙的动力传递。



利用ANSYS技术对齿轮强度**进行有限元分析**，同时对齿面作**齿形及导程修整**，以减低齿轮啮合的冲击和噪音，增加齿轮系的使用寿命。





齿轮材料采用**优质合金钢**，经**碳-氮共渗处理**，从而获得最佳的耐磨性和耐冲击韧性。

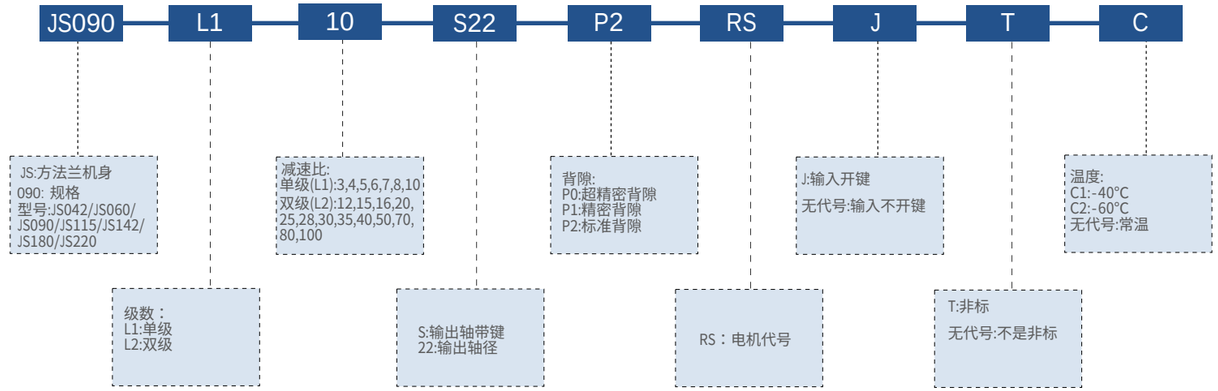


行星架与输出轴采用一体式双支撑的结构设计，确保最大的扭转刚性。

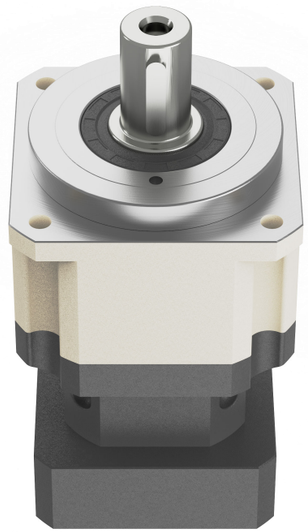


太阳齿轮与输入轴采用一体式的结构设计，确保最大的扭转刚性及高输入转速下的零背隙动力传递。

斜齿行星减速机型号订购说明/Helical-tooth planetary gearbox model illuminate



选型范例：JS090-L1-10-S22-P2-RS-J-T-C



技术参数/ technical specification

规 格		级 数	减速比[1]	JS042	JS060	JS090	JS115	JS142	JS180	JS220
额定输出力矩T_{2N}	Nm	1	3	20	55	130	208	342	588	1,140
			4	19	50	140	290	542	1,050	1,700
			5	22	60	160	330	650	1,200	2,000
			6	20	55	150	310	600	1,100	1,900
			7	19	50	140	300	550	1,100	1,800
			8	17	45	120	260	500	1,000	1,600
			10	14	40	100	230	450	900	1·500
		2	12	20	55	130	208	342	588	1,140
			15	20	55	130	208	342	588	1,140
			20	19	50	140	290	542	1,050	1,700
			25	22	60	160	330	650	1,200	2,000
			30	22	55	130	208	342	588	2,000
			35	22	60	160	330	650	1,200	2,000
			40	22	50	140	290	542	1,050	1,700
			50	22	60	160	330	650	1,200	2,000
			60	20	55	150	310	600	1,100	1,900
			70	19	50	140	300	550	1,100	1,800
			80	17	45	120	260	500	1,000	1,600
			100	14	40	100	230	450	900	1·500
最大输出力矩T_{2B}	Nm	1,2	3~100	3倍额定输出力矩						
额定输入转速n_1	rpm	1,2	3~100	3,000	3,000	3,000	3,000	3,000	3,000	2,000
最大输入转速n_{1B}	rpm	1,2	3~100	6,000	6,000	6,000	6,000	6,000	6,000	4,000
超精密背隙 P0	arcmin	1	3~10	—	—	≤1	≤1	≤1	≤1	≤1
		2	3~100	—	—	—	≤3	≤3	≤3	≤3
精密背隙 P1	arcmin	1	3~10	≤3	≤3	≤3	≤3	≤3	≤3	≤3
		2	12~100	≤5	≤5	≤5	≤5	≤5	≤5	≤5
标准背隙 P2	arcmin	1	3~10	≤5	≤5	≤5	≤5	≤5	≤5	≤5
		2	12~100	≤7	≤7	≤7	≤7	≤7	≤7	≤7
扭转刚性	Nm/arcmin	1,2	3~100	3	7	14	25	50	145	225
容许径向力F_{2rB}[2]	N	1,2	3~100	780	1,530	3,250	6,700	9,400	14,500	50,000
容许轴向力F_{2a1B}[2]	N	1,2	3~100	350	630	1,300	3,000	4,000	6,200	35,000
容许轴向力F_{2a2B}[2]	N	1,2	3~100	390	765	1,625	3,350	4,700	7,250	25,000
使用寿命	hr	1,2	3~100	20,000*						
效率 η	%	1	3~10	≥97%						
		2	12~100	≥94%						
重量	kg	1	3~10	0.5	1.3	3.7	7.8	14.5	29	48
		2	12~100	0.8	1.9	4.1	9	17.5	33	60
使用温度	℃	1,2	3~100	-10℃~+90℃						
润滑		1,2	3~100	合成润滑油脂						
防护等级		1,2	3~100	IP65						
安装方向		1,2	3~100	任意方向						
噪音值（n_1=3000rpm）	dB	1,2	3~100	≤56	≤58	≤60	≤63	≤65	≤67	≤70

减速机转动惯量 Gearbox moment of inertia

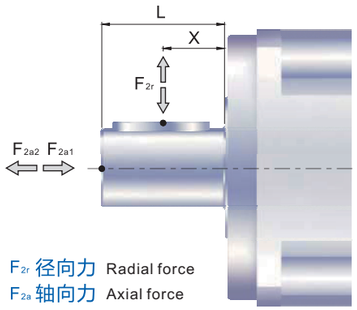
规 格		级 数	减速比[1]	JS042	JS060	JS090	JS115	JS142	JS180	JS220
转动惯量J_1	kg·cm²	1	3	0.03	0.16	0.61	3.25	9.21	28.98	69.61
			4	0.03	0.14	0.48	2.74	7.54	23.67	54.37
			5	0.03	0.13	0.47	2.71	7.42	23.29	53.27
			6	0.03	0.13	0.45	2.65	7.25	22.75	51.72
			7	0.03	0.13	0.45	2.62	7.14	22.48	50.97
			8	0.03	0.13	0.44	2.58	7.07	22.59	50.84
			10	0.03	0.13	0.44	2.57	7.03	22.51	50.56
		2	12	0.03	0.03	0.13	0.47	2.71	7.42	23.29
			15	0.03	0.03	0.13	0.47	2.71	7.42	23.29
			20	0.03	0.03	0.13	0.47	2.71	7.42	23.29
			25	0.03	0.03	0.13	0.47	2.71	7.42	23.29
			30	0.03	0.03	0.13	0.47	2.71	7.42	23.29
			35	0.03	0.03	0.13	0.47	2.71	7.42	23.29
			40	0.03	0.03	0.13	0.47	2.71	7.42	23.29
			50	0.03	0.03	0.13	0.44	2.57	7.03	22.51
			60	0.03	0.03	0.13	0.44	2.57	7.03	22.51
			70	0.03	0.03	0.13	0.44	2.57	7.03	22.51
			80	0.03	0.03	0.13	0.44	2.57	7.03	22.51
			100	0.03	0.03	0.13	0.44	2.57	7.03	22.51

1.减速比（$i=N_{in}/N_{out}$）
2.输出转数 **100rpm** 时，作用于输出轴中心位置。
* 连续运转降低使用寿命二分之一。

JunsRise®

减速机输出轴之容许径向力及轴向力

ALLOWABLE RADIAL AND AXIAL FORCES ON THE OUTPUT SHAFT OF THE GEARBOX



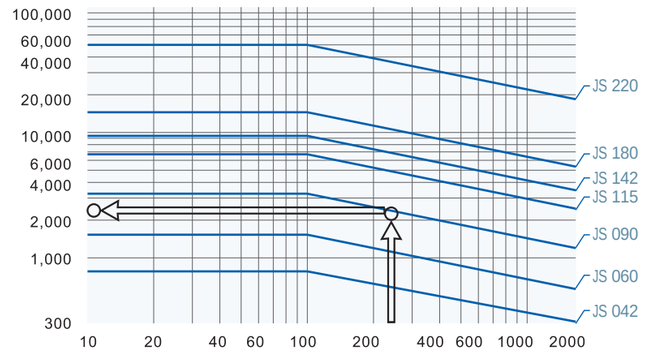
F_{2r} 径向力 Radial force
F_{2a} 轴向力 Axial force

减速机输出轴所能承受之最大径向力及轴向力。端视内部支撑轴承之设计，减速机采用大尺寸的轴承及较大跨距的设计，其能承受更大的径向及轴向负荷。

The maximum radial and axial forces that the output shaft of the gearbox canwithstand. Looking at the design of internal support bearings, the reduceradopts large-sized bearings and a design with a larger span, which canwithstand greater radial and axial loads.

容许径向力F_{2rB}[N]施力于轴中心位置

Permissible radial force F_{2rB}【N】apply force to the center of the shaft



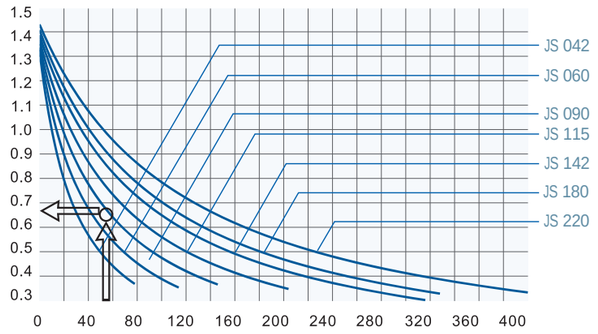
输出轴转速n_2[rpm]
Output shaft speed

当径向力F_{2r}施力于轴中心位置即X=1/2xL时，不同规格之减速机在不同输出转速运用下使用寿命为20,000hr*时，所能承受之容许径向力F_{2rB}，请参照左图，而能承受之容许轴向力F_{2aB}，为

$F_{2a1B}=0.2xF_{2rB}$
$F_{2a2B}=0.1xF_{2rB}$

位置负荷系数k_b

Positional load coefficient



径向力施力位置 X[mm]
Radial force application position

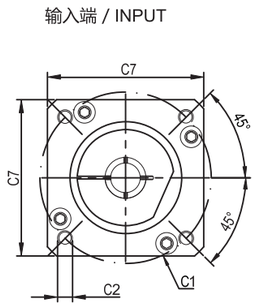
当径向力F_{2r}施力不在轴中心位置时，越靠近减速机即X < 1/2xL，所能承受之容许径向力变大，越远离减速机即X > 1/2xL时，所能承受之容许径向力则变小，藉由左图，依减速机规格及径向力施力位置X，查出位置负荷洗漱K_b，在代入下列公式，求出容许
径向力：
$F'_{2rB}=KbxF_{2rB}$
轴向力:
$F'_{2a1B}=0.2xF'_{2rB}$
$F'_{2a2B}=0.1xF'_{2rB}$

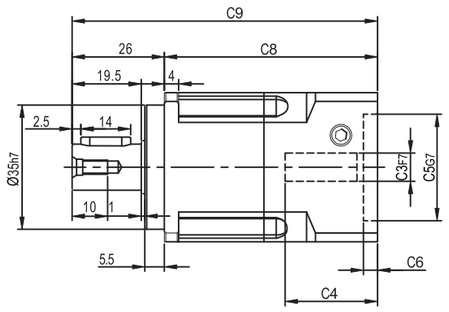
*连续运转降低使用寿命二分之一。The lifetime will be shortened by half under continuous operation.

外形尺寸图表 / OUTLINE DIMENSION SHEET

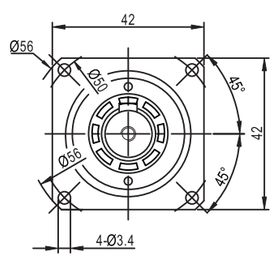
JS-042-L1

输入端 / INPUT



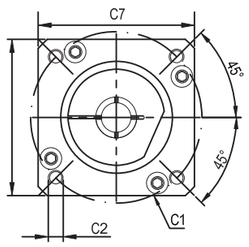


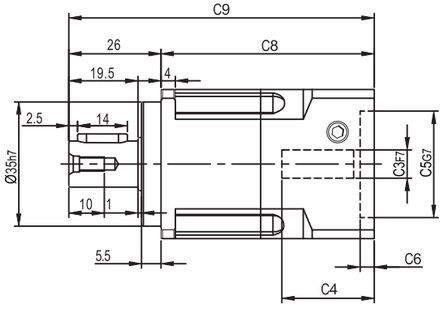
输出端 / OUTPUT



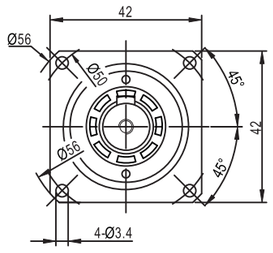
JS-042-L2

输入端 / INPUT

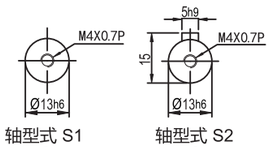




输出端 / OUTPUT



输出轴径/Output Diameter



尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9
JS-042-L1	Ø46	4-M4x10	Ø8	27	Ø30	6	42	64	90
	Ø45	4-M3x8							
JS-042-L2	Ø46	4-M4x10	Ø8	27	Ø30	4	42	84	110
	Ø45	4-M3x8							
JS-042-L1	Ø43.8	4-M3x8	Ø5	29	Ø22	4	42	64	90
JS-042-L2							42	84	110

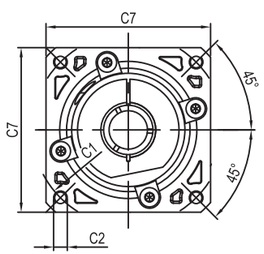
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7 are motor(metric standard) specific dimenisions, which could be customized.

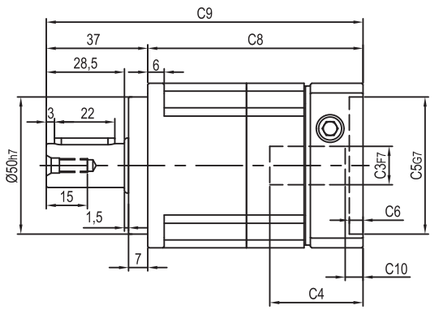
JunsRise®

外形尺寸图表 / OUTLINE DIMENSION SHEET

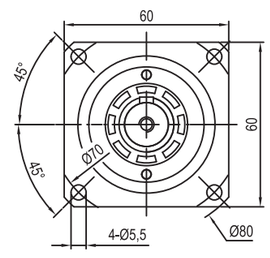
JS-060-L1

输入端 / INPUT



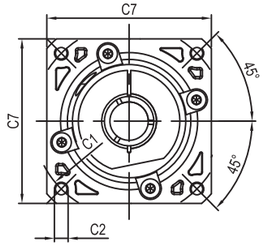


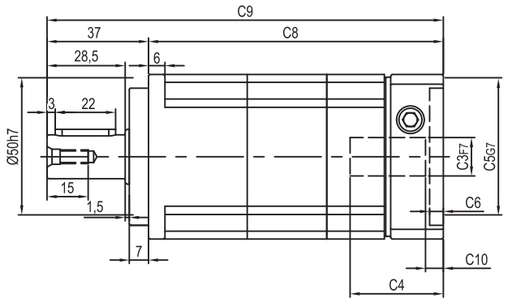
输出端 / OUTPUT



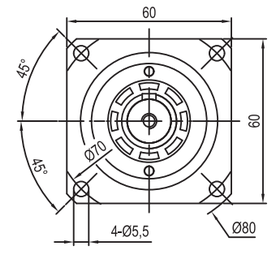
JS-060-L2

输入端 / INPUT

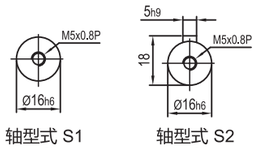




输出端 / OUTPUT



输出轴径/Output Diameter



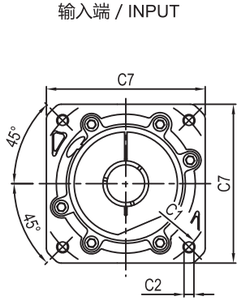
尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
JS-060-L1	Ø66.7	4-M4x10	Ø8	34	Ø38.1	5	60	78.5	115.5	5.5
JS-060-L2								107.5	144.5	5.5
JS-060-L1	Ø70	4-M4x10,4-M5x12	Ø11, Ø14	34	Ø50	5	60	78.5	115.5	5.5
JS-060-L2								107.5	144.5	5.5
JS-060M1-L1	Ø90	4-M5x12,4-M6x14	Ø19	42	Ø70	6.5	80	85	122	12
JS-060M1-L2								114	151	12

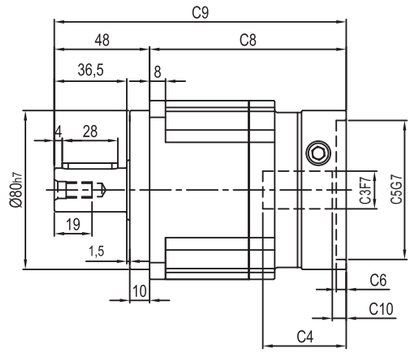
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7 are motor(metric standard) specific dimenisions, which could be customized.
*M1:极限孔(版本号)
*M1:Limit hole (Version number)

外形尺寸图表 / OUTLINE DIMENSION SHEET

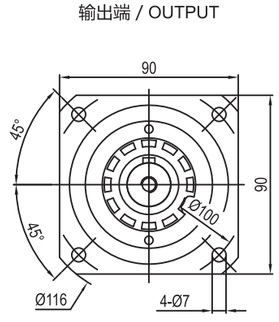
JS-090-L1

输入端 / INPUT



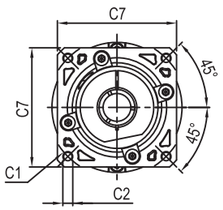


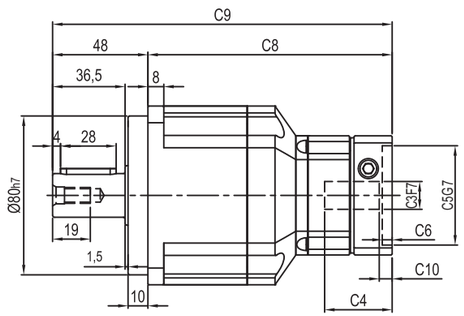
输出端 / OUTPUT



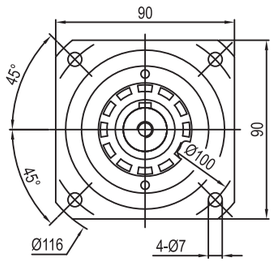
JS-090-L2

输入端 / INPUT

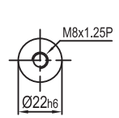




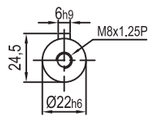
输出端 / OUTPUT



输出轴径/Output Diameter



轴型式 S1
shaft



轴型式 S2
shaft

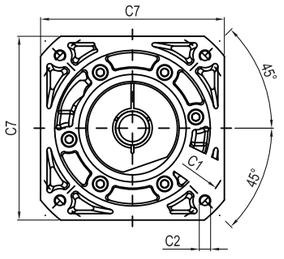
尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
JS-090-L1	Ø90	4-M5x12,4-M6x14	Ø19	42	Ø70	6.5	80	99	147	7
	Ø100	4-M6x14	Ø16	42	Ø80	6.5	86	99	147	6
JS-090M1-L1	Ø115	4-M8x20	Ø19,Ø22	56.5	Ø95	8	100	114.5	162.5	16.5
	Ø145	4-M8x20	Ø19,Ø22,Ø24	59	Ø110	11	130	117	165	19
JS-090-L2	Ø66.7	4-M4x10	Ø8	34	Ø38.1	5	60	123	171	5.5
	Ø70	4-M4x10,4-M5x12	Ø11,Ø14	34	Ø50	5	60	123	171	5.5
JS-090M1-L2	Ø90	4-M5x12,4-M6x14	Ø19	42	Ø70	6.5	80	129.5	177.5	12
	Ø100	4-M6x14	Ø16	42	Ø80	6.5	86	129.5	177.5	11

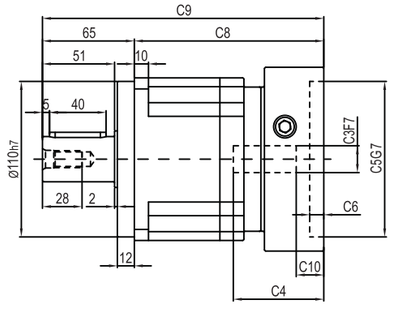
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7are motor(metric standard) specific dimenisions, which could be customized.
*M1:极限孔(版本号)
*M1:Limit hole (Version number)

外形尺寸图表 / OUTLINE DIMENSION SHEET

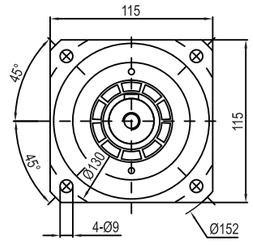
JS-115-L1

输入端 / INPUT



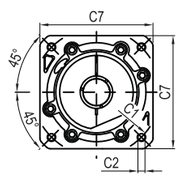


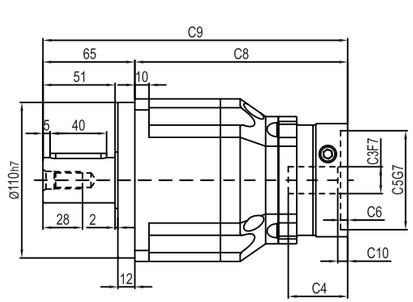
输出端 / OUTPUT



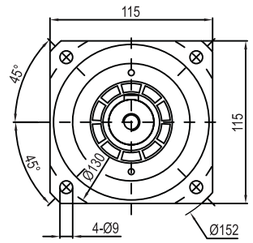
JS-115-L2

输入端/ INPUT

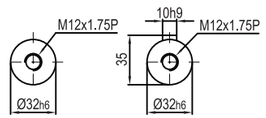




输出端 /OUTPUT



输出轴径/Output Diameter



轴型式 S1
shaft

轴型式 S2
shaft

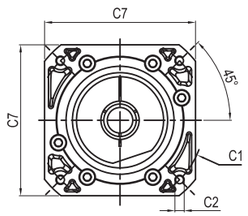
尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
JS-115-L1	Ø145	4-M8x20	Ø19,Ø22,Ø24	64	Ø110	10	130	134	199	19.5
JS-115M1-L1	Ø200	4-M12x28	Ø35	81	Ø114.3	10	180	151.5	216.5	28
JS-115-L2	Ø90	4-M5x12,4-M6x14	Ø19	42	Ø70	6.5	80	150.5	215.5	7
	Ø100	4-M6x14	Ø16	42	Ø80	6.5	86	150.5	215.5	6
JS-115M1-L2	Ø115	4-M8x20	Ø19,Ø22	56.5	Ø95	8	100	166	231	16.5
	Ø145	4-M8x20	Ø19,Ø22,Ø24	59	Ø110	11	130	168.5	233.5	19

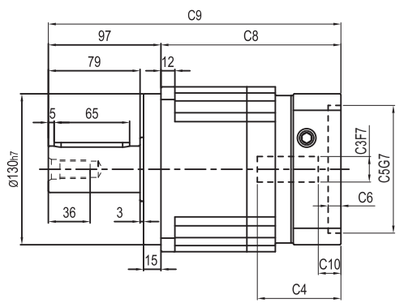
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7are motor(metric standard) specific dimenisions, which could be customized.
*M1:极限孔(版本号)
*M1:Limit hole (Version number)

外形尺寸图表 / OUTLINE DIMENSION SHEET

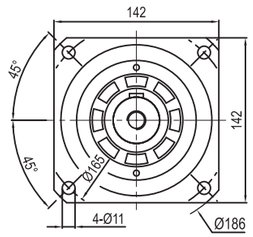
JS-142-L1

输入端/ INPUT



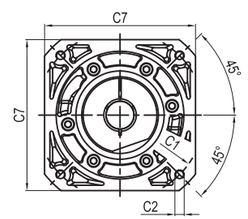


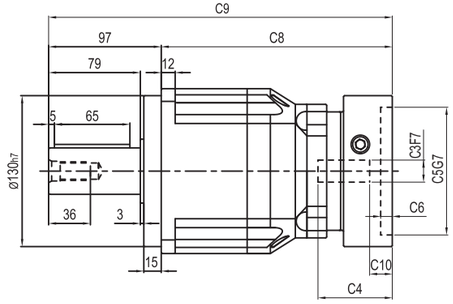
输出端/OUTPUT



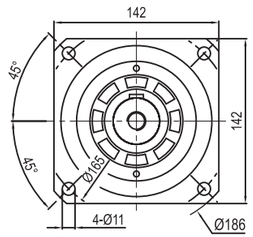
JS-142-L2

输入端/ INPUT

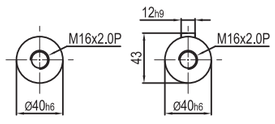




输出端/OUTPUT



输出轴径/Output Diameter



轴型式 S1
shaft

轴型式 S2
shaft

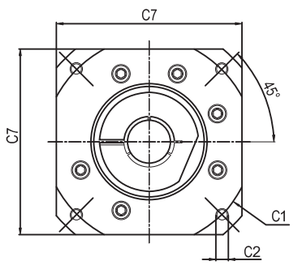
尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
JS-142-L1	Ø145	4-M8x20	Ø22, Ø24	72	Ø110	11	130	155	252	19.5
	Ø200	4-M12x28	Ø35	81.5	Ø114.3	8	180	165	262	25
JS-142-L2	Ø145	4-M8x20	Ø19,Ø22,Ø24	64	Ø110	10	130	199	296	19.5
JS-142M1-L2	Ø200	4-M12x28	Ø35	81	Ø114.3	10	180	216.5	313.5	28

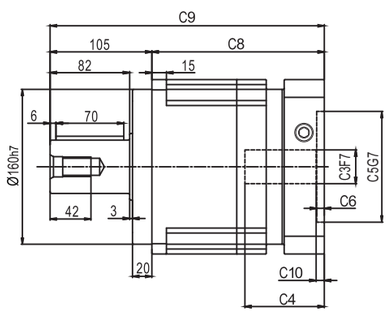
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7 are motor(metric standard) specific dimenisions, which could be customized.
*M1:极限孔(版本号)
*M1:Limit hole (Version number)

外形尺寸图表 / OUTLINE DIMENSION SHEET

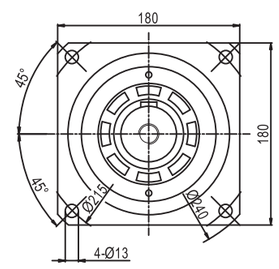
JS-180-L1

输入端/INPUT



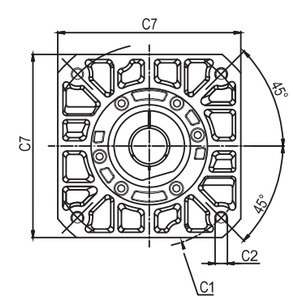


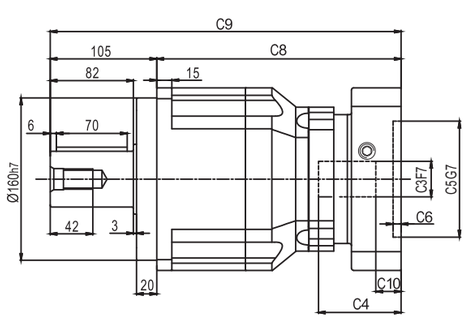
输出端/ OUTPUT



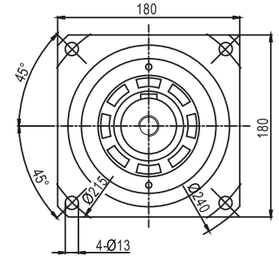
JS-180-L2

输入端/ INPUT

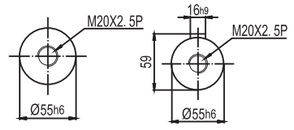




输出端 /OUTPUT



输出轴径/Output Diameter



轴型式 S1
shaft

轴型式 S2
shaft

尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
JS-180-L1	Ø200	4-M12x28	Ø35	82	Ø114.3	8	180	178	283	8.5
	Ø200	4-M12x28	Ø42	117.5	Ø114.3	8	180	213.5	318.5	45.5
	Ø215	4-M12x28	Ø38	87	Ø180	8	192	183	288	13.5
	Ø235	4-M12x28	Ø42	117.5	Ø200	10	220	213.5	318.5	45.5
JS-180-L2	Ø145	4-M8x20	Ø22,Ø24	72	Ø110	11	130	231	336	19.5
	Ø200	4-M12x28	Ø35	81.5	Ø114.3	8	180	241	346	25

*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7 are motor(metric standard) specific dimenisions, which could be customized.

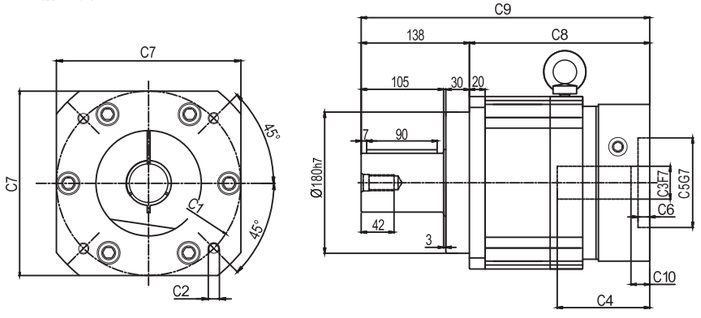
JSR

JunsRise®

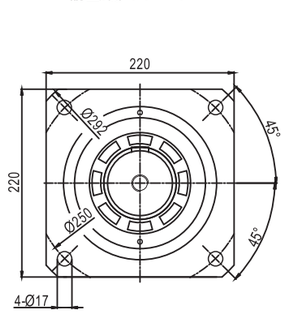
外形尺寸图表 / OUTLINE DIMENSION SHEET

JS-220-L1

输入端/ INPUT

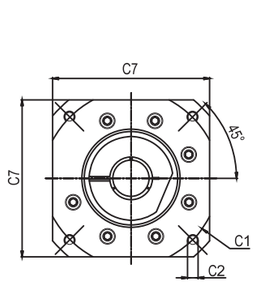


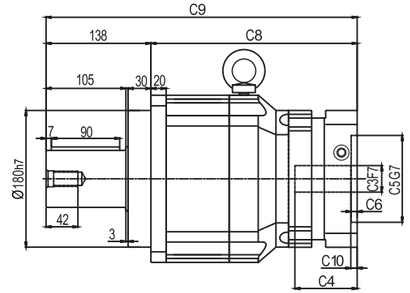
输出端/OUTPUT



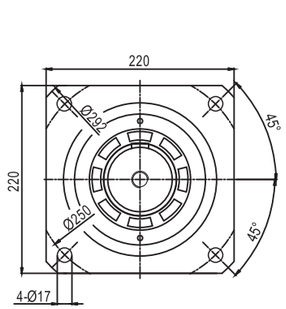
JS-220-L2

输入端/ INPUT

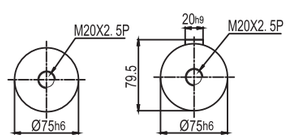




输出端/OUTPUT



输出轴径/Output Diameter



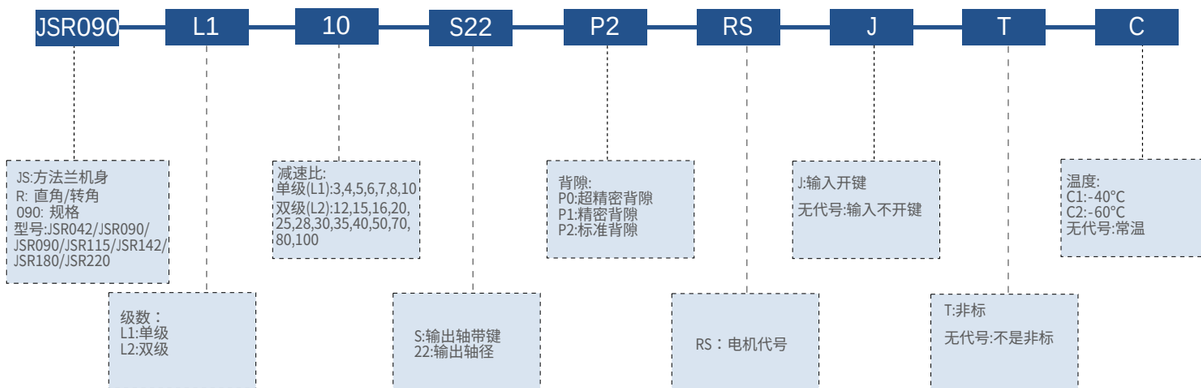
轴型式 S1 shaft

轴型式 S2 shaft

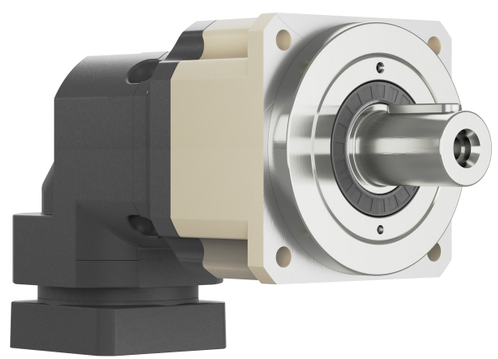
尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
JS-220-L1	Ø200	4-M12x28	Ø35,Ø42	118	Ø114.3	15	200	230	368	24
	Ø215	4-M12x30	Ø38	108	Ø180	8	200	220	358	11.5
	Ø235	4-M12x30	Ø42,Ø55	118	Ø200	10	220	230	368	24
JS-220-L2	Ø200	4-M12x28	Ø35	82	Ø114.3	8	180	271.5	409.5	8.5
	Ø200	4-M12x28	Ø42	117.5	Ø114.3	8	180	307	445	45.5
	Ø215	4-M12x28	Ø38	87	Ø180	8	192	276.5	414.5	13.5
	Ø235	4-M12x28	Ø42	117.5	Ø200	10	220	307	445	45.5

*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7 are motor(metric standard) specific dimenisions, which could be customized.

斜齿行星减速机型号订购说明/Helical-tooth planetary gearbox model illuminate



选型范例：JSR090-L1-10-S22-P2-RS-J-T-C



技术参数/ technical specification

规 格		级 数	减速比[1]	JSR042	JSR060	JSR090	JSR115	JSR142	JSR180	JSR220
额定输出力矩T_{2N}	Nm	1	3	20	55	130	208	342	588	1,140
			4	19	50	140	290	542	1,050	1,700
			5	22	60	160	330	650	1,200	2,000
			6	20	55	150	310	600	1,100	1,900
			7	19	50	140	300	550	1,100	1,800
			8	17	50	140	290	542	1,050	1,700
			10	14	60	160	330	650	1,200	2,000
			14	–	50	140	300	550	1,100	1,800
			20	–	40	100	230	450	900	1,500
		2	12	–	55	130	208	342	588	1,140
			15	20	55	130	208	342	588	1,140
			20	19	50	140	290	542	1,050	1,700
			25	22	60	160	330	650	1,200	2,000
			30	22	55	130	208	342	588	2,000
			35	22	60	160	330	650	1,200	2,000
			40	22	50	140	290	542	1,050	1,700
			50	22	60	160	330	650	1,200	2,000
			60	22	55	150	310	600	1,100	1,900
			70	22	60	160	330	650	1,200	2,000
			80	22	50	140	290	542	1,050	1,700
			100	22	60	160	330	650	1,200	2,000
			120	–	–	150	310	600	1,100	1,900
			140	–	–	140	300	550	1,100	1,800
			160	–	–	120	260	500	1,000	1,600
			200	–	–	100	230	450	900	1,500
最大输出力矩T_{2B}	Nm	1,2	3~200	3倍额定输出力矩						
额定输入转速n_1	rpm	1,2	3~200	3,000	3,000	3,000	3,000	3,000	3,000	2,000
最大输入转速n_{1B}	rpm	1,2	3~200	6,000	6,000	6,000	6,000	6,000	6,000	4,000
超精密背隙 P0	arcmin	1	3~20	–	–	≤2	≤2	≤2	≤2	≤2
		2	12~200	–	–	≤4	≤4	≤4	≤4	≤4
精密背隙 P1	arcmin	1	3~20	≤4	≤4	≤4	≤4	≤4	≤4	≤4
		2	12~200	≤7	≤7	≤7	≤7	≤7	≤7	≤7
标准背隙 P2	arcmin	1	3~20	≤6	≤6	≤6	≤6	≤6	≤6	≤6
		2	12~200	≤9	≤9	≤9	≤9	≤9	≤9	≤9
扭转刚性	Nm/arcmin	1,2	3~200	3	7	14	25	50	145	225
容许径向力F_{2rB}[2]	N	1,2	3~200	780	1,530	3,250	6,700	9,400	14,500	50,000
容许轴向力F_{2a1B}[2]	N	1,2	3~200	350	630	1,300	3,000	4,000	6,200	35,000
容许轴向力F_{2a2B}[2]	N	1,2	3~200	390	765	1,625	3,350	4,700	7,250	25,000
使用寿命	hr	1,2	3~200	20,000*						
效率 η	%	1	3~20	≤95%						
		2	12~200	≤92%						
重量	kg	1	3~20	0.9	2.1	6.4	13	24.5	51	83
		2	12~200	1.2	2.5	7.8	14.2	27.5	54	95
使用温度	℃	1,2	3~200	-10℃~+90℃						
润滑		1,2	3~200	合成润滑油脂						
防护等级		1,2	3~200	IP65						
安装方向		1,2	3~200	任意方向						
噪音值（n_1=3000rpm）	dB	1,2	3~200	≤61	≤63	≤65	≤68	≤70	≤72	≤74

减速机转动惯量

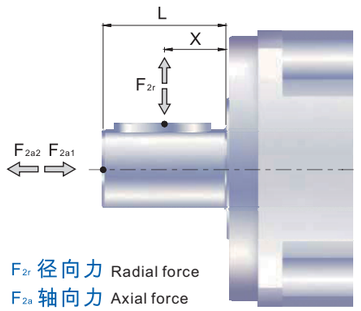
规 格		级 数	减速比[1]	JSR042	JSR060	JSR090	JSR115	JSR142	JSR180	JSR220
转动惯量J_1	kg · cm²	1	3~7	0.09	0.35	2.25	6.84	23.4	68.9	135.4
			8~10	0.09	0.07	1.87	6.25	21.8	65.6	119.8
			14~20	–	0.07	1.87	6.25	21.8	65.6	119.8
		2	12~40	0.09	0.09	0.35	2.25	6.84	23.4	68.9
			50	0.09	0.09	0.31	1.87	6.25	21.8	65.6
			60	0.09	0.09	0.35	2.25	6.84	23.4	68.9
			70~100	0.09	0.09	0.31	1.87	6.25	21.8	65.6
			120~200	–	–	0.31	1.87	6.25	21.8	65.6

1.减速比（$i=N_{in}/N_{out}$）
2.输出转数 **100rpm** 时，作用于输出轴中心位置。
* 连续运转降低使用寿命二分之一。

JunsRise®

减速机输出轴之容许径向力及轴向力

ALLOWABLE RADIAL AND AXIAL FORCES ON THE OUTPUT SHAFT OF THE GEARBOX

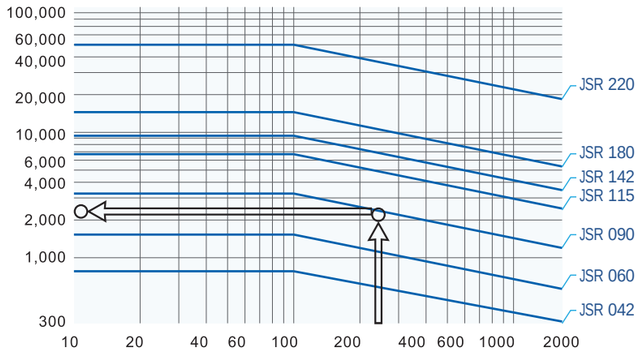


减速机输出轴所能承受之最大径向力及轴向力。端视内部支撑轴承之设计，减速机采用大尺寸的轴承及较大跨距的设计，其能承受更大的径向及轴向负荷。

The maximum radial and axial forces that the output shaft of the gearbox canwithstand. Looking at the design of internal support bearings, the reduceradopts large-sized bearings and a design with a larger span, which canwithstand greater radial and axial loads.

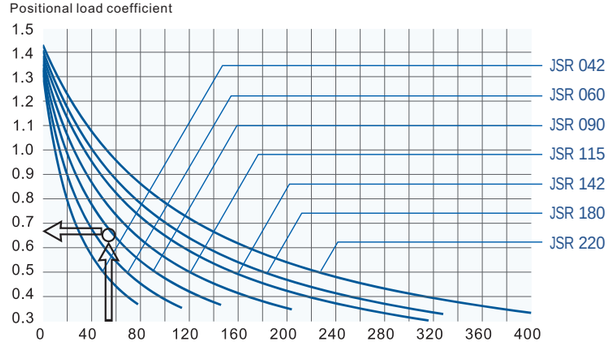
容许径向力F_{2rB}[N]施力于轴中心位置

Permissible radial force F_{2rB}【N】apply force to the center of the shaft



位置负荷系数k_b

Positional load coefficient



*连续运转降低使用寿命二分之一。The lifetime will be shortened by half under continuous operation.

当径向力F_{2r}施力于轴中心位置即X=1/2xL时，不同规格之减速机在不同输出转速运用下使用寿命为20,000hr*时，所能承受之容许径向力F_{2rB}，请参照左图，而能承受之容许轴向力F_{2aB}，为

$F_{2a1B}=0.2xF_{2rB}$
$F_{2a2B}=0.1xF_{2rB}$

当径向力F_{2r}施力不在轴中心位置时，越靠近减速机即X<1/2xL，所能承受之容许径向力变大，越远离减速机即X>1/2xL时，所能承受之容许径向力则变小，藉由左图，依减速机规格及径向力施力位置X，查出位置负荷洗漱K_b，在代入下列公式，求出容许径向力：

$F'_{2rB}=KbxF_{2rB}$

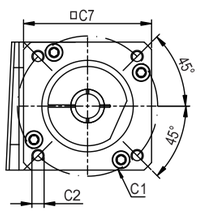
轴向力:

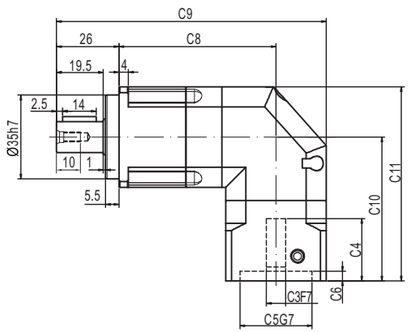
$F'_{2a1B}=0.2xF'_{2rB}$
$F'_{2a2B}=0.1xF'_{2rB}$

外形尺寸图表 / OUTLINE DIMENSION SHEET

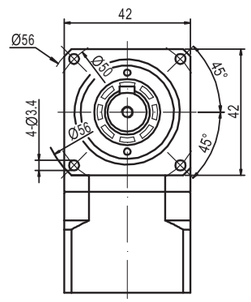
JSR-042-L1

输入端/INPUT



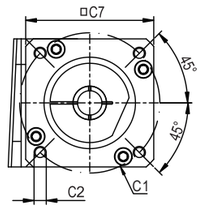


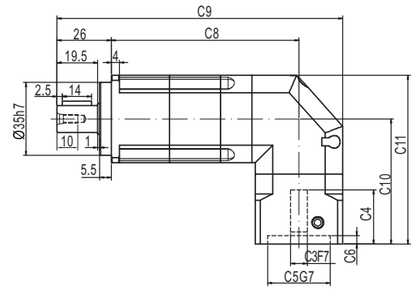
输出端/ OUTPUT



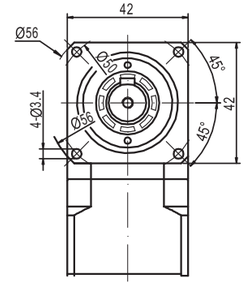
JSR-042-L2

输入端/ INPUT

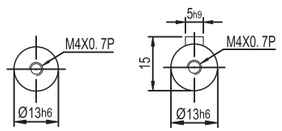




输出端 /OUTPUT



输出轴径/Output Diameter



轴型式 S1 shaft　　轴型式 S2 shaft

尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11
JSR-042-L1	Ø46	4-M4x10	Ø8	27	Ø30	6	42	65.5	108	53.3	74.6
	Ø45	4-M3x8									
JSR-042-L2	Ø46	4-M4x10	Ø8	27	Ø30	6	42	90	128	53.3	74.6
	Ø45	4-M3x8									

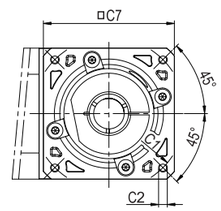
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7 are motor(metric standard) specific dimenisions, which could be customized.

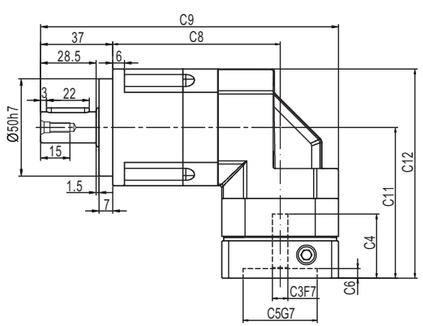
JunsRise®

外形尺寸图表 / OUTLINE DIMENSION SHEET

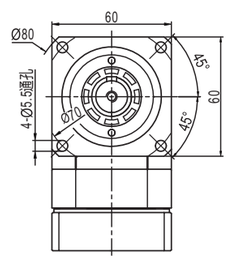
JSR-060-L1

输入端/ INPUT



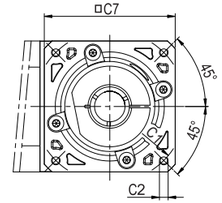


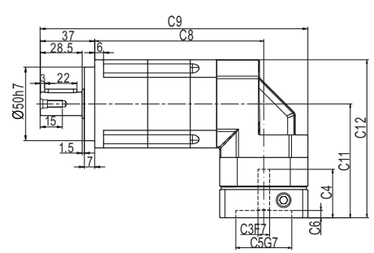
输出端/OUTPUT



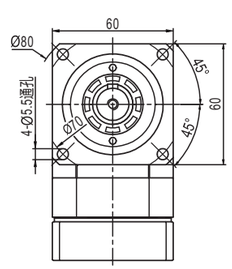
JSR-060-L2

输入端/ INPUT

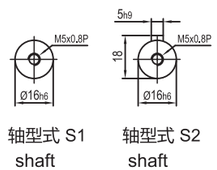




输出端/OUTPUT



输出轴径/Output Diameter



轴型式 S1 shaft　　轴型式 S2 shaft

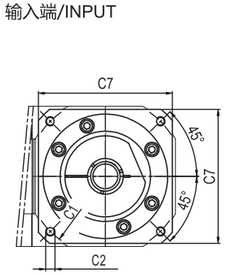
尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12
JSR-060-L1	Ø66.7	4-M4x10	Ø8	33	Ø38.1	5	60	86	153	5.5	77.5	107.5
JSR-060-L2								115	182			
JSR-060-L1	Ø70	4-M4x10,4-M5x12	Ø11,Ø14	33	Ø50	5	60	86	153	5.5	77.5	107.5
JSR-060-L2								115	182			
JSR-060M1-L1	Ø90	4-M5x12,4-M6x14	Ø19	42.5	Ø70	6.5	80	86	163	12	87	117
JSR-060M1-L2								115	192			

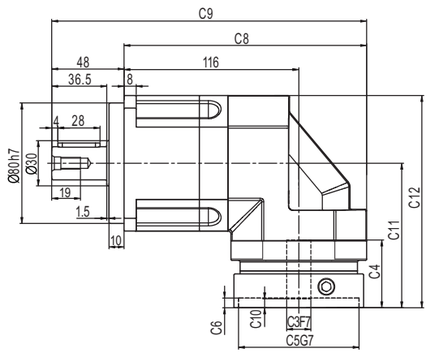
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7 are motor(metric standard) specific dimenisions, which could be customized.
*M1:极限孔(版本号)
*M1:Limit hole (Version number)

外形尺寸图表 / OUTLINE DIMENSION SHEET

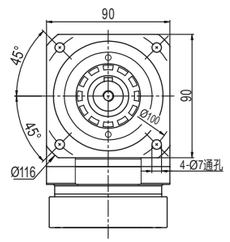
JSR-090-L1

输入端/INPUT



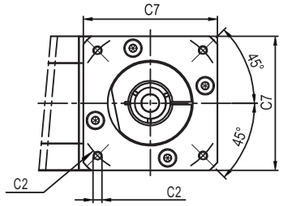


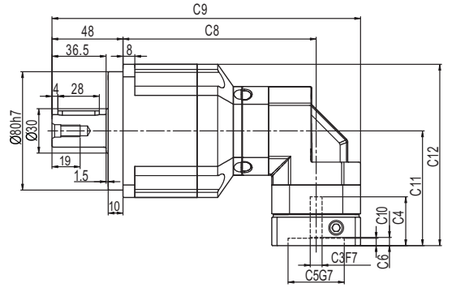
输出端/ OUTPUT



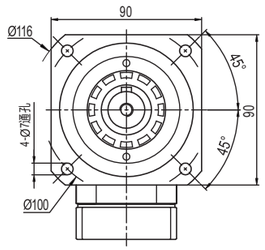
JSR-090-L2

输入端/ INPUT

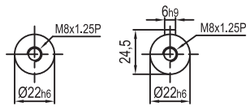




输出端/OUTPUT



输出轴径/Output Diameter



轴型式 S1 shaft　　轴型式 S2 shaft

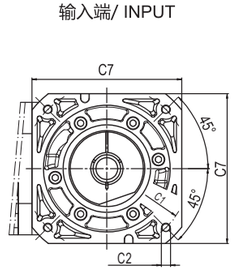
尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12
JSR-090-L1	Ø90	4-M5x12,4-M6x14	Ø19	45	Ø70	6.5	80	116	209	7	96	141
	Ø100	4-M6x14	Ø16	45	Ø80	6.5	86	116	209	6	96	141
JSR-090M1-L1	Ø115	4-M8x20	Ø19,Ø22	56.5	Ø95	8	100	116	214	16.5	117.5	162.5
	Ø145	4-M8x20	Ø19,Ø22,Ø24	59	Ø110	11	130	116	229	19	120	165
JSR-090-L2	Ø66.7	4-M4x10	Ø8	33	Ø38.1	5	60	130.5	208.5	5.5	77.5	122.5
	Ø70	4-M4x10,4-M5x12	Ø11,Ø14	33	Ø50	5	60	130.5	208.5	5.5	77.5	122.5
JSR-090M1-L2	Ø90	4-M5x12,4-M6x14	Ø19	42.5	Ø70	6.5	80	130.5	218.5	12	87	132
	Ø100	4-M6x14	Ø16	42.5	Ø80	6.5	86	130.5	221.5	11	87	132

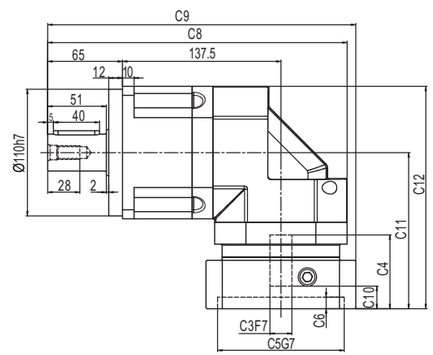
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7are motor(metric standard) specific dimenisions, which could be customized.
*M1:极限孔(版本号)
*M1:Limit hole (Version number)

外形尺寸图表 / OUTLINE DIMENSION SHEET

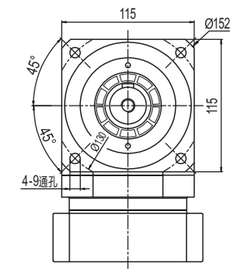
JSR-115-L1

输入端/ INPUT



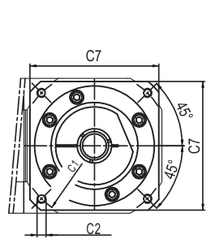


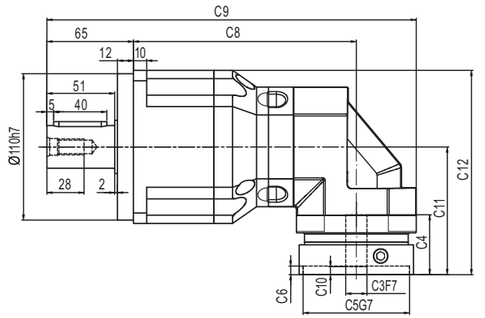
输出端/OUTPUT



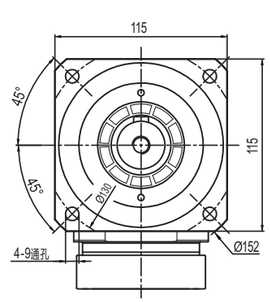
JSR-115-L2

输入端/ INPUT

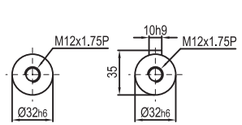




输出端/OUTPUT



输出轴径/Output Diameter



轴型式 S1 shaft　　轴型式 S2 shaft

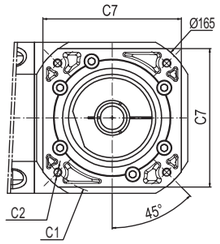
尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12
JSR-115-L1	Ø145	4-M8x20	Ø19,Ø22,Ø24	64	Ø110	10	130	137.5	267.5	19.5	135.5	193
JSR-115M1-L1	Ø200	4-M12x28	Ø35	81	Ø114.3	10	180	137.5	292.5	28	152.5	210
JSR-115-L2	Ø90	4-M5x12,4-M6x14	Ø19	45	Ø70	6.5	80	167.5	277.5	7	96	153.5
	Ø100	4-M6x14	Ø16	45	Ø80	6.5	86	167.5	277.5	6	96	153.5
JSR-115M1-L2	Ø115	4-M8x20	Ø19,Ø22	56.5	Ø95	8	100	167.5	282.5	16.5	117.5	175
	Ø145	4-M8x20	Ø19,Ø22,Ø24	59	Ø110	11	130	167.5	297.5	19	120	177.5

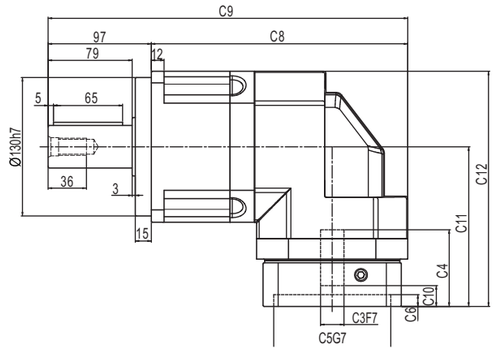
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7are motor(metric standard) specific dimenisions, which could be customized.
*M1:极限孔(版本号)
*M1:Limit hole (Version number)

外形尺寸图表 / OUTLINE DIMENSION SHEET

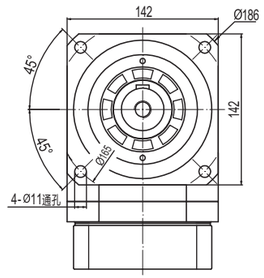
JSR-142-L1

输入端/INPUT





输出端/ OUTPUT

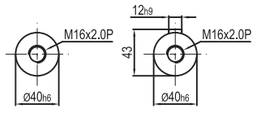


JSR-142-L2

输入端/ INPUT

输出端 /OUTPUT

输出轴径/Output Diameter



轴型式 S1 shaft　　轴型式 S2 shaft

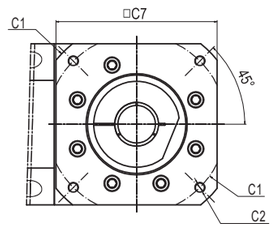
尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12
JSR-142-L1	Ø145	4-M8x20	Ø22,Ø24	72	Ø110	11	130	170	338	19.5	150	221
	Ø200	4-M12x28	Ø35	82	Ø114.3	8	180	170	357	25	160	231
JSR-142-L2	Ø145	4-M8x20	Ø19,Ø22,Ø24	64	Ø110	10	130	202.5	364.5	19.5	135.5	206.5
JSR-142M1-L2	Ø200	4-M12x28	Ø35	81	Ø114.3	10	180	202.5	389.5	28	152.5	223.5

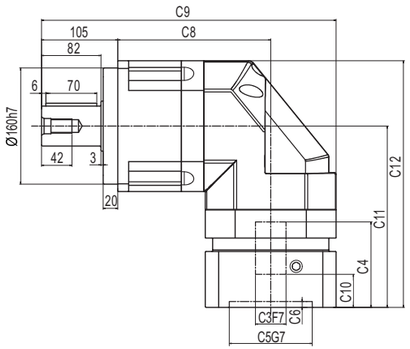
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7are motor(metric standard) specific dimenisions, which could be customized.
*M1:极限孔(版本号)
*M1:Limit hole (Version number)

外形尺寸图表 / OUTLINE DIMENSION SHEET

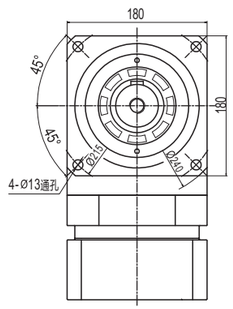
JSR-180-L1

输入端/ INPUT



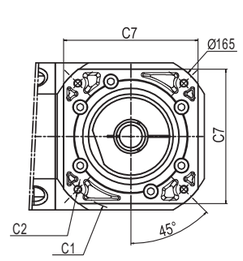


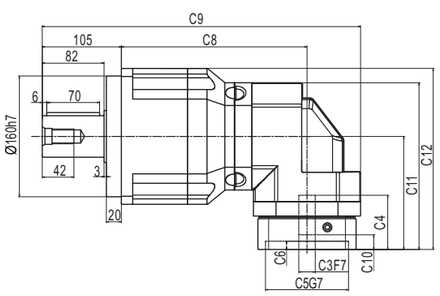
输出端/OUTPUT



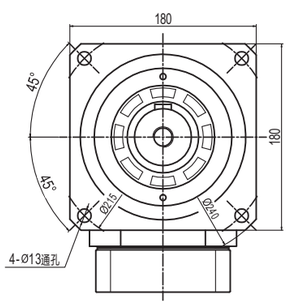
JSR-180-L2

输入端/ INPUT

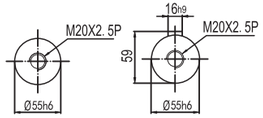




输出端/OUTPUT



输出轴径/Output Diameter



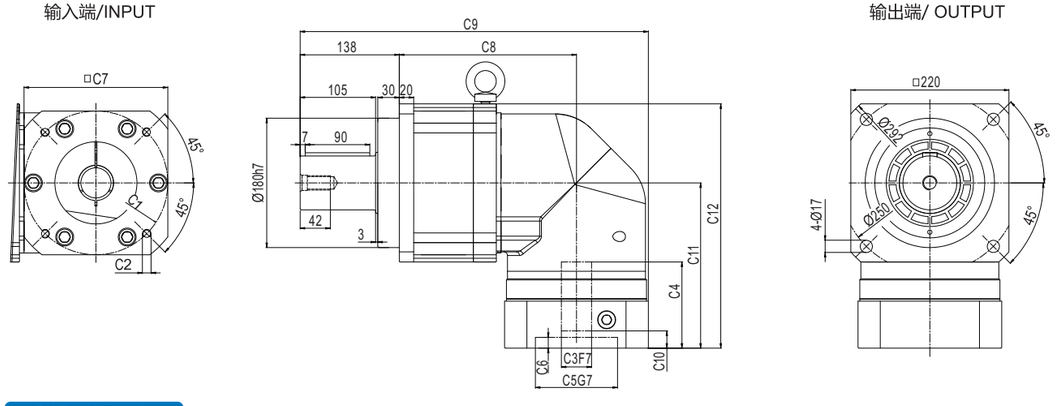
轴型式 S1 shaft　　轴型式 S2 shaft

尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12
JSR-180-L1	Ø200	4-M12x28	Ø35	82	Ø114.3	8	180	210.5	405. 5	8. 5	214	304
	Ø200	4-M12x28	Ø42	117. 5	Ø114.3	8	180	210.5	405. 5	45. 5	249. 5	339. 5
	Ø215	4-M12x28	Ø38	87	Ø180	8	192	210.5	411. 5	13. 5	219	309
	Ø235	4-M12x28	Ø42	117. 5	Ø200	10	220	213.5	318. 5	45. 5	249. 5	339. 5
JSR-180-L2	Ø145	4-M8x20	Ø22,Ø24	72	Ø110	11	130	246	422	19. 5	150	240
	Ø200	4-M12x28	Ø35	82	Ø114.3	8	180	246	441	25	160	250

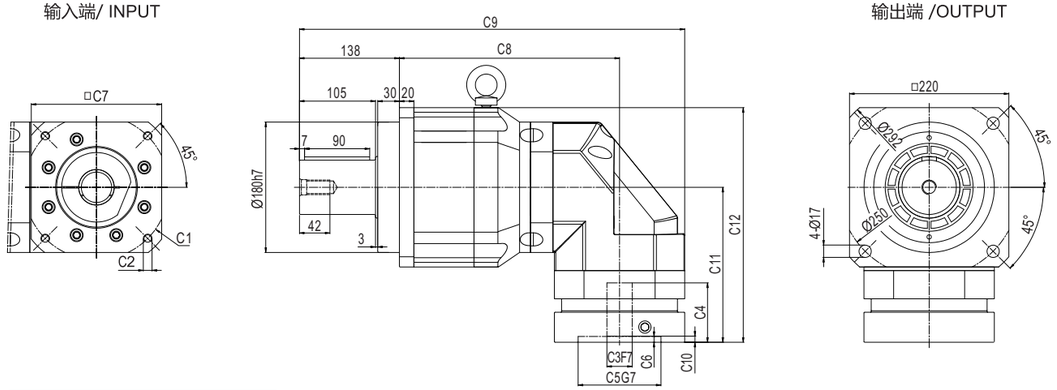
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7are motor(metric standard) specific dimenisions, which could be customized.

外形尺寸图表 / OUTLINE DIMENSION SHEET

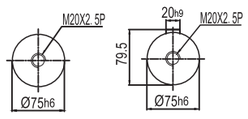
JSR-220-L1



JSR-220-L2



输出轴径/Output Diameter

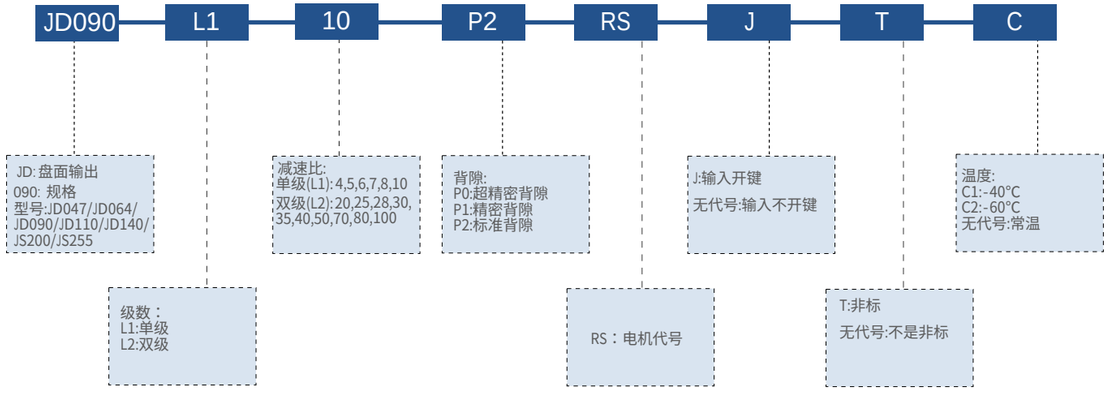


轴型式 S1 shaft　　轴型式 S2 shaft

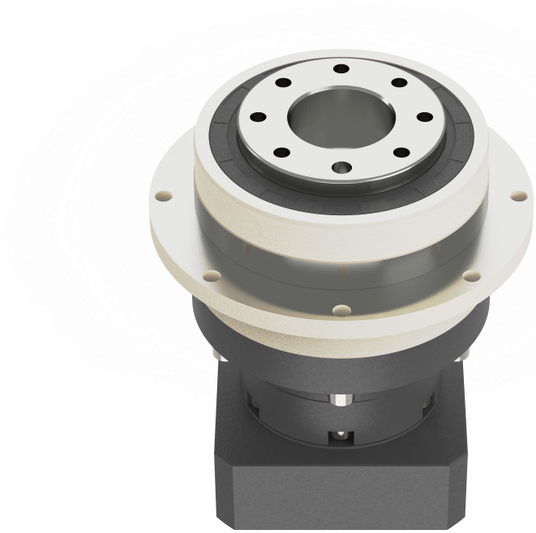
尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12
JSR-220-L1	Ø200	4-M12x30	Ø35,Ø42	120	Ø114.3	15	200	258.5	484.5	22.5	230	340
	Ø215	4-M12x28	Ø38	110	Ø180	8	200	258.5	484.5	12.5	220	330
	Ø235	4-M12x28	Ø42,Ø55	120	Ø200	10	220	258.5	494.5	24	230	340
JSR-220-L2	Ø200	4-M12x28	Ø35	82	Ø114.3	8	180	304	532	8.5	214	324
	Ø200	4-M12x28	Ø42	117.5	Ø114.3	8	180	316	532	45.5	249.5	359.5
	Ø215	4-M12x28	Ø38	87	Ø180	8	192	316	538	13.5	219	329
	Ø235	4-M12x30	Ø42	117.5	Ø200	10	220	316	552	45.5	249.5	359.5

*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7 are motor(metric standard) specific dimenisions, which could be customized.

斜齿行星减速机型号订购说明/Helical-tooth planetary gearbox model illuminate



选型范例：JD090-L1-10-P2-RS-J-T-C



减速机性能资料 / GEAR BOX PERFORMANCE INFORMATION

规 格		级 数	减速比[1]	JD047	JD064	JD090	JD110	JD140	JD200	JD255
额定输出力矩T_{2N}	Nm	1	4	19	48	130	270	560	1,100	1,700
			5	22	60	160	330	650	1,200	2,000
			6	-	55	150	310	600	1,100	1,900
			7	19	50	140	300	550	1,100	1,800
			8	17	45	120	260	500	1,000	1,600
			10	14	40	100	230	450	900	1,500
		2	20	19	48	130	270	560	1,100	1,700
			25	22	60	160	330	650	1,200	2,000
			35	22	60	160	330	650	1,200	2,000
			40	22	48	130	270	560	1,100	1,700
			50	22	60	160	330	650	1,200	2,000
			60	-	55	150	310	600	1,100	1,900
			70	19	50	140	300	550	1,100	1,800
			80	-	45	120	260	500	1,000	1,600
			100	14	40	100	230	450	900	1 500
最大输出力矩T_{2B}	Nm	1,2	4~100	3倍额定输出力矩						
额定输入转速n_1	rpm	1,2	4~100	3,000	3,000	3,000	3,000	3,000	3,000	2,000
最大输入转速n_{1B}	rpm	1,2	4~100	6,000	6,000	6,000	6,000	6,000	6,000	4,000
超精密背隙 P0	arcmin	1	4~100	-	-	≤1	≤1	≤1	≤1	≤1
		2	4~10	-	-	-	≤3	≤3	≤3	≤3
精密背隙 P1	arcmin	1	20~100	≤3	≤3	≤3	≤3	≤3	≤3	≤3
		2	4~10	≤5	≤5	≤5	≤5	≤5	≤5	≤5
标准背隙 P2	arcmin	1	20~100	≤5	≤5	≤5	≤5	≤5	≤5	≤5
		2	4~10	≤7	≤7	≤7	≤7	≤7	≤7	≤7
扭转刚性	Nm/arcmin	1,2	20~100	7	13	31	82	151	440	1,006
最大弯曲力矩M_{2KB}[2]	Nm	1,2	4~100	42.5	125	235	430	1,300	3,064	5,900
容许径向力F_{2B}[2]	N	1,2	4~100	1,080	2,110	2,310	4,800	6,200	5,450	10,600
使用寿命	hr	1,2	4~100	20,000＊						
效率 η	%	1	4~10	≥97%						
		2	20~100	≥94%						
重量	kg	1	4~10	0.7	1.2	3.0	5.6	11.9	31.6	56.1
		2	20~100	1.0	1.6	3.7	7.3	15.9	36.9	70.4
使用温度	℃	1,2	4~100	-10℃~+90℃						
润滑		1,2	4~100	合成润滑油脂						
防护等级		1,2	4~100	IP65						
安装方向		1,2	4~100	任意方向						
噪音值（n_1=3000rpm）	dB	1,2	4~100	≤56	≤58	≤60	≤63	≤65	≤67	≤70

减速机转动惯量

规 格		级 数	减速比[1]	JD047	JD064	JD090	JD110	JD140	JD200	JD255
转动惯量J_1	kg·cm²	1	4	0.03	0.14	0.51	2.87	7.54	25.03	58.31
			5	0.03	0.13	0.47	2.71	7.42	23.29	53.27
			6	-	0.13	0.45	2.65	7.25	-	-
			7	0.03	0.13	0.45	2.62	7.14	22.48	50.97
			8	0.03	0.13	0.45	2.58	7.07	22.48	50.97
			10	0.03	0.13	0.44	2.57	7.03	22.51	50.56
		2	20	0.03	0.13	0.13	0.47	2.71	7.42	23.29
			25	0.03	0.13	0.13	0.47	2.71	7.42	23.29
			35	0.03	0.13	0.13	0.47	2.71	7.42	23.29
			40	0.03	0.13	0.13	0.44	2.57	7.03	22.51
			50	0.03	0.13	0.13	0.44	2.57	7.03	22.51
			60	-	0.13	0.13	0.44	2.57	-	-
			70	0.03	0.13	0.13	0.44	2.57	7.03	22.51
			80	-	0.13	0.13	0.44	2.57	-	-
			100	0.03	0.13	0.13	0.44	2.57	7.03	22.51

1.减速比（$i=N_{in}/N_{out}$）
＊ 连续运转降低使用寿命二分之一。

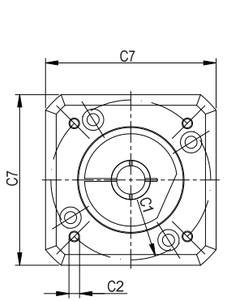
2.输出转数 **100rpm** 时，作用于输出轴中心位置。

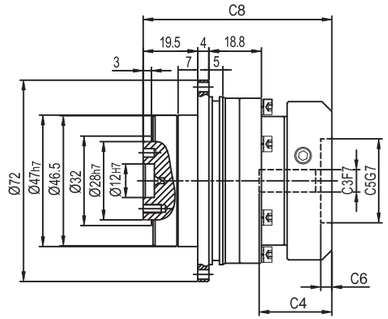
JunsRise®

外形尺寸图表 / OUTLINE DIMENSION SHEET

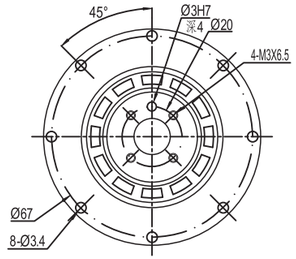
JD-042-L1

输入端/ INPUT



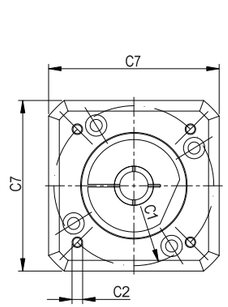


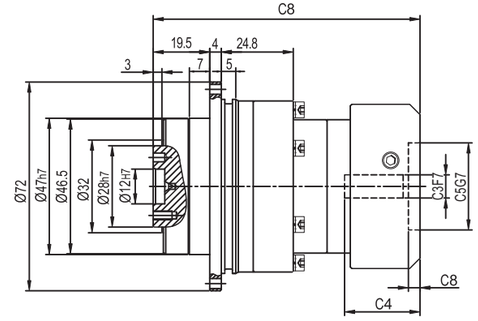
输出端/OUTPUT



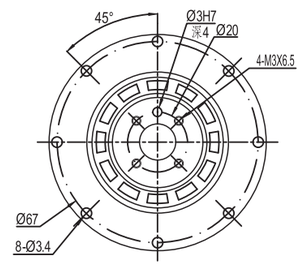
JD-042-L2

输入端/ INPUT





输出端/OUTPUT



输出轴径/Output Diameter

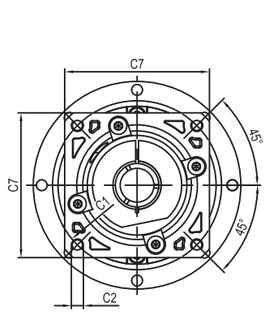
尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8
JD-047-L1	Ø46	4-M4x10	Ø8	26	Ø30	4	42	67.5
	Ø45	4-M3x8						
JD-047-L2	Ø46	4-M4x10	Ø8	26	Ø30	4	42	92
	Ø45	4-M3x8						

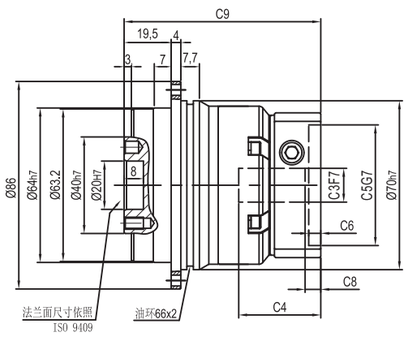
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7 are motor(metric standard) specific dimenisions, which could be customised.

外形尺寸图表 / OUTLINE DIMENSION SHEET

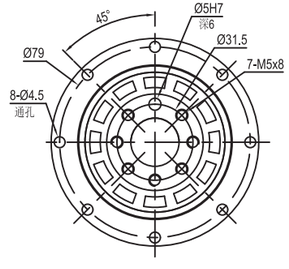
JD-064-L1

输入端/ INPUT



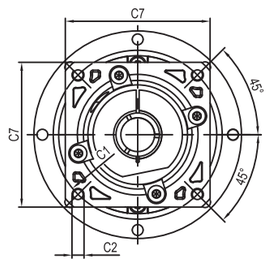


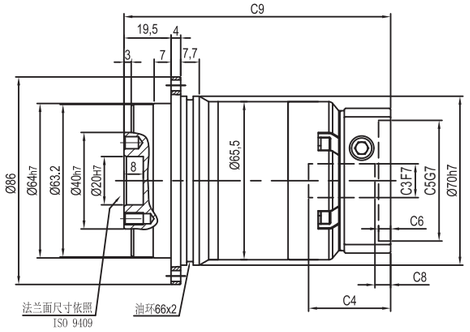
输出端/OUTPUT



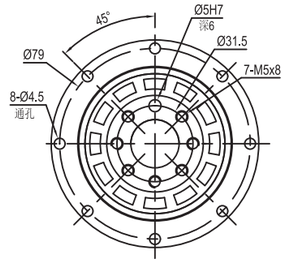
JD-064-L2

输入端/ INPUT





输出端/OUTPUT



输出轴径/Output Diameter

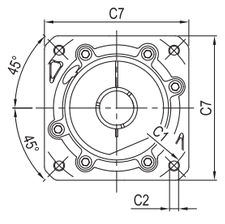
尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9
JD-064-L1	Ø66.7	4-M4x10	Ø8	34	Ø38.1	5	60	5.5	81.5
JD-064-L2									110.5
JD-064-L1	Ø70	4-M4x10,4-M5x12	Ø11,Ø14	34	Ø50	5	60	5.5	81.5
JD-064-L2									110.5
JD-064M1-L1	Ø90	4-M5x12,4-M6x14	Ø19	42	Ø70	6.5	80	12	88
JD-064M1-L2									117

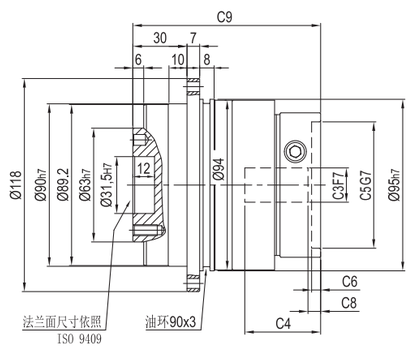
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7are motor(metric standard) specific dimenisions, which could be customized.
*M1:极限孔(版本号)
*M1:Limit hole (Version number)

外形尺寸图表 / OUTLINE DIMENSION SHEET

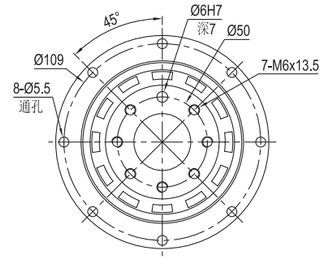
JD-090-L1

输入端/INPUT



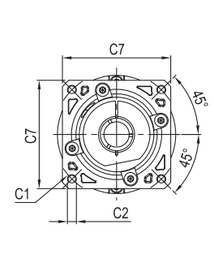


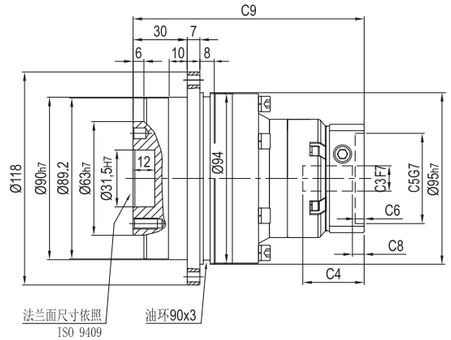
输出端/ OUTPUT



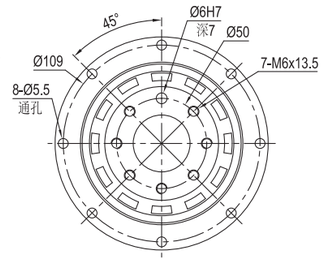
JD-090-L2

输入端/ INPUT





输出端 /OUTPUT



输出轴径/Output Diameter

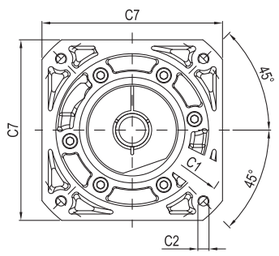
尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9
JD-090-L1	Ø90	4-M5x12 , 4-M6x14	Ø19	42	Ø70	6.5	80	7	104
	Ø100	4-M6x14	Ø16	42	Ø80	6.5	86	6	104
JD-090M1-L1	Ø115	4-M8x20	Ø19,Ø22	56.5	Ø95	8	100	16.5	119.5
	Ø145	4-M8x20	Ø19,Ø22,Ø24	59	Ø110	11	130	19	122
JD-090-L2	Ø66.7	4-M4x10	Ø8	34	Ø38.1	5	60	5.5	128
	Ø70	4-M4x10 , 4-M5x12	Ø11,Ø14	34	Ø50	5	60	5.5	128
JD-090M1-L2	Ø90	4-M5x12 , 4-M6x14	Ø19	42	Ø70	6.5	80	12	134.5
	Ø100	4-M6x14	Ø16	42	Ø80	6.5	86	11	134.5

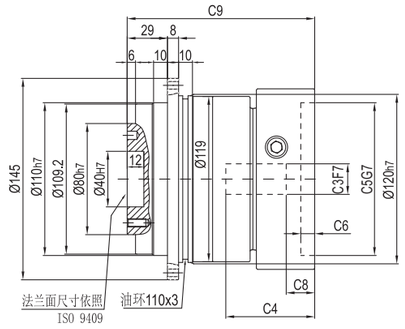
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7are motor(metric standard) specific dimenisions, which could be customized.
*M1:极限孔(版本号)
*M1:Limit hole (Version number)

外形尺寸图表 / OUTLINE DIMENSION SHEET

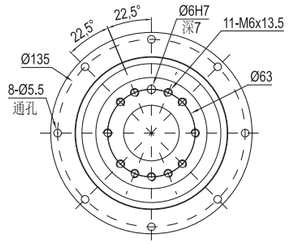
JD-110-L1

输入端/ INPUT



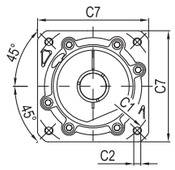


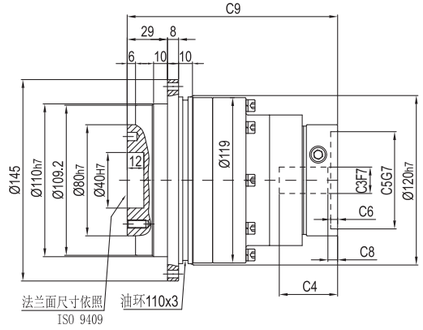
输出端/OUTPUT



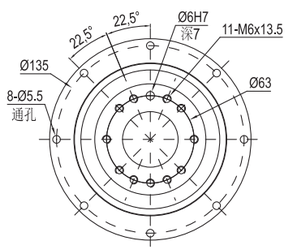
JD-110-L2

输入端/ INPUT





输出端/OUTPUT



输出轴径/Output Diameter

尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9
JD-110-L1	Ø145	4-M8x20	Ø19,Ø22,Ø24	64	Ø110	10	130	19.5	135
JD-110M1-L1	Ø200	4-M12x28	Ø35	81	Ø114.3	10	180	28	152.5
JD-110-L2	Ø90	4-M5x12 , 4-M6x14	Ø19	42	Ø70	6.5	80	7	151.5
	Ø100	4-M6x14	Ø16	42	Ø80	6.5	86	6	151.5
JD-110M1-L2	Ø115	4-M8x20	Ø19,Ø22	56.5	Ø95	8	100	16.5	167
	Ø145	4-M8x20	Ø19,Ø22,Ø24	59	Ø110	11	130	19	169.5

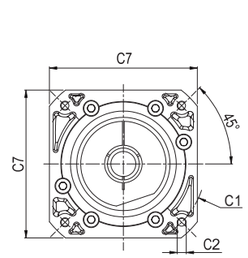
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7 are motor(metric standard) specific dimenisions, which could be customized.
*M1:极限孔(版本号)
*M1:Limit hole (Version number)

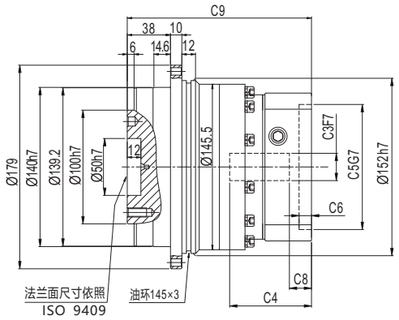
JunsRise®

外形尺寸图表 / OUTLINE DIMENSION SHEET

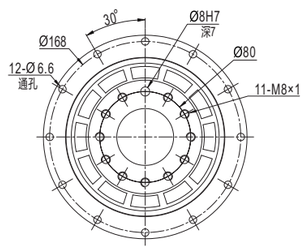
JD-140-L1

输入端 / INPUT



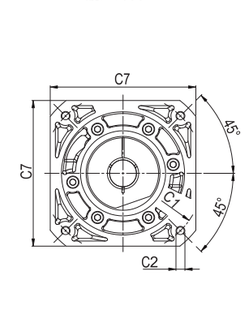


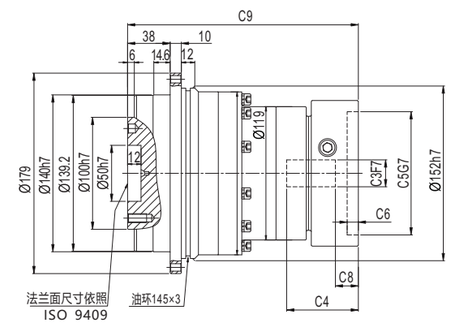
输出端 / OUTPUT



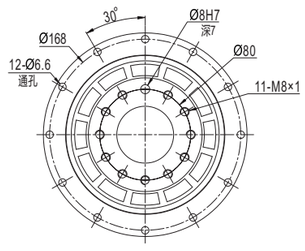
JD-140-L2

输入端 / INPUT





输出端 / OUTPUT



输出轴径/Output Diameter

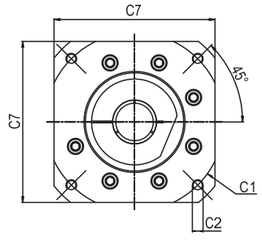
尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9
JD-140-L1	Ø145	4-M8x20	Ø22,Ø24	72	Ø110	11	130	19.5	162
	Ø200	4-M12x28	Ø35	81.5	Ø114.3	8	180	25	172
JD-140-L2	Ø145	4-M8x20	Ø19,Ø22,Ø24	64	Ø110	10	130	19.5	206
JD-140M1-L2	Ø200	4-M12x28	Ø35	81	Ø114.3	10	180	28	223.5

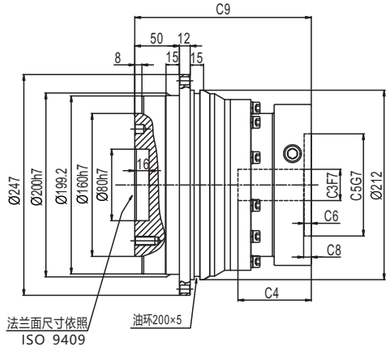
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7 are motor(metric standard) specific dimenisions, which could be customized.
*M1:极限孔(版本号)
*M1:Limit hole (Version number)

外形尺寸图表 / OUTLINE DIMENSION SHEET

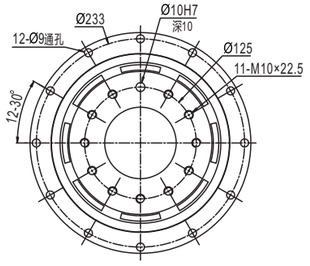
JD-200-L1

输入端 / INPUT



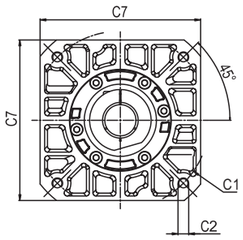


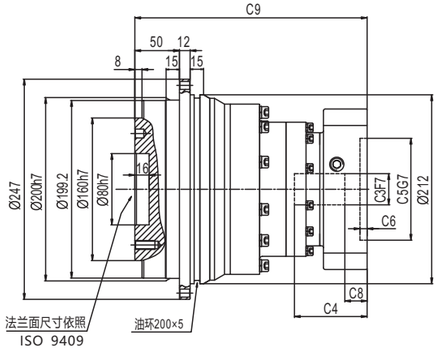
输出端 / OUTPUT



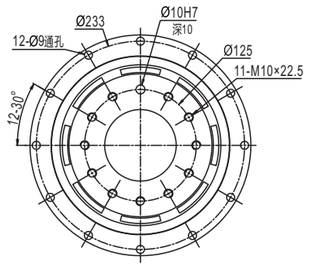
JD-200-L2

输入端 / INPUT





输出端 / OUTPUT



输出轴径/Output Diameter

尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9
JD-200-L1	Ø200	4-M12x28	Ø35	82	Ø114.3	8	180	8.5	197.5
	Ø200	4-M12x28	Ø42	117.5	Ø114.3	8	180	45.5	233
	Ø215	4-M12x28	Ø38	87	Ø180	8	192	13.5	202.5
	Ø235	4-M12x28	Ø42	117.5	Ø200	10	220	45.5	233
JD-200-L2	Ø145	4-M8x20	Ø22,Ø24	72	Ø110	11	130	19.5	250.5
	Ø200	4-M12x28	Ø35	81.5	Ø114.3	8	180	25	260.5

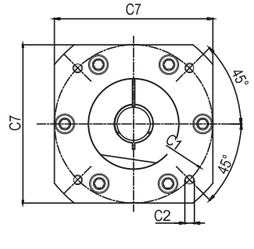
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7 are motor(metric standard) specific dimenisions, which could be customized.

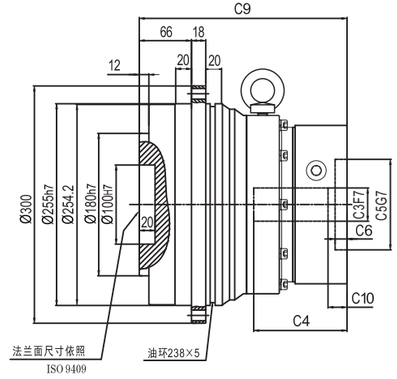
JunsRise®

外形尺寸图表 / OUTLINE DIMENSION SHEET

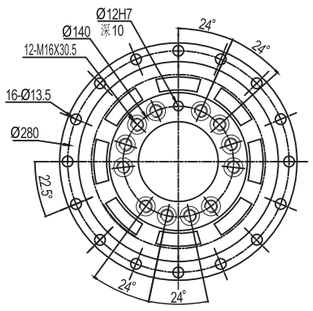
JD-255-L1

输入端/INPUT



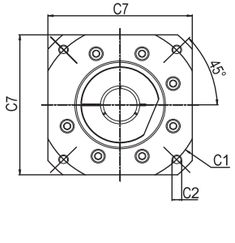


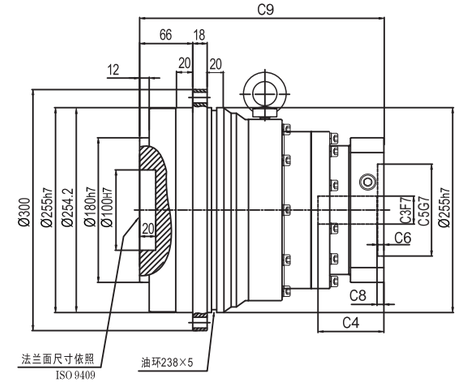
输出端/ OUTPUT



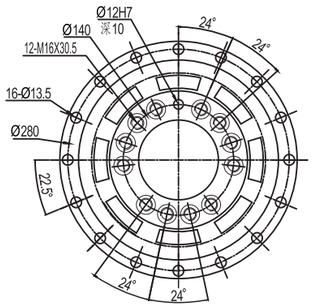
JD-255-L2

输入端/ INPUT





输出端 /OUTPUT



输出轴径/Output Diameter

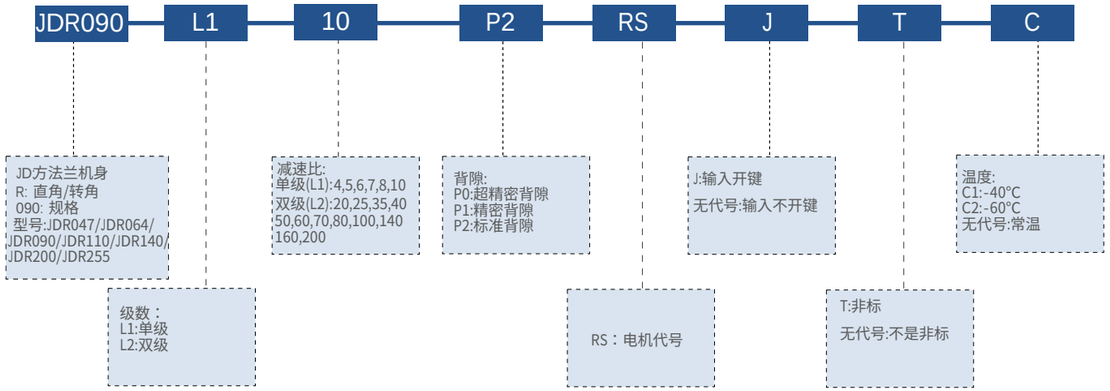
尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9
JD-255-L1	Ø200	4-M12x28	Ø35,Ø42	118	Ø114.3	15	200	24	262.5
	Ø215	4-M12x30	Ø38	108	Ø180	8	200	11.5	252.5
	Ø235	4-M12x30	Ø42,Ø55	118	Ø200	10	220	24	262.5
JD-255-L2	Ø200	4-M12x28	Ø35	82	Ø114.3	8	180	8.5	304
	Ø200	4-M12x28	Ø42	117.5	Ø114.3	8	180	45.5	339.5
	Ø215	4-M12x28	Ø38	87	Ø180	8	192	13.5	309
	Ø235	4-M12x28	Ø42	117.5	Ø200	10	220	45.5	339.5

*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7 are motor(metric standard) specific dimenisions, which could be customized.

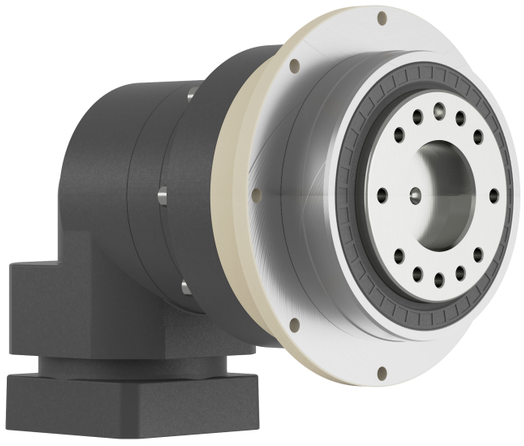
JDR

JunsRise®

斜齿行星减速机型号订购说明/Helical-tooth planetary gearbox model illuminate



选型范例：JDR090-L1-10-P2-RS-J-T-C



减速机性能资料/ GEAR BOX PERFORMANCE INFORMATION

规 格		级 数	减速比[1]	JDR047	JDR064	JDR090	JDR110	JDR140	JDR200	JDR255
额定输出力矩T_{2N}	Nm	1	4	19	48	130	270	560	1,100	1,700
			5	22	60	160	330	650	1,200	2,000
			6	-	55	150	310	600	1,100	1,900
			7	19	50	140	300	550	1,100	1,800
			8	17	48	130	270	560	1,100	1,700
			10	14	60	160	330	650	1,200	2,000
			14	-	50	140	300	550	1,100	1,800
			20	-	40	100	230	450	900	1,500
		2	20	19	48	130	270	560	1,100	1,700
			25	22	60	160	330	650	1,200	2,000
			35	22	60	160	330	650	1,200	2,000
			40	22	48	130	270	560	1,100	1,700
			50	22	60	160	330	650	1,200	2,000
			60	-	55	150	310	600	1,100	1,900
			70	22	60	160	330	650	1,200	2,000
			80	-	48	130	270	560	1,100	1,700
			100	22	60	160	330	650	1,200	2,000
			120	-	-	150	310	600	1,100	1,900
			140	-	-	140	300	550	1,100	1,800
			160	-	-	120	260	500	1,000	1,600
			200	-	-	100	230	450	900	1,500
最大输出力矩T_{2B}	Nm	1,2	4~200	3倍额定输出力矩						
额定输入转速n_1	rpm	1,2	4~200	3,000	3,000	3,000	3,000	3,000	3,000	2,000
最大输入转速n_{1B}	rpm	1,2	4~200	6,000	6,000	6,000	6,000	6,000	6,000	4,000
超精密背隙 P0	arcmin	1	4~20	-	-	≤2	≤2	≤2	≤2	≤2
		2	20~200	-	-	≤4	≤4	≤4	≤4	≤4
精密背隙 P1	arcmin	1	4~20	≤4	≤4	≤4	≤4	≤4	≤4	≤4
		2	20~200	≤7	≤7	≤7	≤7	≤7	≤7	≤7
标准背隙 P2	arcmin	1	4~20	≤6	≤6	≤6	≤6	≤6	≤6	≤6
		2	20~200	≤9	≤9	≤9	≤9	≤9	≤9	≤9
扭转刚性		1,2	4~200	7	13	31	82	151	440	1,006
最大弯曲力矩M_{2KB}[2]	Nm	1,2	4~200	42.5	125	235	430	1,300	3,064	5,900
容许径向力F_{2B}[2]	N	1,2	4~200	1,080	2,110	2,310	4,800	6,200	5,450	10,600
使用寿命	hr	1,2	4~200	20,000＊						
效率 η	%	1	4~20	≥95%						
		2	20~200	≥92%						
重量	kg	1	4~20	1.1	2.1	5.9	10.5	21.9	50.9	85.4
		2	20~200	1.4	1.9	4.5	9.8	20.1	45.4	85.9
使用温度	℃	1,2	4~200	-10℃~+90℃						
润滑		1,2	4~200	合成润滑油脂						
防护等级		1,2	4~200	IP65						
安装方向		1,2	4~200	任意方向						
噪音值（n_1=3000rpm）	dB	1,2	4~200	≤61	≤63	≤65	≤68	≤70	≤72	≤74

减速机转动惯量

规 格		级 数	减速比[1]	JDR047	JDR064	JDR090	JDR110	JDR140	JDR200	JDR255
转动惯量J_1	kg·cm²	1	4~7	0.09	0.35	2.25	6.84	23.4	68.9	135.4
			8~10	0.09	0.07	1.87	6.25	21.8	65.6	119.8
			14~20	–	0.07	1.87	6.25	21.8	65.6	119.8
		2	20~40	0.09	0.09	0.35	2.25	6.84	23.4	68.9
			50	–	0.09	0.31	1.87	6.25	21. 8	65.6
			60	–	0.09	0.35	2.25	6.84	–	–
			70~100	–	0.09	0.31	1.87	6.25	21. 8	65.6
			120~200	–	–	0.31	1.87	6.25	21. 8	65.6

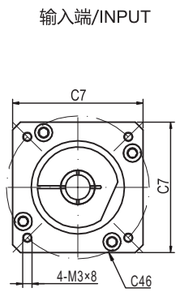
1.减速比（$i=N_{in}/N_{out}$）
＊ 连续运转降低使用寿命二分之一。

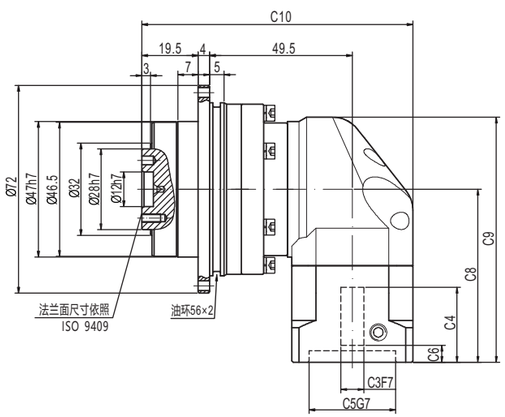
2.输出转数 100rpm 时，作用于输出轴中心位置。

外形尺寸图表 / OUTLINE DIMENSION SHEET

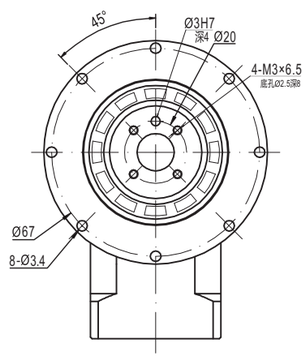
JDR-047-L1

输入端/INPUT



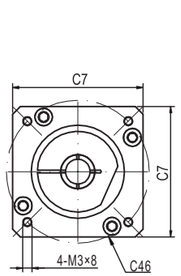


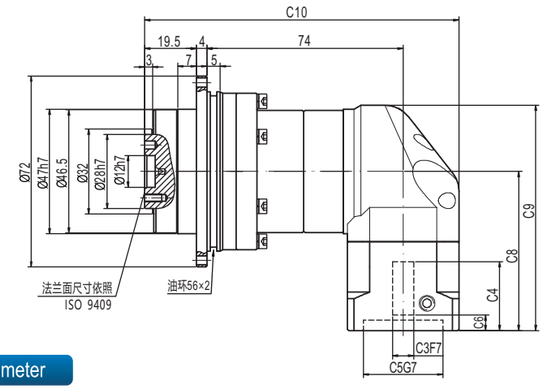
输出端/ OUTPUT

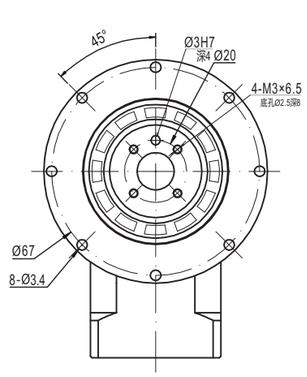


JDR-047-L2

输入端/ INPUT







输出端 /OUTPUT

输出轴径/Output Diameter

尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
JDR-047-L1	Ø46	4-M4x10	Ø8	26	Ø30	4	42	60	96	94
	Ø45	4-M3x8								
JDR-047-L2	Ø46	4-M4x10	Ø8	26	Ø30	4	42	60	96	118. 5
	Ø45	4-M3x8								

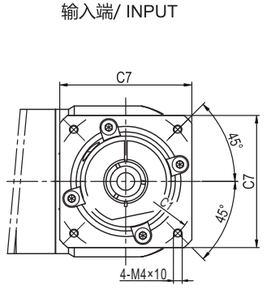
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7are motor(metric standard) specific dimenisions, which could be customized.

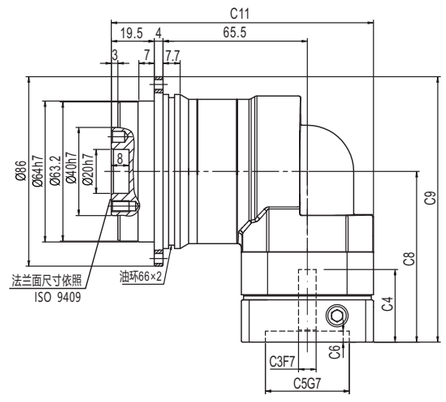
JunsRise®

外形尺寸图表 / OUTLINE DIMENSION SHEET

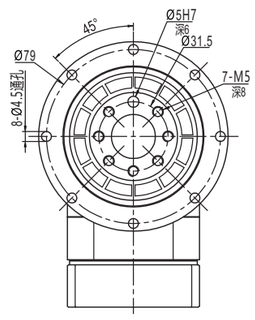
JDR-064-L1

输入端/ INPUT



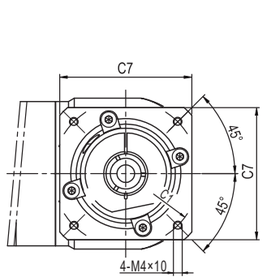


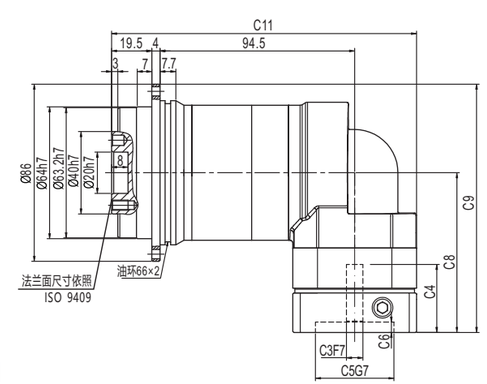
输出端/OUTPUT

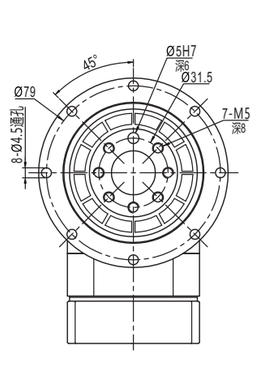


JDR-064-L2

输入端/ INPUT







输出端/OUTPUT

输出轴径/Output Diameter

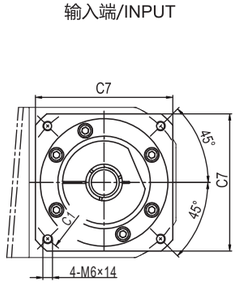
尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11
JDR-064-L1	Ø66.7	4-M4x10	Ø8	33	Ø38.1	5	60	77.5	120.5	5.5	119
JDR-064-L2											148
JDR-064-L1	Ø70	4-M4x10,4-M5x12	Ø11,Ø14	33	Ø50	5	60	77.5	120.5	5.5	119
JDR-064-L2											148
JDR-064M1-L1	Ø90	4-M5x12,4-M6x14	Ø19	42.5	Ø70	6.5	80	87	130	12	129
JDR-064M1-L2											158

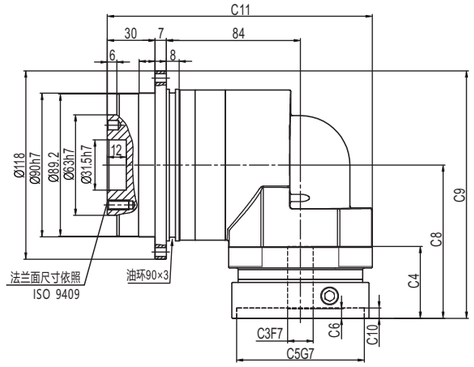
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7are motor(metric standard) specific dimenisions, which could be customized.
*M1:极限孔(版本号)
*M1:Limit hole (Version number)

外形尺寸图表 / OUTLINE DIMENSION SHEET

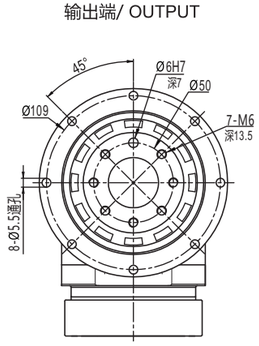
JDR-090-L1

输入端/INPUT



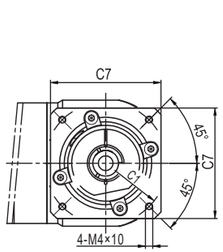


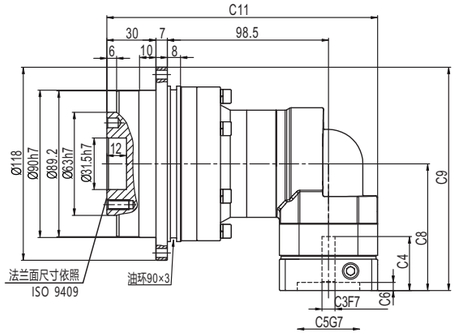
输出端/ OUTPUT



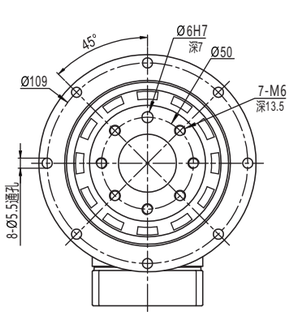
JDR-090-L2

输入端/ INPUT





输出端 /OUTPUT



输出轴径/Output Diameter

尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11
JDR-090-L1	Ø90	4-M5x12,4-M6x14	Ø19	45	Ø70	6.5	80	96	155	7	166
	Ø100	4-M6x14	Ø16	45	Ø80	6.5	86	96	155	6	166
JDR-090M1-L1	Ø115	4-M8x20	Ø19,Ø22	56.5	Ø95	8	100	117.5	176.5	16.5	171
	Ø145	4-M8x20	Ø19,Ø22,Ø24	59	Ø110	11	130	120	179	19	186
JDR-090-L2	Ø66.7	4-M4x10	Ø8	33	Ø38.1	5	60	77.5	136.5	5.5	165.5
	Ø70	4-M4x10,4-M5x12	Ø11,Ø14	33	Ø50	5	60	77.5	136.5	5.5	165.5
JDR-090M1-L2	Ø90	4-M5x12,4-M6x14	Ø19	42.5	Ø70	6.5	80	87	146	12	175.5
	Ø100	4-M6x14	Ø16	42.5	Ø80	6.5	86	87	146	11	175.5

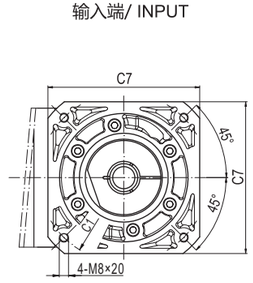
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7are motor(metric standard) specific dimenisions, which could be customized.
*M1:极限孔(版本号)
*M1:Limit hole (Version number)

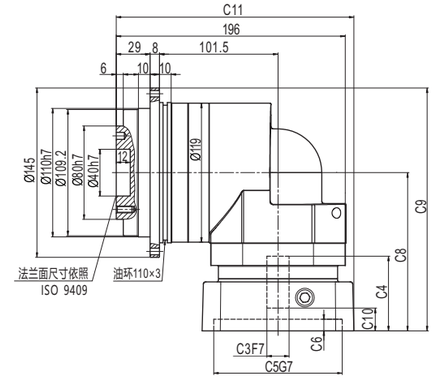
JunsRise®

外形尺寸图表 / OUTLINE DIMENSION SHEET

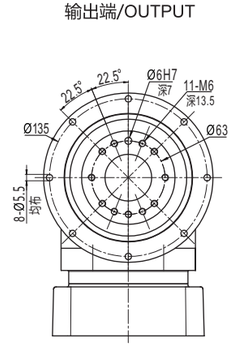
JDR-110-L1

输入端/ INPUT



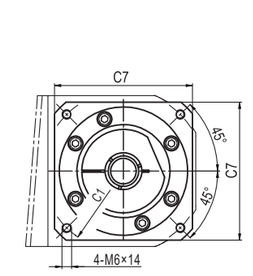


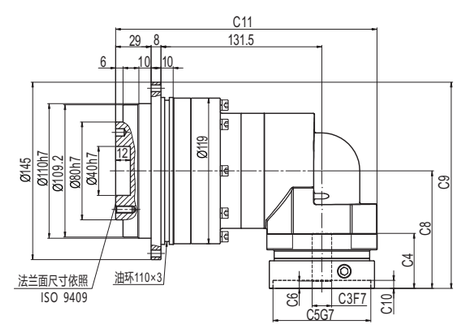
输出端/OUTPUT



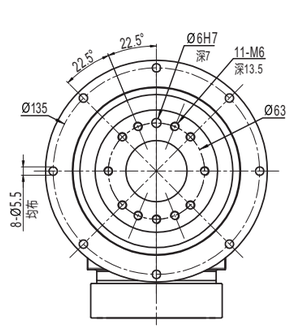
JDR-110-L2

输入端/ INPUT





输出端/OUTPUT



输出轴径/Output Diameter

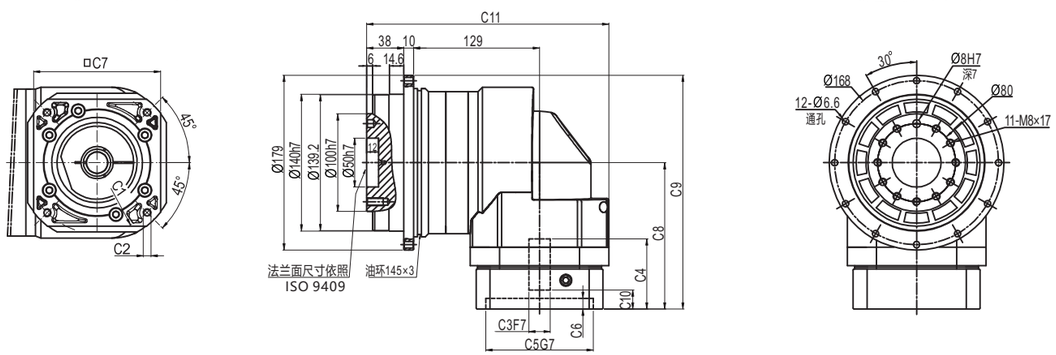
尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11
JDR-110-L1	Ø145	4-M8x20	Ø19,Ø22,Ø24	64	Ø110	10	130	135.5	208	19.5	203.5
JDR-110M1-L1	Ø200	4-M12x28	Ø35	81	Ø114.3	10	180	152.5	225	28	228.5
JDR-110-L2	Ø90	4-M5x12,4-M6x14	Ø19	45	Ø70	6.5	80	96	168.5	7	213.5
	Ø100	4-M6x14	Ø16	45	Ø80	6.5	86	96	168.5	6	213.5
JDR-110M1-L2	Ø115	4-M8x20	Ø19,Ø22	56.5	Ø95	8	100	117.5	190	16.5	218.5
	Ø145	4-M8x20	Ø19,Ø22,Ø24	59	Ø110	11	130	120	192.5	19	233.5

*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7are motor(metric standard) specific dimenisions, which could be customized.
*M1:极限孔(版本号)
*M1:Limit hole (Version number)

外形尺寸图表 / OUTLINE DIMENSION SHEET

JDR-140-L1

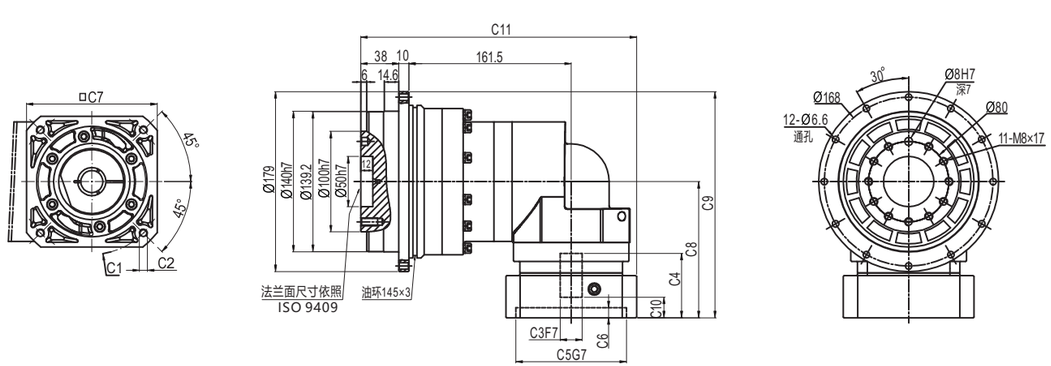
输入端 / INPUT



输出端 / OUTPUT

JDR-140-L2

输入端 / INPUT



输出端 / OUTPUT

输出轴径/Output Diameter

尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11
JDR-140-L1	Ø145	4-M8x20	Ø22,Ø24	72	Ø110	11	130	150	239.5	19.5	248
	Ø200	4-M12x28	Ø35	82	Ø114.3	8	180	160	249.5	25	267
JDR-140-L2	Ø145	4-M8x20	Ø19,Ø22,Ø24	64	Ø110	10	130	135.5	225	19.5	274.5
JDR-140M1-L2	Ø200	4-M12x28	Ø35	81	Ø114.3	10	180	152.5	242	28	299.5

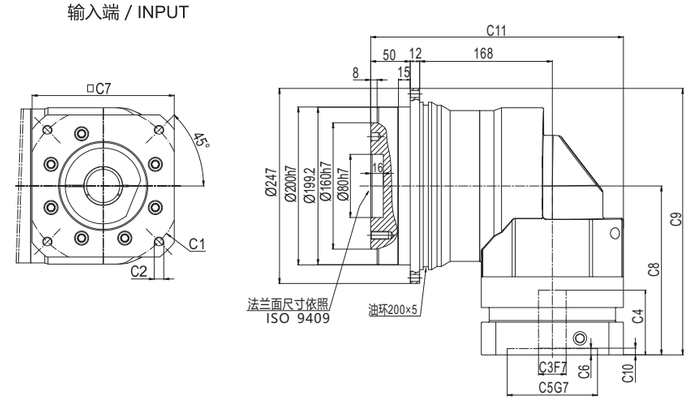
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7are motor(metric standard) specific dimenisions, which could be customized.
*M1:极限孔(版本号)
*M1:Limit hole (Version number)

JunsRise®

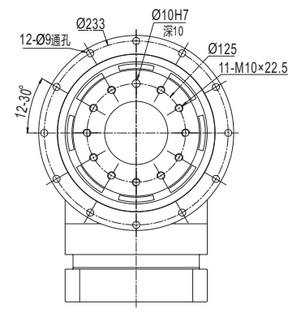
外形尺寸图表 / OUTLINE DIMENSION SHEET

JDR-200-L1

输入端 / INPUT

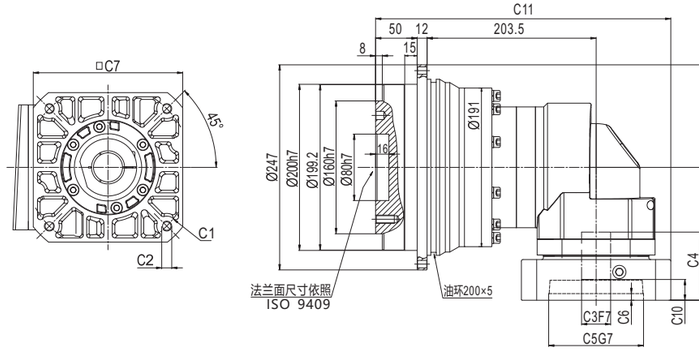


输出端 / OUTPUT

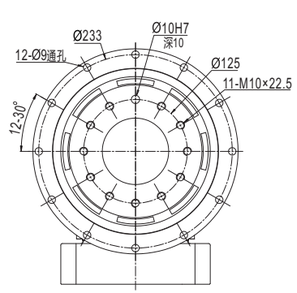


JDR-200-L2

输入端 / INPUT



输出端 / OUTPUT



输出轴径/Output Diameter

尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11
JDR-200-L1	Ø200	4-M12x28	Ø35	82	Ø114.3	8	180	214	337.5	8.5	320
	Ø200	4-M12x28	Ø42	117.5	Ø114.3	8	180	249.5	373	45.5	320
	Ø215	4-M12x28	Ø38	87	Ø180	8	192	219	342.5	13.5	326
	Ø235	4-M12x28	Ø42	117.5	Ø200	10	220	249.5	373	45.5	320
JDR-200-L2	Ø145	4-M8x20	Ø22,Ø24	72	Ø110	11	130	150	247.5	19.5	336.5
	Ø200	4-M12x28	Ø35	82	Ø114.3	8	180	160	283.5	25	355.5

*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7are motor(metric standard) specific dimenisions, which could be customized.

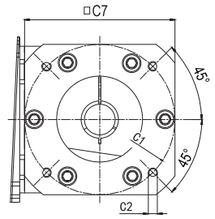
JF/JL

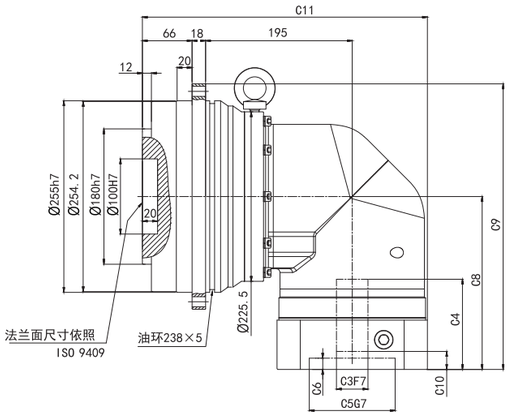
JunsRise®

外形尺寸图表 / OUTLINE DIMENSION SHEET

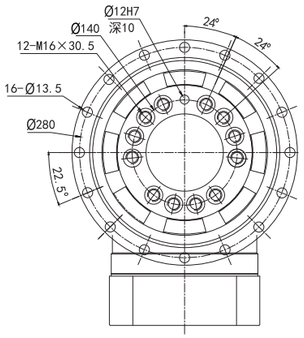
JDR-255-L1

输入端/INPUT



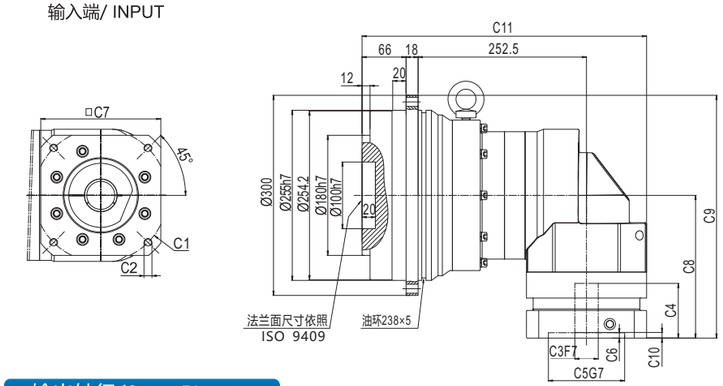


输出端/ OUTPUT

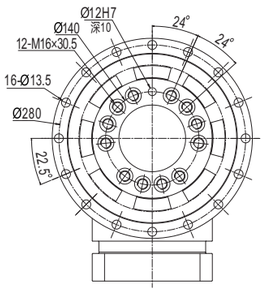


JDR-255-L2

输入端/ INPUT



输出端 /OUTPUT

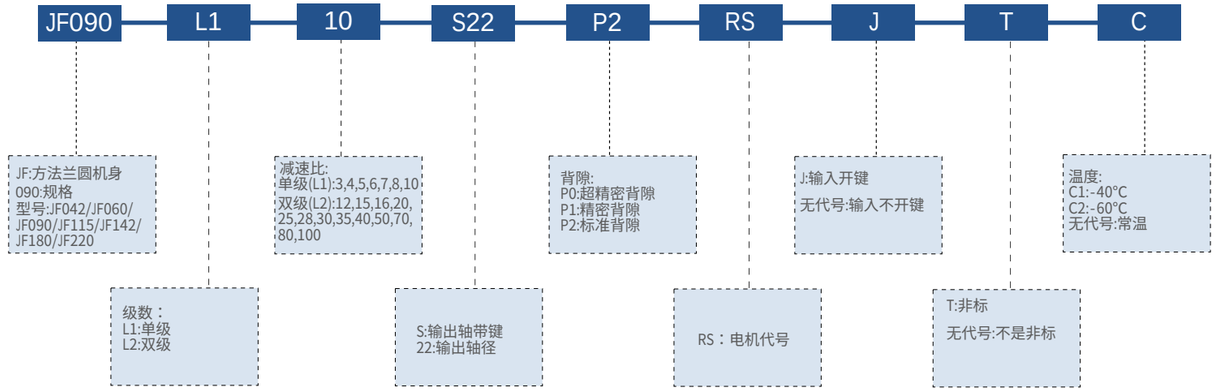


输出轴径/Output Diameter

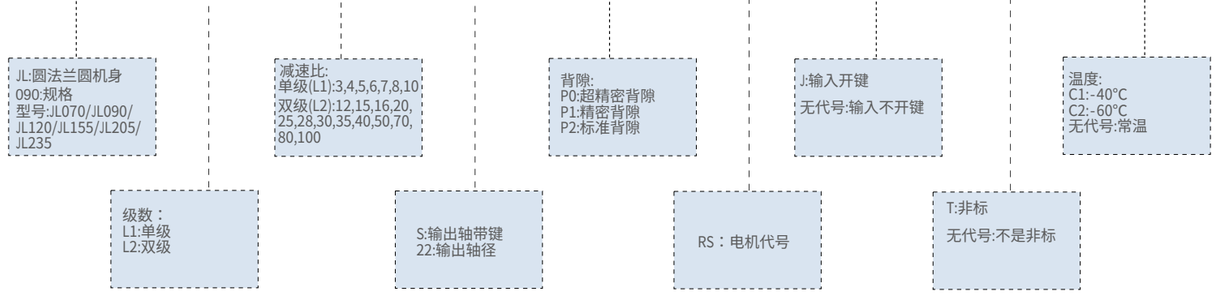
尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11
JDR-255-L1	Ø200	4-M12x30	Ø35,Ø42	120	Ø114.3	15	200	230	380	22.5	379
	Ø215	4-M12x30	Ø38	110	Ø180	8	200	220	370	12.5	379
	Ø235	4-M12x30	Ø42,Ø55	120	Ø200	10	220	230	380	24	389
JDR-255-L2	Ø200	4-M12x28	Ø35	82	Ø114.3	8	180	214	364	8.5	426.5
	Ø200	4-M12x28	Ø42	117.5	Ø114.3	8	180	249.5	399.5	45.5	426.5
	Ø215	4-M12x28	Ø38	87	Ø180	8	192	219	369	13.5	432.5
	Ø235	4-M12x28	Ø42	117.5	Ø200	10	220	249.5	399.5	45.5	446.5

*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7 are motor(metric standard) specific dimenisions, which could be customized.

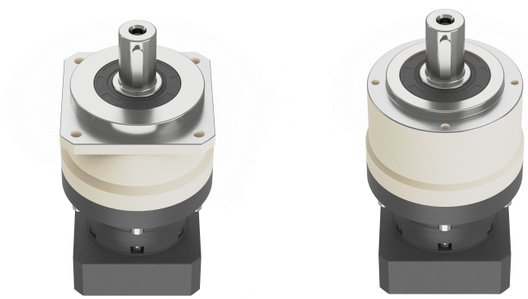
斜齿行星减速机型号订购说明/Helical-tooth planetary gearbox model illuminate



选型范例：JF090-L1-10-S22-P2-RS-J-T-C



选型范例：JL090-L1-10-S22-P2-RS-J-T-C



减速机性能资料 / GEAR BOX PERFORMANCE INFORMATION

规 格		级 数	减速比[1]	JF042	JF060 JF070	JF090 JL090	JF115 JL120	JF142 JL155	JF180 JL205	JF220 JL235
额定输出力矩T_{2N}	Nm	1	3	20	55	130	208	342	588	1,140
			4	19	50	140	290	542	1,050	1,700
			5	22	60	160	330	650	1,200	2,000
			6	20	55	150	310	600	1,100	1,900
			7	19	50	140	300	550	1,100	1,800
			8	17	45	120	260	500	1,000	1,600
			10	14	40	100	230	450	900	1,500
		2	12	20	55	130	208	342	588	1,140
			15	20	55	130	208	342	588	1,140
			20	19	50	140	290	542	1,050	1,700
			25	22	60	160	330	650	1,200	2,000
			30	22	50	130	208	342	588	2,000
			35	22	60	160	330	650	1,200	2,000
			40	22	50	140	290	542	1,050	1,700
			50	22	60	160	330	650	1,200	2,000
			60	20	55	150	310	600	1,100	1,90
			70	19	50	140	300	550	1,100	1,800
			80	17	45	120	260	500	1,000	1,600
			100	14	40	100	230	450	900	1,500
最大输出力矩T_{2B}	Nm	1,2	3~100	3倍额定输出力矩						
额定输入转速n_1	rpm	1,2	3~100	3,000	3,000	3,000	3,000	3,000	3,000	2,000
最大输入转速n_{1B}	rpm	1,2	3~100	6,000	6,000	6,000	6,000	6,000	6,000	4,000
背隙	arcmin	1	3~10	≤5	≤5	≤5	≤5	≤5	≤5	≤5
		2	12~100	≤7	≤7	≤7	≤7	≤7	≤7	≤7
扭转刚性	Nm/arcmin	1,2	3~100	3	7	14	25	50	145	225
容许径向力F_{2rB}[2]	N	1,2	3~100	780	1,530	3,250	6,700	9,400	14,500	50,000
容许轴向力F_{2a1B}[2]	N	1,2	3~100	350	630	1,300	3,000	4,000	6,200	35,000
容许轴向力F_{2a2B}[2]	N	1,2	3~100	390	765	1,625	3,350	4,700	7,250	25,000
使用寿命	hr	1,2	3~100	20,000*						
效率 η	%	1	3~10	≥97%						
		2	12~100	≥94%						
重量	kg	1	3~10	0. 5	1.3	3.7	7.8	14.5	29	48
		2	12~100	0. 8	1.9	4.1	9	17.5	33	60
使用温度	℃	1,2	3~100	-10℃~+90℃						
润滑		1,2	3~100	合成润滑油脂						
防护等级		1,2	3~100	IP65						
安装方向		1,2	3~100	任意方向						
噪音值（n_1=3000rpm）	dB	1,2	3~100	≤56	≤58	≤60	≤63	≤65	≤67	≤70

减速机转动惯量

规 格		级 数	减速比[1]	JF042	JF060 JF070	JF090 JL090	JF115 JL120	JF142 JL155	JF180 JL205	JF220 JL235
转动惯量J_1	kg·cm²	1	3	0.03	0.16	0.61	3. 25	9. 21	28.98	69.61
			4	0.03	0.14	0.48	2. 74	7. 54	23.67	54.37
			5	0.03	0.13	0.47	2. 71	7. 42	23.29	53.27
			6	0.03	0.13	0.45	2. 65	7. 25	22.75	51.72
			7	0.03	0.13	0.45	2. 62	7. 14	22.48	50.97
			8	0.03	0.13	0.44	2. 58	7. 07	22.59	50.84
			10	0.03	0.13	0.44	2. 57	7. 03	22.51	50.56
		2	12	0.03	0.14	0.13	0. 47	2. 71	7.42	23.29
			15	0.03	0.13	0.13	0. 47	2. 71	7.42	23.29
			20	0.03	0.13	0.13	0. 47	2. 71	7.42	23.29
			25	0.03	0.13	0.13	0. 47	2. 71	7.42	23.29
			30	0.03	0.13	0.13	0. 47	2. 71	7.42	23.29
			35	0.03	0.13	0.13	0. 47	2. 71	7.42	23.29
			40	0.03	0.13	0.13	0. 47	2. 71	7.42	23.29
			50	0.03	0.13	0.13	0.44	2. 57	7.03	22.51
			60	0.03	0.13	0.13	0.44	2. 57	7.03	22.51
			70	0.03	0.13	0.13	0.44	2. 57	7.03	22.51
			80	0.03	0.13	0.13	0.44	2. 57	7.03	22.51
			100	0.03	0.13	0.13	0. 44	2. 57	7.03	22.51

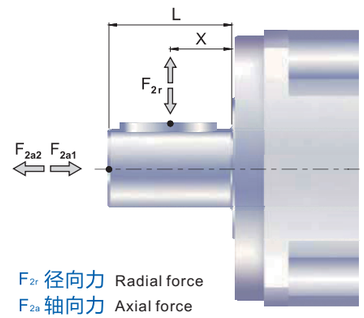
1.减速比（$i=N_{in}/N_{out}$）
* 连续运转降低使用寿命二分之一。

2.输出转数 **100rpm** 时，作用于输出轴中心位置。

JunsRise®

减速机输出轴之容许径向力及轴向力

ALLOWABLE RADIAL AND AXIAL FORCES ONTHE OUTPUT SHAFT OF THE GEAR REDUCER



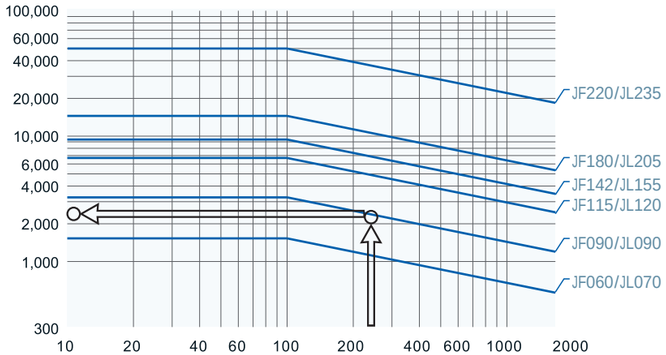
F_{2r} 径向力 Radial force
F_{2a} 轴向力 Axial force

减速机输出轴所能承受之最大径向力及轴向力。端视内部支撑轴承之设计，减速机采用大尺寸的轴承及较大跨距的设计，其能承受更大的径向及轴向负荷。

The maximum radial and axial forces that the output shaft of the gearbox canwithstand. Looking at the design of internal support bearings, the reduceradopts large-sized bearings and a design with a larger span, which canwithstand greater radial and axial loads.

容许径向力F_{2rB}【N】施力于轴中心位置

Permissible radial force F_{2rB}【N】apply force to the center of the shaft



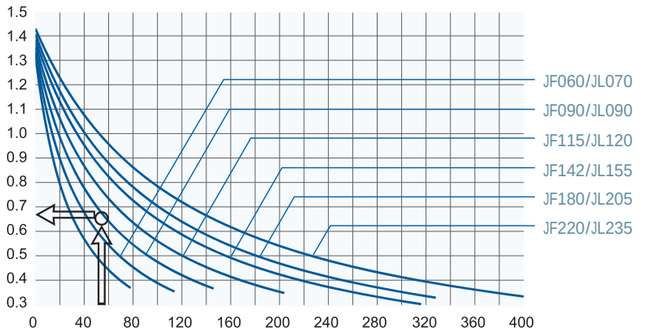
输出轴转速 n_2 [rpm]
Output shaft speed

当径向力F_{2r}施力于轴中心位置即X=1/2xL时，不同规格之减速机在不同输出转速运用下使用寿命为20,000hr*时，所能承受之容许径向力F_{2rB}，请参照左图，而能承受之容许轴向力F_{2aB}，为

$F_{2a1B}=0.2xF_{2rB}$
$F_{2a2B}=0.1xF_{2rB}$

位置符合系数k_b

Positional load coefficient



径向力施力位置 X [mm]
Radial force application position

当径向力F_{2r}施力不在轴中心位置时，越靠近减速机即X < 1/2xL，所能承受之容许径向力变大，越远离减速机即X > 1/2xL时，所能承受之容许径向力则变小，藉由左图，依减速机规格及径向力施力位置X，查出位置负荷洗漱K_b，在代入下列公式，求出容许径向力：

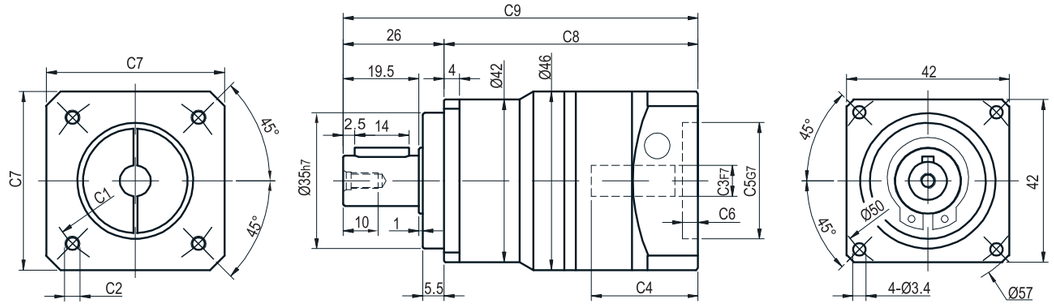
$F'_{2rB}=KbxF_{2rB}$
轴向力:
$F'_{2a1B}=0.2xF'_{2rB}$
$F'_{2a2B}=0.1xF'_{2rB}$

＊ 连续运转降低使用寿命二分之一。The lifetime will be shortened to half under continuous operation.

外形尺寸图表 / OUTLINE DIMENSION SHEET

JF-042-L1

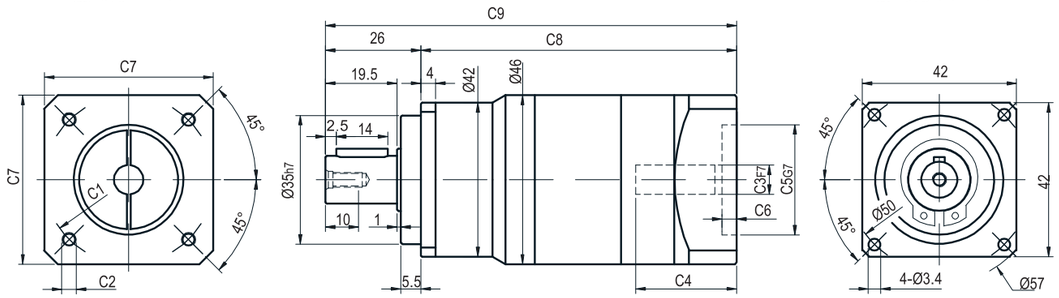
输入端/ INPUT



输出端/OUTPUT

JF-042-L2

输入端/ INPUT



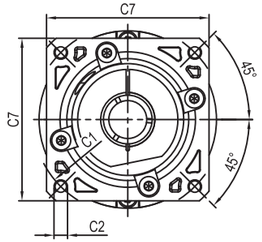
输出端/OUTPUT

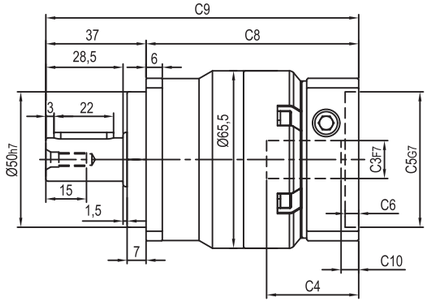
输出轴径/Output Diameter

外形尺寸图表 / OUTLINE DIMENSION SHEET

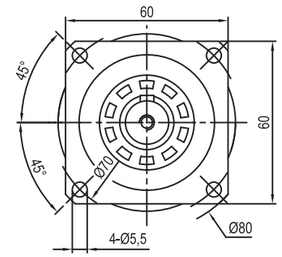
JF-060-L1

输入端/INPUT



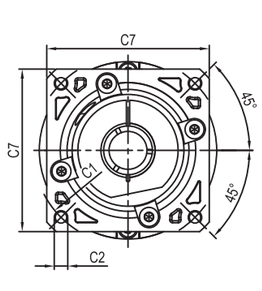


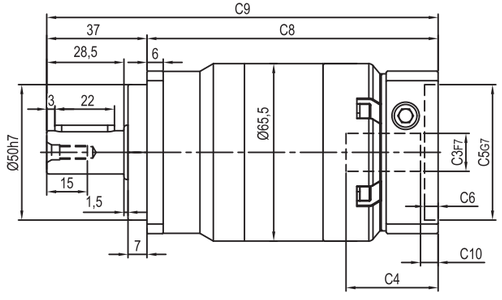
输出端/ OUTPUT



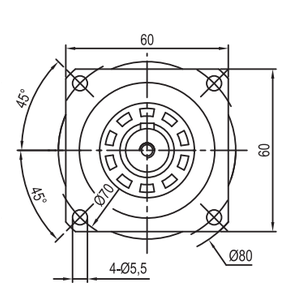
JF-060-L2

输入端/ INPUT

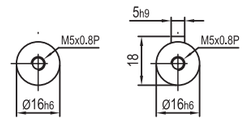




输出端 /OUTPUT



输出轴径/Output Diameter



轴型式 S1 shaft　　轴型式 S2 shaft

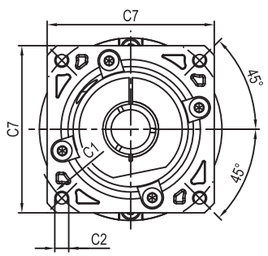
尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
JF-060-L1	Ø66.7	4-M4x10	Ø8	34	Ø38.1	5	60	78.5	115.5	5.5
JF-060-L2								107.5	144.5	5.5
JF-060-L1	Ø70	4-M4x10,4-M5x12	Ø11,Ø14	34	Ø50	5	60	78.5	115.5	5.5
JF-060-L2								107.5	144.5	5.5
JF-060M1-L1	Ø90	4-M5x12,4-M6x14	Ø19	42	Ø70	6.5	80	85	122	12
JF-060M1-L2								114	151	12

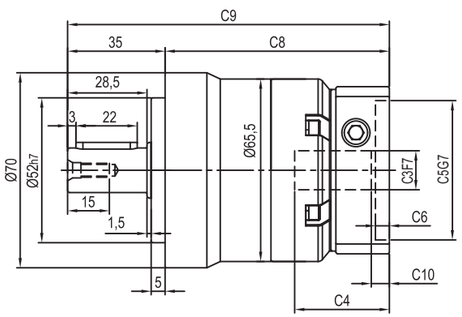
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7are motor(metric standard) specific dimenisions, which could be customized.
*M1:极限孔(版本号)
*M1:Limit hole (Version number)

外形尺寸图表 / OUTLINE DIMENSION SHEET

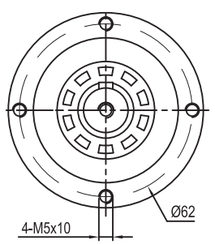
JL-070-L1

输入端 / INPUT



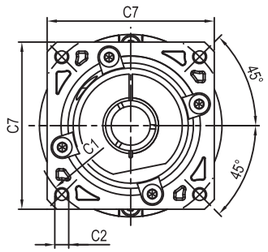


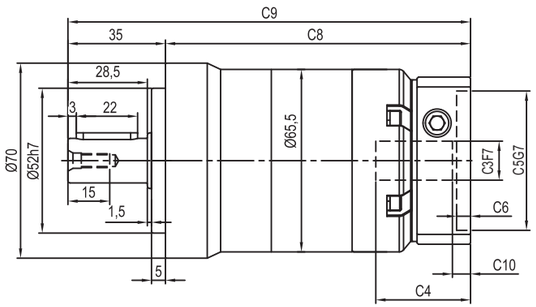
输出端 / OUTPUT



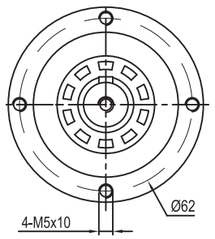
JL-070-L2

输入端 / INPUT

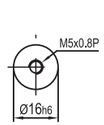




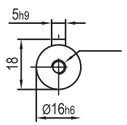
输出端 / OUTPUT



输出轴径/Output Diameter



轴型式 S1
shaft



轴型式 S2
shaft

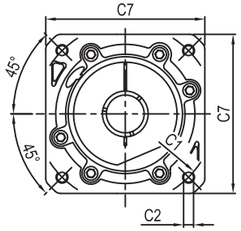
尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
JL-070-L1	Ø66.7	4-M4x10	Ø8	34	Ø38.1	5	60	80.5	115.5	5.5
JL-070-L2								109.5	144.5	5.5
JL-070-L1	Ø70	4-M4x10,4-M5x12	Ø11,Ø14	34	Ø50	5	60	80.5	115.5	5.5
JL-070-L2								109.5	144.5	5.5
JL-070M1-L1	Ø90	4-M5x12,4-M6x14	Ø19	42	Ø70	6.5	80	87	122	12
JL-070M1-L2								116	151	12

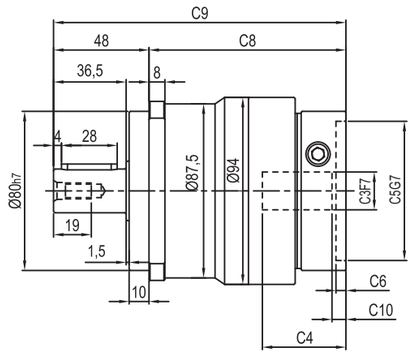
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7 are motor(metric standard) specific dimenisions, which could be customized.
*M1:极限孔(版本号)
*M1:Limit hole (Version number)

外形尺寸图表 / OUTLINE DIMENSION SHEET

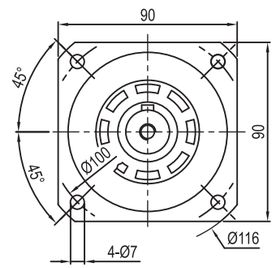
JF-090-L1

输入端/ INPUT



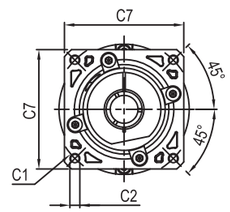


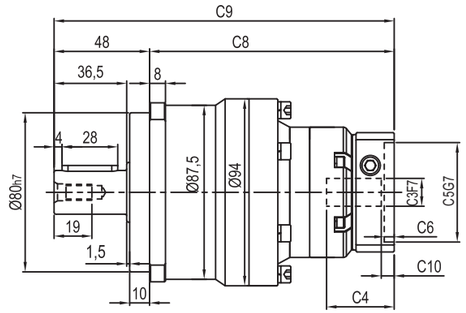
输出端/OUTPUT



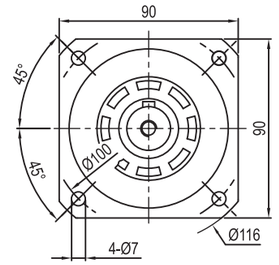
JF-090-L2

输入端/ INPUT

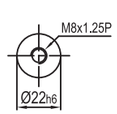




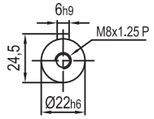
输出端/OUTPUT



输出轴径/Output Diameter



轴型式 S1
shaft



轴型式 S2
shaft

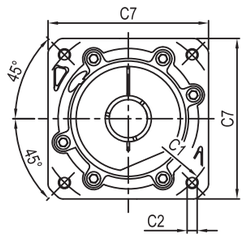
尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
JF-090-L1	Ø90	4-M5x12,4-M6x14	Ø19	42	Ø70	6.5	80	99	147	7
	Ø100	4-M6x14	Ø16	42	Ø80	6.5	86	99	147	6
JF-090M1-L1	Ø115	4-M8x20	Ø19,Ø22	56.5	Ø95	8	100	114.5	162.5	16.5
	Ø145	4-M8x20	Ø19,Ø22,Ø24	59	Ø110	11	130	117	165	19
JF-090-L2	Ø66.7	4-M4x10	Ø8	34	Ø38.1	5	60	123	171	5.5
	Ø70	4-M4x10,4-M5x12	Ø11,Ø14	34	Ø50	5	60	123	171	5.5
JF-090M1-L2	Ø90	4-M5x12,4-M6x14	Ø19	42	Ø70	6.5	80	129.5	177.5	12
	Ø100	4-M6x14	Ø16	42	Ø80	6.5	86	129.5	177.5	11

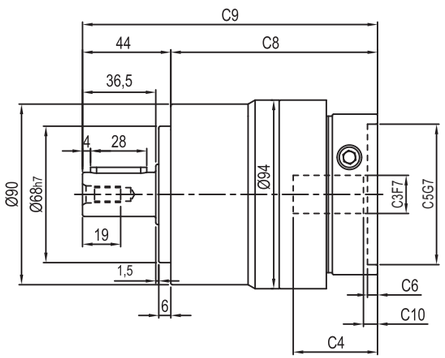
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7 are motor(metric standard) specific dimenisions, which could be customized.
*M1:极限孔(版本号)
*M1:Limit hole (Version number)

外形尺寸图表 / OUTLINE DIMENSION SHEET

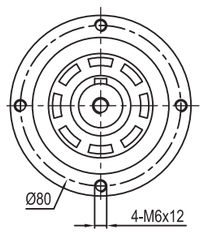
JL-090-L1

输入端 / INPUT



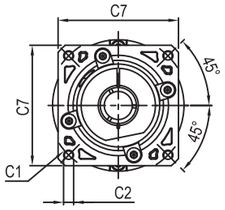


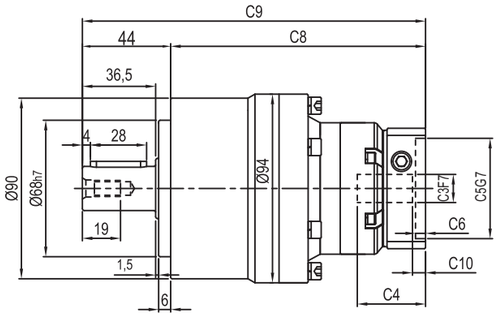
输出端 / OUTPUT



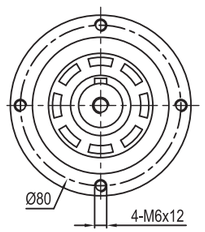
JL-090-L2

输入端 / INPUT

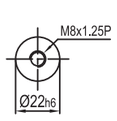




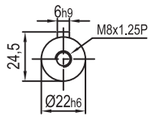
输出端 / OUTPUT



输出轴径/Output Diameter



轴型式 S1
shaft



轴型式 S2
shaft

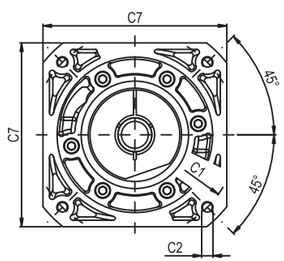
尺寸Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
JL-090-L1	Ø90	4-M5x12,4-M6x14	Ø19	42	Ø70	6.5	80	103	147	7
	Ø100	4-M6x14	Ø16	42	Ø80	6.5	86	103	147	6
JL-090M1-L1	Ø115	4-M8x20	Ø19,Ø22	56.5	Ø95	8	100	118.5	162.5	16.5
	Ø145	4-M8x20	Ø19,Ø22,Ø24	59	Ø110	11	130	121	165	19
JL-090-L2	Ø66.7	4-M4x10	Ø8	34	Ø38.1	5	60	127	171	5.5
	Ø70	4-M4x10,4-M5x12	Ø11,Ø14	34	Ø50	5	60	127	171	5.5
JL-090M1-L2	Ø90	4-M5x12,4-M6x14	Ø19	42	Ø70	6.5	80	133.5	177.5	12
	Ø100	4-M6x14	Ø16	42	Ø80	6.5	86	133.5	177.5	11

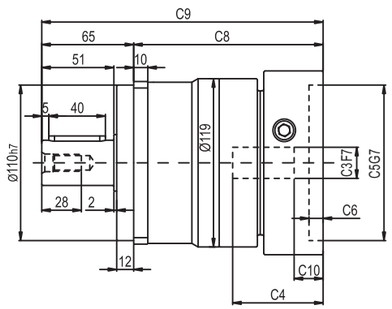
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7are motor(metric standard) specific dimenisions, which could be customized.
*M1:极限孔(版本号)
*M1:Limit hole (Version number)

外形尺寸图表 / OUTLINE DIMENSION SHEET

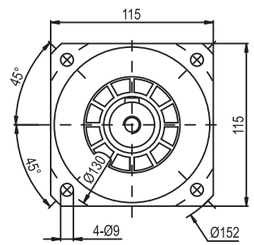
JF-115-L1

输入端/INPUT



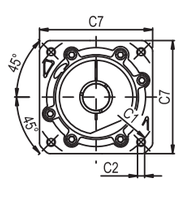


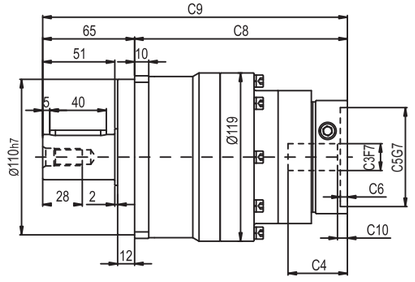
输出端/ OUTPUT



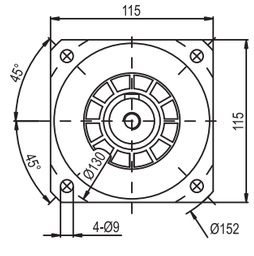
JF-115-L2

输入端/ INPUT

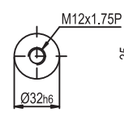




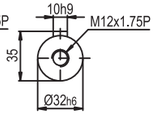
输出端/OUTPUT



输出轴径/Output Diameter



轴型式 S1
shaft



轴型式 S2
shaft

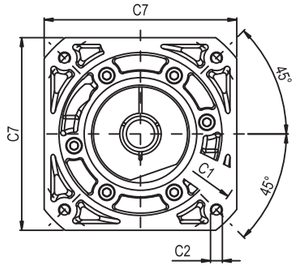
尺寸Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
JF-115-L1	Ø145	4-M8x20	Ø19,Ø22,Ø24	64	Ø110	10	130	134	199	19.5
JF-115M1-L1	Ø200	4-M12x28	Ø35	81	Ø114. 3	10	180	151.5	216.5	28
JF-115-L2	Ø90	4-M5x12 , 4-M6x14	Ø19	42	Ø70	6.5	80	150.5	215.5	7
	Ø100	4-M6x14	Ø16	42	Ø80	6.5	86	150.5	215.5	6
JF-115M1-L2	Ø115	4-M8x20	Ø19,Ø22	56.5	Ø95	8	100	166	231	16.5
	Ø145	4-M8x20	Ø19,Ø22,Ø24	59	Ø110	11	130	168.5	233.5	19

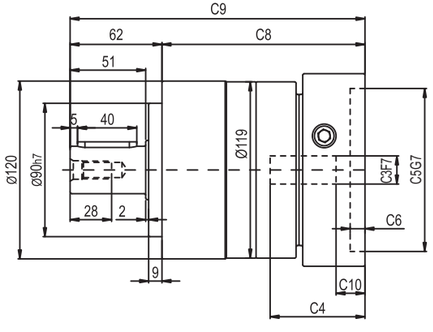
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7are motor(metric standard) specific dimenisions, which could be customized.
*M1:极限孔(版本号)
*M1:Limit hole (Version number)

外形尺寸图表 / OUTLINE DIMENSION SHEET

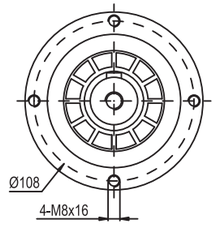
JL-120-L1

输入端 / INPUT



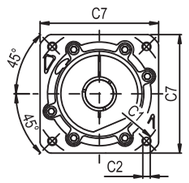


输出端 / OUTPUT

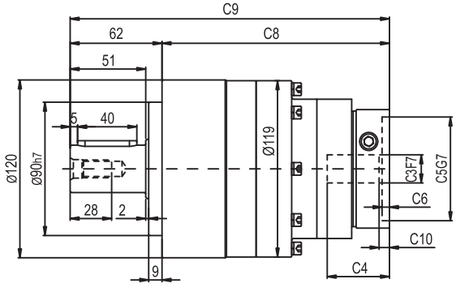


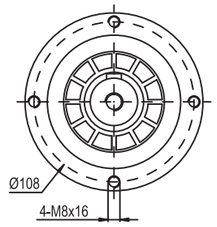
JL-120-L2

输入端 / INPUT

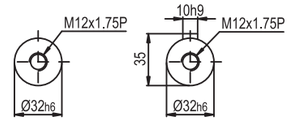


输出端 / OUTPUT





输出轴径/Output Diameter



轴型式 S1 shaft

轴型式 S2 shaft

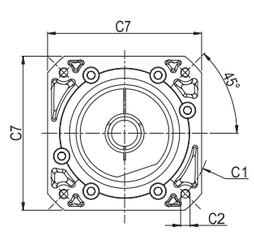
尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
JL-120-L1	Ø145	4-M8x20	Ø19,Ø22,Ø24	64	Ø110	10	130	137	199	19.5
JL-120M1-L1	Ø200	4-M12x28	Ø35	81	Ø114. 3	10	180	154.5	216.5	28
JL-120-L2	Ø90	4-M5x12 , 4-M6x14	Ø19	42	Ø70	6.5	80	153.5	215.5	7
	Ø100	4-M6x14	Ø16	42	Ø80	6.5	86	153.5	215.5	6
JL-120M1-L2	Ø115	4-M8x20	Ø19,Ø22	56.5	Ø95	8	100	169	231	16.5
	Ø145	4-M8x20	Ø19,Ø22,Ø24	59	Ø110	11	130	171.5	233.5	19

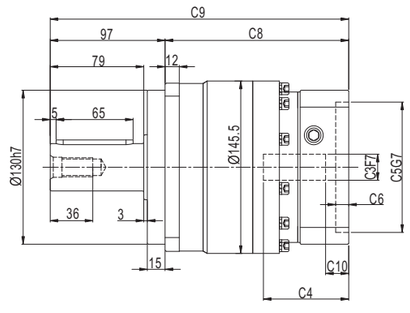
*C1~C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1~C7are motor(metric standard) specific dimenisions, which could be customized.
*M1:极限孔(版本号)
*M1:Limit hole (Version number)

外形尺寸图表 / OUTLINE DIMENSION SHEET

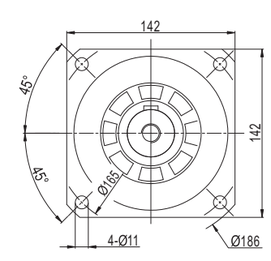
JF-142-L1

输入端 / INPUT



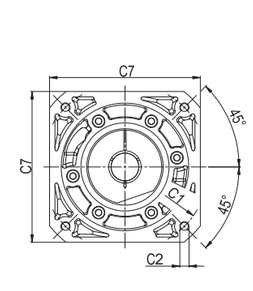


输出端 / OUTPUT

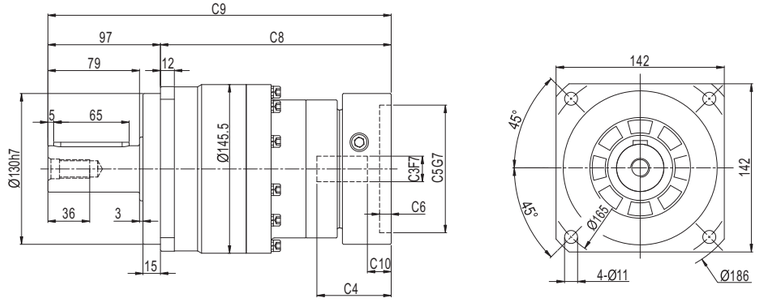


JF-142-L2

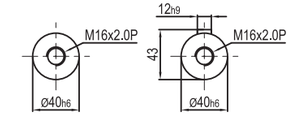
输入端 / INPUT



输出端 / OUTPUT



输出轴径/Output Diameter



轴型式 S1 shaft

轴型式 S2 shaft

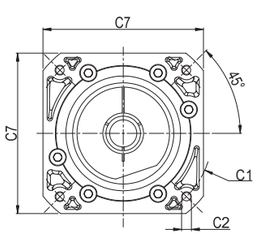
尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
JF-142-L1	Ø145	4-M8x20	Ø22,Ø24	72	Ø110	11	130	155	252	19.5
	Ø200	4-M12x28	Ø35	81.5	Ø114.3	8	180	165	262	25
JF-142-L2	Ø145	4-M8x20	Ø19,Ø22,Ø24	64	Ø110	10	130	199	296	19.5
JF-142M1-L2	Ø200	4-M12x28	Ø35	81	Ø114.3	10	180	216.5	313.5	28

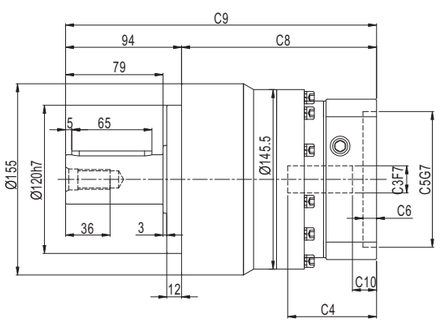
*C1~C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1~C7are motor(metric standard) specific dimenisions, which could be customized.
*M1:极限孔(版本号)
*M1:Limit hole (Version number)

外形尺寸图表 / OUTLINE DIMENSION SHEET

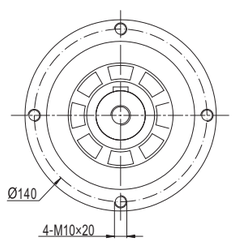
JL-155-L1

输入端 / INPUT



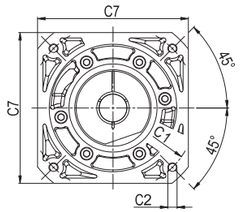


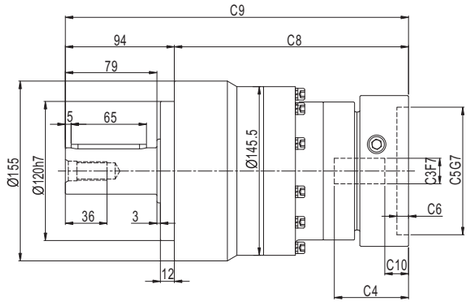
输出端 / OUTPUT



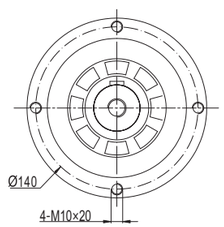
JL-155-L2

输入端 / INPUT

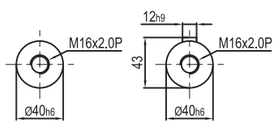




输出端 / OUTPUT



输出轴径/Output Diameter



轴型式 S1 shaft　　轴型式 S2 shaft

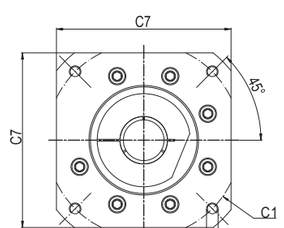
尺寸Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
JL-155-L1	Ø145	4-M8x20	Ø22,Ø24	72	Ø110	11	130	158	252	19.5
	Ø200	4-M12x28	Ø35	81.5	Ø114.3	8	180	168	262	25
JL-155-L2	Ø145	4-M8x20	Ø19,Ø22,Ø24	64	Ø110	10	130	202	296	19.5
JL-155M1-L2	Ø200	4-M12x28	Ø35	81	Ø114.3	10	180	219.5	313.5	28

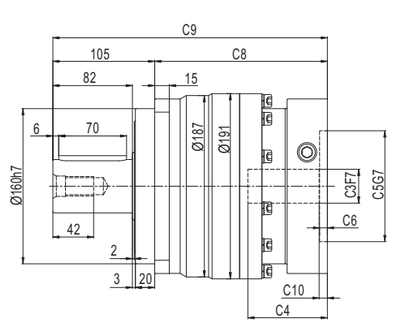
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7are motor(metric standard) specific dimenisions, which could be customized.
*M1:极限孔(版本号)
*M1:Limit hole (Version number)

外形尺寸图表 / OUTLINE DIMENSION SHEET

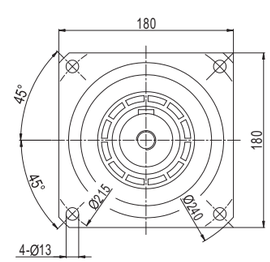
JF-180-L1

输入端 / INPUT



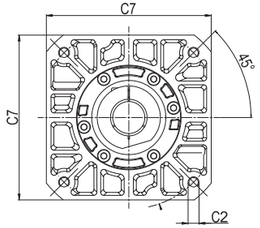


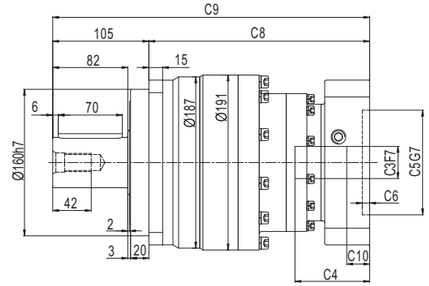
输出端 / OUTPUT



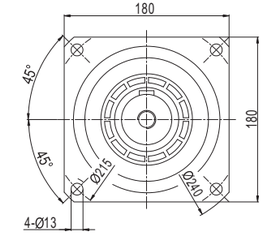
JF-180-L2

输入端 / INPUT

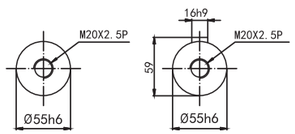




输出端 / OUTPUT



输出轴径/Output Diameter



轴型式 S1 shaft　　轴型式 S2 shaft

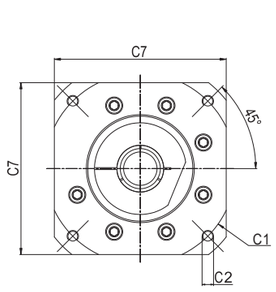
尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
JF-180-L1	Ø200	4-M12x28	Ø35	82	Ø114.3	8	180	178	283	8.5
	Ø200	4-M12x28	Ø42	117.5	Ø114.3	8	180	213.5	318.5	45.5
	Ø215	4-M12x28	Ø38	87	Ø180	8	192	183	288	13.5
	Ø235	4-M12x28	Ø42	117.5	Ø200	10	220	213.5	318.5	45.5
JF-180-L2	Ø145	4-M8x20	Ø22,Ø24	72	Ø110	11	130	231	336	19.5
	Ø200	4-M12x28	Ø35	81.5	Ø114.3	8	180	241	346	25

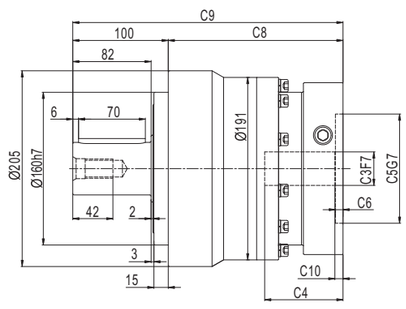
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7are motor(metric standard) specific dimenisions, which could be customized.

外形尺寸图表 / OUTLINE DIMENSION SHEET

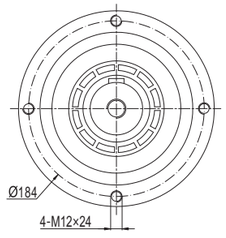
JL-205-L1

输入端 / INPUT



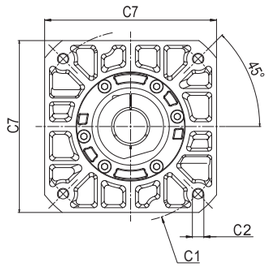


输出端 / OUTPUT

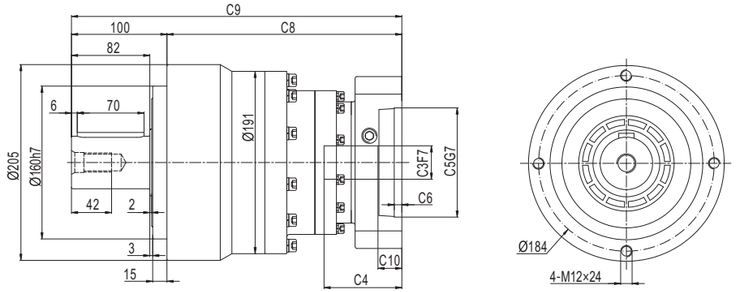


JL-205-L2

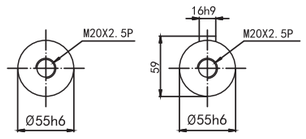
输入端 / INPUT



输出端 / OUTPUT



输出轴径/Output Diameter



轴型式 S1 shaft　　轴型式 S2 shaft

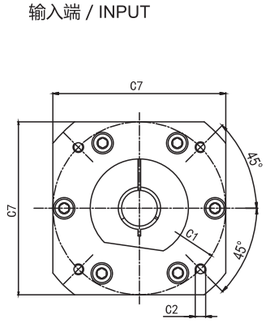
尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
JL-205-L1	Ø200	4-M12x28	Ø35	82	Ø114.3	8	180	183	283	8.5
	Ø200	4-M12x28	Ø42	117.5	Ø114.3	8	180	218.5	318.5	45.5
	Ø215	4-M12x28	Ø38	87	Ø180	8	192	188	288	13.5
	Ø235	4-M12x28	Ø42	117.5	Ø200	10	220	218.5	318.5	45.5
JL-205-L2	Ø145	4-M8x20	Ø22,Ø24	72	Ø110	11	130	236	336	19.5
	Ø200	4-M12x28	Ø35	81.5	Ø114.3	8	180	246	346	25

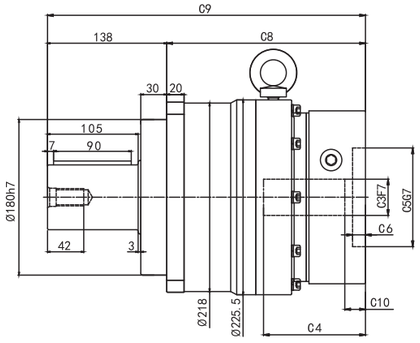
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7 are motor(metric standard) specific dimenisions, which could be customized.

外形尺寸图表 / OUTLINE DIMENSION SHEET

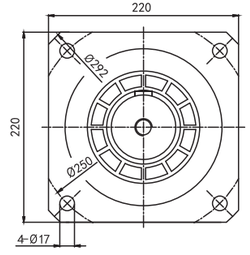
JF-220-L1

输入端 / INPUT



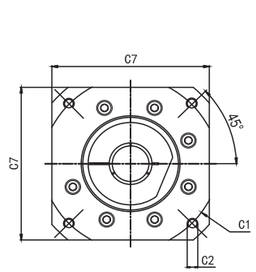


输出端 / OUTPUT

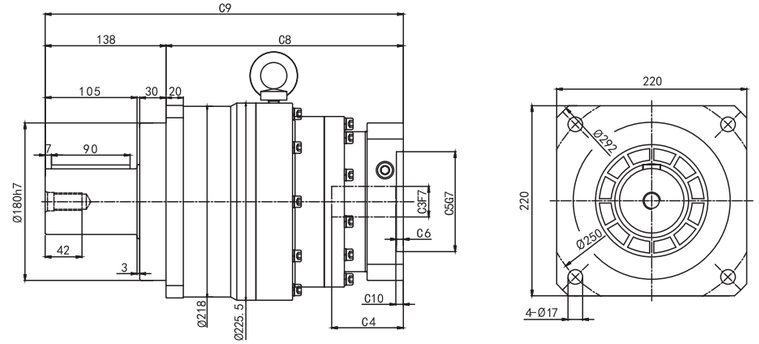


JF-220-L2

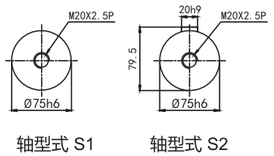
输入端 / INPUT



输出端 / OUTPUT



输出轴径/Output Diameter



轴型式 S1 shaft　　轴型式 S2 shaft

尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
JF-220-L1	Ø200	4-M12x28	Ø35,Ø42	118	Ø114.3	15	200	230	368	24
	Ø215	4-M12x30	Ø38	108	Ø180	8	200	220	358	11.5
	Ø235	4-M12x30	Ø42,Ø55	118	Ø200	10	220	230	368	24
JF-220-L2	Ø200	4-M12x28	Ø35	82	Ø114.3	8	180	271.5	409.5	8.5
	Ø200	4-M12x28	Ø42	117.5	Ø114.3	8	180	307	445	45.5
	Ø215	4-M12x28	Ø38	87	Ø180	8	192	276.5	414.5	13.5
	Ø235	4-M12x28	Ø42	117.5	Ø200	10	220	307	445	45.5

*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7 are motor(metric standard) specific dimenisions, which could be customized.

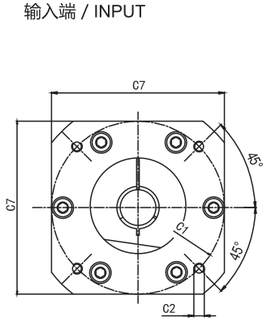
JFR/JLR

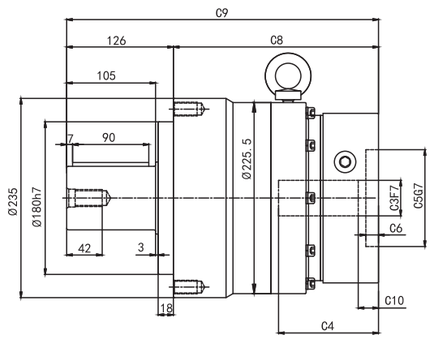
JunsRise®

外形尺寸图表 / OUTLINE DIMENSION SHEET

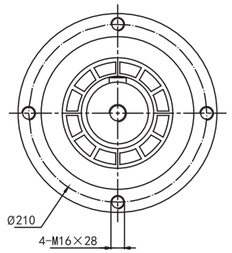
JL-235-L1

输入端 / INPUT



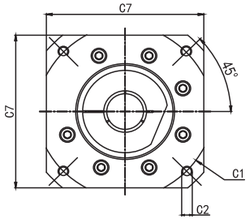


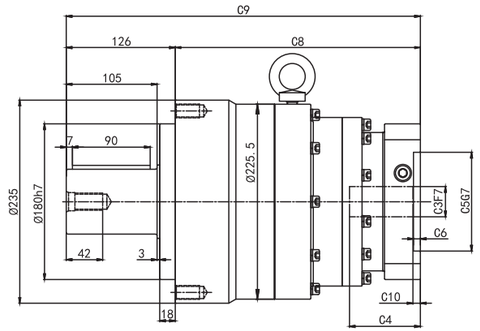
输出端 / OUTPUT



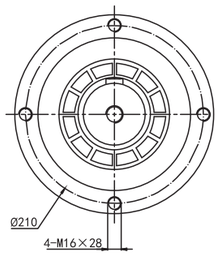
JL-235-L2

输入端 / INPUT

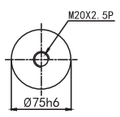




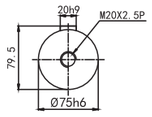
输出端 / OUTPUT



输出轴径/Output Diameter



轴型式 S1
shaft

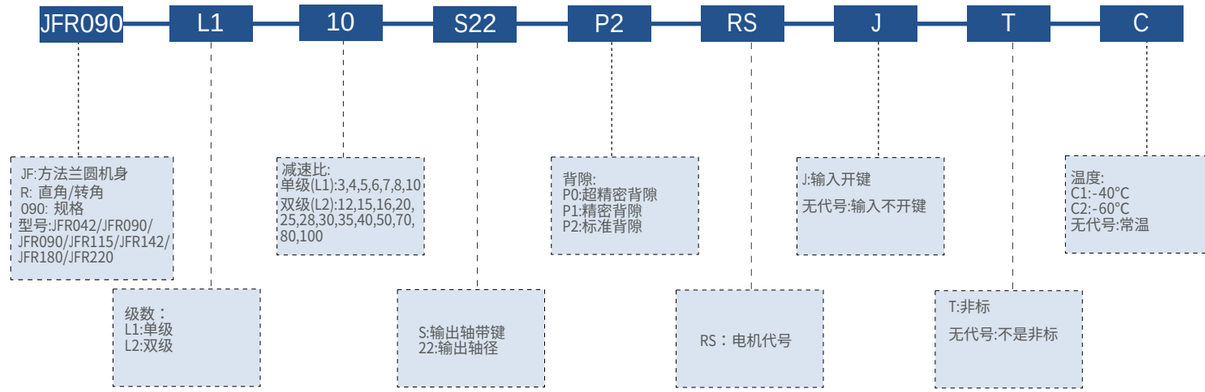


轴型式 S2
shaft

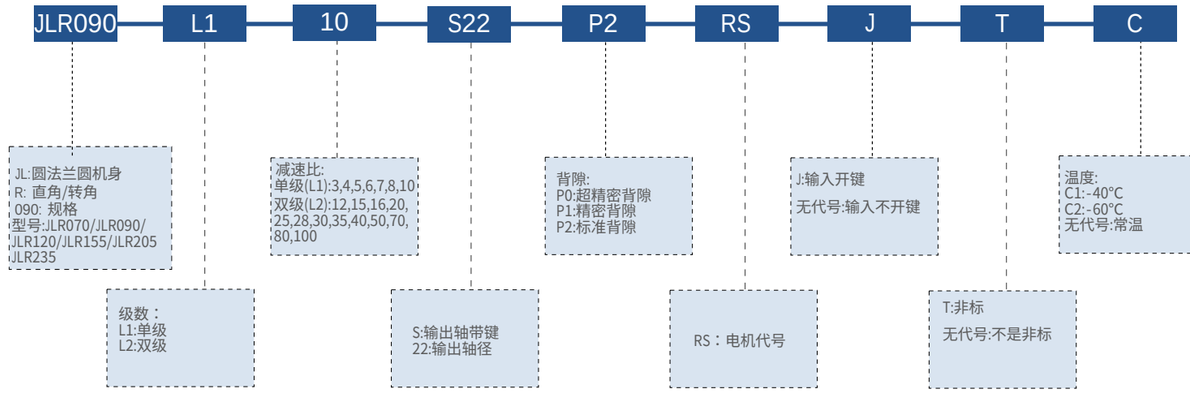
尺寸Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
JL-235-L1	Ø200	4-M12x28	Ø35,Ø42	118	Ø114.3	15	200	242	368	24
	Ø215	4-M12x30	Ø38	108	Ø180	8	200	230	358	11.5
	Ø235	4-M12x30	Ø42,Ø55	118	Ø200	10	220	242	368	24
JL-235-L2	Ø200	4-M12x28	Ø35	82	Ø114.3	8	180	283.5	409.5	8.5
	Ø200	4-M12x28	Ø42	117.5	Ø114.3	8	180	319	445	45.5
	Ø215	4-M12x28	Ø38	87	Ø180	8	192	288.5	414.5	13.5
	Ø235	4-M12x28	Ø42	117.5	Ø200	10	220	319	445	45.5

*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7 are motor(metric standard) specific dimenisions, which could be customized.

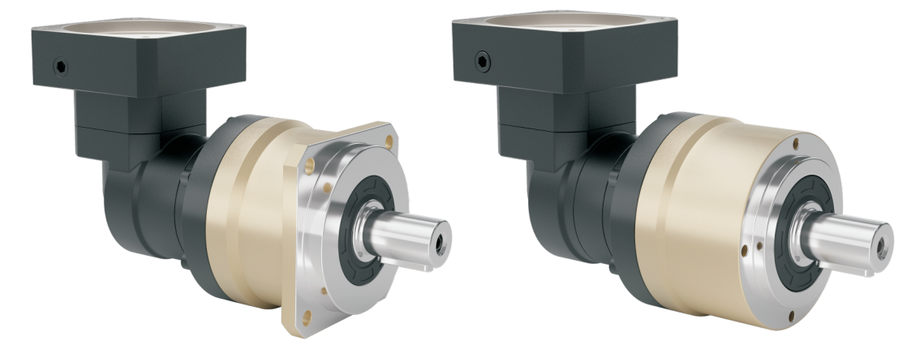
斜齿行星减速机型号订购说明/Helical-tooth planetary gearbox model illuminate



选型范例：JFR090-L1-10-S22-P2-RS-J-T-C



选型范例：JLR090-L1-10-S22-P2-RS-J-T-C



减速机性能资料 / GEAR BOX PERFORMANCE INFORMATION

规 格		级 数	减速比[1]	JFR060 JLR070	JFR090 JLR090	JFR115 JLR120	JFR142 JLR155	JFR180 JLR205	JFR220 JLR235
额定输出力矩T_{2N}	Nm	1	3	55	130	208	342	588	1,140
			4	50	140	290	542	1,050	1,700
			5	60	160	330	650	1,200	2,000
			6	55	150	310	600	1,100	1,900
			7	50	140	300	550	1,100	1,800
			8	50	140	290	542	1,050	1,700
			10	60	160	330	650	1,200	2,000
			14	50	140	300	550	1,100	1,800
			20	40	100	230	450	900	1,500
		2	12	55	130	208	342	588	1,140
			15	55	130	208	342	588	1,140
			20	50	140	290	542	1,050	1,700
			25	60	160	330	650	1,200	2,000
			30	55	130	208	342	588	2,000
			35	60	160	330	650	1,200	2,000
			40	50	140	290	542	1,050	1,700
			50	60	160	330	650	1,200	2,000
			60	55	150	310	600	1,100	1,900
			70	60	160	330	650	1,200	2,000
			80	50	140	290	542	1,050	1,700
			100	60	160	330	650	1,200	2,000
			120	–	150	310	600	1,100	1,900
			140	–	140	300	550	1,100	1,800
			160	–	120	260	500	1,000	1,600
			200	–	100	230	450	900	1,500
最大输出力矩T_{2B}	Nm	1,2	3~200	3倍额定输出力矩					
额定输入转速n_{1}	rpm	1,2	3~200	3,000	3,000	3,000	3,000	3,000	2,000
最大输入转速n_{1B}	rpm	1,2	3~200	6,000	6,000	6,000	6,000	6,000	4,000
背隙	arcmin	1	3~20	≤10	≤10	≤10	≤10	≤10	≤10
		2	12~200	≤12	≤12	≤12	≤12	≤12	≤12
扭转刚性	Nm/arcmin	1,2	3~200	7	14	25	50	145	225
容许径向力F_{2rB}[2]	N	1,2	3~200	1,530	3,250	6,700	9,400		50,000
容许轴向力F_{2a1B}[2]	N	1,2	3~200	630	1,300	3,000	4,000	6,200	35,000
容许轴向力F_{2a2B}[2]	N	1,2	3~200	765	1,625	3,350	4,700	7,250	25,000
使用寿命	hr	1,2	3~200	20,000*					
效率 η	%	1	3~20	≤95%					
		2	12~200	≤92%					
重量	kg	1	3~20	2.1	6.4	13	24.5	51	83
		2	12~200	2.5	7.8	14.2	27.5	54	95
使用温度	℃	1,2	3~200	-10℃~+90℃					
润滑		1,2	3~200	合成润滑油脂					
防护等级		1,2	3~200	IP65					
安装方向		1,2	3~200	任意方向					
噪音值（n_1=3000rpm）	dB	1,2	3~200	≤63	≤65	≤68	≤70	≤72	≤74

减速机转动惯量

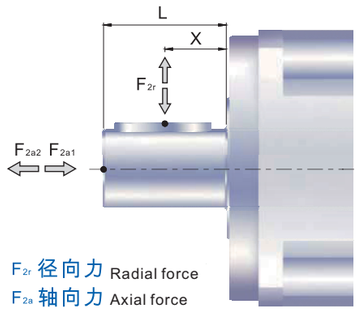
规 格		级 数	减速比[1]	JFR060 JLR070	JFR090 JLR090	JFR115 JLR120	JFR142 JLR155	JFR180 JLR205	JFR220 JLR235
转动惯量J_1	kg · cm²	1	3~7	0.35	2.25	6.84	23.4	68.9	135.4
			8~10	0.07	1.87	6.25	21.8	65.6	119.8
			14~20	0.07	1.87	6.25	21.8	65.6	119.8
		2	12~40	0.35	0.35	2.25	6.84	23.4	68.9
			50	0.07	0.31	1.87	6.25	21.8	65.6
			60	0.07	0.35	2.25	6.84	23.4	68.9
			70~100	0.07	0.31	1.87	6.25	21.8	65.6
			120~200	0.07	0.31	1.87	6.25	21.8	65.6

1.减速比（$i=N_{in}/N_{out}$）
2.输出转数 **100rpm** 时，作用于输出轴中心位置。
* 连续运转降低使用寿命二分之一。

JunsRise®

减速机输出轴之容许径向力及轴向力

ALLOWABLE RADIAL AND AXIAL FORCES ONTHE OUTPUT SHAFT OF THE GEAR REDUCER



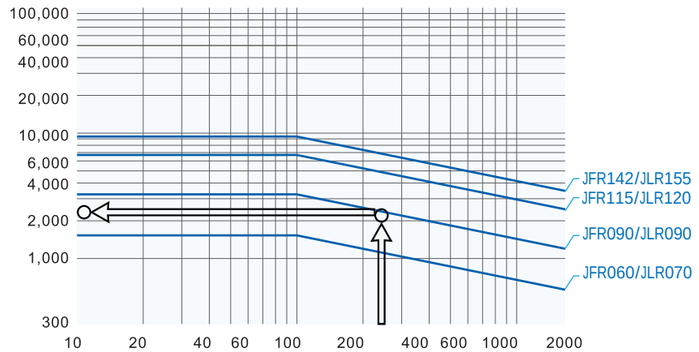
F_{2r} 径向力 Radial force
F_{2a} 轴向力 Axial force

减速机输出轴所能承受之最大径向力及轴向力。端视内部支撑轴承之设计，减速机采用大尺寸的轴承及较大跨距的设计，其能承受更大的径向及轴向负荷。

The maximum radial and axial forces that the output shaft of the gearbox canwithstand. Looking at the design of internal support bearings, the reduceradopts large-sized bearings and a design with a larger span, which canwithstand greater radial and axial loads.

容许径向力F_{2rB}[N]施力于轴中心位置

Permissible radial force F_{2rB}【N】apply force to the center of the shaft

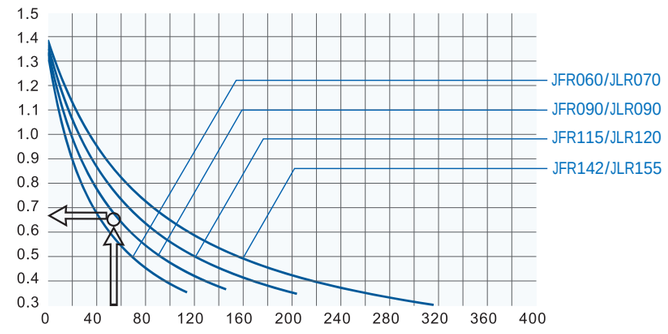


当径向力F_{2r}施力于轴中心位置即X=1/2xL时，不同规格之减速机在不同输出转速运用下使用寿命为20,000hr*时，所能承受之容许径向力F_{2rB}，请参照左图，而能承受之容许轴向力F_{2aB}，为

$F_{2a1B}=0.2xF_{2rB}$
$F_{2a2B}=0.1xF_{2rB}$

位置负荷系数k_b

Positional load coefficient



当径向力F_{2r}施力不在轴中心位置时，越靠近减速机即X<1/2xL，所能承受之容许径向力变大，越远离减速机即X>1/2xL时，所能承受之容许径向力则变小，藉由左图，依减速机规格及径向力施力位置X，查出位置负荷洗漱K_b，在代入下列公式，求出容许径向力：

$F'_{2rB}=KbxF_{2rB}$

轴向力:

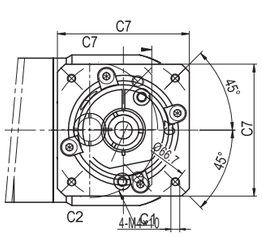
$F'_{2a1B}=0.2xF'_{2rB}$
$F'_{2a2B}=0.1xF'_{2rB}$

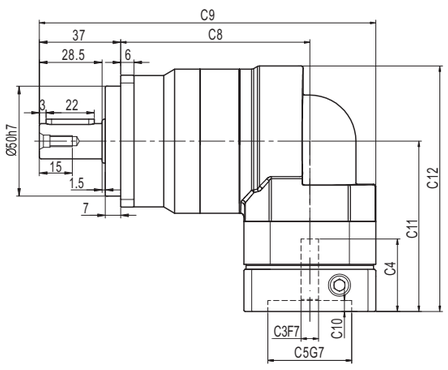
＊ 连续运转降低使用寿命二分之一。The lifetime will be shortened by half under continuous operation.

外形尺寸图表 / OUTLINE DIMENSION SHEET

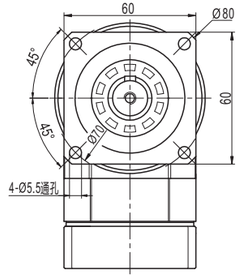
JFR060-L1

输入端 / INPUT



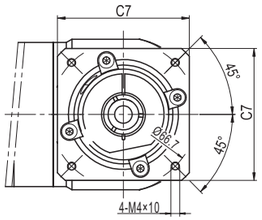


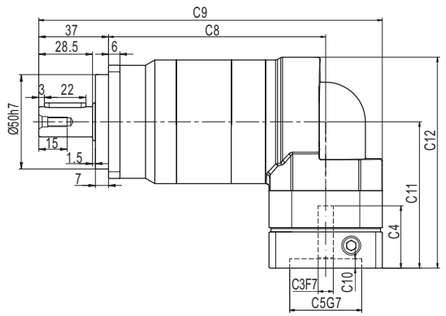
输出端 / OUTPUT



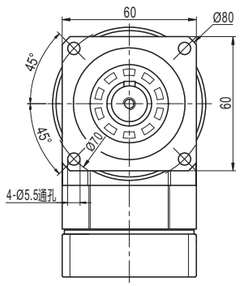
JFR060-L2

输入端 / INPUT

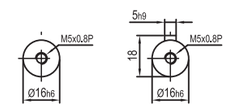




输出端 / OUTPUT



输出轴径/Output Diameter



轴型式 S1
shaft

轴型式 S2
shaft

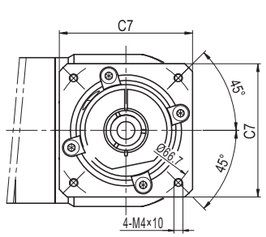
尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12
JFR060-L1	Ø66.7	4-M4x10	Ø8	33	Ø38.1	5	60	86	153	5.5	77.5	111.75
JFR060-L2								115	182			
JFR060-L1	Ø70	4-M4x10,4-M5x12	Ø11,Ø14	33	Ø50	5	60	86	153	5.5	77.5	111.75
JFR060-L2								115	182			
JFR060M1-L1	Ø90	4-M5x12,4-M6x14	Ø19	42.5	Ø70	6.5	80	86	163	12	87	121.25
JFR060M1-L2								115	192			

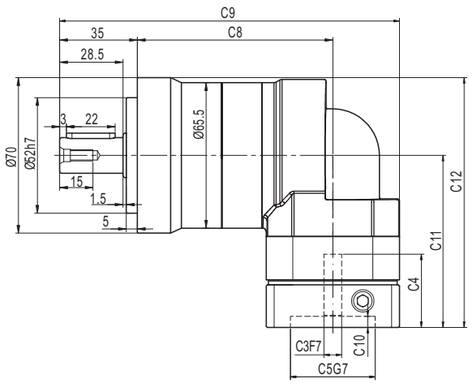
*C1~C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1~C7are motor(metric standard) specific dimenisions, which could be customized.
*M1:极限孔(版本号)
*M1:Limit hole (Version number)

外形尺寸图表 / OUTLINE DIMENSION SHEET

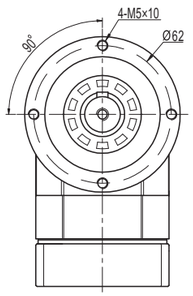
JLR070-L1

输入端 / INPUT



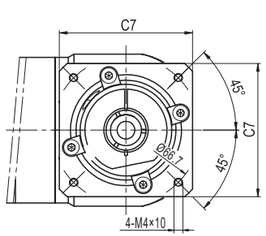


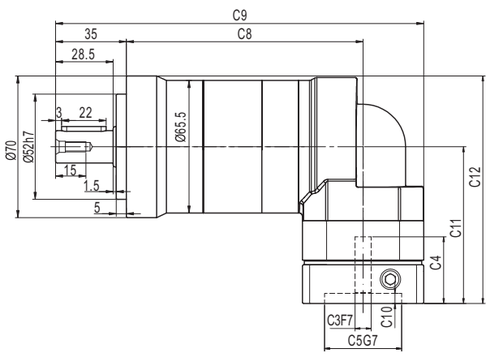
输出端 / OUTPUT



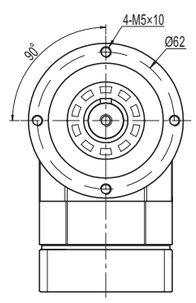
JLR070-L2

输入端 / INPUT

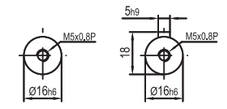




输出端 / OUTPUT



输出轴径/Output Diameter



轴型式 S1
shaft

轴型式 S2
shaft

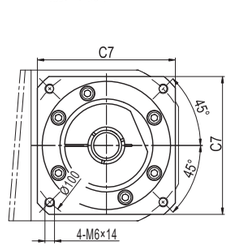
尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12
JLR070-L1	Ø66.7	4-M4x10	Ø8	33	Ø38.1	5	60	88	153	5.5	77.5	112.5
JLR070-L2								117	182			
JLR070-L1	Ø70	4-M4x10,4-M5x12	Ø11,Ø14	33	Ø50	5	60	88	153	5.5	77.5	112.5
JLR070-L2								117	182			
JLR070M1-L1	Ø90	4-M5x12,4-M6x14	Ø19	42.5	Ø70	6.5	80	88	163	12	87	122
JLR070M1-L2								117	192			

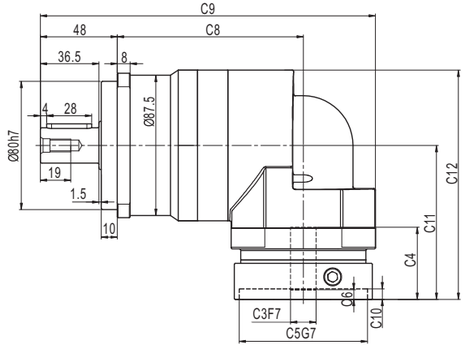
*C1~C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1~C7are motor(metric standard) specific dimenisions, which could be customized.
*M1:极限孔(版本号)
*M1:Limit hole (Version number)

外形尺寸图表 / OUTLINE DIMENSION SHEET

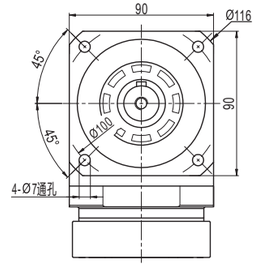
JFR090-L1

输入端 / INPUT



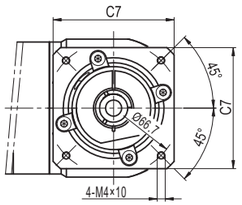


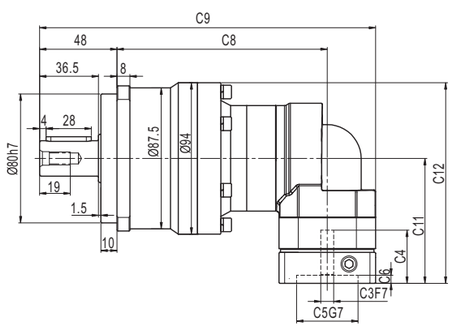
输出端 / OUTPUT



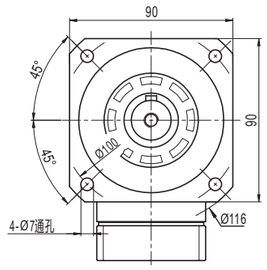
JFR090-L2

输入端 / INPUT

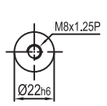




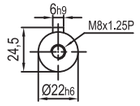
输出端 / OUTPUT



输出轴径/Output Diameter



轴型式 S1
shaft



轴型式 S2
shaft

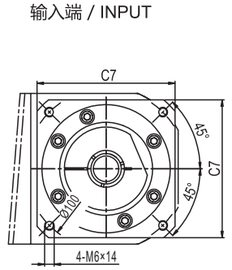
尺寸Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12
JFR090-L1	Ø90	4-M5x12,4-M6x14	Ø19	45	Ø70	6.5	80	116	209	7	96	143
	Ø100	4-M6x14	Ø16	45	Ø80	6.5	86	116	209	6	96	143
JFR090M1-L1	Ø115	4-M8x20	Ø19,Ø22	56.5	Ø95	8	100	116	214	16.5	117.5	164.5
	Ø145	4-M8x20	Ø19,Ø22,Ø24	59	Ø110	11	130	116	229	19	120	167
JFR090-L2	Ø66.7	4-M4x10	Ø8	33	Ø38.1	5	60	130.5	208.5	5.5	77.5	124.5
	Ø70	4-M4x10,4-M5x12	Ø11,Ø14	33	Ø50	5	60	130.5	208.5	5.5	77.5	124.5
JFR090M1-L2	Ø90	4-M5x12,4-M6x14	Ø19	42.5	Ø70	6.5	80	130.5	218.5	12	87	134
	Ø100	4-M6x14	Ø16	42.5	Ø80	6.5	86	130.5	221.5	11	87	134

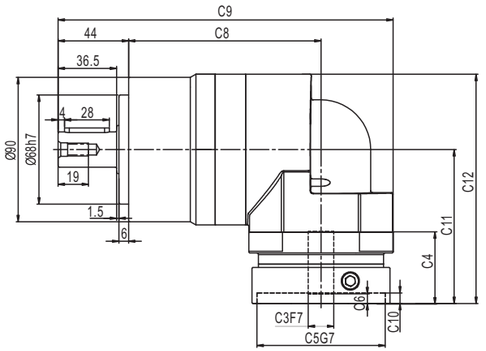
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7are motor(metric standard) specific dimenisions, which could be customized.
*M1:极限孔(版本号)
*M1:Limit hole (Version number)

外形尺寸图表 / OUTLINE DIMENSION SHEET

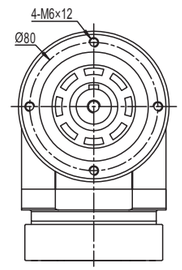
JLR090-L1

输入端 / INPUT



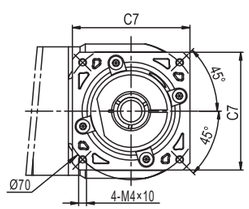


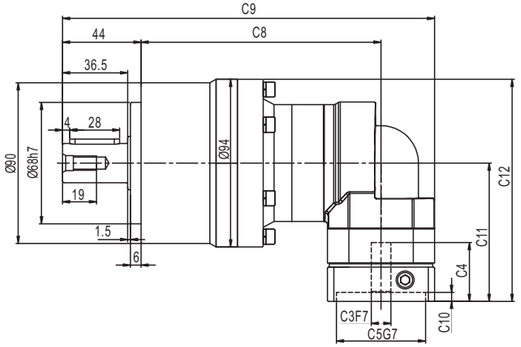
输出端 / OUTPUT



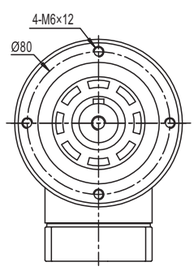
JLR090-L2

输入端 / INPUT

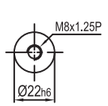




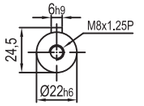
输出端 / OUTPUT



输出轴径/Output Diameter



轴型式 S1
shaft



轴型式 S2
shaft

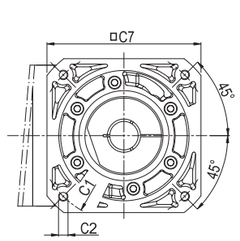
尺寸Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12
JLR090-L1	Ø90	4-M5x12,4-M6x14	Ø19	45	Ø70	6.5	80	120	209	7	96	143
	Ø100	4-M6x14	Ø16	45	Ø80	6.5	86	120	209	6	96	143
JLR090M1-L1	Ø115	4-M8x20	Ø19,Ø22	56.5	Ø95	8	100	120	214	16.5	117.5	164.5
	Ø145	4-M8x20	Ø19,Ø22,Ø24	59	Ø110	11	130	120	229	19	120	167
JLR090-L2	Ø66.7	4-M4x10	Ø8	33	Ø38.1	5	60	134.5	208.5	5.5	77.5	124.5
	Ø70	4-M4x10,4-M5x12	Ø11,Ø14	33	Ø50	5	60	134.5	208.5	5.5	77.5	124.5
JLR090M1-L2	Ø90	4-M5x12,4-M6x14	Ø19	42.5	Ø70	6.5	80	134.5	218.5	12	87	134
	Ø100	4-M6x14	Ø16	42.5	Ø80	6.5	86	134.5	221.5	11	87	134

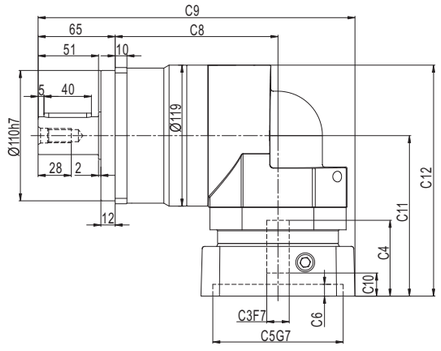
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7are motor(metric standard) specific dimenisions, which could be customized.
*M1:极限孔(版本号)
*M1:Limit hole (Version number)

外形尺寸图表 / OUTLINE DIMENSION SHEET

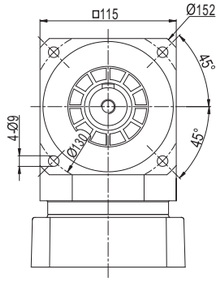
JFR115-L1

输入端 / INPUT



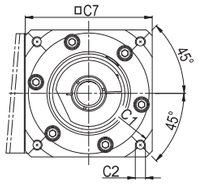


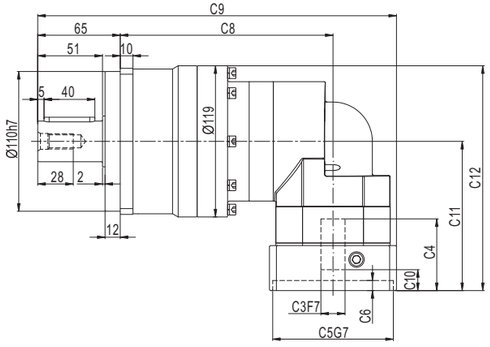
输出端 / OUTPUT



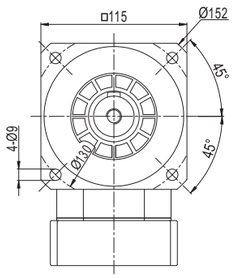
JFR115-L2

输入端 / INPUT

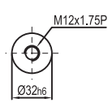




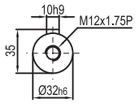
输出端 / OUTPUT



输出轴径/Output Diameter



轴型式 S1
shaft



轴型式 S2
shaft

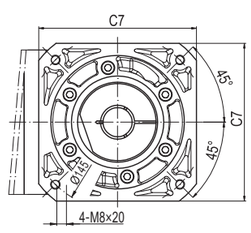
尺寸Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12
JFR115-L1	Ø145	4-M8x20	Ø19,Ø22,Ø24	64	Ø110	10	130	137.5	267.5	19.5	135.5	195
JFR115M1-L1	Ø200	4-M12x28	Ø35	81	Ø114. 3	10	180	137.5	292.5	28	152.5	212
JFR115-L2	Ø90	4-M5x12 ,4-M6x14	Ø19	45	Ø70	6.5	80	167.5	277.5	7	96	155.5
	Ø100	4-M6x14	Ø16	45	Ø80	6.5	86	167.5	277.5	6	96	155.5
JFR115M1-L2	Ø115	4-M8x20	Ø19,Ø22	56.5	Ø95	8	100	167.5	282.5	16.5	117.5	177
	Ø145	4-M8x20	Ø19,Ø22,Ø24	59	Ø110	11	130	167.5	297.5	19	120	179.5

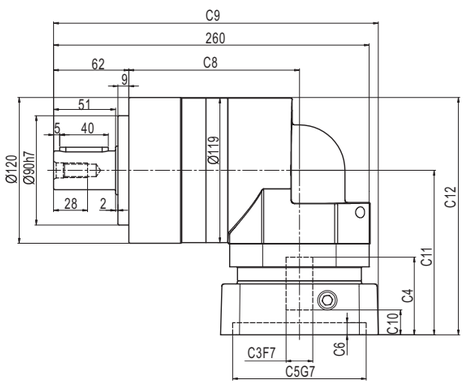
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7 are motor(metric standard) specific dimenisions, which could be customized.
*M1:极限孔(版本号)
*M1:Limit hole (Version number)

外形尺寸图表 / OUTLINE DIMENSION SHEET

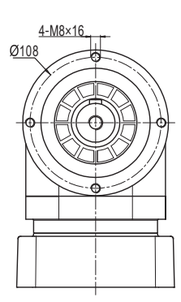
JLR120-L1

输入端 / INPUT



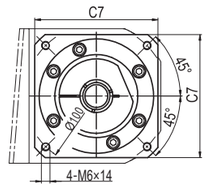


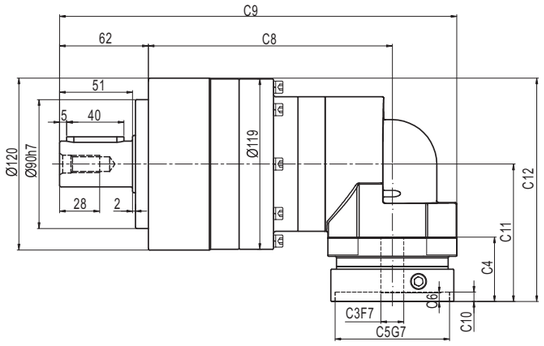
输出端 / OUTPUT



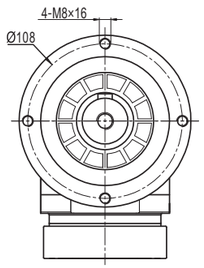
JLR120-L2

输入端 / INPUT

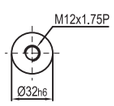




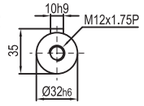
输出端 / OUTPUT



输出轴径/Output Diameter



轴型式 S1
shaft



轴型式 S2
shaft

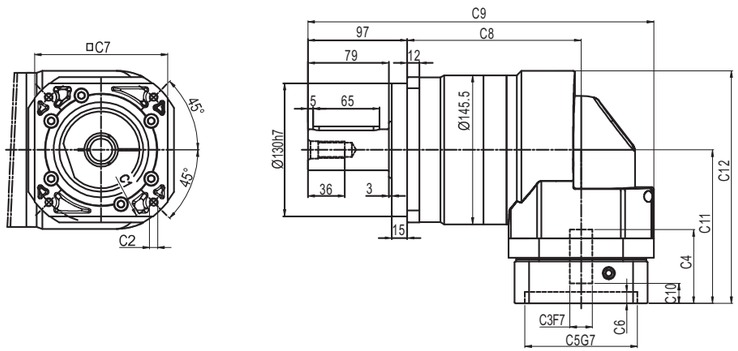
尺寸Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12
JLR120-L1	Ø145	4-M8x20	Ø19,Ø22,Ø24	64	Ø110	10	130	140.5	267.5	19.5	135.5	195.5
JLR120M1-L1	Ø200	4-M12x28	Ø35	81	Ø114.3	10	180	140.5	292.5	28	152.5	212.5
JLR120-L2	Ø90	4-M5x12 , 4-M6x14	Ø19	45	Ø70	6.5	80	170.5	277.5	7	96	156
	Ø100	4-M6x14	Ø16	45	Ø80	6.5	86	170.5	277.5	6	96	156
JLR120M1-L2	Ø115	4-M8x20	Ø19,Ø22	56.5	Ø95	8	100	170.5	282.5	16.5	117.5	177.5
	Ø145	4-M8x20	Ø19,Ø22,Ø24	59	Ø110	11	130	170.5	297.5	19	120	180

*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7 are motor(metric standard) specific dimenisions, which could be customized.
*M1:极限孔(版本号)
*M1:Limit hole (Version number)

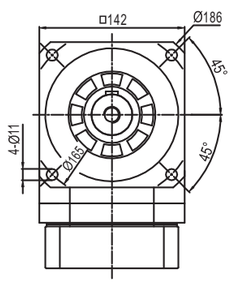
外形尺寸图表 / OUTLINE DIMENSION SHEET

JFR142-L1

输入端 / INPUT

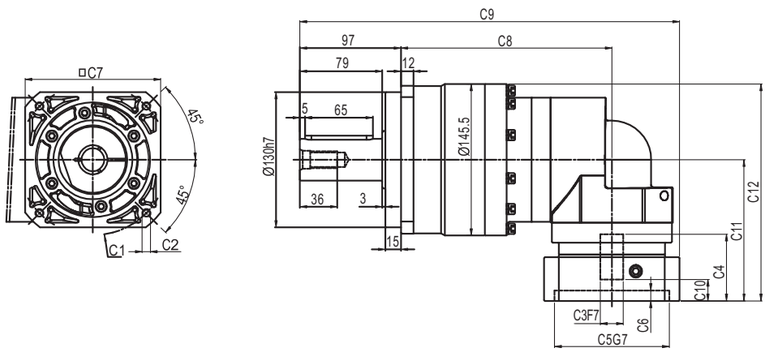


输出端 / OUTPUT

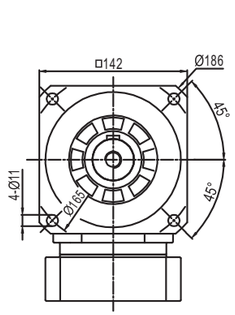


JFR142-L2

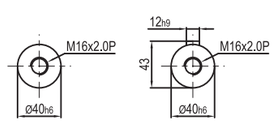
输入端 / INPUT



输出端 / OUTPUT



输出轴径/Output Diameter



轴型式 S1 shaft　　轴型式 S2 shaft

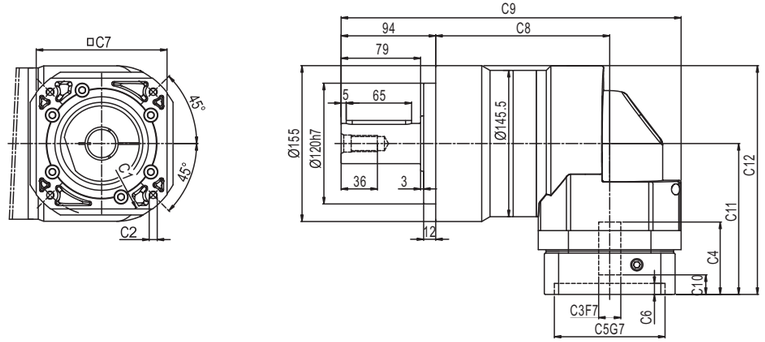
尺寸Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12
JFR142-L1	Ø145	4-M8x20	Ø22,Ø24	72	Ø110	11	130	170	338	19.5	150	227.25
	Ø200	4-M12x28	Ø35	82	Ø114.3	8	180	170	357	25	160	237.25
JFR142-L2	Ø145	4-M8x20	Ø19,Ø22,Ø24	64	Ø110	10	130	202.5	364.5	19.5	135.5	210.75
JFR142M1-L2	Ø200	4-M12x28	Ø35	81	Ø114.3	10	180	202.5	389.5	28	152.5	227.75

*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7 are motor(metric standard) specific dimenisions, which could be customized.
*M1:极限孔(版本号)
*M1:Limit hole (Version number)

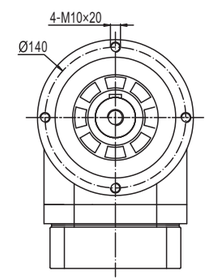
外形尺寸图表 / OUTLINE DIMENSION SHEET

JLR155-L1

输入端 / INPUT

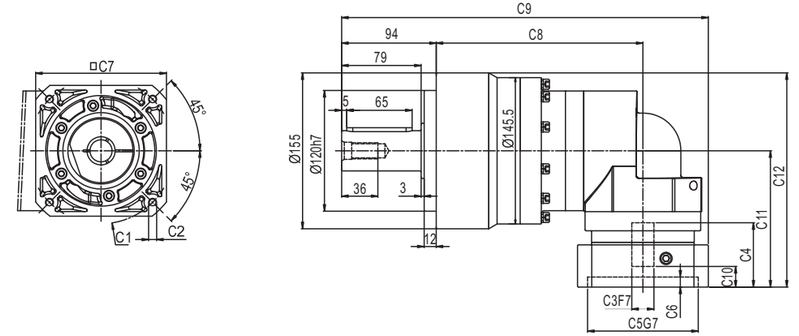


输出端 / OUTPUT

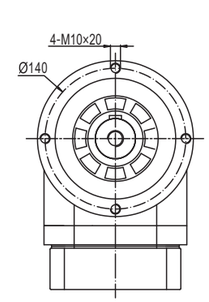


JLR155-L2

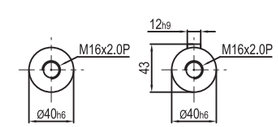
输入端 / INPUT



输出端 / OUTPUT



输出轴径/Output Diameter



轴型式 S1 shaft　　轴型式 S2 shaft

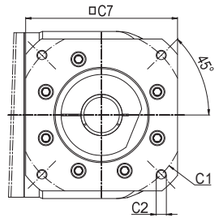
尺寸Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12
JLR155-L1	Ø145	4-M8x20	Ø22,Ø24	72	Ø110	11	130	173	338	19.5	150	227.5
	Ø200	4-M12x28	Ø35	82	Ø114.3	8	180	173	357	25	160	237.5
JLR155-L2	Ø145	4-M8x20	Ø19,Ø22,Ø24	64	Ø110	10	130	205.5	364.5	19.5	135.5	213
JLR155M1-L2	Ø200	4-M12x28	Ø35	81	Ø114.3	10	180	205.5	389.5	28	152.5	230

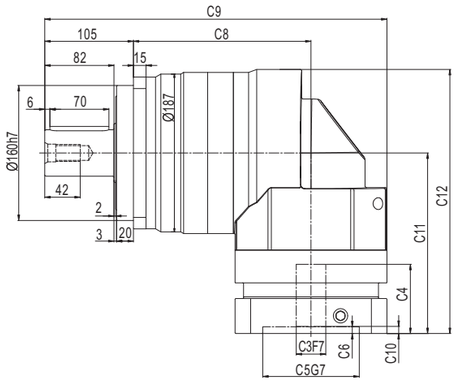
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7 are motor(metric standard) specific dimenisions, which could be customized.
*M1:极限孔(版本号)
*M1:Limit hole (Version number)

外形尺寸图表 / OUTLINE DIMENSION SHEET

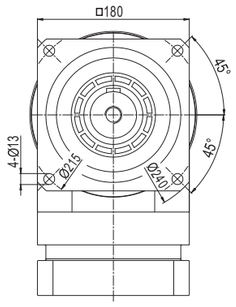
JFR180-L1

输入端 / INPUT



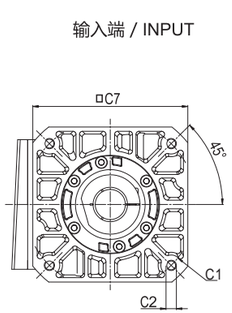


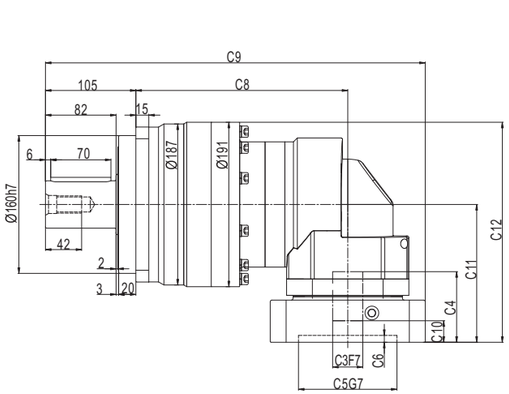
输出端 / OUTPUT



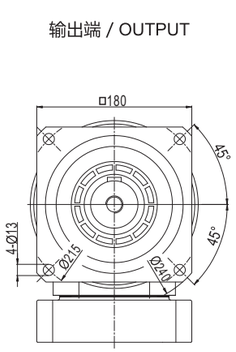
JFR180-L2

输入端 / INPUT

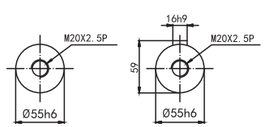




输出端 / OUTPUT



输出轴径/Output Diameter



轴型式 S1
shaft

轴型式 S2
shaft

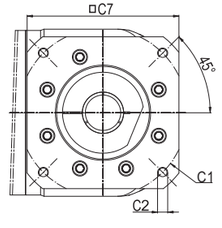
尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12
JFR180-L1	Ø200	4-M12x28	Ø35	82	Ø114.3	8	180	210.5	405.5	8.5	214	313
	Ø200	4-M12x28	Ø42	117.5	Ø114.3	8	180	210.5	405.5	45.5	249.5	348.5
	Ø215	4-M12x28	Ø38	87	Ø180	8	192	210.5	411.5	13.5	219	318
	Ø235	4-M12x28	Ø42	117.5	Ø200	10	220	213.5	318.5	45.5	249.5	348.5
JFR180-L2	Ø145	4-M8x20	Ø22,Ø24	72	Ø110	11	130	246	422	19.5	150	247.5
	Ø200	4-M12x28	Ø35	82	Ø114.3	8	180	246	441	25	160	257.5

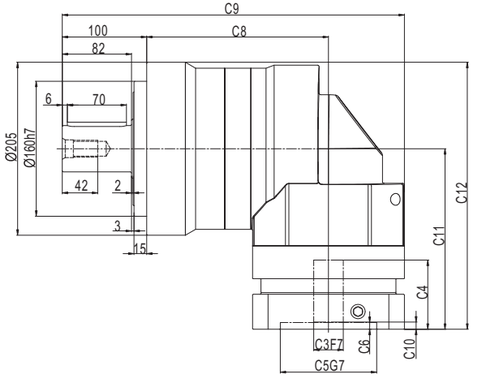
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7are motor(metric standard) specific dimenisions, which could be customized.

外形尺寸图表 / OUTLINE DIMENSION SHEET

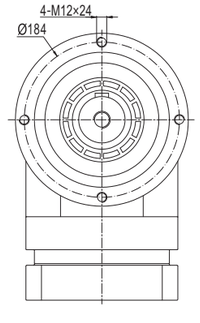
JLR205-L1

输入端 / INPUT



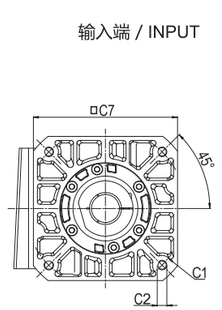


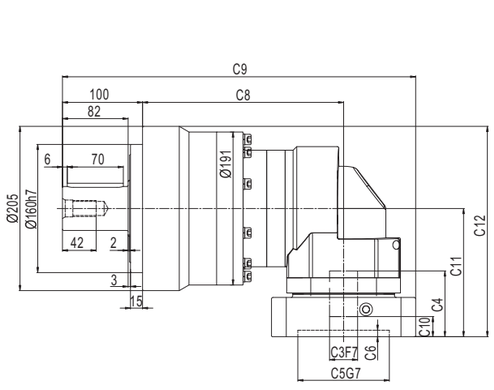
输出端 / OUTPUT



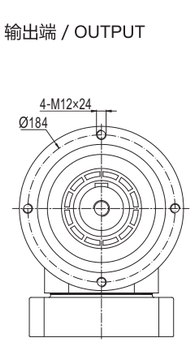
JLR205-L2

输入端 / INPUT

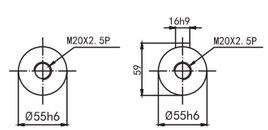




输出端 / OUTPUT



输出轴径/Output Diameter



轴型式 S1
shaft

轴型式 S2
shaft

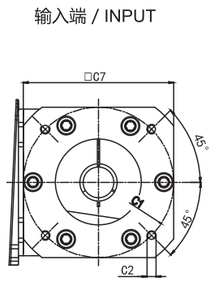
尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12
JLR205-L1	Ø200	4-M12x28	Ø35	82	Ø114.3	8	180	215.5	405.5	8.5	214	318
	Ø200	4-M12x28	Ø42	117.5	Ø114.3	8	180	215.5	405.5	45.5	249.5	353.5
	Ø215	4-M12x28	Ø38	87	Ø180	8	192	215.5	411.5	13.5	219	323
	Ø235	4-M12x28	Ø42	117.5	Ø200	10	220	218.5	318.5	45.5	249.5	353.5
JLR205-L2	Ø145	4-M8x20	Ø22,Ø24	72	Ø110	11	130	251	422	19.5	150	252.5
	Ø200	4-M12x28	Ø35	82	Ø114.3	8	180	251	441	25	160	262.5

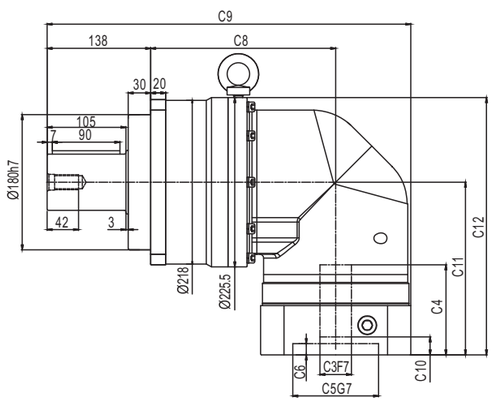
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7are motor(metric standard) specific dimenisions, which could be customized.

外形尺寸图表 / OUTLINE DIMENSION SHEET

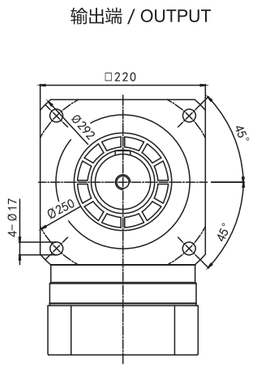
JFR220-L1

输入端 / INPUT



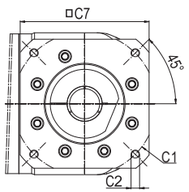


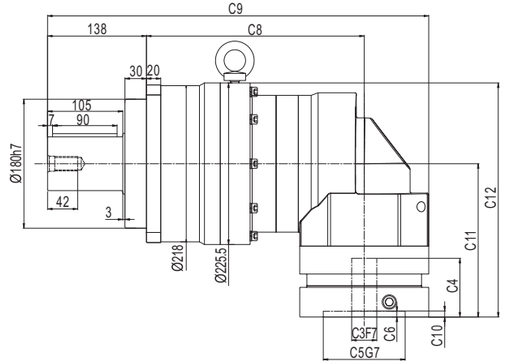
输出端 / OUTPUT



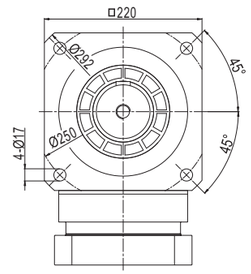
JFR220-L2

输入端 / INPUT

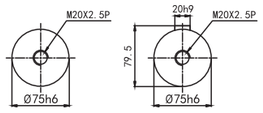




输出端 / OUTPUT



输出轴径/Output Diameter



轴型式 S1 shaft　　轴型式 S2 shaft

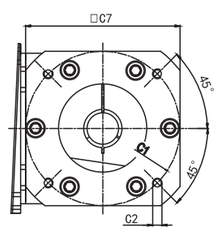
尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12
JFR220-L1	Ø200	4-M12x28	Ø35,Ø42	120	Ø114.3	15	200	246. 5	484. 5	22. 5	230	342. 75
	Ø215	4-M12x30	Ø38	110	Ø180	8	200	246. 5	484. 5	12. 5	220	332. 75
	Ø235	4-M12x30	Ø42,Ø55	120	Ø200	10	220	246. 5	494. 5	24	230	342. 75
JFR220-L2	Ø200	4-M12x28	Ø35	82	Ø114.3	8	180	304	532	8. 5	214	326. 75
	Ø200	4-M12x28	Ø42	117.5	Ø114.3	8	180	304	532	45. 5	249. 5	362. 25
	Ø215	4-M12x28	Ø38	87	Ø180	8	192	304	538	13. 5	219	331. 75
	Ø235	4-M12x28	Ø42	117.5	Ø200	10	220	304	552	45. 5	249. 5	362. 25

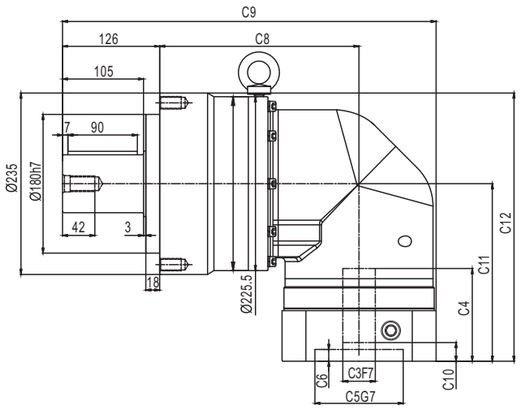
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7 are motor(metric standard) specific dimenisions, which could be customized.

外形尺寸图表 / OUTLINE DIMENSION SHEET

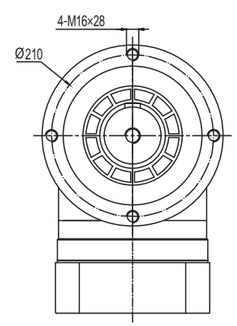
JLR235-L1

输入端 / INPUT



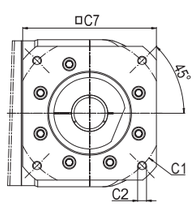


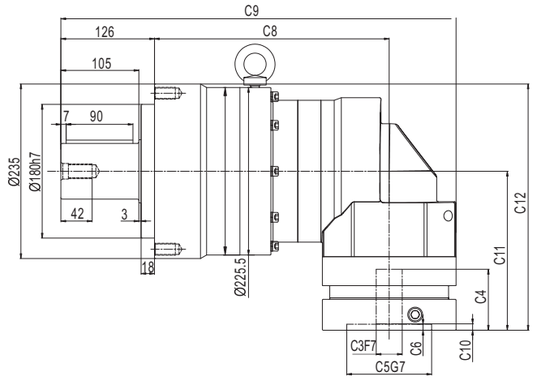
输出端 / OUTPUT



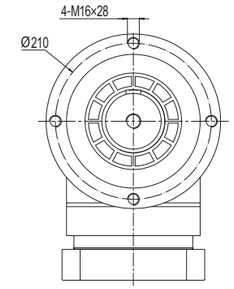
JLR235-L2

输入端 / INPUT

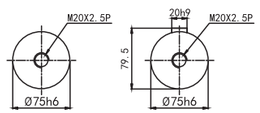




输出端 / OUTPUT



输出轴径/Output Diameter



轴型式 S1 shaft　　轴型式 S2 shaft

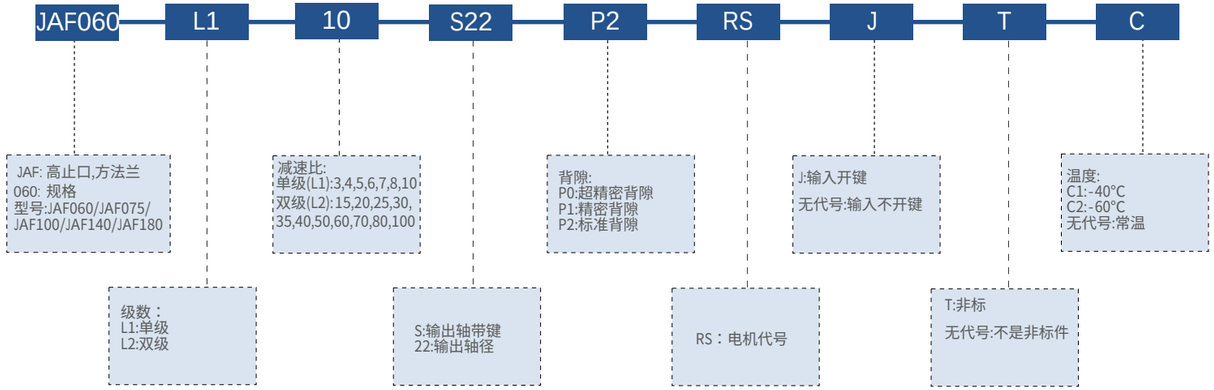
尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12
JLR235-L1	Ø200	4-M12x28	Ø35,Ø42	120	Ø114.3	15	200	258. 5	484. 5	22. 5	230	347.5
	Ø215	4-M12x30	Ø38	110	Ø180	8	200	258. 5	484. 5	12. 5	220	337.5
	Ø235	4-M12x30	Ø42,Ø55	120	Ø200	10	220	258. 5	494. 5	24	230	347.5
JLR235-L2	Ø200	4-M12x28	Ø35	82	Ø114.3	8	180	316	532	8. 5	214	331.5
	Ø200	4-M12x28	Ø42	117.5	Ø114.3	8	180	316	532	45. 5	249.5	367
	Ø215	4-M12x28	Ø38	87	Ø180	8	192	316	538	13. 5	219	336.5
	Ø235	4-M12x28	Ø42	117.5	Ø200	10	220	316	552	45. 5	249.5	367

*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7 are motor(metric standard) specific dimenisions, which could be customized.

JAF

JunsRise®

斜齿行星减速机型号订购说明/Helical-tooth planetary gearbox model illuminate



选型范例：JAF060-L1-10-S22-P2-RS-J-T-C



减速机性能资料 / GEAR BOX PERFORMANCE INFORMATION

规 格		级 数	减速比[1]	JAF060	JAF075	JAF100	JAF140	JAF180
额定输出力矩T_{2N}	Nm	1	3	55	130	208	342	588
			4	50	140	290	542	1,050
			5	60	160	330	650	1,200
			6	55	150	310	600	1,100
			7	50	140	300	550	1,100
			8	45	120	260	500	1,000
			10	40	100	230	450	900
		2	15	55	130	208	342	588
			20	50	140	290	542	1,050
			25	60	160	330	650	1,200
			30	55	160	330	650	1,200
			35	50	160	330	650	1,200
			40	45	120	260	500	1,000
			50	60	160	330	650	1,200
			60	55	150	310	600	1,100
			70	50	140	300	550	1,100
			80	45	120	260	500	1,000
			100	40	100	230	450	900
最大输出力矩T_{2B}	Nm	1,2	3~100	3倍额定输出力矩				
额定输入转速n_1	rpm	1,2	3~100	3,000	3,000	3,000	3,000	3,000
最大输入转速n_{1B}	rpm	1,2	3~100	6,000	6,000	6,000	6,000	6,000
超精密背隙P0	arcmin	1	3~10	—	≤1	≤1	≤1	≤1
		2	3~100	—	—	≤3	≤3	≤3
精密背隙P1	arcmin	1	3~10	≤3	≤3	≤3	≤3	≤3
		2	12~100	≤5	≤5	≤5	≤5	≤5
标准背隙P2	arcmin	1	3~10	≤5	≤5	≤5	≤5	≤5
		2	12~100	≤7	≤7	≤7	≤7	≤7
扭转刚性	Nm/arcmin	1,2	3~100	7	14	25	50	145
容许径向力F_{2R}	N	1,2	3~100	1,400	4,100	9,200	14,000	18,000
容许轴向力F_{2S}	N	1,2	3~100	1,000	3,300	5,220	10,800	13,000
容许轴向力F_{2R}	N	1,2	3~100	1,100	3,700	5,800	11,400	19,500
使用寿命	h	1,2	3~100	30,000（S5工作制）				
效率η	%	1	3~10	≥97%				
		2	12~100	≥94%				
重量	kg	1	3~10	1.3	3.7	7.8	14.5	29
		2	12~100	1.9	41	9	17.5	33
使用温度	℃	1,2	3~100	-10℃~+90℃				
润滑		1,2	3~100	合成润滑油脂				
防护等级		1,2	3~100	IP65				
安装方向		1,2	3~100	任意方向				
噪音值	dB	1,2	3~100	≤58	≤60	≤63	≤65	≤67

减速机转动惯量

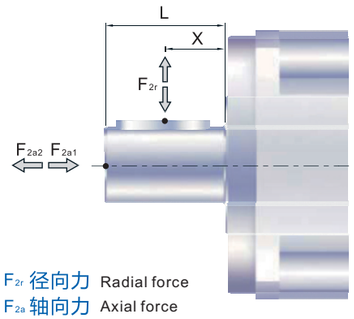
规 格		级 数	减速比[1]	JAF060	JAF075	JAF100	JAF140	JAF180
转动惯量J_1	kg·cm²	1	3	0.16	0.61	3.25	9.21	28.98
			4	0.14	0.48	2.74	7.54	23.67
			5	0.13	0.47	2.71	7.42	23.29
			6	0.13	0.45	2.65	7.25	22.75
			7	0.13	0.45	2.62	7.14	22.48
			8	0.13	0.44	2.58	7.07	22.59
			10	0.13	0.44	2.57	7.03	22.51
		2	15	0.03	0.13	0.47	2.71	7.42
			20	0.03	0.13	0.47	2.71	7.42
			25	0.03	0.13	0.47	2.71	7.42
			30	0.03	0.13	0.47	2.71	7.42
			35	0.03	0.13	0.47	2.71	7.42
			40	0.03	0.13	0.47	2.71	7.42
			50	0.03	0.13	0.44	2.57	7.03
			60	0.03	0.13	0.44	2.57	7.03
			70	0.03	0.13	0.44	2.57	7.03
			80	0.03	0.13	0.44	2.57	7.03
			100	0.03	0.13	0.44	2.57	7.03

1.减速比（$i=N_{in}/N_{out}$）
* 连续运转降低使用寿命二分之一。

2.输出转数 **100rpm** 时，作用于输出轴中心位置。

减速机输出轴之容许径向力及轴向力

ALLOWABLE RADIAL AND AXIAL FORCES ON THE OUTPUT SHAFT OF THE GEARBOX



F_{2r} 径向力 Radial force

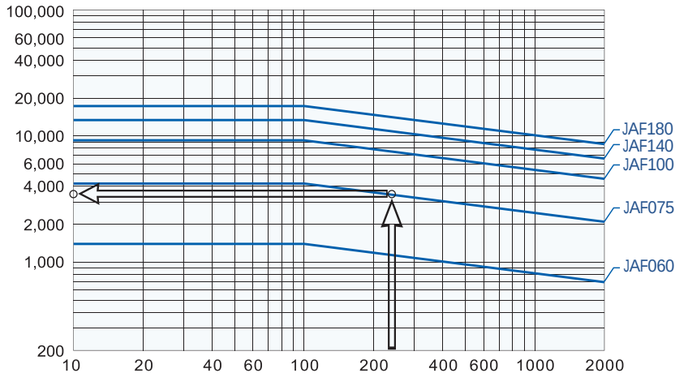
F_{2a} 轴向力 Axial force

减速器输出轴所能承受的最大径向力和轴向力，取决于内部支撑轴承的设计。采用大跨距设计，选择大承载力轴承，获得最大的径向力和轴向力承载能力。

The permitted radial and axial loads on output shaft depends on the design of the gearbox supporting bearing. Large span design andlarge bearing capacity are adopted, to obtain the maximym bearingcapacityofradialand axialloads.

容许径向力 F_{2rB}[N] 施力于轴中心位置

Permissible radial force F_{2rB}【N】apply force to the center of the shaft



输出轴转速 n_2[rpm]

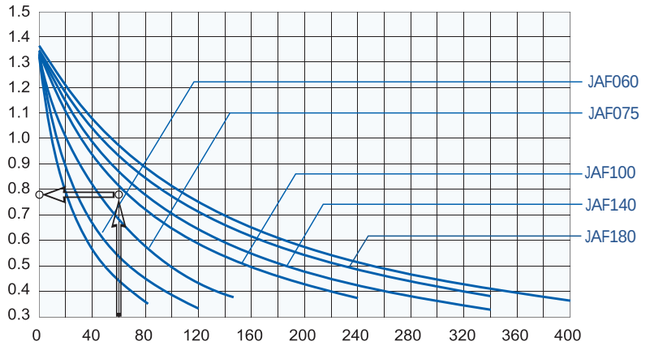
Output shaft speed

当径向力F_{2r}作用在轴中心位置即X=1/2xL，各种规格减速器在不同输出转速的运行时，所能承受之容许径向力F_{2rB}，请参考左图

When the radial force F_{2r} is applied to the center of the shaft, i.e. X=1/2xL, theallowable radial force F_{2rB} that can be withstood by ifferent specifications of reducers nder different output speeds is refer to the left picture

位置负荷系数 k_b

Positional load coefficient



径向力施力位置 X[mm]

Radial force application position

当径向力F_{2r}作用点不在轴中心位置时，越靠近减速器即X<112xL，所能承受之容许径向力越大；越远离减径向力则越小。请参考左图，按减速器规格及径向力作用点位置X值，查出位置负荷系数K_b，代入下列公式，求出容许径向力:

When the radial force F_{2r} is not in the center of the shaft, the closer to the gearbox, that is, X<1/2xL, the allowable radial force that can be borne becomes larger, and the farther away from the reducer, i.e., X>1/2xL, the allowable force that can be borne becomes smaller.

$F'_{2rB}=K_bXF_{2rB}$

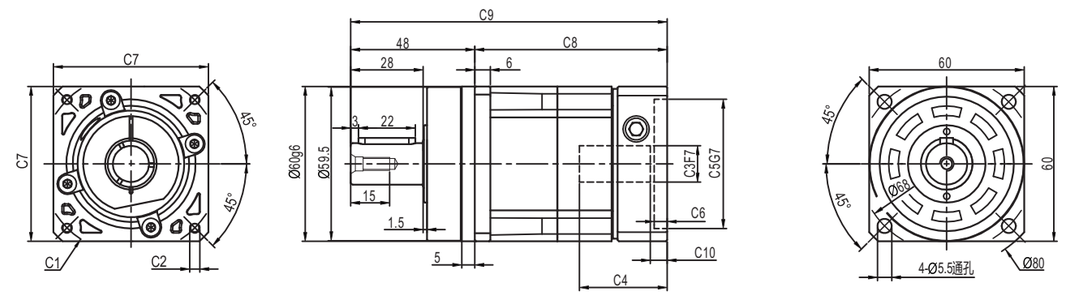
JunsRise®

外形尺寸图表 / OUTLINE DIMENSION SHEET

JAF060-L1

输入端/ INPUT

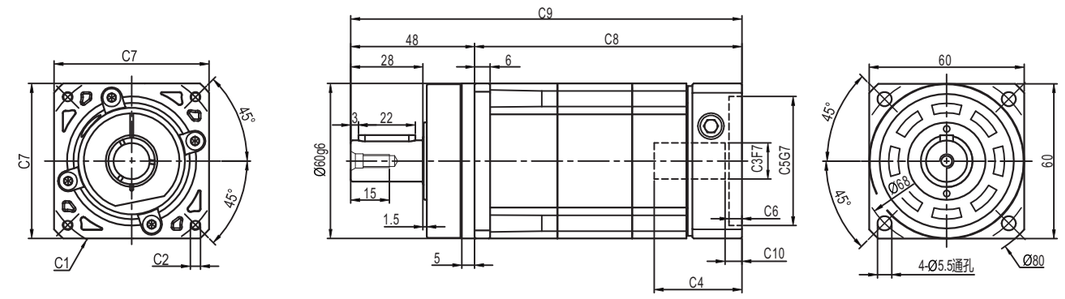
输出端/OUTPUT



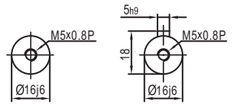
JAF060-L2

输入端/ INPUT

输出端/OUTPUT



输出轴径/Output Diameter



轴型式 S1 shaft

轴型式 S2 shaft

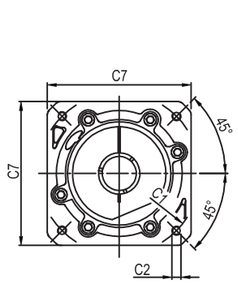
尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
JAF060-L1	Ø66.7	4-M4x10	Ø8	34	Ø38.1	5	60	74.5	122.5	6.5
JAF060-L2								103.5	151.5	6.5
JAF060-L1	Ø70	4-M4x10,4-M5x12	Ø11,Ø14	34	Ø50	5	60	74.5	122.5	6.5
JAF060-L2								103.5	151.5	6.5
JAF060M1-L1	Ø90	4-M5x12,4-M6x14	Ø19	42	Ø70	6.5	80	81	129	12
JAF060M2-L2								110	158	12

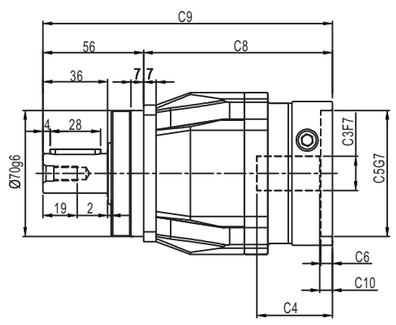
*C1~C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1~C7are motor(metric standard) specific dimenisions, which could be customized.
*M1:极限孔(版本号)
*M1:Limit hole (Version number)

外形尺寸图表 / OUTLINE DIMENSION SHEET

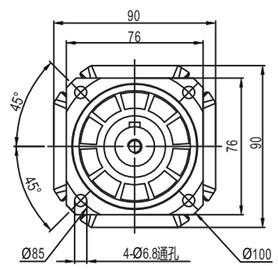
JAF075-L1

输入端/INPUT



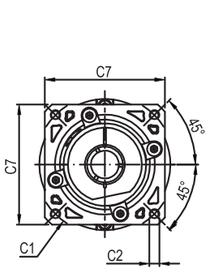


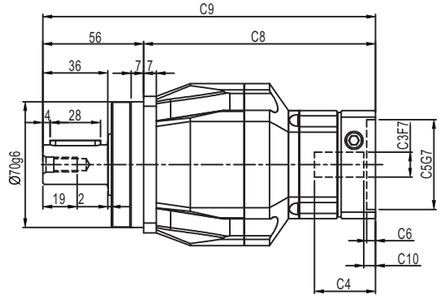
输出端/ OUTPUT



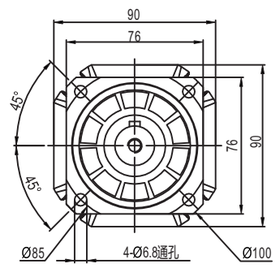
JAF075-L2

输入端/ INPUT

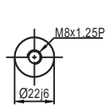




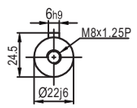
输出端 /OUTPUT



输出轴径/Output Diameter



轴型式 S1
shaft



轴型式 S2
shaft

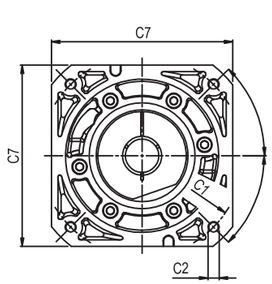
尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
JAF075-L1	Ø90	4-M5x12,4-M6x14	Ø19	42	Ø70	6.5	80	105	161	7
	Ø100	4-M6x14	Ø16	42	Ø80	6.5	86	105	161	7
JAF075M1-L1	Ø115	4-M8x20	Ø19,Ø22	56.5	Ø95	8	100	120.5	176.5	17.5
	Ø145	4-M8x20	Ø19,Ø22Ø24	59	Ø110	11	130	123	178	20
JAF075-L2	Ø66.7	4-M4x10	Ø8	34	Ø38.1	5	60	129	185	5.5
	Ø70	4-M4x10,4-M5x12	Ø11,Ø14	34	Ø50	5	60	129	185	5.5
JAF075M1-L2	Ø90	4-M5x12,4-M6x14	Ø19	42	Ø70	6.5	80	135.5	191.5	12
	Ø100	4-M6x14	Ø16	42	Ø80	65	86	135.5	191.5	11

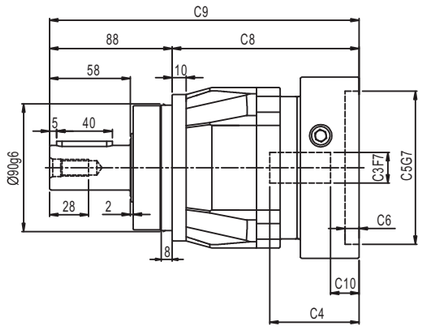
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7 are motor(metric standard) specific dimensions, which could be customized.
*M1:极限孔(版本号)
*M1:Limit hole (Version number)

外形尺寸图表 / OUTLINE DIMENSION SHEET

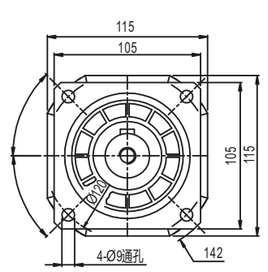
JAF100-L1

输入端/ INPUT



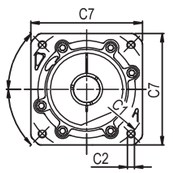


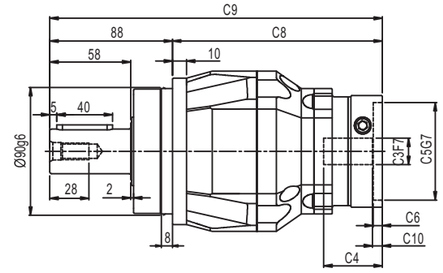
输出端/OUTPUT



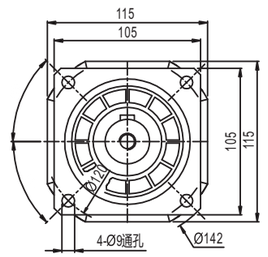
JAF100-L2

输入端/ INPUT

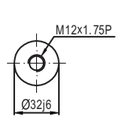




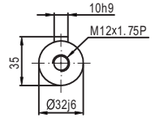
输出端/OUTPUT



输出轴径/Output Diameter



轴型式 S1
shaft



轴型式 S2
shaft

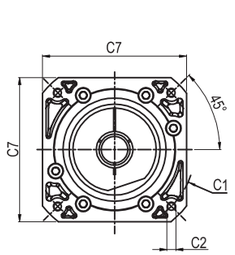
尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
JAF100-L1	Ø145	4-M8x20	Ø19,Ø22,Ø24	64	Ø110	10	130	134	222	19.5
JAF100M1-L1	Ø200	4-M12x28	Ø35	81	Ø114.3	10	180	151.5	239.5	28
JAF100-L2	Ø90	4-M5x12,4-M6x14	Ø19	42	Ø70	6.5	80	150.5	238.5	7
	Ø100	4-M6x14	Ø16	42	Ø80	6.5	86	150.5	238.5	6
JAF100M1-L2	Ø115	4-M8x20	Ø19,Ø22	56.5	Ø95	8	100	166	254	16.5
	Ø145	4-M8x20	Ø19,Ø22,Ø24	59	Ø110	11	130	168.5	256.5	19

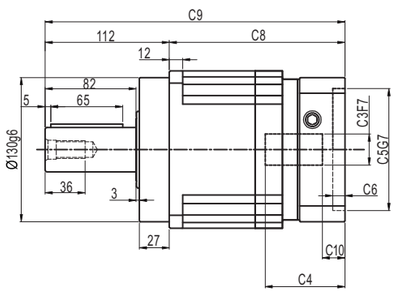
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7 are motor(metric standard) specific dimensions, which could be customized.
*M1:极限孔(版本号)
*M1:Limit hole (Version number)

外形尺寸图表 / OUTLINE DIMENSION SHEET

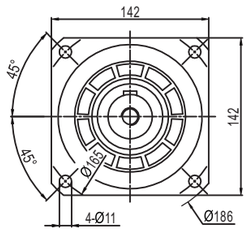
JAF140-L1

输入端/INPUT



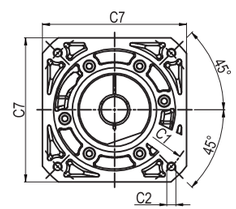


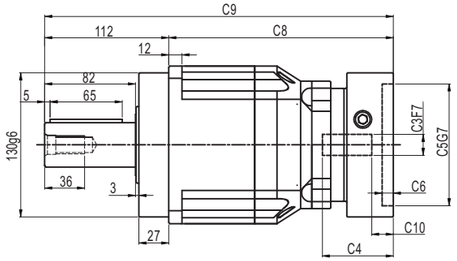
输出端/ OUTPUT



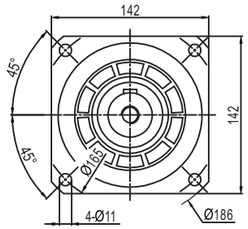
JAF140-L2

输入端/ INPUT

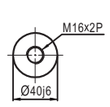




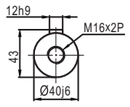
输出端 /OUTPUT



输出轴径/Output Diameter



轴型式 S1
shaft



轴型式 S2
shaft

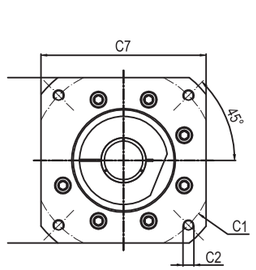
尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
JAF140-L1	Ø145	4-M8x20	Ø22,Ø24	72	Ø110	11	130	158.5	270.5	19.5
	Ø200	4-M12x20	Ø35	81.5	Ø114.3	8	180	168.5	280.5	25
JAF140-L2	Ø145	4-M8x20	Ø19,Ø22,Ø24	64	Ø110	10	130	202.5	314.5	19.5
JAF140M1-L2	Ø200	4-M12x20	Ø35	81	Ø114.3	10	180	220	332	28

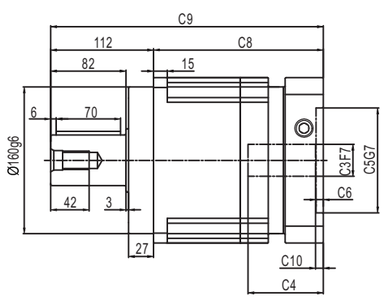
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7are motor(metric standard) specific dimenisions, which could be customized.
*M1:极限孔(版本号)
*M1:Limit hole (Version number)

外形尺寸图表 / OUTLINE DIMENSION SHEET

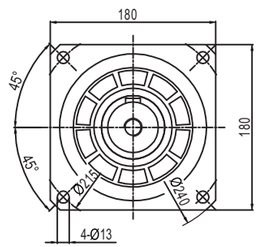
JAF180-L1

输入端/ INPUT



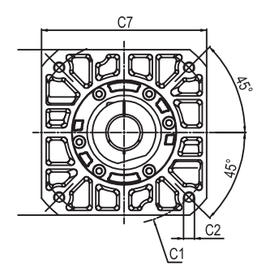


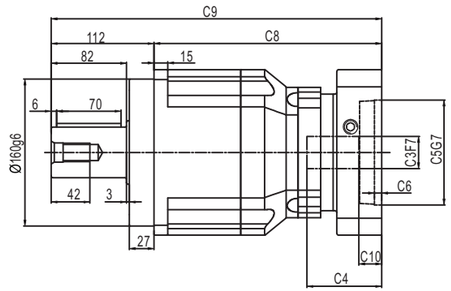
输出端/OUTPUT



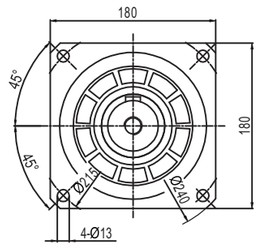
JAF180-L2

输入端/ INPUT

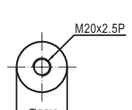




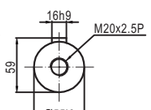
输出端/OUTPUT



输出轴径/Output Diameter



轴型式 S1
shaft



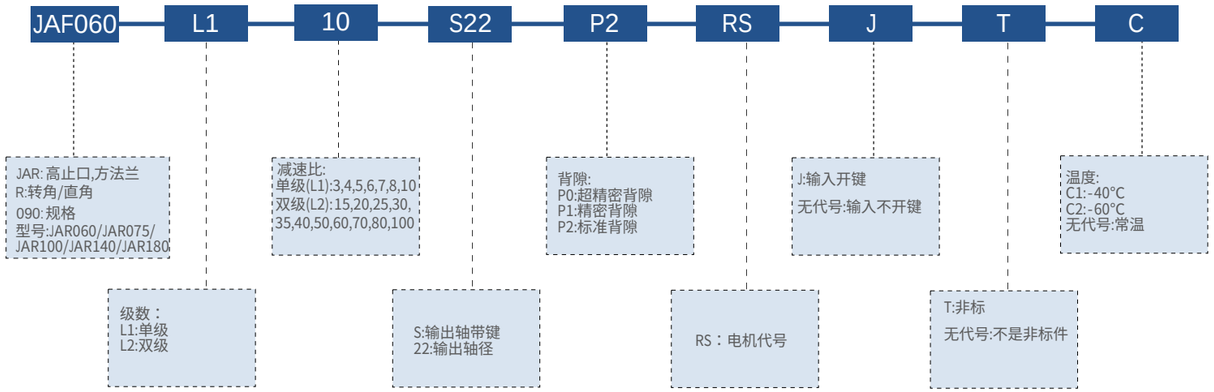
轴型式 S2
shaft

尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
JAF180-L1	Ø200	4-M12x28	Ø35	82	Ø114.3	8	180	185	297	8.5
	Ø200	4-M12x28	Ø42	117.5	Ø114.3	8	180	220.5	332.5	45.5
	Ø215	4-M12x28	Ø38	87	Ø180	8	192	190	302	13. 5
	Ø235	4-M12x28	Ø42	117.5	Ø200	10	200	220.5	332.5	45.5
JAF180-L2	Ø145	4-M8x20	Ø22,Ø2	72	Ø110	11	130	238	350	19. 5
	Ø200	4-M12x28	Ø35	81.5	Ø114.3	8	180	248	360	25

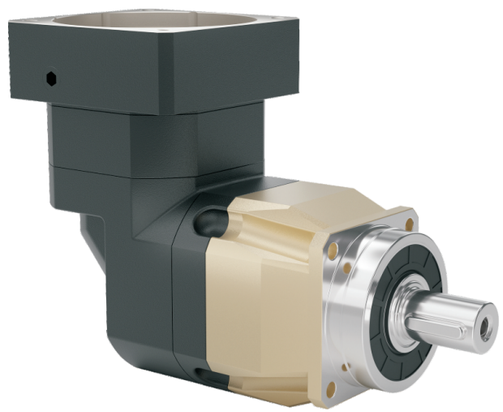
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7are motor(metric standard) specific dimenisions, which could be customized.

JAR

斜齿行星减速机型号订购说明/Helical-tooth planetary gearbox model illuminate



选型范例：JAF-L1-10-S22-P2-RS-J-T-C



减速机性能资料 / GEAR BOX PERFORMANCE INFORMATION

规 格 Model		级 数 Stage	减速比 [1] Ratio	JAR60	JAR75	JAR100	JAR140	JAR180
额定输出力矩T_{2N} Rated output torque	Nm	1	3	55	130	208	342	588
			4	50	140	290	542	1,050
			5	60	160	330	650	1,200
			6	55	150	310	600	1,100
			7	50	140	300	550	1,100
			8	50	140	290	542	1,000
			10	60	160	330	650	520
			14	50	140	300	550	1,100
			20	40	100	230	450	520
		2	12	55	130	208	342	588
			15	55	130	208	342	588
			20	50	140	290	542	1,050
			25	60	160	330	650	1,200
			30	55	130	208	342	1,200
			35	60	160	330	650	1,200
			40	50	140	290	542	1,200
			50	60	160	330	650	1,200
			60	55	150	310	600	1,200
			70	60	160	330	650	1,200
			80	50	140	290	542	1,200
			100	60	160	330	650	1,200
			120	–	150	310	600	1,100
			140	–	140	300	550	1,100
			160	–	120	260	500	1,000
			200	–	100	230	450	520
最大输出力矩T_{2B}/Max.output torque	Nm	1,2	3~200	3倍额定输出力矩 3 times the rated output torque				
额定输入转速n_1/Rated input speed	rpm	1,2	3~200	3,000	3,000	3,000	3,000	3,000
最大输入转速n_{1B}/Max.input speed	rpm	1,2	3~200	6,000	6,000	6,000	6,000	6,000
超精密背隙 P0/Ultra-precision backlash	arcmin	1	3~20	–	≤2	≤2	≤2	≤2
		2	12~200	–	≤4	≤4	≤4	≤4
精密背隙 P1/Precision backlash	arcmin	1	3~20	≤4	≤4	≤4	≤4	≤4
		2	12~200	≤7	≤7	≤7	≤7	≤7
标准背隙 P2/Precision backlash	arcmin	1	3~20	≤6	≤6	≤6	≤6	≤6
		2	12~200	≤9	≤9	≤9	≤9	≤9
扭转刚性/Torsional rigidity	Nm/arcmin	1,2	3~200	7	14	25	50	145
容许径向力F_{2R} /Allowable radial force	N	1,2	3~200	1,400	4,100	9,200	14,000	18,000
容许轴向力F_{2A} / Allowable radial force	N	1,2	3~200	1,000	3,300	5,220	10,800	13,000
容许轴向力F_{2E} / Allowable radial force	N	1,2	3~200	1,100	3,700	5,800	11,400	19,500
使用寿命/Life time	hr	1,2	3~200	30,000 (S5工作制)				
效率 η /Efficiency	%	1	3~20	≥95%				
		2	12~200	≥92%				
重量/Weight	kg	1	3~20	2.1	6.4	13	24.5	51
		2	12~200	2.5	7.8	14.2	27.5	54
使用温度/Operating temperature	℃	1,2	3~200	-10℃~+90℃				
润滑/lubrication		1,2	3~200	合成润滑油脂 Synthetic lubricating grease				
防护等级/Ingress protection		1,2	3~200	IP65				
安装方向/Mount position		1,2	3~200	任意方向 Any direction				
噪音值(n_1=3000rpm)/Noise level	dB	1,2	3~200	≤63	≤65	≤68	≤70	≤72

减速机转动惯量 Gearbox moment of inertia

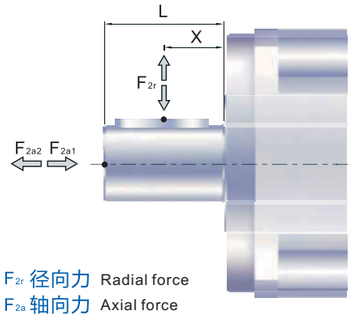
规 格 Model		级 数 Stage	减速比 [1] Ratio	JAR60	JAR75	JAR100	JAR140	JAR180
转动惯量J_1 Moment of inertia	kg · cm²	1	3~10	0.35	2.25	6.84	23.4	68.9
			14	0.07	1.87	6.25	21.8	65.6
			20	0.07	1.87	6.25	21.8	65.6
		2	15	–	–	–	–	–
			20	–	–	–	–	–
			25~100	0.09	0.35	2.25	6.84	23.4
			120~200	–	0.31	1.87	6.25	21.8

1.减速比Ratio($i=N_{in}/N_{out}$)
* 连续运转降低使用寿命二分之一。
The lifetime will be shortened by half under continuous operation.

2.输出转速 **100rpm** 时，作用于输出轴中心位置。
When the output speed is 100rpm, it applieson the center of the output shaft.

减速机输出轴之容许径向力及轴向力

ALLOWABLE RADIAL AND AXIAL FORCES ON THE OUTPUT SHAFT OF THE GEARBOX



F_{2r} 径向力 Radial force

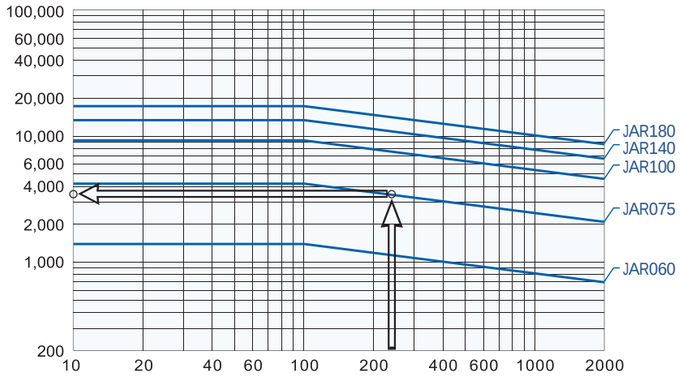
F_{2a} 轴向力 Axial force

减速器输出轴所能承受的最大径向力和轴向力，取决于内部支撑轴承的设计。采用大跨距设计，选择大承载力轴承，获得最大的径向力和轴向力承载能力。

The permitted radial and axial loads on output shaft depends on the design of the gearbox supporting bearing. Large span design andlarge bearing capacity are adopted, to obtain the maximym bearingcapacityofradialand axialloads.

容许径向力 F_{2rB}[N] 施力于轴中心位置

Permissible radial force F_{2rB}【N】apply force to the center of the shaft



输出轴转速 n_2[rpm]

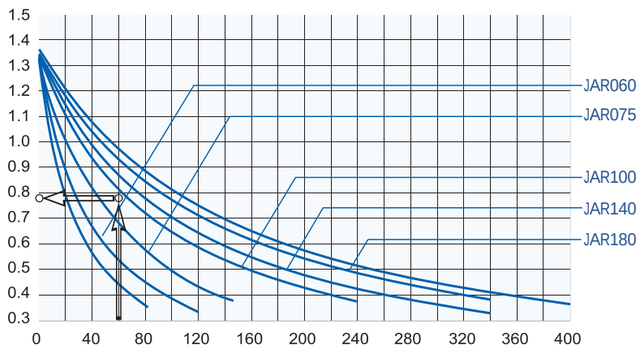
Output shaft speed

当径向力F_{2r}作用在轴中心位置即X=1/2xL，各种规格减速器在不同输出转速的运行时，所能承受之容许径向力F_{2rB}，请参考左图

When the radial force F_{2r} is applied to the center of the shaft, i.e. X=1/2xL, theallowable radial force F_{2rB} that can be withstood by ifferent specifications of reducers nder different output speeds is refer to the left picture

位置负荷系数 k_b

Positional load coefficient



径向力施力位置 X[mm]

Radial force application position

当径向力F_{2r}作用点不在轴中心位置时，越靠近减速器即X<112xL，所能承受之容许径向力越大；越远离减径向力则越小。请参考左图，按减速器规格及径向力作用点位置X值，查出位置负荷系数K_b，代入下列公式，求出容许径向力:

When the radial force F_{2r} is not in the center of the shaft, the closer to the gearbox, that is, X<1/2xL, the allowable radial force that can be borne becomes larger, and the farther away from the reducer, i.e., X>1/2xL, the allowable force that can be borne becomes smaller.

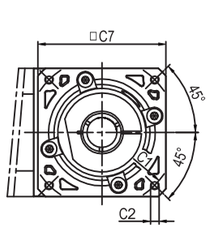
$F'_{2rB}=K_bXF_{2rB}$

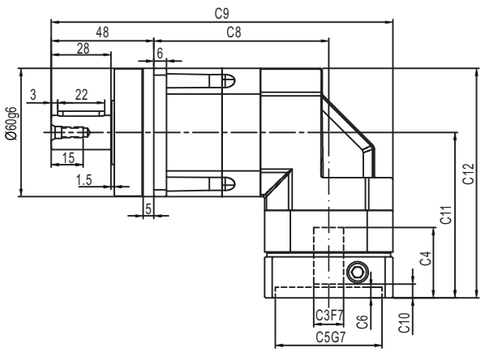
JunsRise®

外形尺寸图表 / OUTLINE DIMENSION SHEET

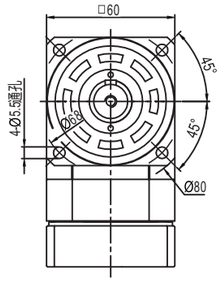
JAR060-L1

输入端/INPUT



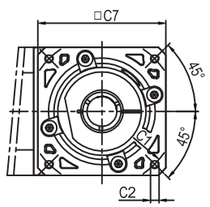


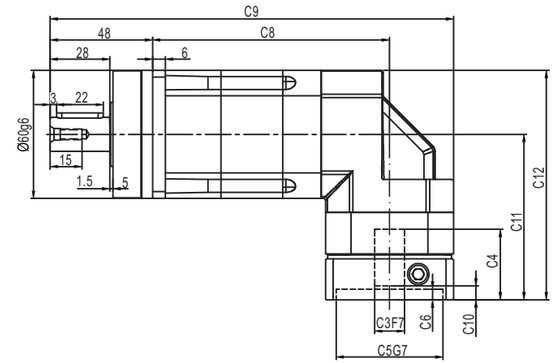
输出端/ OUTPUT



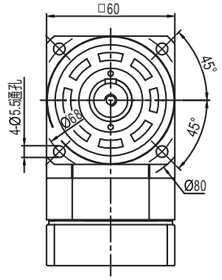
JAR060-L2

输入端/ INPUT

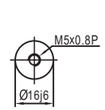




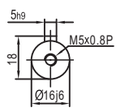
输出端 /OUTPUT



输出轴径/Output Diameter



轴型式 S1 shaft



轴型式 S2 shaft

尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12
JAR060-L1	Ø66.7	4-M4×10	Ø8	33	Ø38	5	60	82	160	5.5	77.5	107.5
JAR060-L2								111	189			
JAR060-L1	Ø70	4-M4x10,4-M5x12	Ø11,Ø14	33	Ø50	5	60	82	160	5.5	77.5	107.5
JAR060-L2								111	189			
JAR060M1-L1	Ø90	4-M5x12,4-M6x14	Ø19	42.5	Ø70	6.5	80	82	170	12	87	117
JAR060M1-L2								111	199			

*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。

*C1～C7 are motor(metric standard) specific dimenisions, which could be customized.

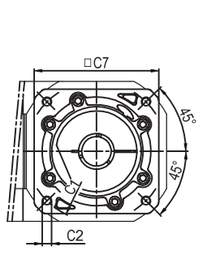
*M1:极限孔(版本号)

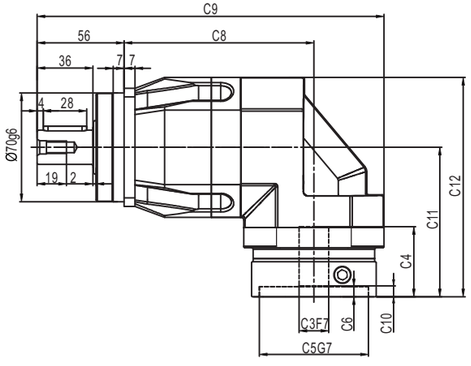
*M1:Limit hole (Version number)

外形尺寸图表 / OUTLINE DIMENSION SHEET

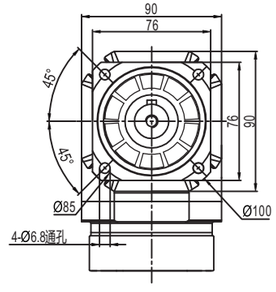
JAR075-L1

输入端/ INPUT



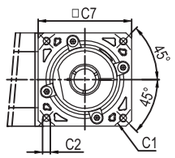


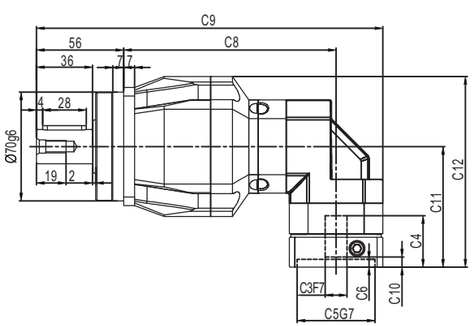
输出端/OUTPUT



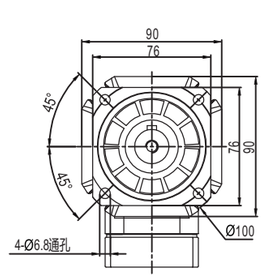
JAR075-L2

输入端/ INPUT

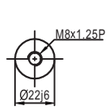




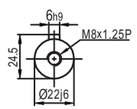
输出端/OUTPUT



输出轴径/Output Diameter



轴型式 S1
shaft



轴型式 S2
shaft

尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12
JAR075-L1	Ø90	4-M5x12,4-M6x14	Ø19	45	Ø70	6.5	80	122	223	7	96	141
	Ø100	4-M6x14	Ø16	45	Ø80	6.5	86	122	223	6	96	141
JAR075M1-L1	Ø115	4-M8x20	Ø19,Ø22	56.5	Ø95	8	100	122	228	16.5	117.5	162.5
	Ø145	4-M8x20	Ø19,Ø22,Ø24	59	Ø110	11	130	122	243	19	120	165
JAR075-L2	Ø66.7	4-M4x10	Ø8	33	Ø38.1	5	60	136.5	222.5	5.5	77.5	122.5
	Ø70	4-M4x10,4-M5x12	Ø11,Ø14	33	Ø50	5	60	136.5	222.5	5.5	77.5	122.5
JAR075M1-L2	Ø90	4-M5x12,4-M6x14	Ø19	42.5	Ø70	6.5	80	136.5	232.5	12	87	132
	Ø100	4-M6x14	Ø16	42.5	Ø80	6.5	86	136.5	235.5	11	87	132

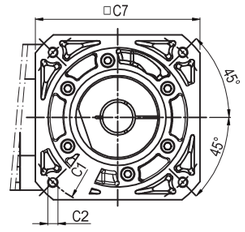
*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7are motor(metric standard) specific dimenisions, which could be customized.
*M1:极限孔(版本号)
*M1:Limit hole (Version number)

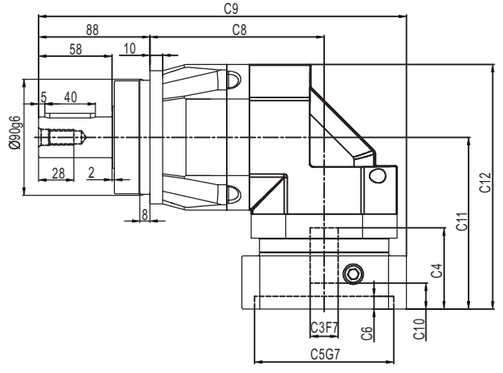
JunsRise®

外形尺寸图表 / OUTLINE DIMENSION SHEET

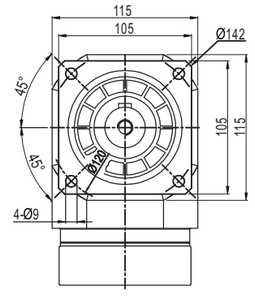
JAR100-L1

输入端/INPUT



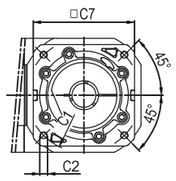


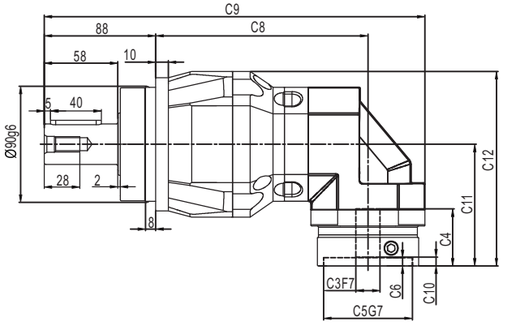
输出端/ OUTPUT



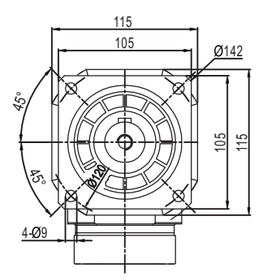
JAR100-L2

输入端/ INPUT

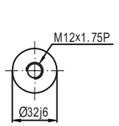




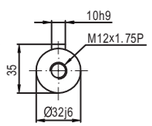
输出端 /OUTPUT



输出轴径/Output Diameter



轴型式 S1
shaft



轴型式 S2
shaft

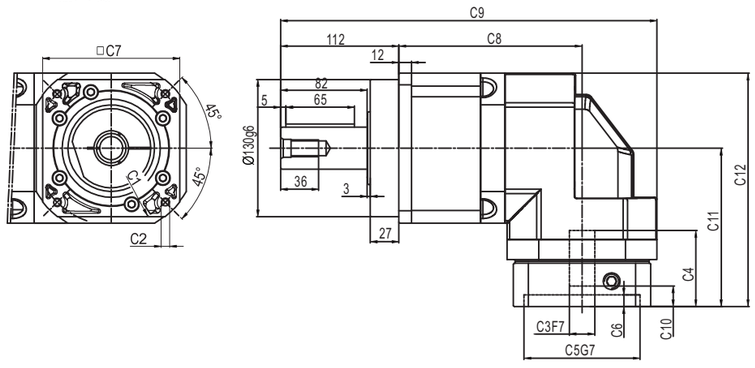
尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12
JAR-100-L1	Ø145	4-M8x20	Ø19,Ø22,Ø24	64	Ø110	10	130	137.5	290.5	195	135.5	193
JAR-100M1-L1	Ø200	4-M12x28	Ø35	81	Ø114.3	10	180	137.5	315.5	28	152.5	210
JAR-100-L2	Ø90	4-M5x12,4-M6x14	Ø19	45	Ø70	6.5	80	167.5	300.5	7	96	153.5
	Ø100	4-M6x14	Ø16	45	Ø80	65	86	167.5	300.5	6	96	153.5
JAR-100M1-L2	Ø115	4-M8x20	19,Ø22	56.5	Ø95	8	100	167.5	305.5	16.5	117.5	175
	Ø145	4-M8x20	Ø19,Ø22,Ø24	59	Ø110	11	130	167.5	320.5	19	120	177.5

*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7are motor(metric standard) specific dimenisions, which could be customized.
*M1:极限孔(版本号)
*M1:Limit hole (Version number)

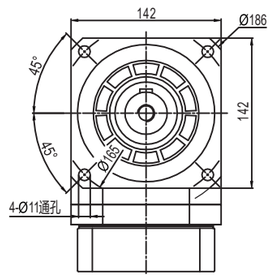
外形尺寸图表 / OUTLINE DIMENSION SHEET

JAR140-L1

输入端/ INPUT

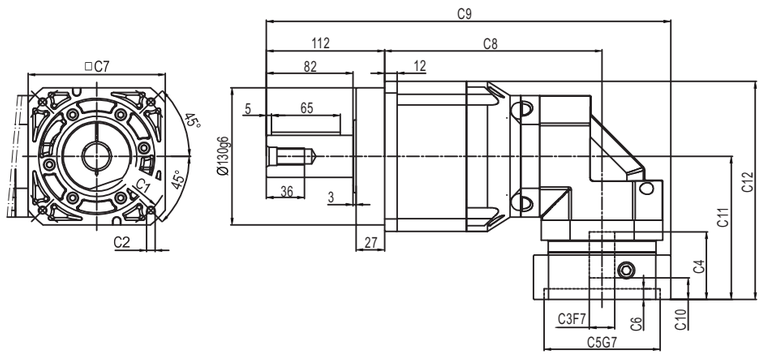


输出端/OUTPUT

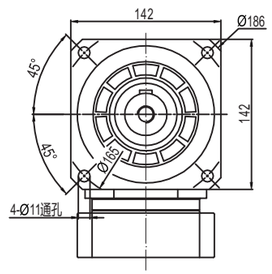


JAR140-L2

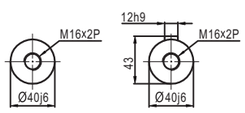
输入端/ INPUT



输出端/OUTPUT



输出轴径/Output Diameter



轴型式 S1 shaft　　轴型式 S2 shaft

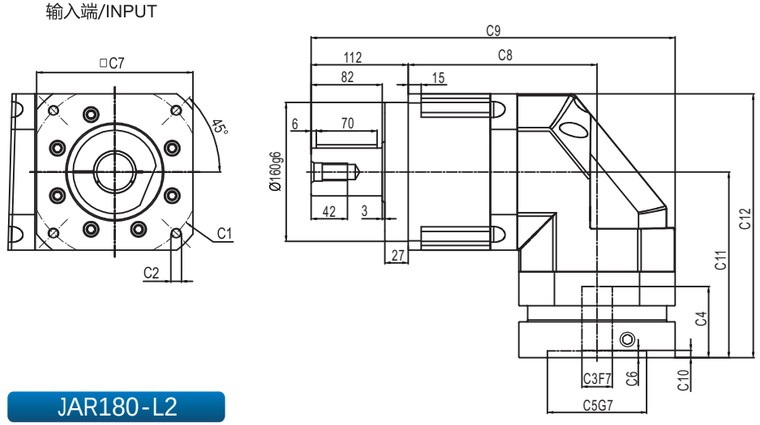
尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12
JAR-140-L1	Ø145	4-M8×20	Ø19,Ø22	72	Ø110	11	130	173.5	356.5	19.5	150	221
	Ø200	4-M12×28	Ø35	82	Ø114.3	8	180	173.5	375.5	25	160	231
JAR-140-L2	Ø145	4-M8×20	Ø19,Ø22,Ø24	64	Ø110	10	130	206	383	19.5	35.5	06.5
JAR-140M1-L2	Ø200	4-M12×28	Ø35	81	Ø114.3	10	180	206	408	28	52.5	23.5

*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7are motor(metric standard) specific dimenisions, which could be customized.
*M1:极限孔(版本号)
*M1:Limit hole (Version number)

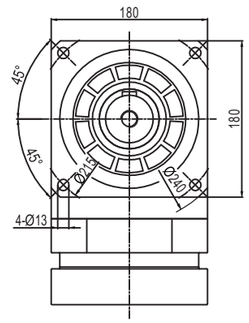
外形尺寸图表 / OUTLINE DIMENSION SHEET

JAR180-L1

输入端/INPUT

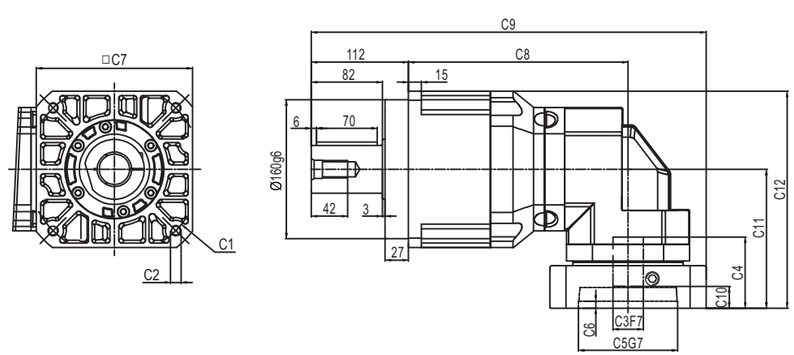


输出端/ OUTPUT

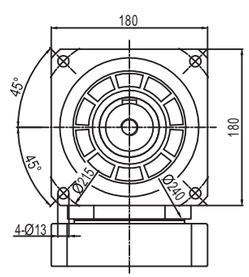


JAR180-L2

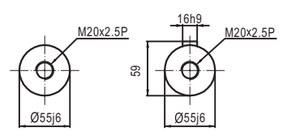
输入端/ INPUT



输出端 /OUTPUT



输出轴径/Output Diameter



轴型式 S1 shaft　　轴型式 S2 shaft

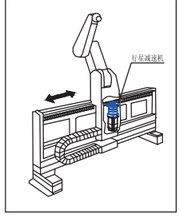
尺寸 Size	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12
JAR-180-L1	Ø200	4-M12×28	Ø35	82	Ø114.3	8	180	217.5	419.5	8.5	214	304
	Ø200	4-M12×28	Ø42	117.5	Ø114.3	8	180	217.5	419.5	45.5	249.5	339.5
	Ø215	4-M8×20	Ø38	87	Ø180	8	192	217.5	425.5	13.5	219	309
	Ø235	4-M12×28	Ø42	117.5	Ø200	10	220	217.5	439.5	45.5	249.5	339.5
JAR-180-L2	Ø145	4-M8×20	Ø19,Ø24	72	Ø110	11	130	246	383	19.5	150	240
	Ø200	4-M12×28	Ø35	82	Ø114.3	8	180	253	408	25	160	250

*C1～C7是公制标准马达连接板之尺寸，可根据客户要求单独定做。
*C1～C7are motor(metric standard) specific dimenisions, which could be customized.

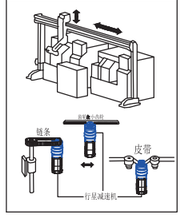
SL

JunsRise®

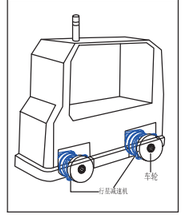
机器人的行走轴（齿条和小齿轮）
The walking shaft of a robot (rack and pinion)



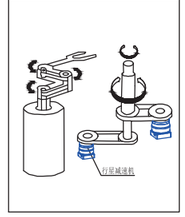
机床的龙门机器人
Gantry robot of machine tool



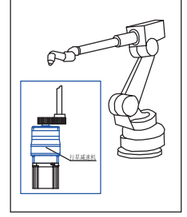
无人搬运车
Unmanned vehicle



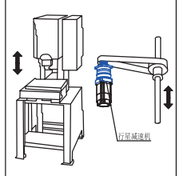
晶圆搬运机器人
Wafer handling robot



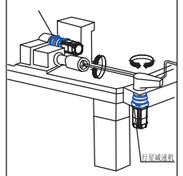
高度工作用机器人
Robot for working in height



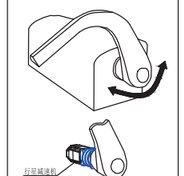
冲压设备（铆接）
Stamping equipment (riveting)



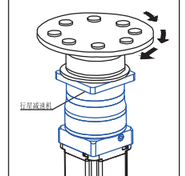
弯管机
Pipe bending machine



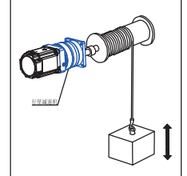
注塑成型取出机器人
Injection mold taken-out robot



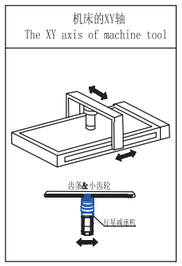
角度（定位）控制
Angle (positioning) contol



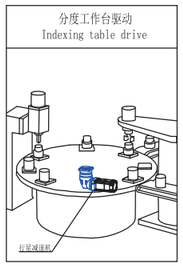
卷起
Roll up



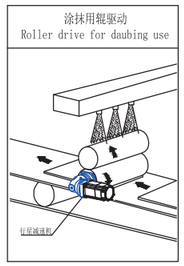
机床的XY轴
The XY axis of machine tool



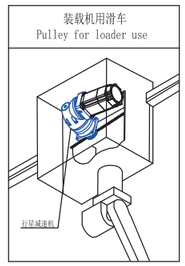
分度工作台驱动
Indexing table drive



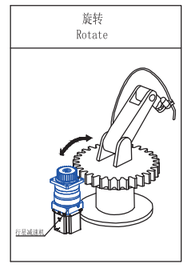
涂抹用辊驱动
Roller drive for daubing use



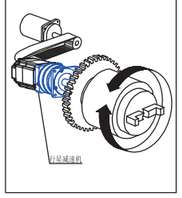
装载机用滑车
Pulley for loader use



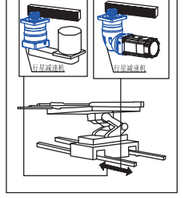
旋转
Rotate



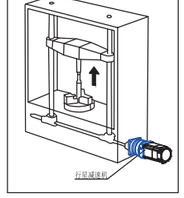
轴输入型皮带驱动
Shaft input belt drive



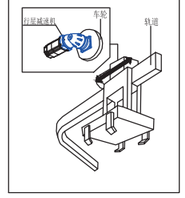
液晶玻璃基板搬运机器人
Liquid crystal galss substraste handling robot



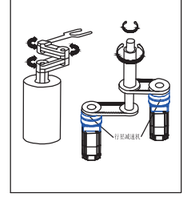
拉力试验机
Tensile testing machine



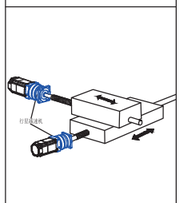
顶棚行走式搬运车
Roof walking van



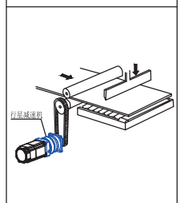
搬送
Transport



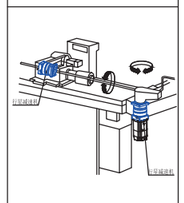
两轴控制（XY工作台）
Two axis control (XY workbench)



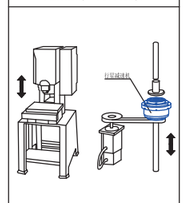
辊驱动
Roller drive



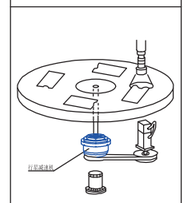
弯管机
Pipe bending machine



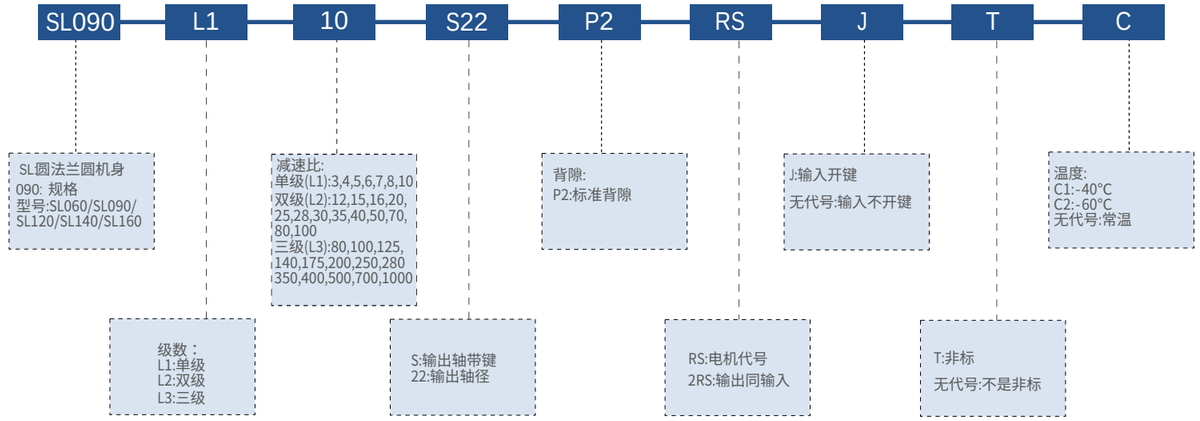
冲压（铆接）
Punching (riveting)



印刷电路板检查装置
Printed circuit board inspection device



直齿行星减速机型号订购说明/Straight-tooth planetary gearbox model illuminate



选型范例：SL090-L1-10-S22-P2-RS-J-T-C



技术参数

型号 Model	单位 Unit	SL/ SF	级数 Stages
寿命① lifetime	h	20000	
最低工作温度 Min.operating temp	℃	-25	
最高工作温度 Max.operating temp	℃	+90	
防护等级 Degree of protection	IP	IP65	
润滑方式 Mounting position		长效润滑/Life lubrication	
安装方式 Mounting position		任意/Any	
旋转方向 Direction of rotation		输出、输入同向/Same direction	
满载效率 Maxiumum efficency	%	94%	1-stages
		92%	2-stages
		88%	3-stages

型号 Model	单位 Unit	SL060	SL090	SL120	SL160B	级数 Stages
最大容许径向力 Max.radial force②		400	1050	2200	3650	1-stages
		500	1300	2600	4650	2-stages
		800	1500	2900	5400	3-stages
最大容许轴向力 Max.axial force③		300	850	1600	2000	1-stages
		390	1100	2100	2700	2-stages
		700	1300	2600	5500	3-stages
抗扭刚性 Torsional stiffness		3.2	8.5	17.5	37.5	

型号 Model	单位 Unit	SL060	SL090	SL120	SF140B SF160B	级数 Stages
最大容许径向力 Max.radial force②	N	400	1050	2200	3650	1-stages
		500	1300	2600	4650	2-stages
		800	1500	2900	5400	3-stages
最大容许轴向力 Max.axial force③	N	300	850	1600	2000	1-stages
		390	1100	2100	2700	2-stages
		700	1300	2600	5500	3-stages
抗扭刚性 Torsional stiffness	Nm/arcmin	3.2	8.5	17.5	37.5	

说 明

① 寿命是在额定负载下，连续运转的时间；
② 最大容许径向力是单级在输出转速为100rpm时，双级在输出转速为50rpm时，三级在输出转速10rpm时，作用于输出轴中心位置（1/2轴长处）所测得容许径向力；
③ 最大容许轴向力是单级在输出转速为100rpm时，双级在输出转速为50rpm时，三级在输出转速为10rpm时，作用于输出轴外端面所测得容许轴向力；如有其它特殊要求时，请与PLT技术人员联系。

JunsRise®

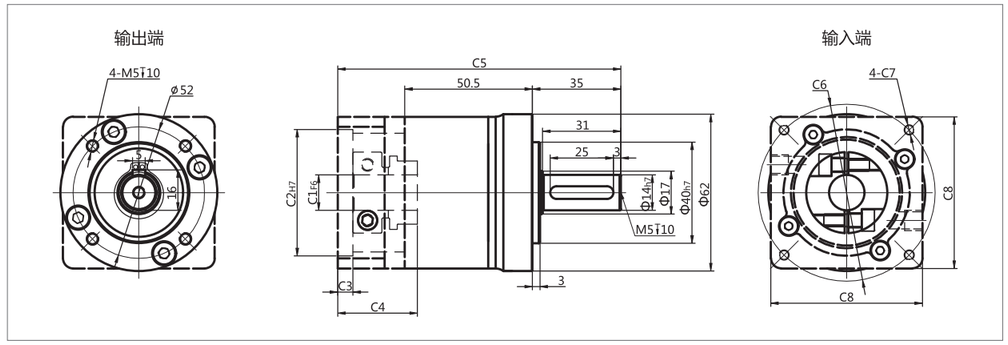
技术参数

型号 Model	单位 Unit	SL060 SF060	SL090 SF090	SL120 SF120	SL160B SF140B SF160B	减速比 Ratios(i)	级数 Stages
额定输出扭矩 Tn Nominal torquet Tn	Nm	16.5	63.0	155.0	310.0	3	1-stages
		26.0	90.0	230.0	460.0	4	
		28.0	100.0	245.0	500.0	5	
		20.0	68.0	165.0	340.0	7	
		12.5	43.0	95.0	195.0	10	
		19.5	75.0	185.0	370.0	9	2-stages
		31.5	110.0	275.0	550.0	12	
		31.5	110.0	275.0	550.0	16	
		31.5	110.0	275.0	550.0	20	
		33.5	120.0	290.0	600.0	25	
		31.5	110.0	275.0	550.0	28	
		33.5	120.0	290.0	600.0	35	
		31.5	110.0	275.0	550.0	40	
		33.5	120.0	290.0	600.0	50	
		24.0	81.0	195.0	400.0	70	
		37.5	130.0	335.0	665.0	80	3-stages
		37.5	130.0	335.0	665.0	100	
		40.0	145.0	355.0	720.0	125	
		37.5	130.0	335.0	665.0	140	
		40.0	145.0	355.0	720.0	175	
		37.5	130.0	335.0	665.0	200	
		40.0	145.0	355.0	720.0	250	
		37.5	130.0	335.0	665.0	280	
		40.0	145.0	355.0	720.0	350	
		37.5	130.0	335.0	665.0	400	
		40.0	145.0	355.0	720.0	500	
		28.0	95.0	230.0	480.0	700	
		18.0	62.0	135.0	280.0	1000	
故障停止扭矩 T_{2n} Max.output torque T_{2n}	Nm	2倍额定输出扭矩/2* Nominal torqute					
回程侧隙① Backlash	arcmin	< 8	< 8	< 8	< 8	P2	1-stages
		< 12	< 12	< 12	< 12	P2	2-stages
		< 14	< 14	< 14	< 14	P2	3-stages
空载扭矩 NO-load torque	Nm	0.18	0.6	1.1	2.5		1-stages
		0.17	0.55	1.0	2.2		2-stages
		0.16	0.5	0.9	2.0		3-stages
额定输入转速 Rated input speed	rpm	3000	3000	3000	2500		
最大输入转速 Max.input speed	rpm	7000	6000	5000	4200		
噪声② Noise	dB	≤58	≤60	≤62	≤65		

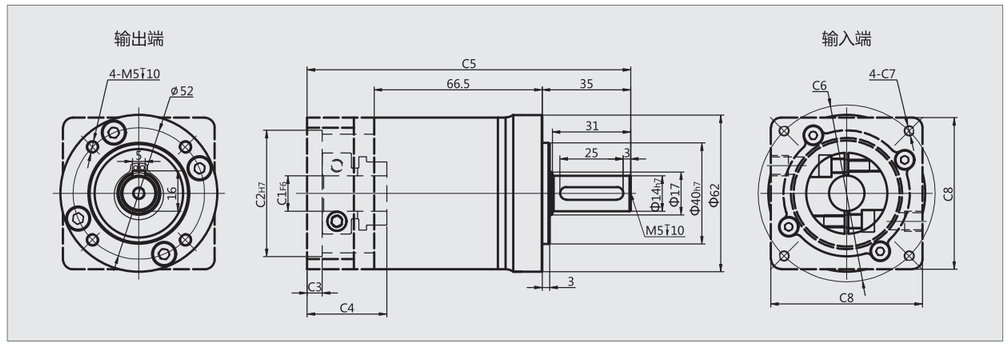
说 明

① 回程间隙是在受2%的额定输出力矩T_{2n}下测得；
② 噪声值是在额定输入转速下无负载情况下，离被测机体1米距离测得。

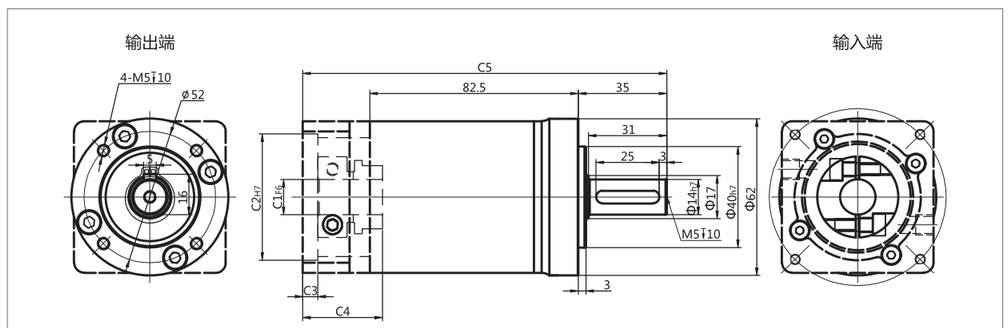
SL060-L1



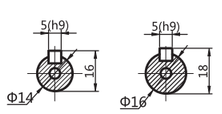
SL060-L2



SL060-L3

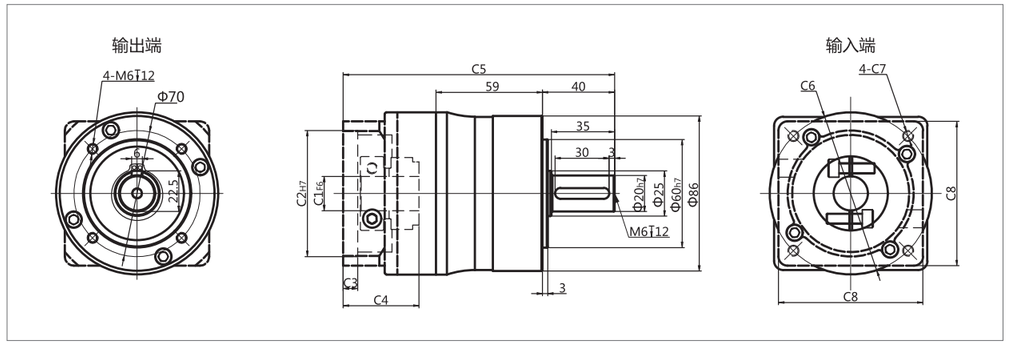


输出轴径

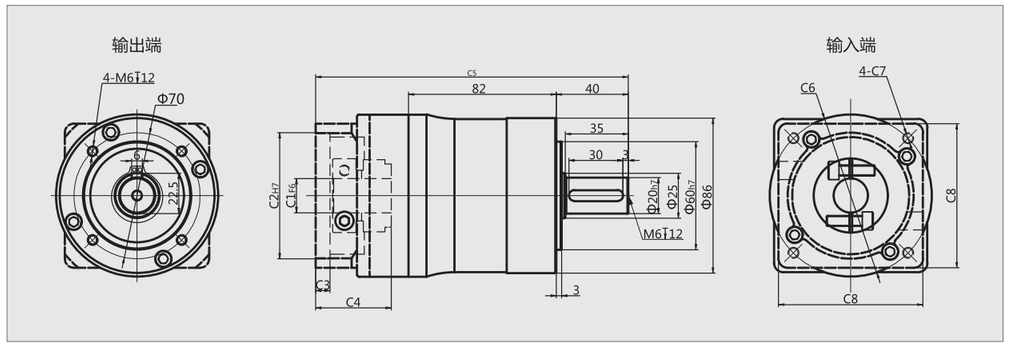


适配电机	C1	C2	C3	C4	L1	L2	L3	C5	C6	C7	C8
50/100W	Φ8	Φ30	5	31.5	112	128	144	Φ45/Φ46	M3牙深6/M4牙深8	60
400W	Φ14	Φ50	6	31.5	112	128	144	Φ70	M4牙深8/M5牙深10	60
750W	Φ19	Φ70	6	36.5	117	133	149	Φ90	M5牙深10/M6牙深12	80
57步进	Φ8	Φ38.1	5	31.5	112	128	144	Φ66.67	M4牙深8	60
86步进	Φ14	Φ73	6	39	114.5	130.5	146.5	Φ98.4	M5牙深10/M6牙深12	86

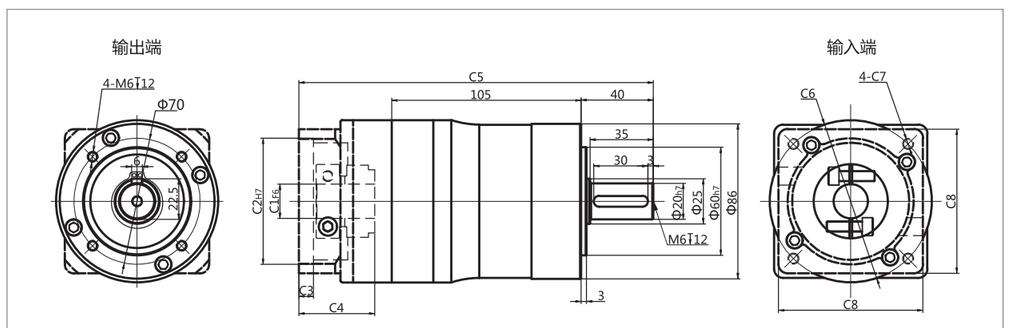
SL090-L1



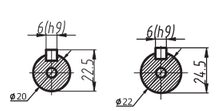
SL090-L2



SL090-L3

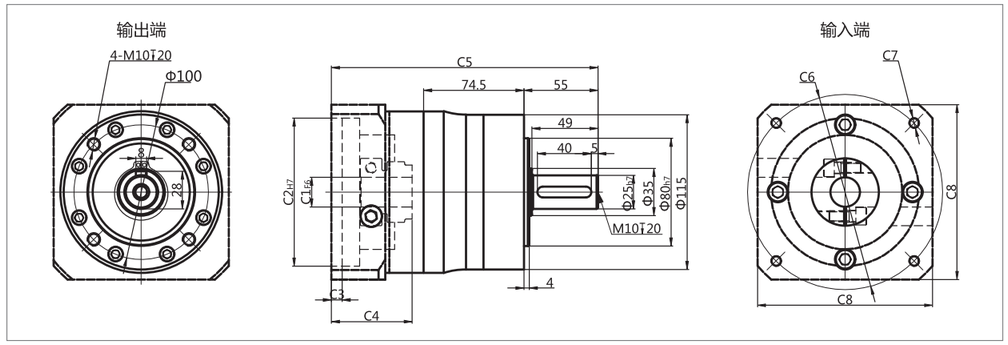


输出轴径

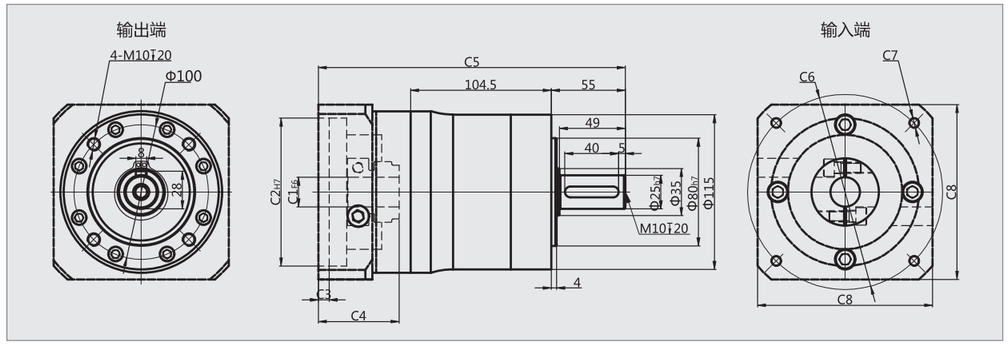


适配电机	C1	C2	C3	C4	L1	L2	L3	C5	C6	C7	C8
400W	Φ14	Φ50	5	39	147.5	170.5	193.5	Φ70	M4牙深8/M5牙深10	60
750W	Φ19	Φ70	8	42	150.5	173.5	196.5	Φ90	M5牙深10/M6牙深12	80
1500W	Φ22	Φ110	8	57	165.5	188.5	211.5	Φ145	M8牙深16	120
2000W	Φ24	Φ95	8	47	155.5	178.5	201.5	Φ115	M6牙深12/M8牙深16	100
86步进	Φ14/Φ19	Φ73	6	42	150.5	173.5	196.5	Φ98.4	M5牙深10/M6牙深12	86
110步进	Φ19	Φ85	8	57	165.5	188.5	211.5	Φ132	M8牙深16	120

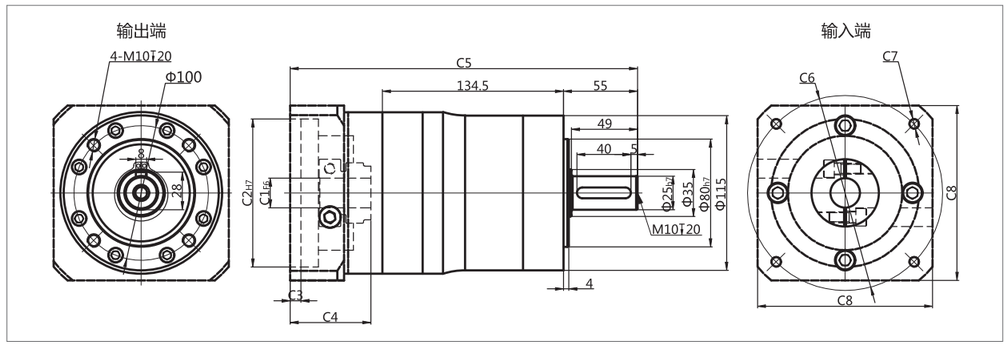
SL120-L1



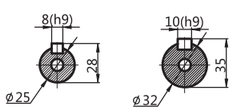
SL120-L2



SL120-L3

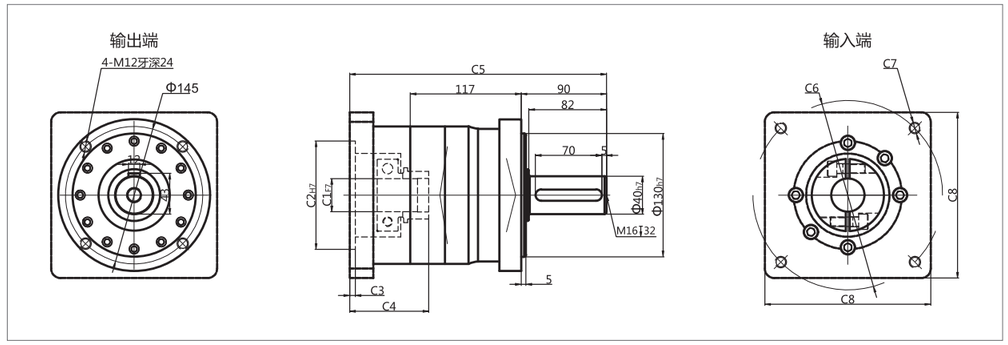


输出轴径

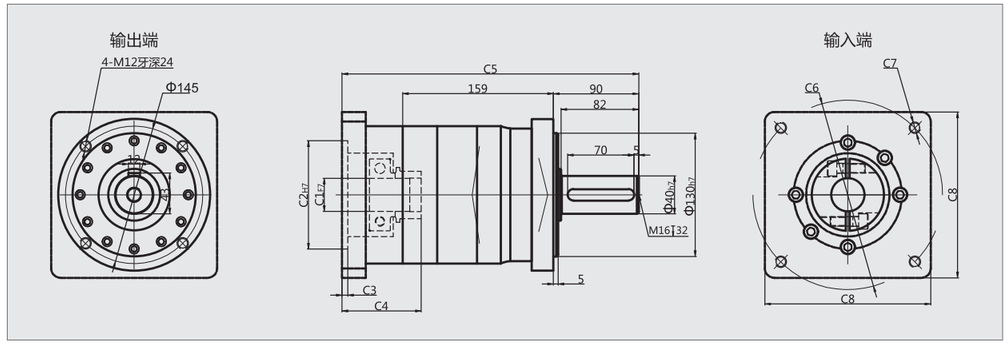


适配电机	C1	C2	C3	C4	L1	L2	L3	C5	C6	C7	C8
750W	Φ19	Φ70	8	47	185	215	245		Φ90	M5牙深10/M6牙深12	120
1500W	Φ22	Φ110	8	60	198	228	258		Φ145	M8牙深16	130
2000W	Φ24	Φ95	8	60	198	228	258		Φ115	M6牙深12/M8牙深16	120
3000W	Φ28	Φ110	8	72	210	240	270		Φ145	M8牙深16	130
110步进	Φ19	Φ85	8	60	198	228	258		Φ132	M8牙深16	120
130步进	Φ19	Φ100	8	60	198	228	258		Φ155	M8牙深16	130

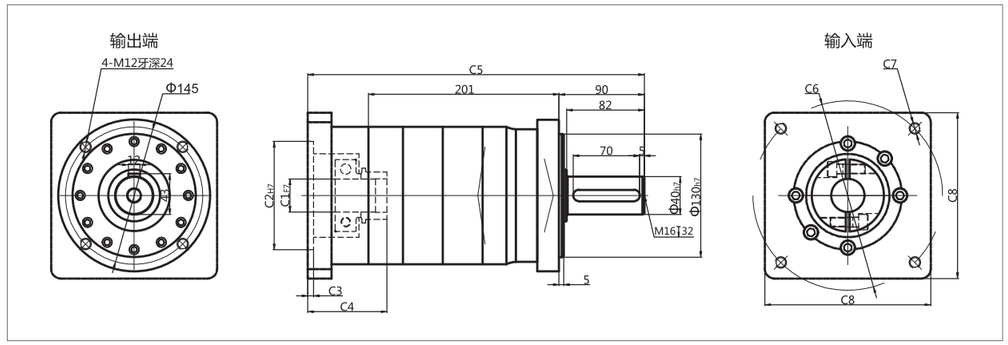
SL160B-L1



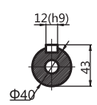
SL160B-L2



SL160B-L3



输出轴径



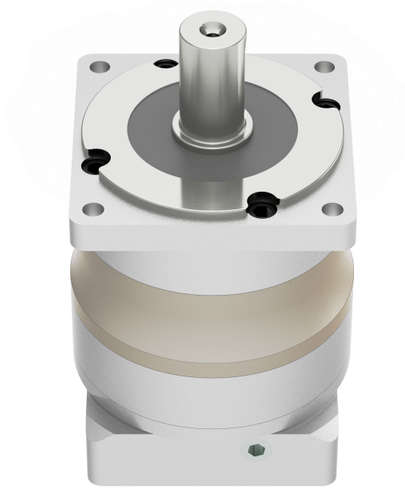
适配电机	C1	C2	C3	C4	L1	L2	L3	C5	C6	C7	C8
3000W	Φ35	Φ114.3	6	81.5	271	313	355		Φ200	M12牙深24	175
3500W	Φ28	Φ130	8	81.5	271	313	355		Φ174	M10牙深20	149
3800W	Φ28	Φ130	8	67	256.5	298.5	340.5		Φ165	M10牙深20	145
5500W	Φ38	Φ180	6	215	271	313	355		Φ215	M12牙深24	190
7500W	Φ42	Φ114.3	6	113.5	303	345	387		Φ200	M12牙深24	175

直齿行星减速机型号订购说明/Straight-tooth planetary gearbox model illuminate

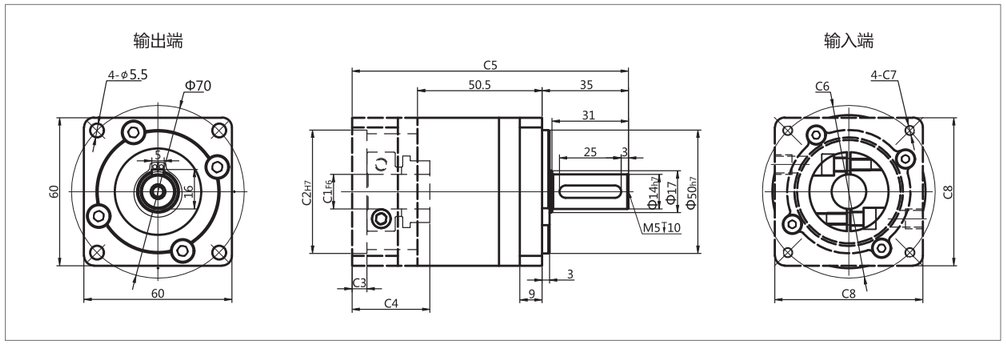
SF090 — L1 — 10 — S22 — P2 — RS — J — T — C

- SF090：SF方法兰方机身
090: 规格
型号:SF060/SF090/
SF120/SF140/SF160
- L1：级数：
L1:单级
L2:双级
L3:三级
- 10：减速比:
单级(L1):3,4,5,6,7,8,10
双级(L2):12,15,16,20,
25,28,30,35,40,50,70,
80,100
三级(L3):80,100,125,
140,175,200,250,280
350,400,500,700,1000
- S22：S:输出轴带键
22:输出轴径
- P2：背隙:
P2:标准背隙
- RS：RS:电机代号
2RS:输出同输入
- J：J:输入开键
无代号:输入不开键
- T：T:非标
无代号:不是非标
- C：温度:
C1:-40℃
C2:-60℃
无代号:常温

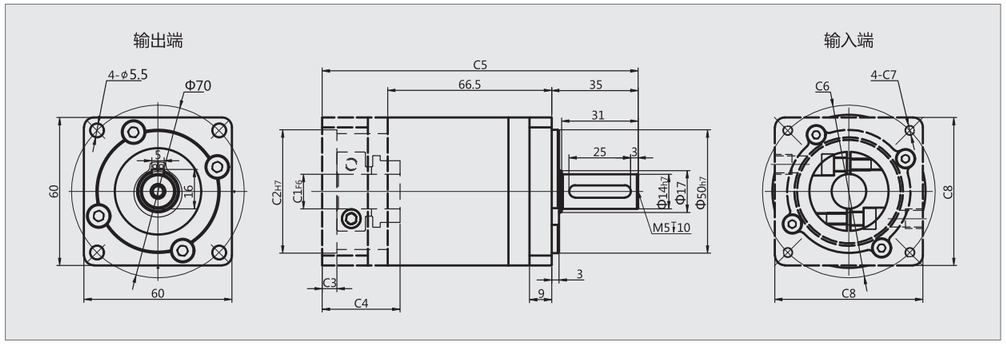
选型范例：SF090-L1-10-S22-P2-RS-J-T-C



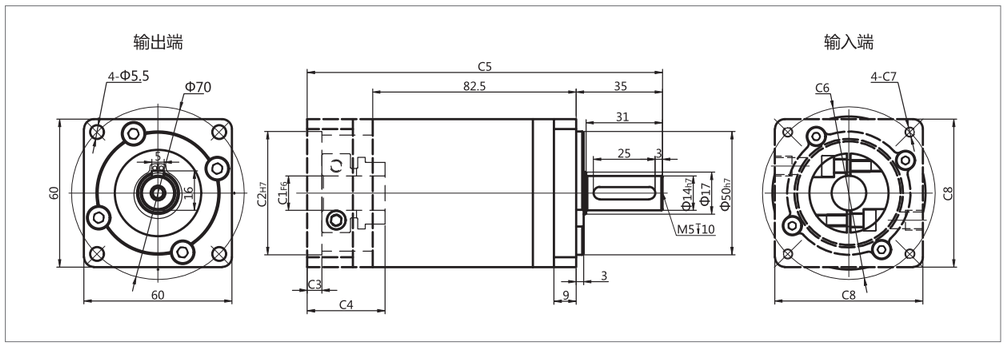
SF060-L1



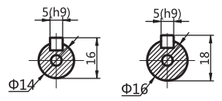
SF060-L2



SF060-L3

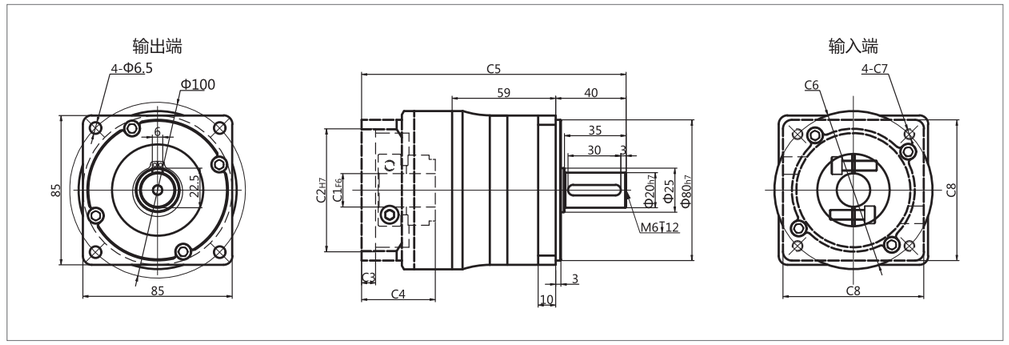


输出轴径

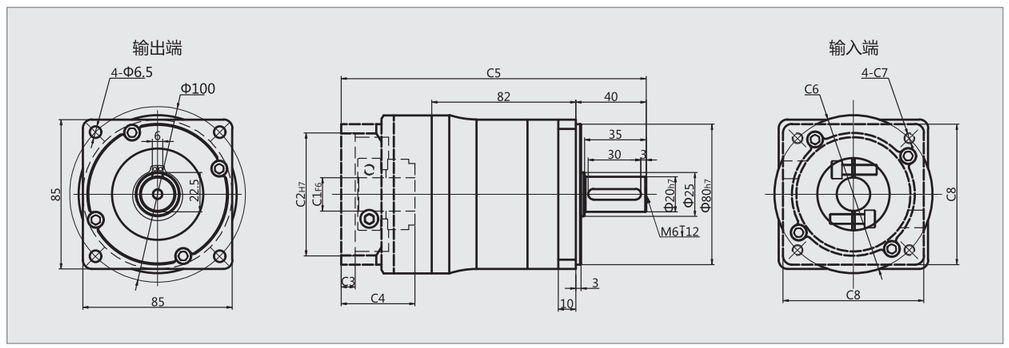


适配电机	C1	C2	C3	C4	L1 C5	L2 C5	L3 C5	C6	C7	C8
50/100W	Φ8	Φ30	5	31.5	112	128	144	Φ45/Φ46	M3牙深6/M4牙深8	60
400W	Φ14	Φ50	6	31.5	112	128	144	Φ70	M4牙深8/M5牙深10	60
750W	Φ19	Φ70	6	36.5	117	133	149	Φ90	M5牙深10/M6牙深12	80
57步进	Φ8	Φ38.1	5	31.5	112	128	144	Φ66.67	M4牙深8	60
86步进	Φ14	Φ73	6	39	114.5	130.5	146.5	Φ98.4	M5牙深10/M6牙深12	86

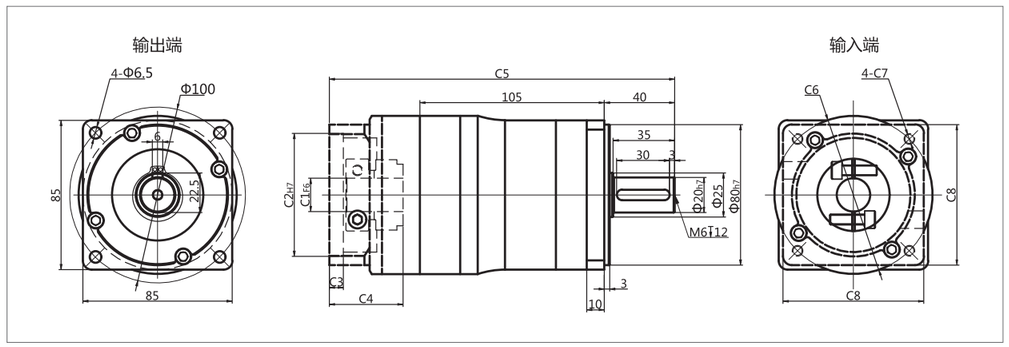
SF090-L1



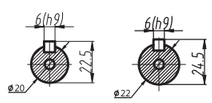
SF090-L2



SF090-L3

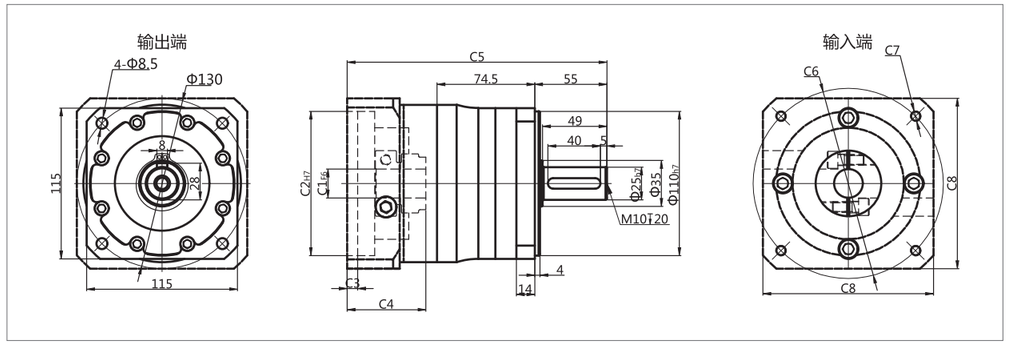


输出轴径

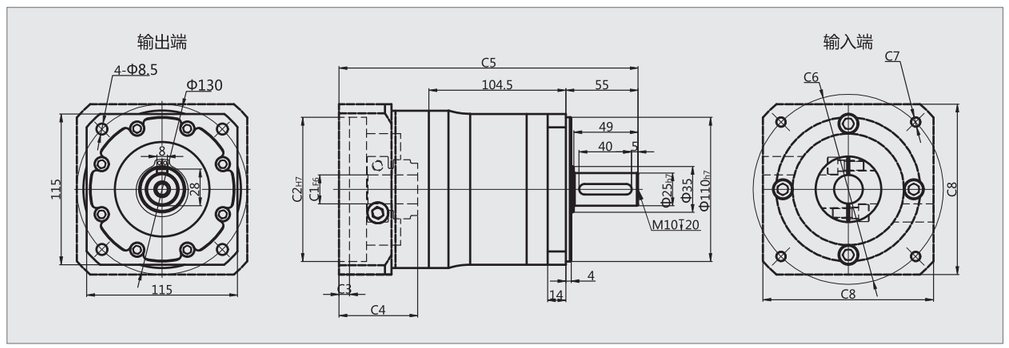


适配电机	C1	C2	C3	C4	L1 C5	L2 C5	L3 C5	C6	C7	C8
400W	Φ14	Φ50	5	39	147.5	170.5	193.5	Φ70	M4牙深8/M5牙深10	60
750W	Φ19	Φ70	8	42	150.5	173.5	196.5	Φ90	M5牙深10/M6牙深12	80
1500W	Φ22	Φ110	8	57	165.5	188.5	211.5	Φ145	M8牙深16	120
2000W	Φ24	Φ95	8	47	155.5	178.5	201.5	Φ115	M6牙深12/M8牙深16	100
86步进	Φ14/Φ19	Φ73	6	42	150.5	173.5	196.5	Φ98.4	M5牙深10/M6牙深12	86
110步进	Φ19	Φ85	8	57	165.5	188.5	211.5	Φ132	M8牙深16	120

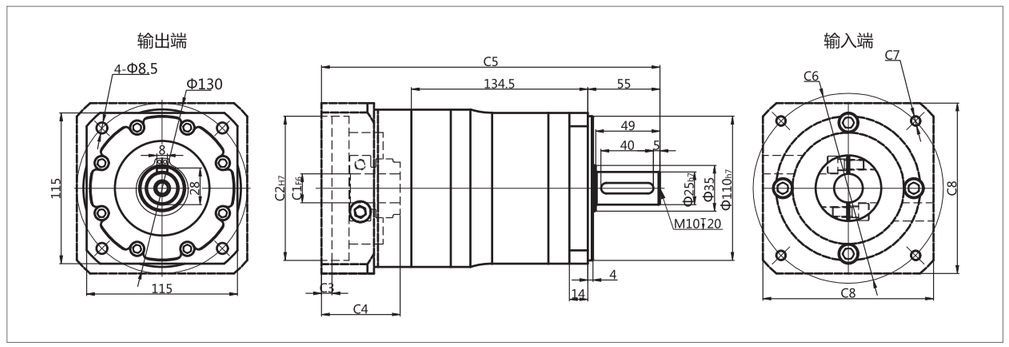
SF120-L1



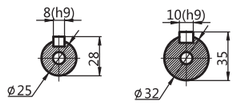
SF120-L2



SF120-L3

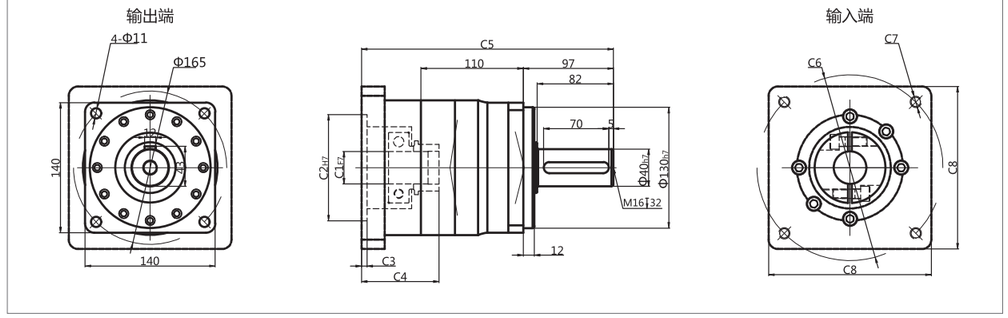


输出轴径

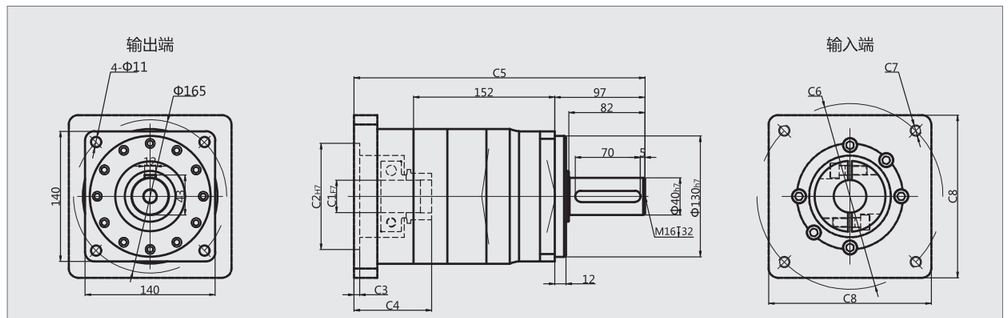


适配电机	C1	C2	C3	C4	L1 C5	L2 C5	L3 C5	C6	C7	C8
750W	Φ19	Φ70	8	47	185	215	245	Φ90	M5牙深10/M6牙深12	120
1500W	Φ22	Φ110	8	60	198	228	258	Φ145	M8牙深16	130
2000W	Φ24	Φ95	8	60	198	228	258	Φ115	M6牙深12/M8牙深16	120
3000W	Φ28	Φ110	8	72	210	240	270	Φ145	M8牙深16	130
110步进	Φ19	Φ85	8	60	198	228	258	Φ132	M8牙深16	120
130步进	Φ19	Φ100	8	60	198	228	258	Φ155	M8牙深16	130

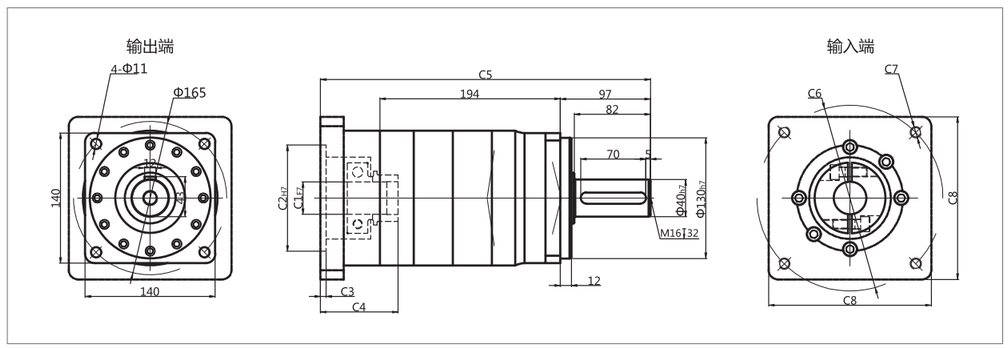
SF140B-L1



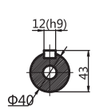
SF140B-L2



SF140B-L3

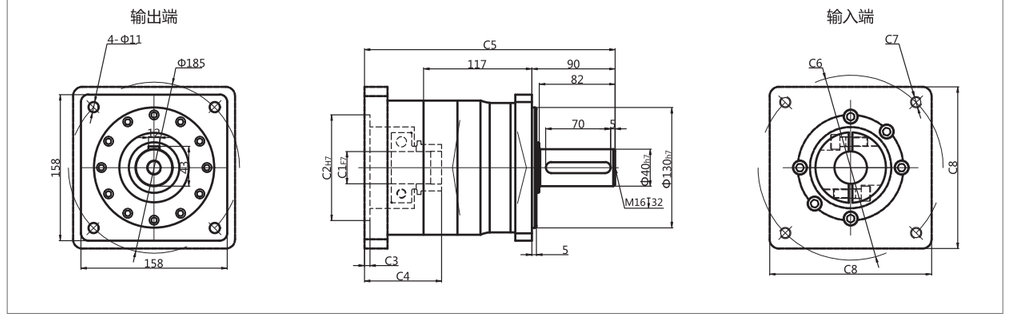


输出轴径

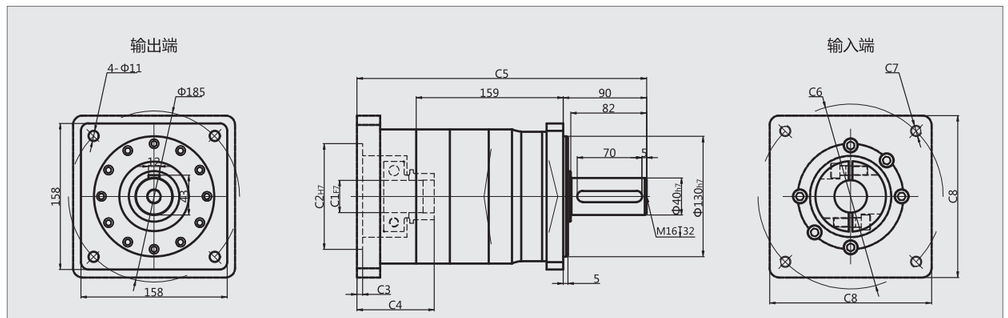


适配电机	C1	C2	C3	C4	L1 C5	L2 C5	L3 C5	C6	C7	C8
3000W	Φ35	Φ114.3	6	81.5	271	313	355	Φ200	M12牙深24	175
3500W	Φ28	Φ130	8	81.5	271	313	355	Φ174	M10牙深20	149
3800W	Φ28	Φ130	8	67	256.5	298.5	340.5	Φ165	M10牙深20	145
5500W	Φ38	Φ180	6	215	271	313	355	Φ215	M12牙深24	190
7500W	Φ42	Φ114.3	6	113.5	303	345	387	Φ200	M12牙深24	175

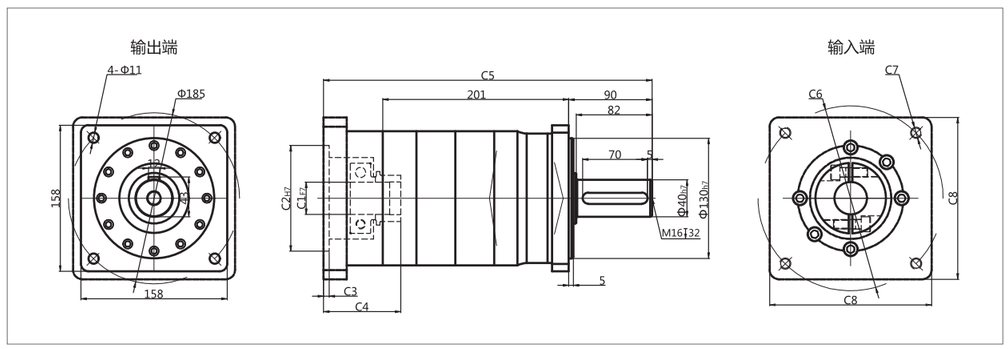
SF160B-L1



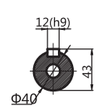
SF160B-L2



SF160B-L3



输出轴径

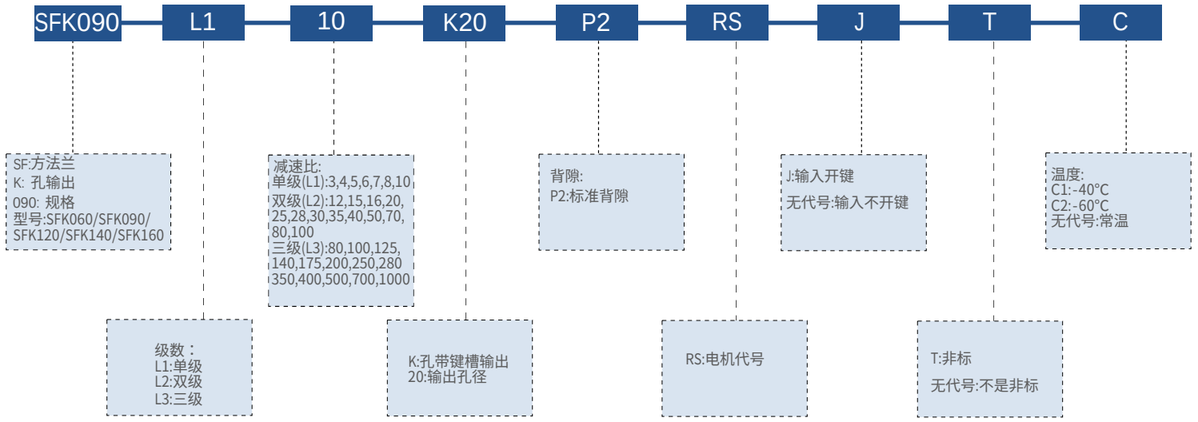


适配电机	C1	C2	C3	C4	L1 C5	L2 C5	L3 C5	C6	C7	C8
3000W	Φ35	Φ114.3	6	81.5	271	313	355	Φ200	M12牙深24	175
3500W	Φ28	Φ130	8	81.5	271	313	355	Φ174	M10牙深20	149
3800W	Φ28	Φ130	8	67	256.5	298.5	340.5	Φ165	M10牙深20	145
5500W	Φ38	Φ180	6	215	271	313	355	Φ215	M12牙深24	190
7500W	Φ42	Φ114.3	6	113.5	303	345	387	Φ200	M12牙深24	175

SFK

JunsRise®

直齿行星减速机型号订购说明/Straight-tooth planetary gearbox model illuminate



选型范例：SFK090-L1-10-S22-P2-RS-J-T-C



技术参数

型号 Model	单位 Unit	SFK060 SSE060 SSF060	SFK090 SSE090 SSF090	SFK120 SSE120 SSF120	SFK140B SFK160B SSE160B SSF140B SSF160B	减速比 Ratios(i)	级数 Stages
额定输出扭矩 Tn Nominal torquet Tn	Nm	16.5	63.0	155.0	310.0	3	1-stages
		26.0	90.0	230.0	460.0	4	
		28.0	100.0	245.0	500.0	5	
		20.0	68.0	165.0	340.0	7	
		12.5	43.0	95.0	195.0	10	
		19.5	75.0	185.0	370.0	9	2-stages
		31.5	110.0	275.0	550.0	12	
		31.5	110.0	275.0	550.0	16	
		31.5	110.0	275.0	550.0	20	
		33.5	120.0	290.0	600.0	25	
		31.5	110.0	275.0	550.0	28	
		33.5	120.0	290.0	600.0	35	
		31.5	110.0	275.0	550.0	40	
		33.5	120.0	290.0	600.0	50	
		24.0	81.0	195.0	400.0	70	
		37.5	130.0	335.0	665.0	80	3-stages
		37.5	130.0	335.0	665.0	100	
		40.0	145.0	355.0	720.0	125	
		37.5	130.0	335.0	665.0	140	
		40.0	145.0	355.0	720.0	175	
		37.5	130.0	335.0	665.0	200	
		40.0	145.0	355.0	720.0	250	
		37.5	130.0	335.0	665.0	280	
		40.0	145.0	355.0	720.0	350	
		37.5	130.0	335.0	665.0	400	
		40.0	145.0	355.0	720.0	500	
		28.0	95.0	230.0	480.0	700	
		18.0	62.0	135.0	280.0	1000	
故障停止扭矩 T_{2n} Max.output torque T_{2n}	Nm	2倍额定输出扭矩/2* Nominal torqute					
回程侧隙① Backlash	arcemin	< 8	< 8	< 8	< 8	P2	1-stages
		< 12	< 12	< 12	< 12	P2	2-stages
		< 14	< 14	< 14	< 14	P2	3-stages
空载扭矩 NO-load torque	Nm	0.18	0.6	1.1	2.5		1-stages
		0.17	0.55	1.0	2.2		2-stages
		0.16	0.5	0.9	2.0		3-stages
额定输入转速 Rated input speed	rpm	3000	3000	3000	2500		
最大输入转速 Max.input speed	rpm	7000	6000	5000	4200		
噪声② Noise	dB	≤58	≤60	≤62	≤65		

说 明

① 回程间隙是在受2%的额定输出力矩T_{2N}下测得；
② 噪声值是在额定输入转速下无负载情况下，离被测机体1米距离测得。

技术参数

型号 Model	单位 Unit	SFK/ SSE/ SSF	级数 Stages
寿命① lifetime	h	20000	
最低工作温度 Min.operating temp	℃	-25	
最高工作温度 Max.operating temp	℃	+90	
防护等级 Degree of protection	IP	IP65	
润滑方式 Mounting position		长效润滑/Life lubrication	
安装方式 Mounting position		任意/Any	
旋转方向 Direction of rotation		输出、输入同向/Same direction	
满载效率 Maxiumum efficency	%	94%	1-stages
		92%	2-stages
		88%	3-stages

型号 Model	单位 Unit	SFK060	SFK090	SFK120	SFK140B SFK160B	级数 Stages
最大容许径向力 Max.radial force②	N	800	2100	4400	7300	1-stages
		1000	2600	5200	9300	2-stages
		1600	3000	5800	10800	3-stages
最大容许轴向力 Max.axial force③	N	400	1000	1700	2000	1-stages
		520	1300	2400	2700	2-stages
		850	1800	3000	5500	3-stages
抗扭刚性 Torsional stiffness	Nm/arcmin	3.2	8.2	18.5	30.0	

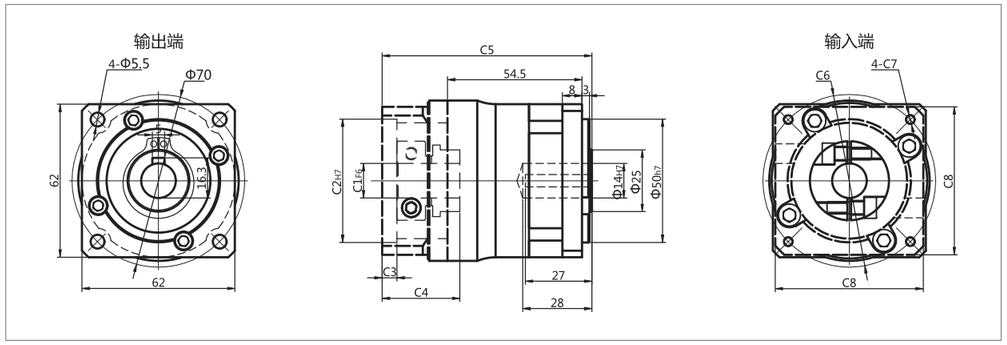
型号 Model	单位 Unit	SSE060 SSF060	SSE090 SSF090	SSE120 SSF120	SSE160B SSF140B	级数 Stages
最大容许径向力 Max.radial force②	N	400	1050	2200	3650	1-stages
		500	1300	2600	4650	2-stages
		800	1500	2900	5400	3-stages
最大容许轴向力 Max.axial force③	N	300	850	1600	2000	1-stages
		390	1100	2100	2700	2-stages
		700	1300	2600	5500	3-stages
抗扭刚性 Torsional stiffness	Nm/arcmin	3.2	8.5	17.5	37.5	

说 明

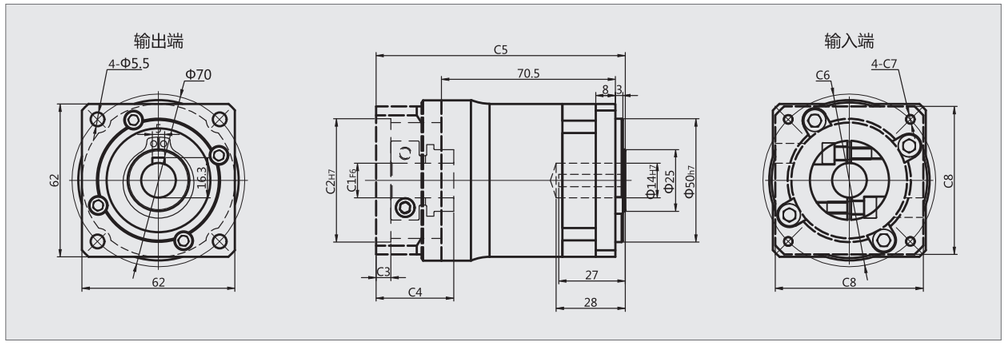
① 寿命是在额定负载下，连续运转的时间；
② 最大容许径向力是单级在输出转速为100rpm时，双级在输出转速为50rpm时，三级在输出转速10rpm时，作用于输出轴中心位置（1/2轴长处）所测得容许径向力；
③ 最大容许轴向力是单级在输出转速为100rpm时，双级在输出转速为50rpm时，三级在输出转速为10rpm时，作用于输出轴外端面所测得容许轴向力；如有其它特殊要求时，请与PLT技术人员联系。

JunsRise®

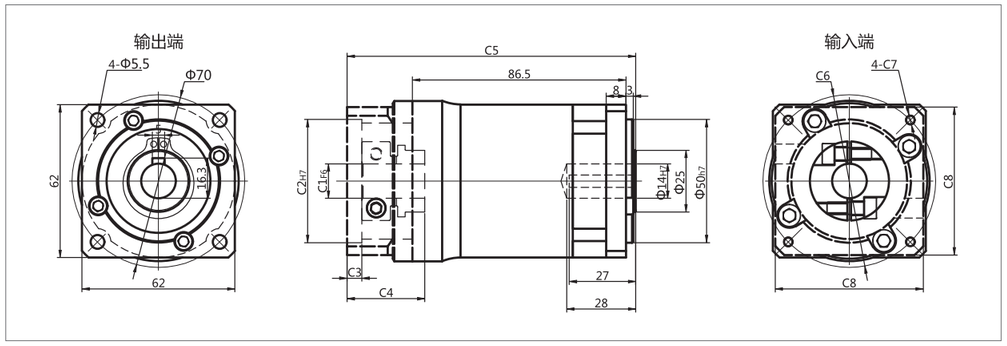
SFK060-L1



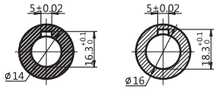
SFK060-L2



SFK060-L3

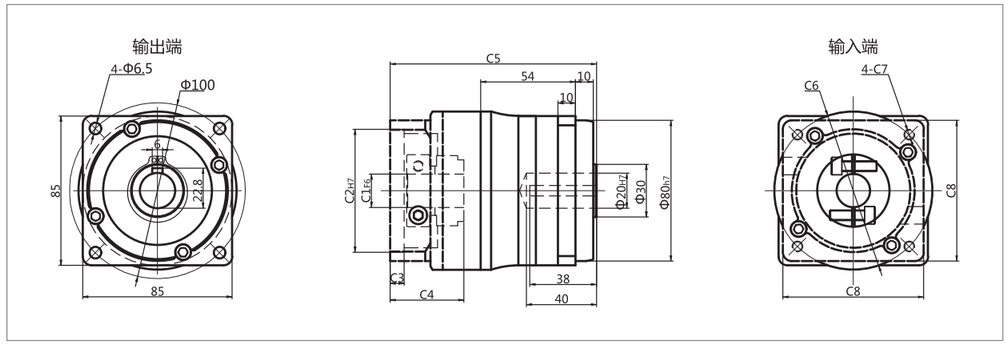


输出轴径

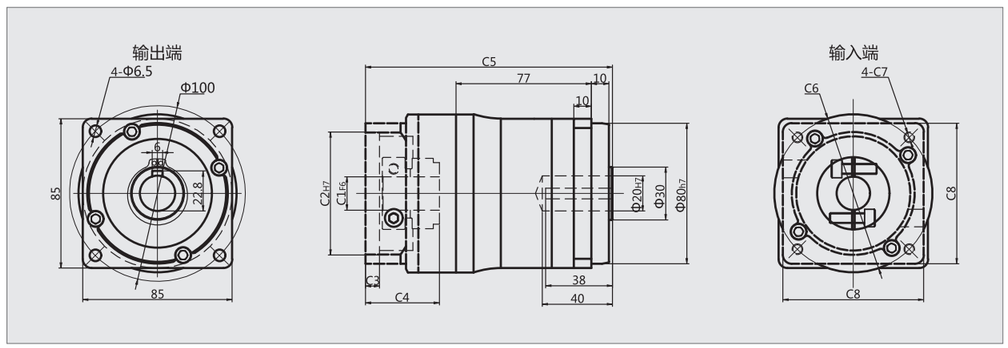


适配电机	C1	C2	C3	C4	L1 C5	L2 C5	L3 C5	C6	C7	C8
50W/100W	Φ8	Φ30	5	31.5	85	101	117	Φ45/Φ46	M3牙深6/M4牙深8	60
400W	Φ14	Φ50	6	31.5	85	101	117	Φ70	M4牙深8/M5牙深10	60
750W	Φ19	Φ70	6	36.5	90	106	122	Φ90	M5牙深10/M6牙深12	80
57步进	Φ8	Φ38.1	5	31.5	85	101	117	Φ66.67	M4牙深8	60
86步进	Φ14	Φ73	6	39	92.5	108.5	124.5	Φ98.4	M5牙深10/M6牙深12	86

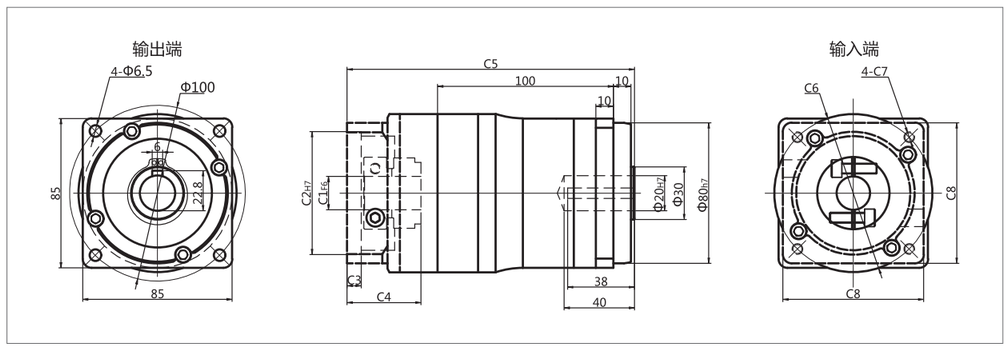
SFK090-L1



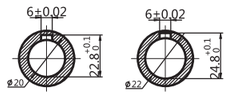
SFK090-L2



SFK090-L3

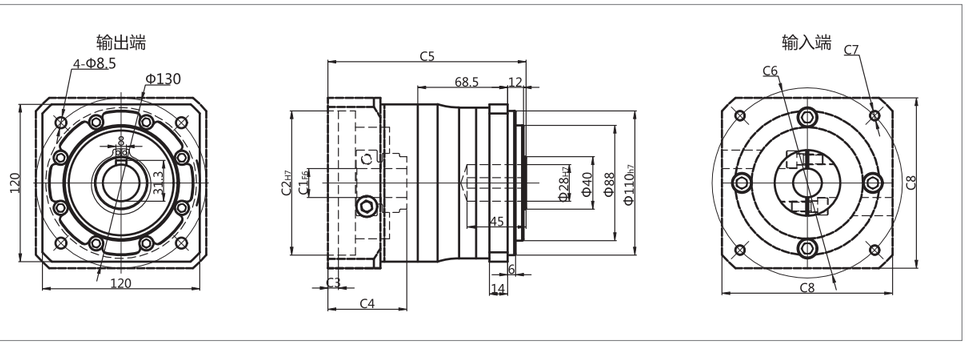


输出轴径

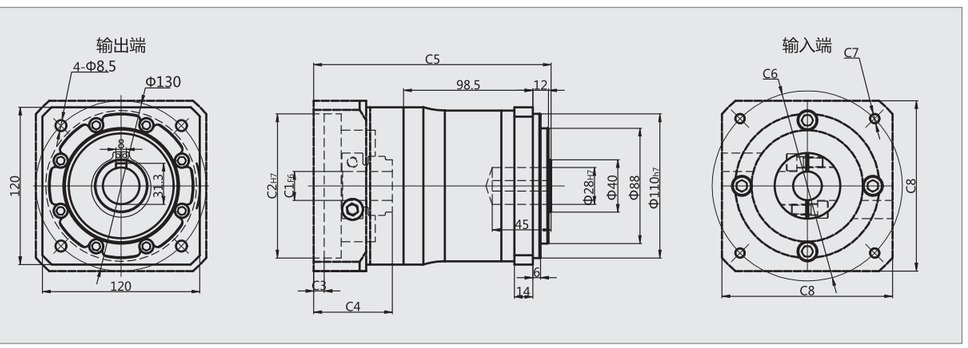


					L1	L2	L3			
适配电机	C1	C2	C3	C4	C5			C6	C7	C8
400W	Φ14	Φ50	5	39	114.5	137.5	160.5	Φ70	M4牙深8/M5牙深10	60
750W	Φ19	Φ70	8	42	117.5	140.5	163.5	Φ90	M5牙深10/M6牙深12	80
1500W	Φ22	Φ110	8	57	132.5	155.5	188.5	Φ145	M8牙深16	120
2000W	Φ24	Φ95	8	47	122.5	145.5	178.5	Φ115	M6牙深12/M8牙深16	100
86步进	Φ14/Φ19	Φ73	6	42	117.5	140.5	163.5	Φ98.4	M5牙深10/M6牙深12	86
110步进	Φ19	Φ85	8	57	132.5	155.5	188.5	Φ132	M8牙深16	120

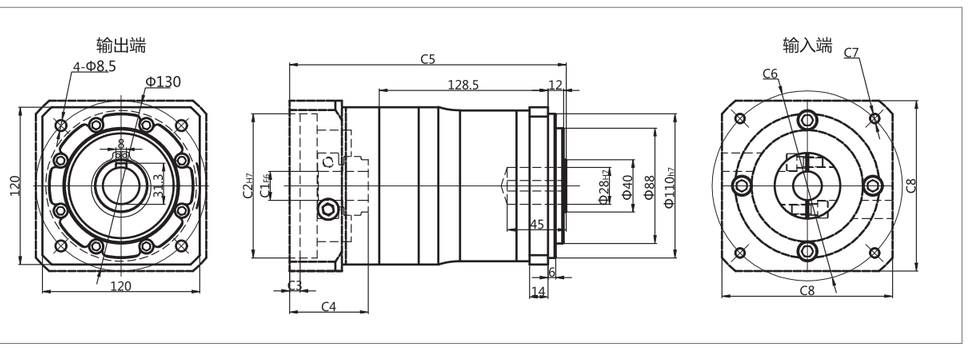
SFK120-L1



SFK120-L2



SFK120-L3

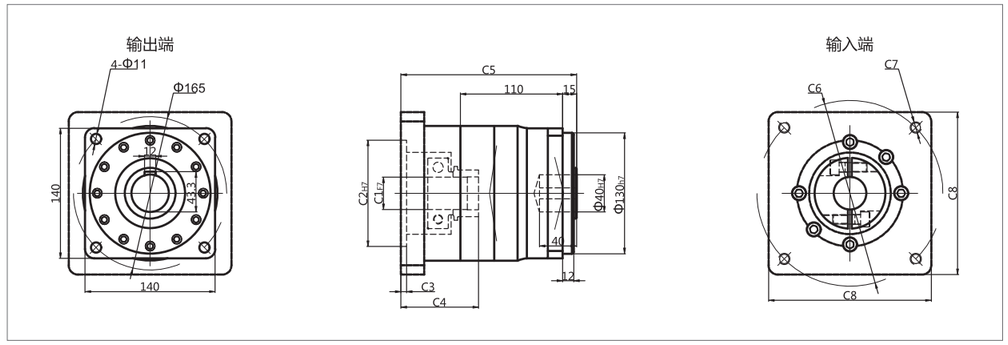


输出轴径

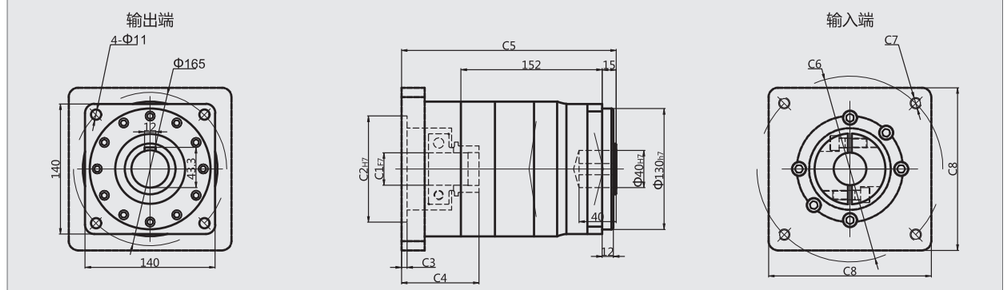


					L1	L2	L3			
适配电机	C1	C2	C3	C4	C5			C6	C7	C8
750W	Φ19	Φ70	8	47	138	168	198	Φ90	M5牙深10/M6牙深12	120
1500W	Φ22	Φ110	8	60	151	181	211	Φ145	M8牙深16	130
2000W	Φ24	Φ95	8	60	151	181	211	Φ115	M6牙深12/M8牙深16	120
3000W	Φ28	Φ110	8	72	163	193	223	Φ145	M8牙深16	130
110步进	Φ19	Φ85	8	60	151	181	211	Φ132	M8牙深16	120
130步进	Φ19	Φ100	8	60	151	181	211	Φ155	M8牙深16	130

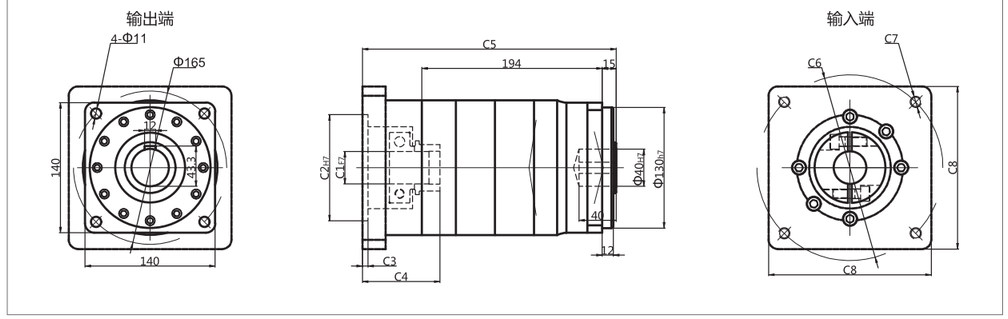
SFK140B-L1



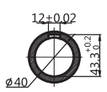
SFK140B-L2



SFK140B-L3

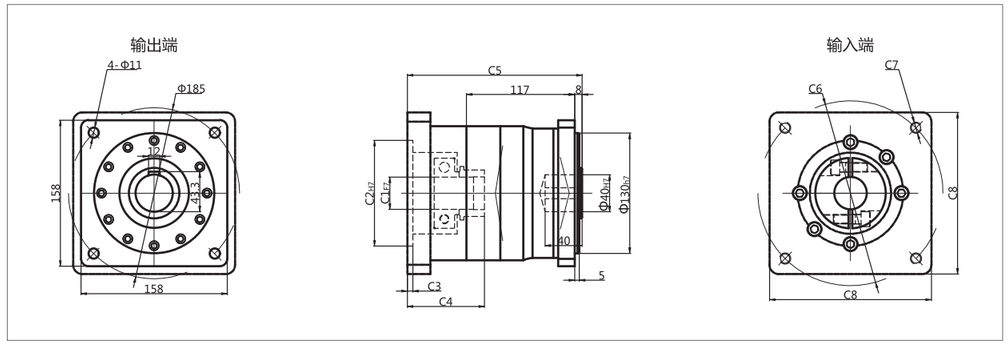


输出轴径

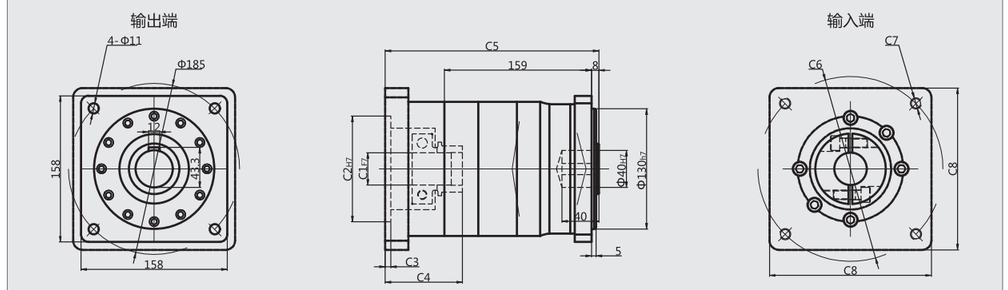


					L1	L2	L3			
适配电机	C1	C2	C3	C4	C5			C6	C7	C8
3000W	Φ35	Φ114.3	6	81.5	189	231	273	Φ200	M12牙深24	175
3500W	Φ28	Φ130	8	81.5	189	231	273	Φ174	M10牙深20	149
3800W	Φ28	Φ130	8	67	174.5	216.5	258.5	Φ165	M10牙深20	145
5500W	Φ38	Φ180	6	215	189	231	273	Φ215	M12牙深24	190
7500W	Φ42	Φ114.3	6	113.5	221	263	305	Φ200	M12牙深24	175

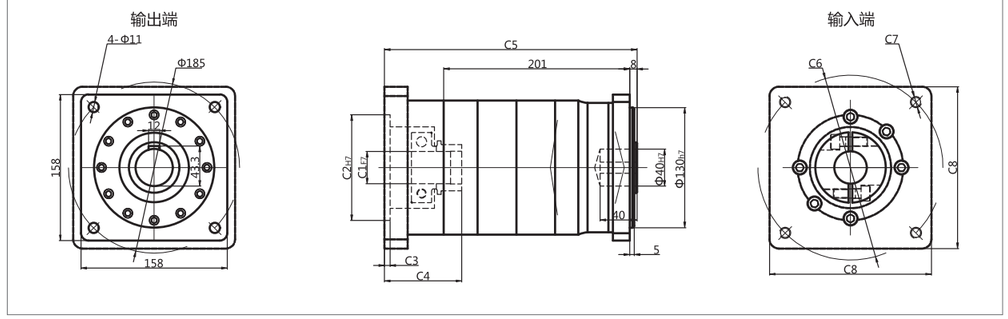
SFK160B-L1



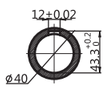
SFK160B-L2



SFK160B-L3



输出轴径



					L1	L2	L3			
适配电机	C1	C2	C3	C4	C5			C6	C7	C8
3000W	Φ35	Φ114.3	6	81.5	189	231	273	Φ200	M12牙深24	175
3500W	Φ28	Φ130	8	81.5	189	231	273	Φ174	M10牙深20	149
3800W	Φ28	Φ130	8	67	174.5	216.5	258.5	Φ165	M10牙深20	145
5500W	Φ38	Φ180	6	215	189	231	273	Φ215	M12牙深24	190
7500W	Φ42	Φ114.3	6	113.5	221	263	305	Φ200	M12牙深24	175

SSE

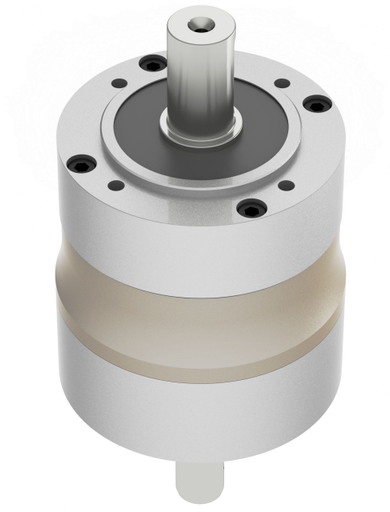
JunsRise®

直齿行星减速机型号订购说明/Straight-tooth planetary gearbox model illuminate

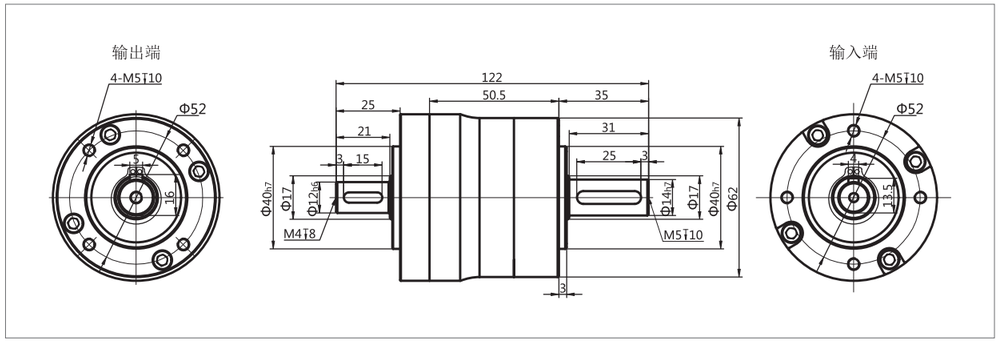
SSE090 — L1 — 10 — S22 — P2 — RS — J — T — C

- SSE090: SSE:圆法兰，轴入轴出
K: 孔输出
090: 规格
型号:SSE060/SSE090/
SSE120/SSE140/SSE160
- L1: 级数：
L1:单级
L2:双级
L3:三级
- 10: 减速比:
单级(L1):3,4,5,6,7,8,10
双级(L2):12,15,16,20,
25,28,30,35,40,50,70,
三级(L3):80,100,125,
140,175,200,250,280
350,400,500,700,1000
- S22: S:输出轴带键
22:输出孔径
- P2: 背隙:
P2:标准背隙
- RS: RS:电机代号
2RS:输出同输入
- J: J:输入开键
无代号:输入不开键
- T: T:非标
无代号:不是非标件
- C: 温度:
C1:-40°C
C2:-60°C
无代号:常温

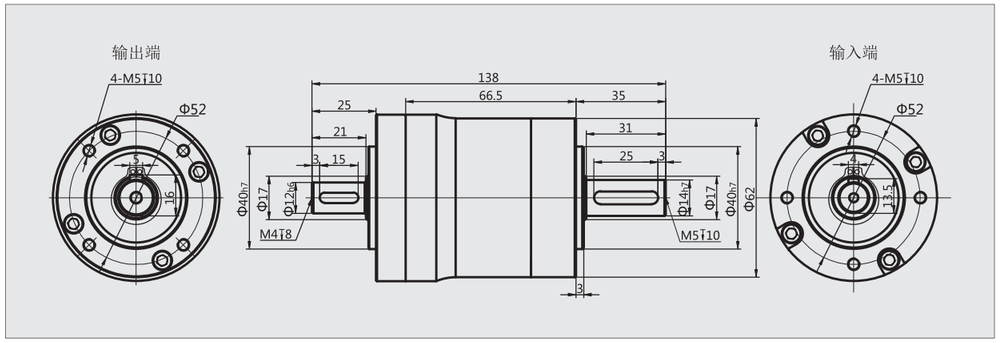
选型范例：SSE090-L1-10-S22-P2-RS-J-T-C



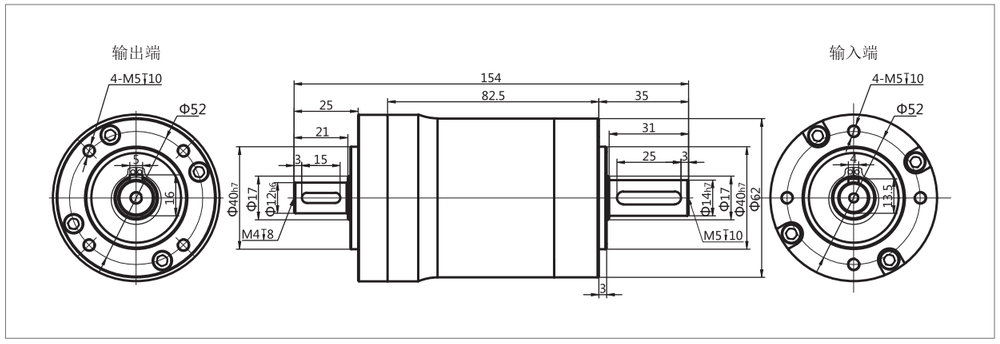
SSE060-L1



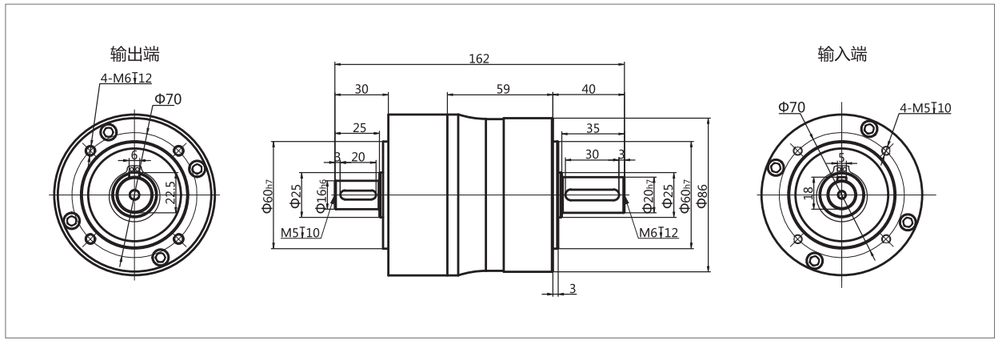
SSE060-L2



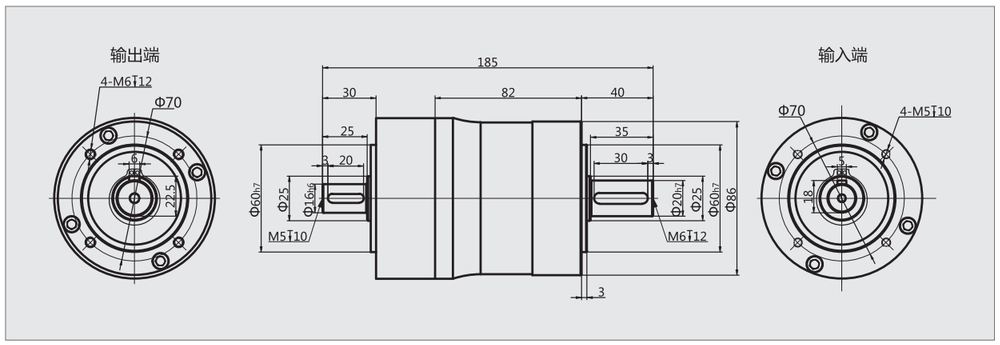
SSE060-L3



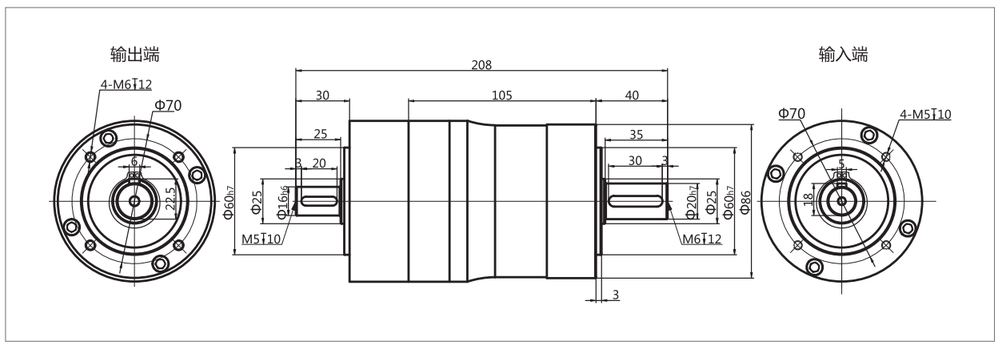
SSE090-L1



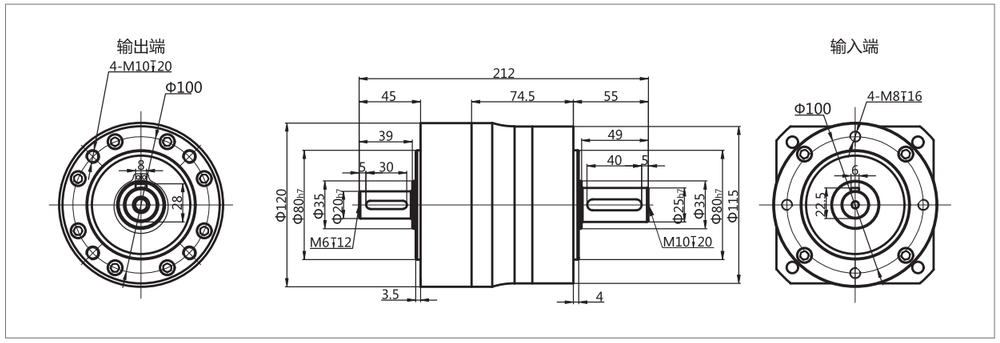
SSE090-L2



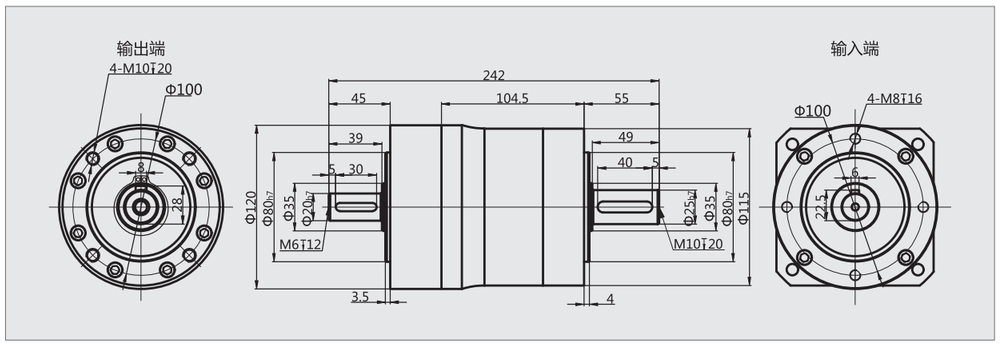
SSE090-L3



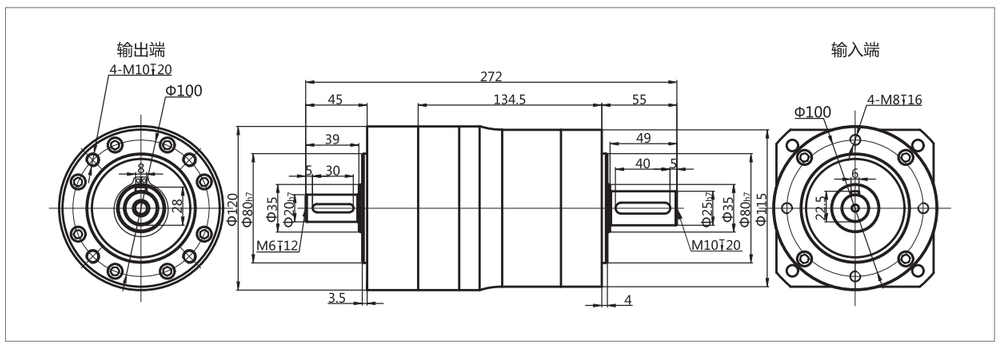
SSE120-L1



SSE120-L2



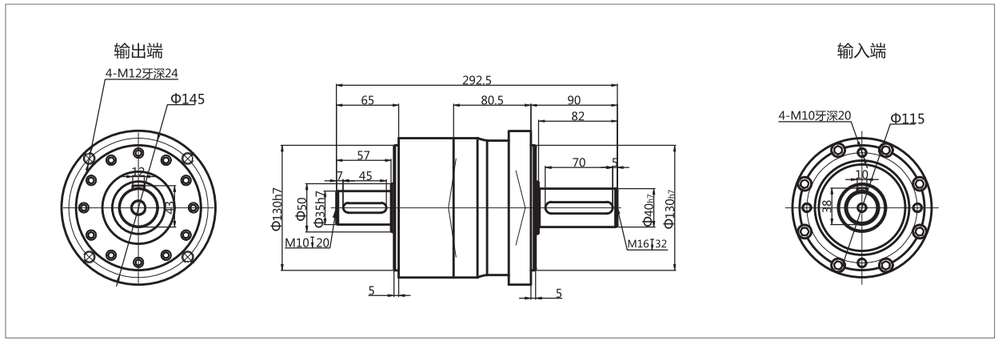
SSE120-L3



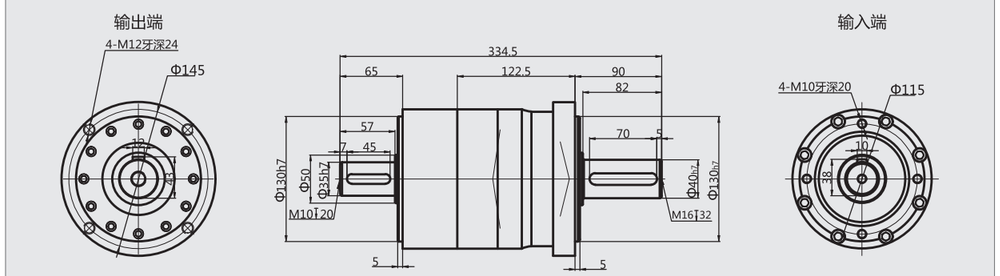
SSF

JunsRise®

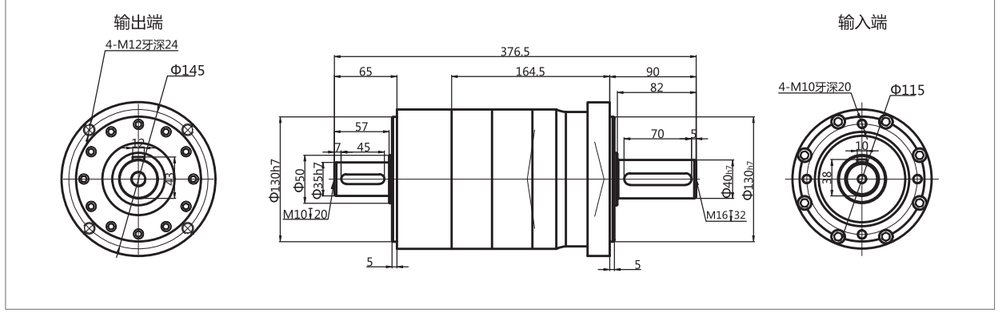
SSE160B-L1



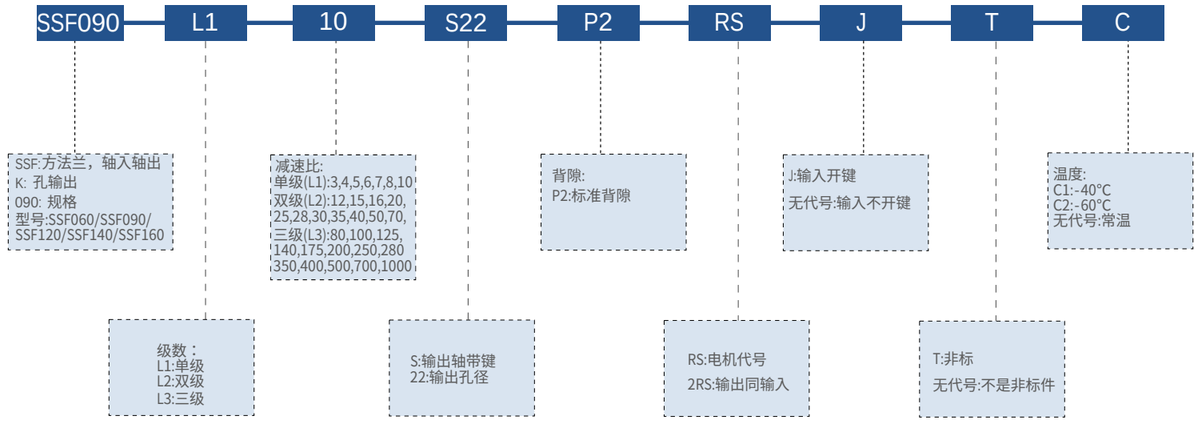
SSE160B-L2



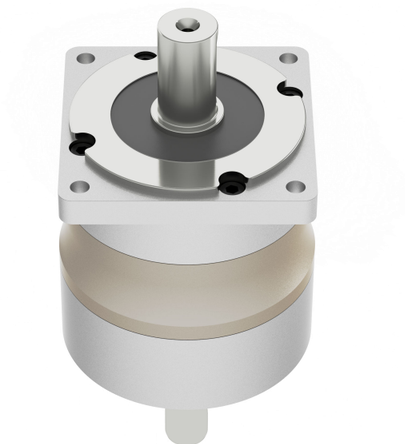
SSE160B-L3



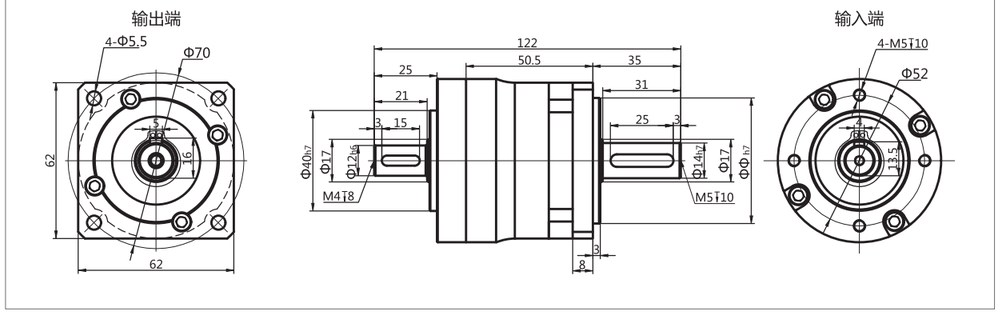
直齿行星减速机型号订购说明/Straight-tooth planetary gearbox model illuminate



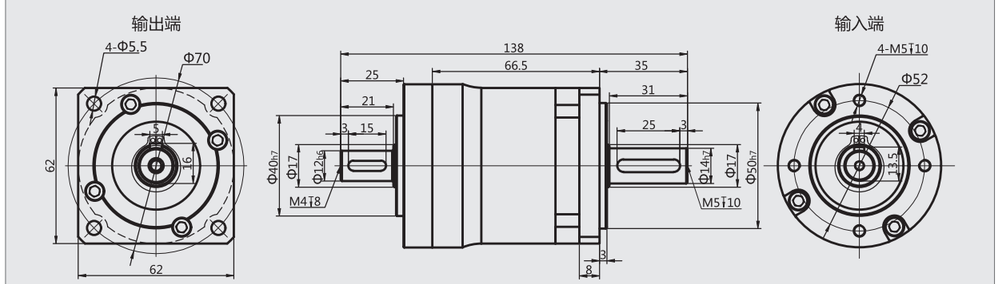
选型范例：SSF090-L1-10-S22-P2-RS-J-T-C



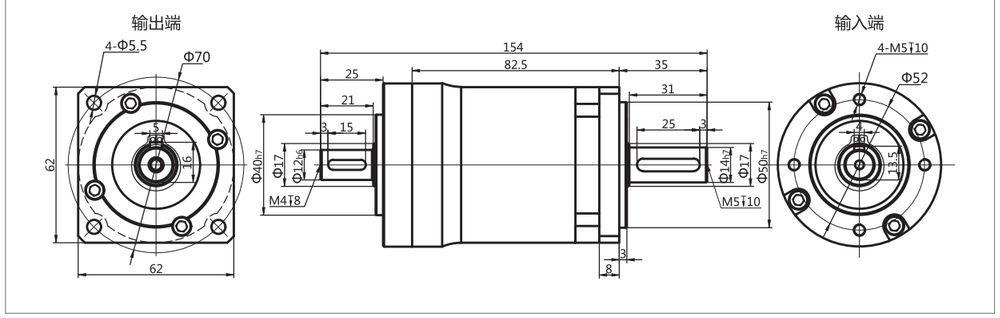
SF060-L1



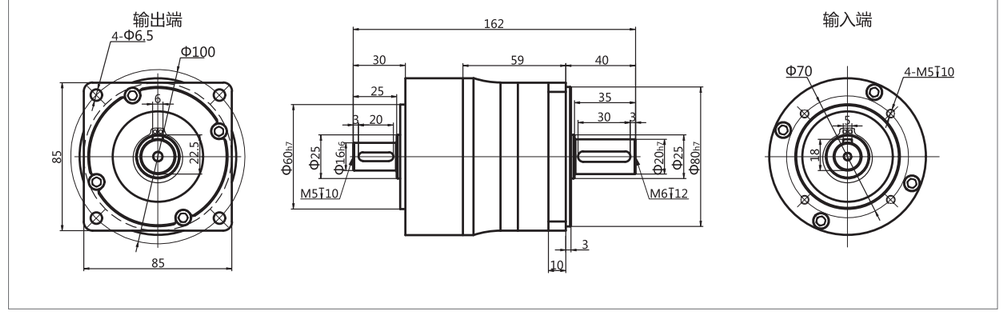
SF060-L2



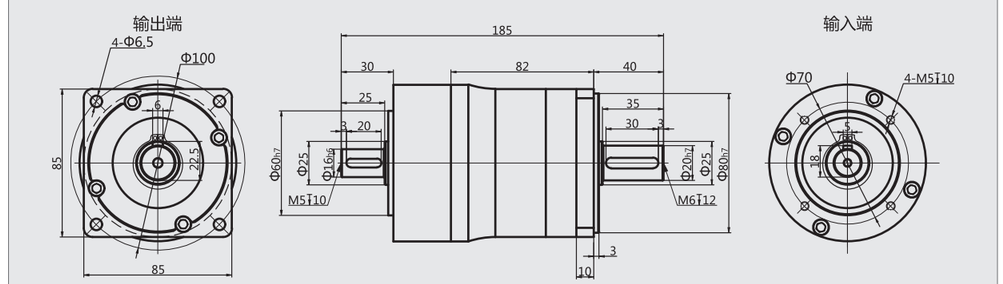
SF060-L3



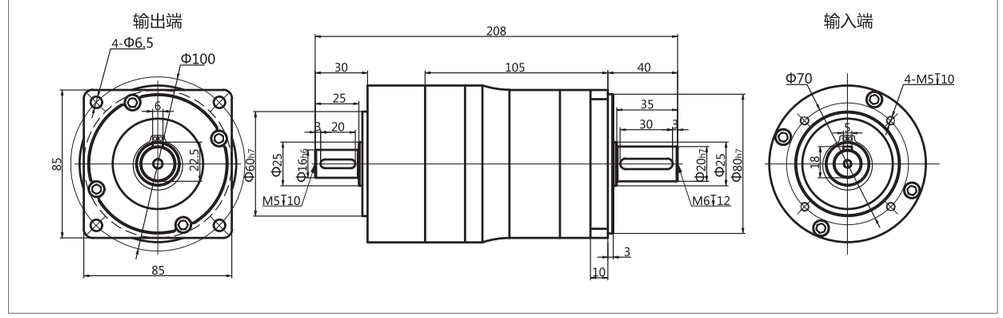
SSF090-L1



SSF090-L2

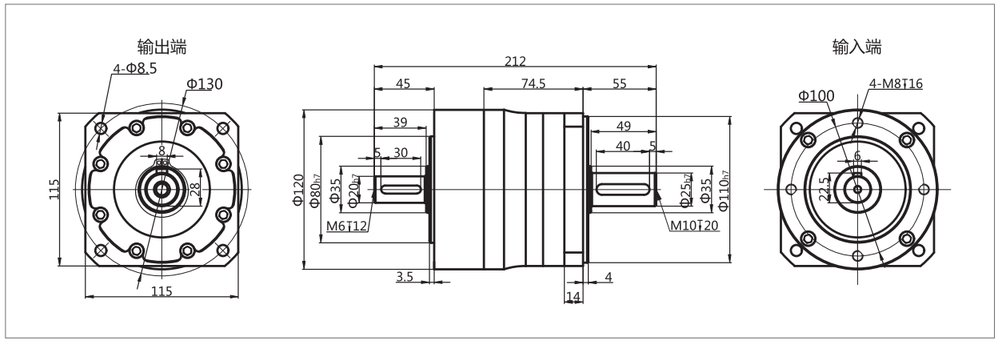


SSF090-L3

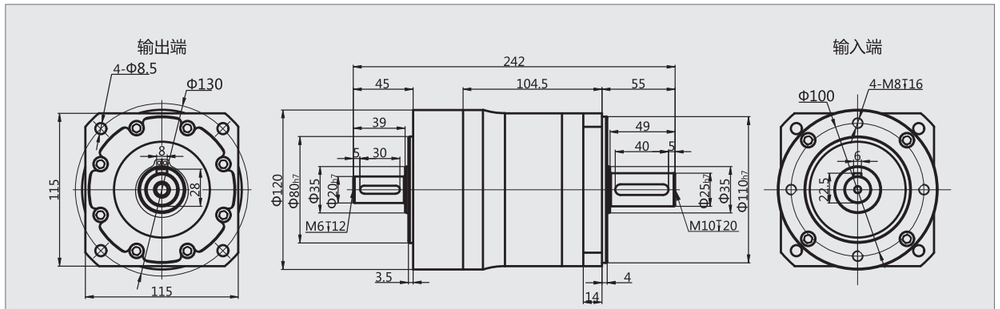


JunsRise®

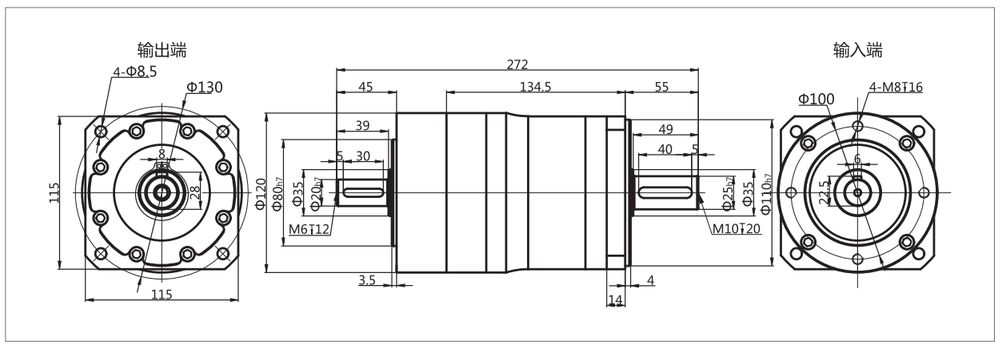
SSF120-L1



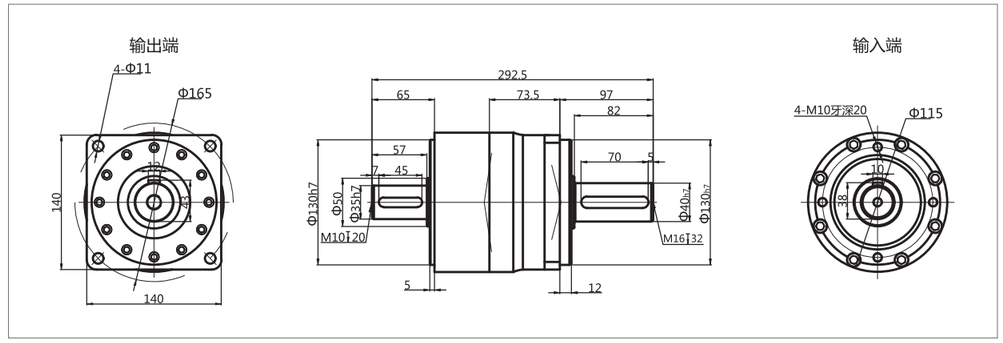
SSF120-L2



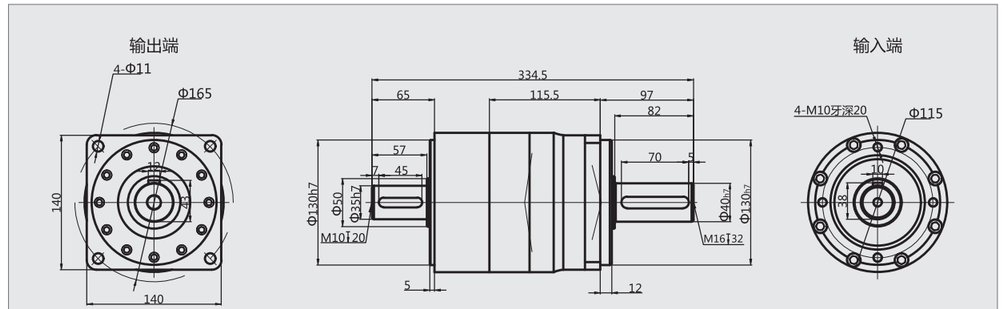
SSF120-L3



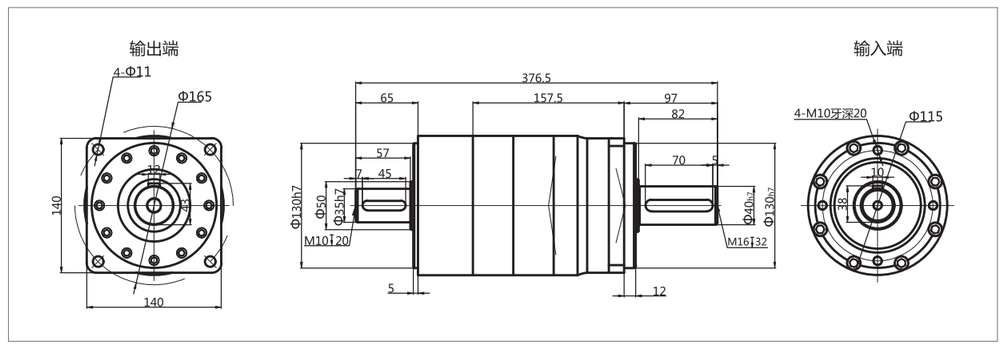
SSF140B-L1



SSF140B-L2



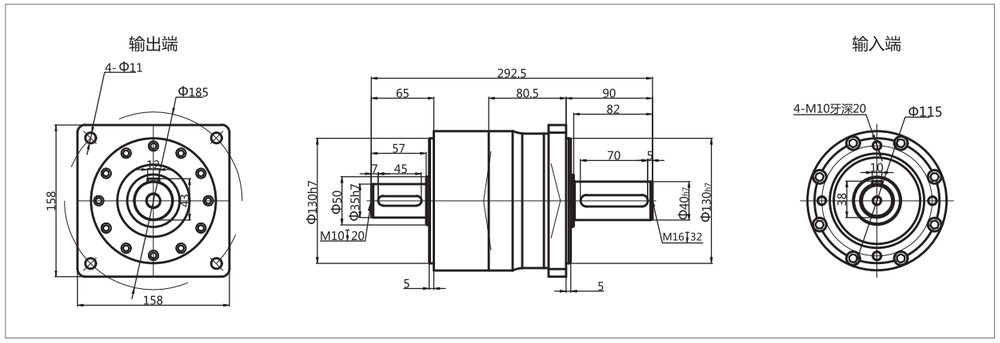
SSF140B-L3



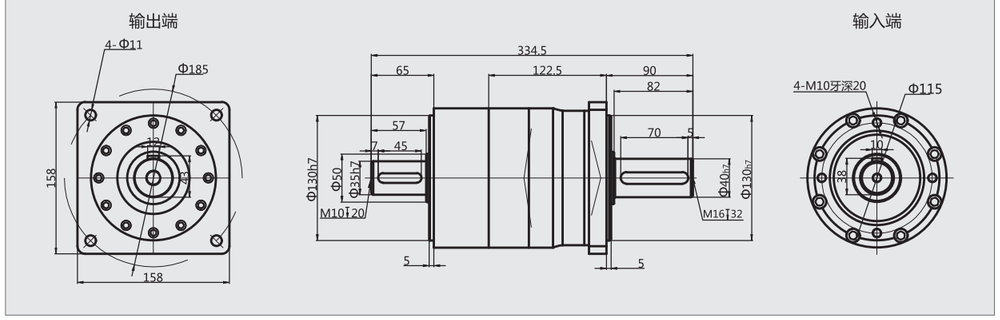
SLR

JunsRise®

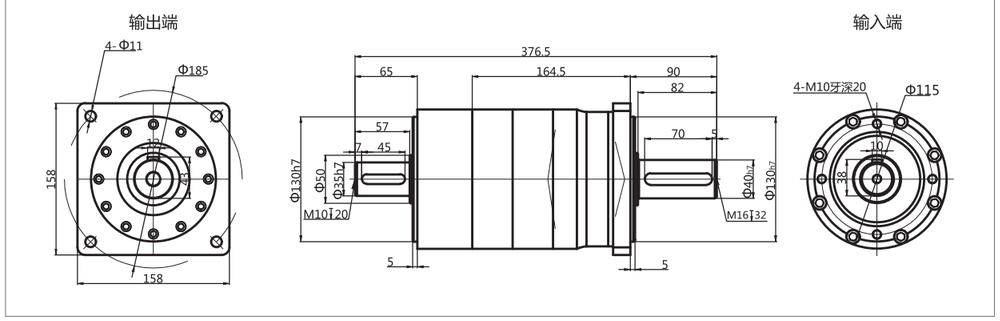
SSF160B-L1



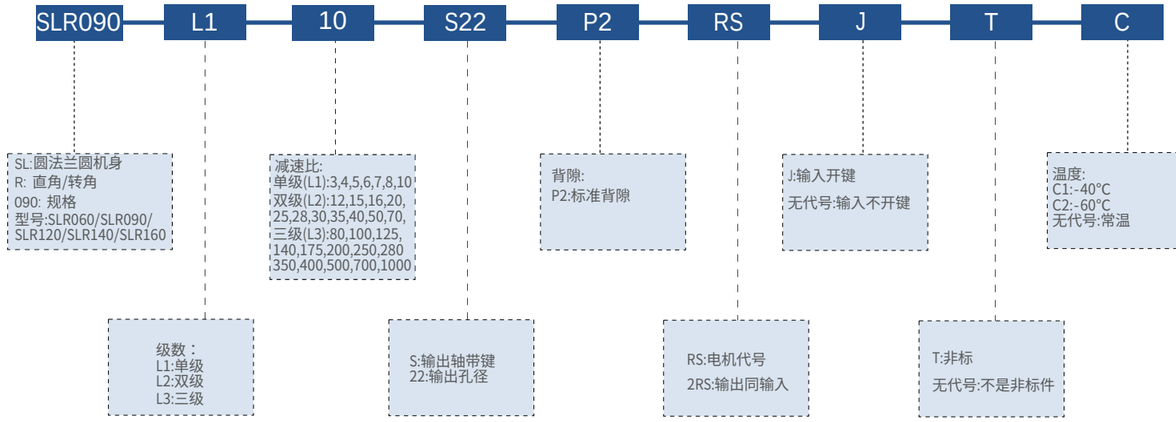
SSF160B-L2



SSF160B-L3



直齿行星减速机型号订购说明/Straight-tooth planetary gearbox model illuminate



选型范例：SLR090-L1-10-S22-P2-RS-J-T-C



技术参数

型号 Model	单位 Unit	SLR060 SFR060 SFKR060	SLR090 SFR090 SFKR090	SLR120 SFR120 SFKR120	SLR160B SLR140B SFR160B SFKR140B SFKR160B	减速比 Ratios(i)	
额定输出扭矩 Tn Nominal torquet Tn	Nm	16.5	63.0	155.0	310.0	3	1-stages
		26.0	90.0	230.0	460.0	4	
		28.0	100.0	245.0	500.0	5	
		20.0	68.0	165.0	340.0	7	
		12.5	43.0	95.0	195.0	10	
		19.5	75.0	185.0	370.0	9	2-stages
		31.5	110.0	275.0	550.0	12	
		31.5	110.0	275.0	550.0	16	
		31.5	110.0	275.0	550.0	20	
		33.5	120.0	290.0	600.0	25	
		31.5	110.0	275.0	550.0	28	
		33.5	120.0	290.0	600.0	35	
		31.5	110.0	275.0	550.0	40	
		33.5	120.0	290.0	600.0	50	
		24.0	81.0	195.0	400.0	70	
		37.5	130.0	335.0	665.0	80	3-stages
		37.5	130.0	335.0	665.0	100	
		40.0	145.0	355.0	720.0	125	
		37.5	130.0	335.0	665.0	140	
		40.0	145.0	355.0	720.0	175	
		37.5	130.0	335.0	665.0	200	
		40.0	145.0	355.0	720.0	250	
		37.5	130.0	335.0	665.0	280	
		40.0	145.0	355.0	720.0	350	
		37.5	130.0	335.0	665.0	400	
		40.0	145.0	355.0	720.0	500	
		28.0	95.0	230.0	480.0	700	
		18.0	62.0	135.0	280.0	1000	
故障停止扭矩 T_{2n} Max.output torque T_{2n}	Nm	2倍额定输出扭矩/2* Nominal torqute					
回程侧隙① Backlash	arcemin	< 11	< 11	< 11	< 11	P2	1-stages
		< 15	< 15	< 15	< 15	P2	2-stages
		< 18	< 18	< 18	< 18	P2	3-stages
空载扭矩 NO-load torque	Nm	0.24	0.8	1.4	2.5		1-stages
		0.24	0.8	1.4	2.5		2-stages
		0.24	0.8	1.4	2.5		3-stages
额定输入转速 Rated input speed	rpm	3000	3000	3000	2500		
最大输入转速 Max.input speed	rpm	7000	6000	5000	4200		
噪声② Noise	dB	≤62	≤65	≤68	≤70		

说 明

① 回程间隙是在受2%的额定输出力矩T_{2N}下测得；
② 噪声值是在额定输入转速下无负载情况下，离被测机体1米距离测得。

JunsRise®

技术参数

型号 Model	单位 Unit	SLR/ SFR/ SFKR	级数 Stages
寿命① lifetime	h	20000	
最低工作温度 Min.operating temp	℃	-25	
最高工作温度 Max.operating temp	℃	+90	
防护等级 Degree of protection	IP	IP65	
润滑方式 Mounting position		长效润滑/Life lubrication	
安装方式 Mounting position		任意/Any	
旋转方向 Direction of rotation		输出、输入同向/Same direction	
满载效率 Maxiumum efficency	%	90%	1-stages
		88%	2-stages
		84%	3-stages

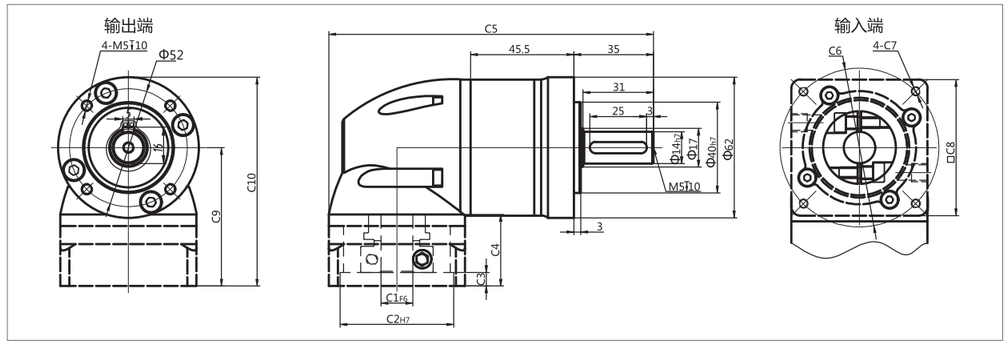
型号 Model	单位 Unit	SLR060 SFR060	SLR090 SFR090	SLR120 SFR120	SLR160B SFR140B FR160B	级数 Stages
最大容许径向力 Max.radial force②	N	400	1050	2200	3650	1-stages
		500	1300	2600	4650	2-stages
		800	1500	2900	5400	3-stages
最大容许轴向力 Max.axial force③	N	300	850	1600	2000	1-stages
		390	1100	2100	2700	2-stages
		700	1300	2600	5500	3-stages
抗扭刚性 Torsional stiffness	Nm/arcmin	3.2	8.5	17.5	37.5	

型号 Model	单位 Unit	SFKR060	SFKR090	SFKR120	SFKR140B SFKR160B	级数 Stages
最大容许径向力 Max.radial force②	N	800	2100	4400	7300	1-stages
		1000	2600	5200	9300	2-stages
		1600	3000	5800	10800	3-stages
最大容许轴向力 Max.axial force③	N	400	1000	1700	2000	1-stages
		520	1300	2400	2700	2-stages
		850	1800	3000	5500	3-stages
抗扭刚性 Torsional stiffness	Nm/arcmin	3.2	8.2	18.5	30.0	

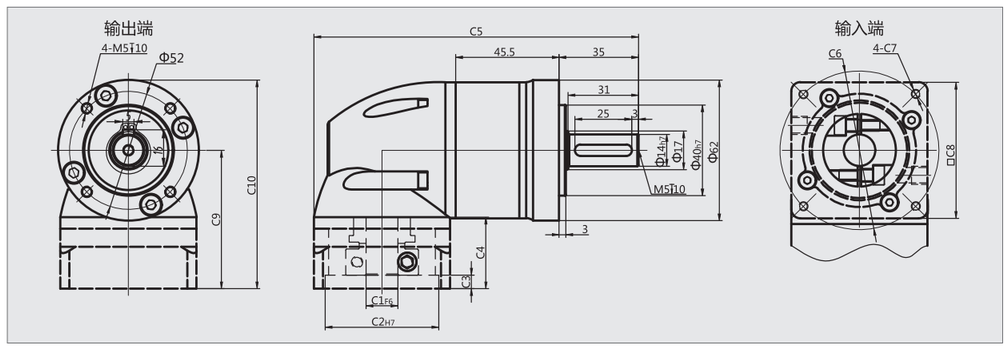
说 明

① 寿命是在额定负载下，连续运转的时间；
② 最大容许径向力是单级在输出转速为100rpm时，双级在输出转速为50rpm时，三级在输出转速10rpm时，作用于输出轴中心位置（1/2轴长处）所测得容许径向力；
③ 最大容许轴向力是单级在输出转速为100rpm时，双级在输出转速为50rpm时，三级在输出转速10rpm时，作用于输出轴外端面所测得容许轴向力；如有其它特殊要求时，请与PLT技术人员联系。

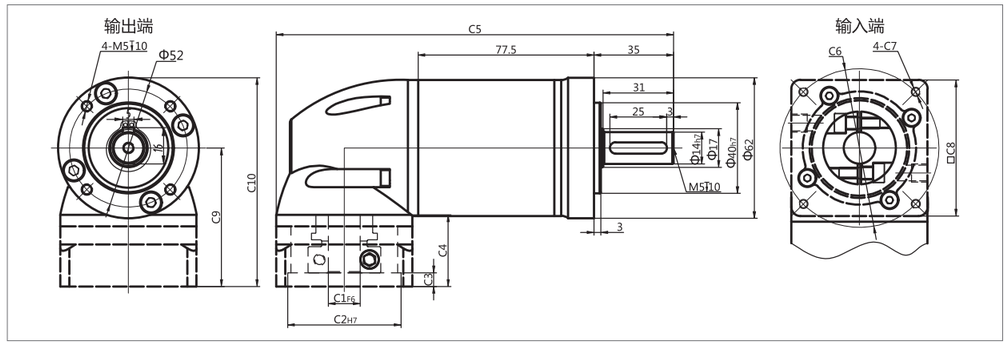
SLR060-L1



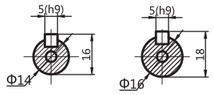
SLR060-L2



SLR060-L3

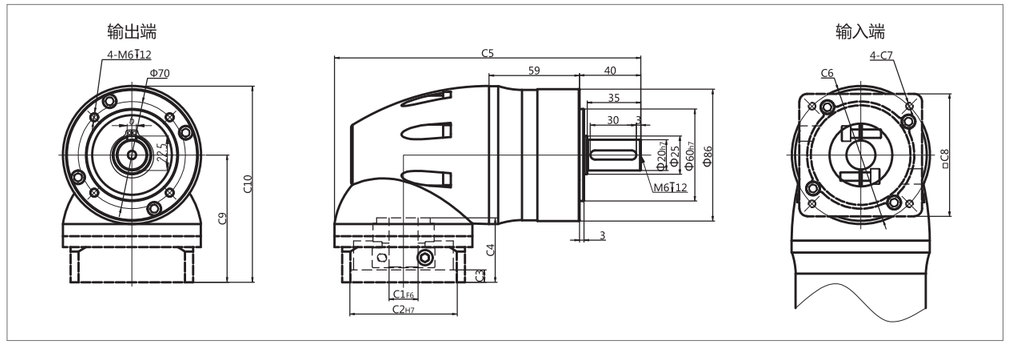


输出轴径

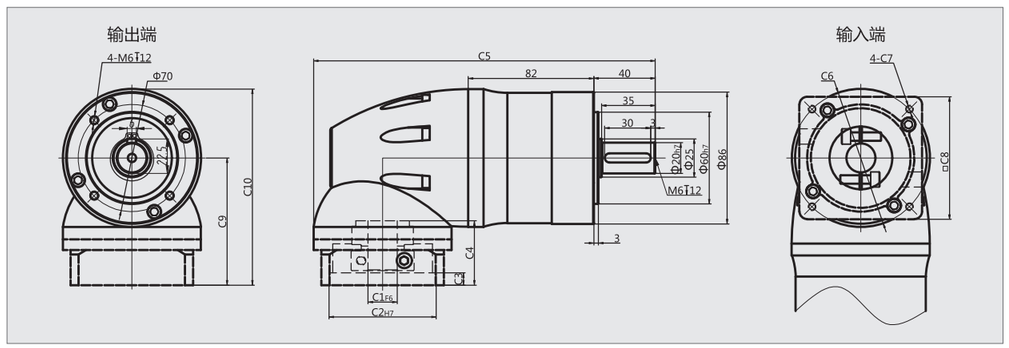


适配电机	C1	C2	C3	C4	L1	L2	L3	C5	C6	C7	C8	C9	C10
50/100W	Φ8	Φ30	5	31.5	143	159	175		Φ45/Φ46	M3牙深6/M4牙深8	60	61	92
400W	Φ14	Φ50	6	31.5	143	159	175		Φ70	M4牙深8/M5牙深10	60	61	92
750W	Φ19	Φ70	6	36.5	150.5	166.5	182.5		Φ90	M5牙深10/M6牙深12	80	63.5	94.5
57步进	Φ8	Φ38.1	5	31.5	143	159	175		Φ66.67	M4牙深8	60	61	92
86步进	Φ14	Φ73	6	39	150.5	169.5	185.5		Φ98.4	M5牙深10	86	63.5	94.5

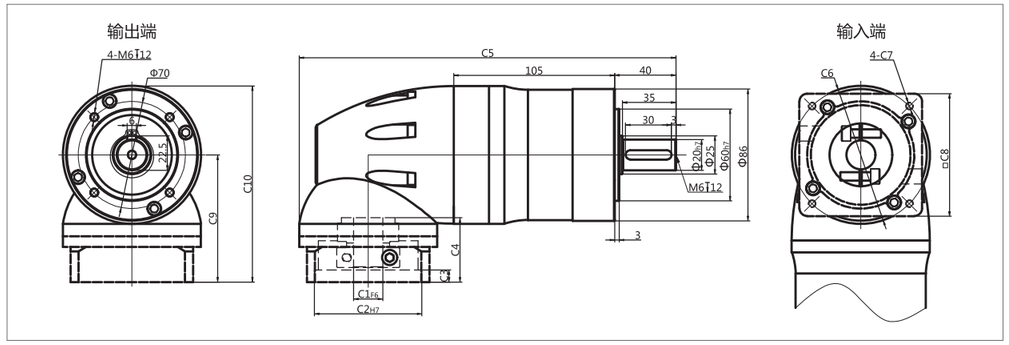
SLR090-L1



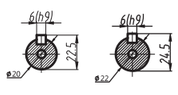
SLR090-L2



SLR090-L3

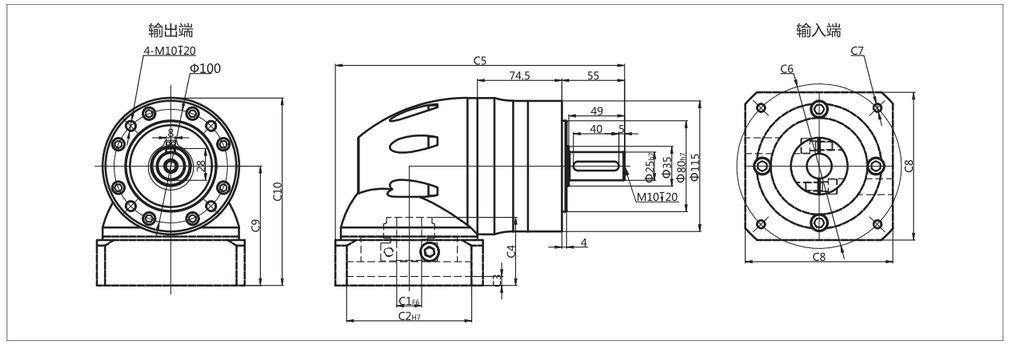


输出轴径

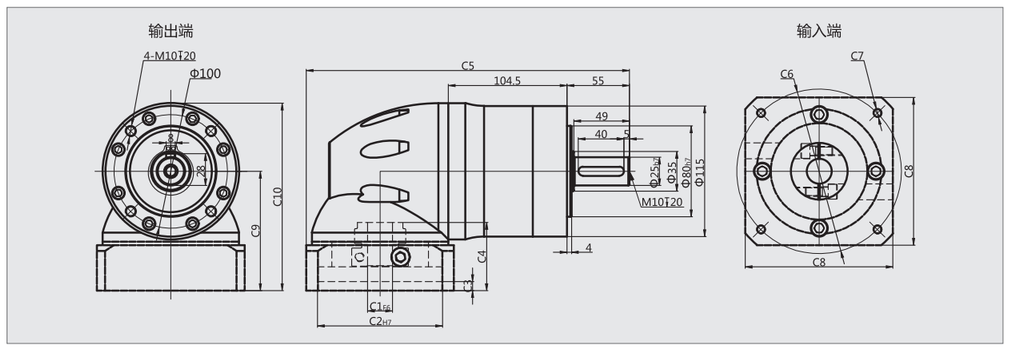


适配电机	C1	C2	C3	C4	L1	L2	L3	C5	C6	C7	C8	C9	C10
400W	Φ14	Φ50	5	39	199.8	222.8	245.8		Φ70	M4牙深8/M5牙深10	60	80	125
750W	Φ19	Φ70	8	42	199.8	222.8	245.8		Φ90	M5牙深10/M6牙深12	80	83	128
1500W	Φ22	Φ110	8	57	214.8	237.8	260.8		Φ145	M8牙深16	120	98	143
2000W	Φ24	Φ95	8	47	214.8	237.8	260.8		Φ115	M6牙深12/M8牙深16	100	98	143
86步进	Φ14/Φ19	Φ73	6	42	199.8	222.8	245.8		Φ98.4	M5牙深10/M6牙深12	86	83	128
110步进	Φ19	Φ85	8	57	214.8	237.8	260.8		Φ132	M8牙深16	120	98	143

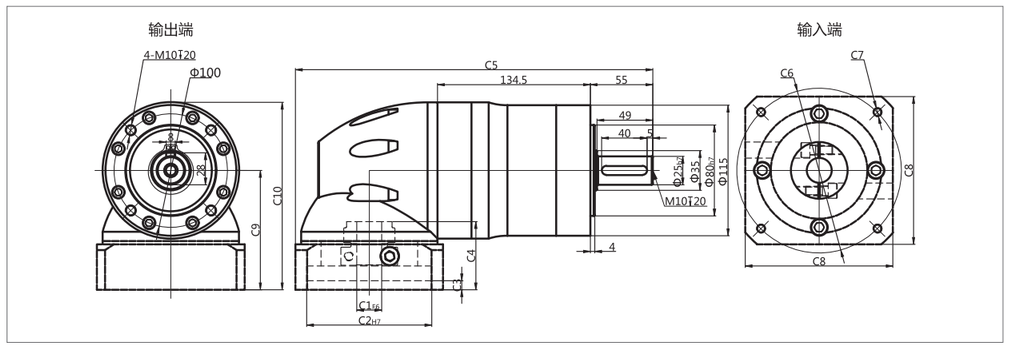
SLR120-L1



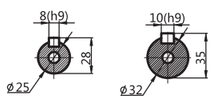
SLR120-L2



SLR120-L3

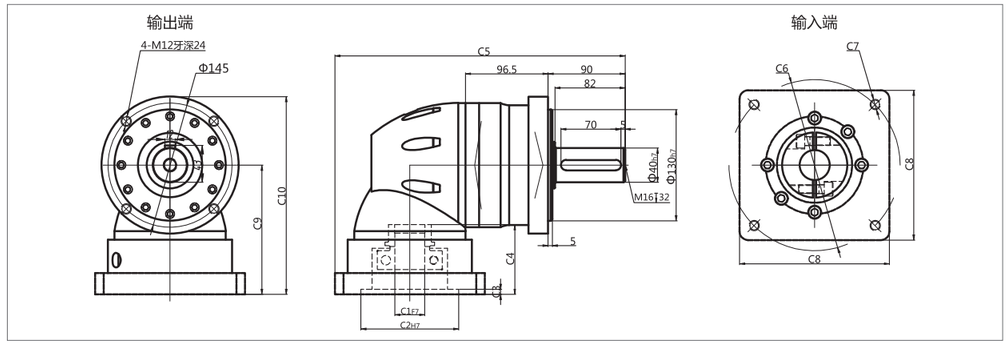


输出轴径

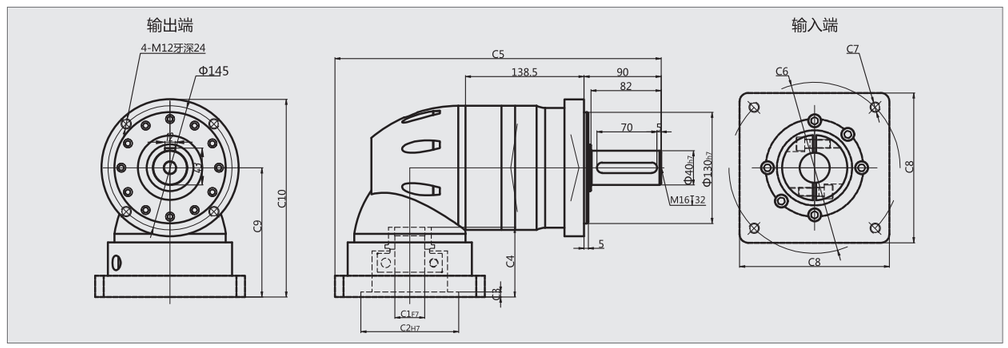


适配电机	C1	C2	C3	C4	L1 C5	L2 C5	L3 C5	C6	C7	C8	C9	C10
750W	Φ19	Φ70	8	47	202.5	232.5	262.5	Φ90	M5牙深10/M6牙深12	120	92	152
1500W	Φ22	Φ110	8	60	207.5	237.5	267.5	Φ145	M8牙深16	130	105	165
2000W	Φ24	Φ95	8	60	202.5	232.5	262.5	Φ115	M6牙深12/M8牙深16	120	105	165
3000W	Φ28	Φ110	8	72	207.5	237.5	267.5	Φ145	M8牙深16	130	117	177
110步进	Φ19	Φ85	8	60	202.5	232.5	262.5	Φ132	M8牙深16	120	105	165
130步进	Φ19	Φ100	8	60	207.5	237.5	267.5	Φ155	M8牙深16	130	101	165

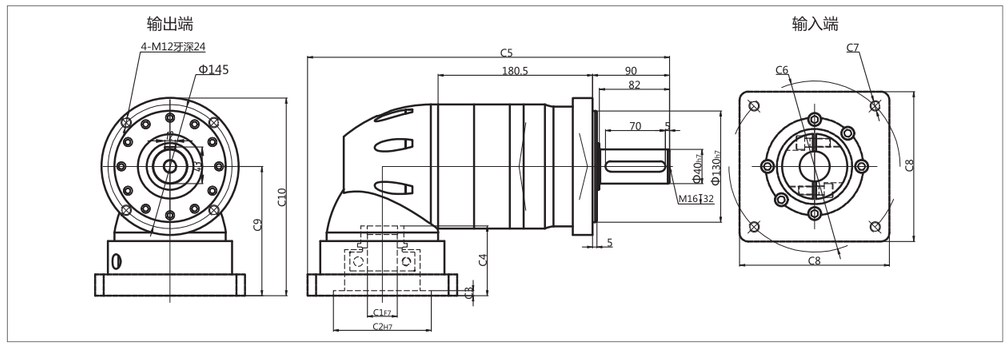
SLR160B-L1



SLR160B-L2



SLR160B-L3

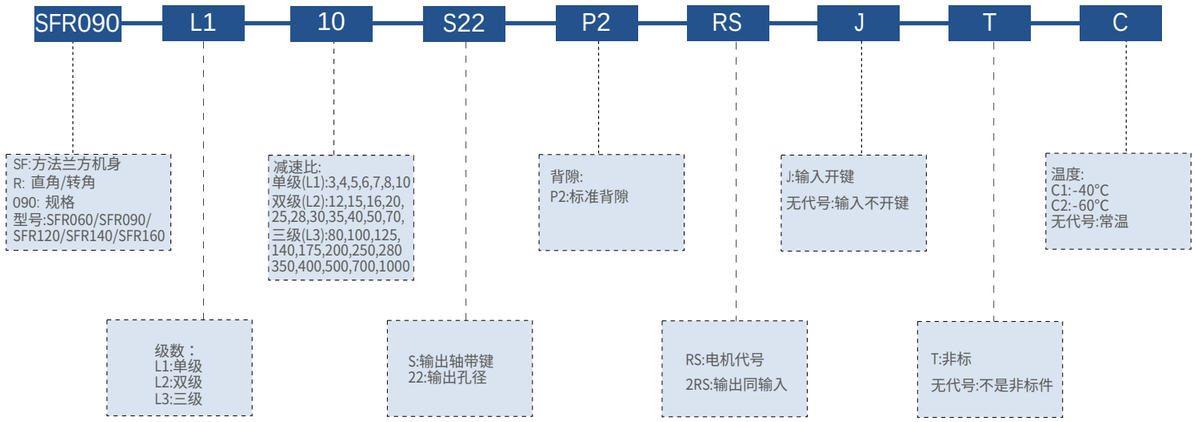


输出轴径

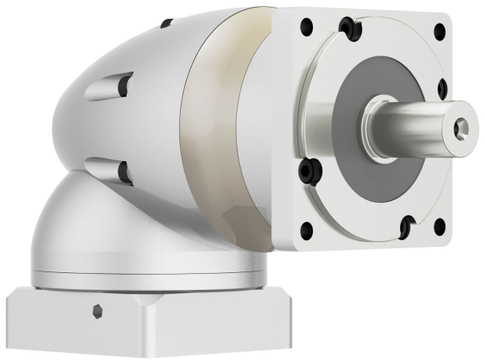


适配电机	C1	C2	C3	C4	L1 C5	L2 C5	L3 C5	C6	C7	C8	C9	C10
3000W	Φ35	Φ114.3	6	81.5	339	381	423	Φ200	M12牙深24	175	151	231
3500W	Φ28	Φ130	8	81.5	326	368	410	Φ174	M10牙深20	149	151	231
3800W	Φ28	Φ130	8	67	324	366	408	Φ165	M10牙深20	145	136.5	216.5
5500W	Φ38	Φ180	6	215	346.5	388.5	430.5	Φ215	M12牙深24	190	151	231
7500W	Φ42	Φ114.3	6	113.5	339	381	423	Φ200	M12牙深24	175	183	262

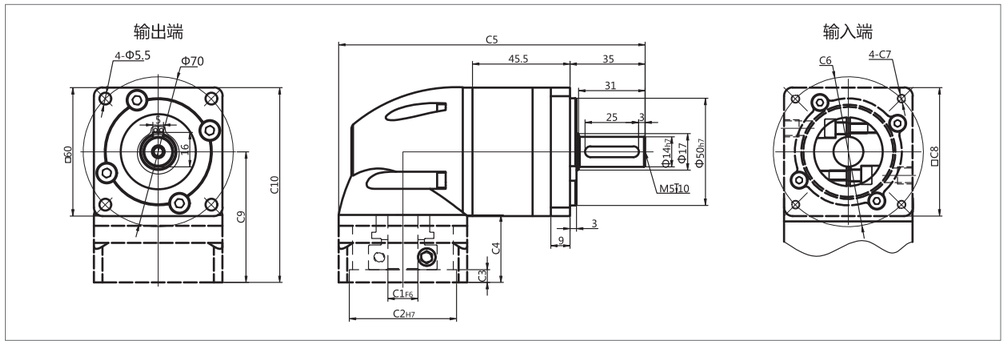
直齿行星减速机型号订购说明/Straight-tooth planetary gearbox model illuminate



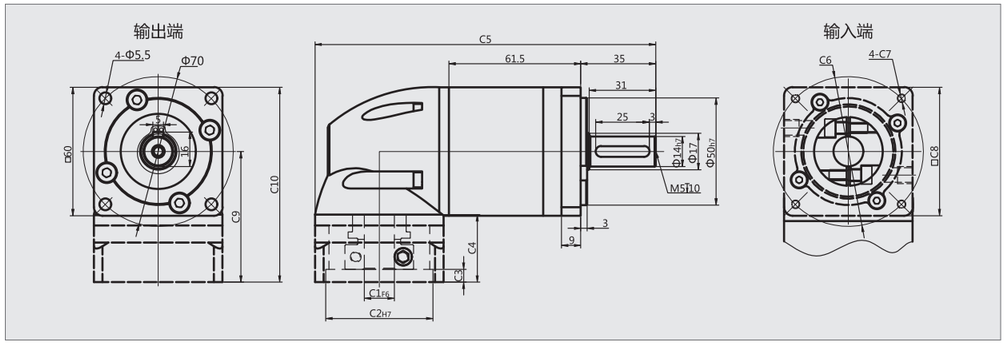
选型范例：SFR090-L1-10-S22-P2-RS-J-T-C



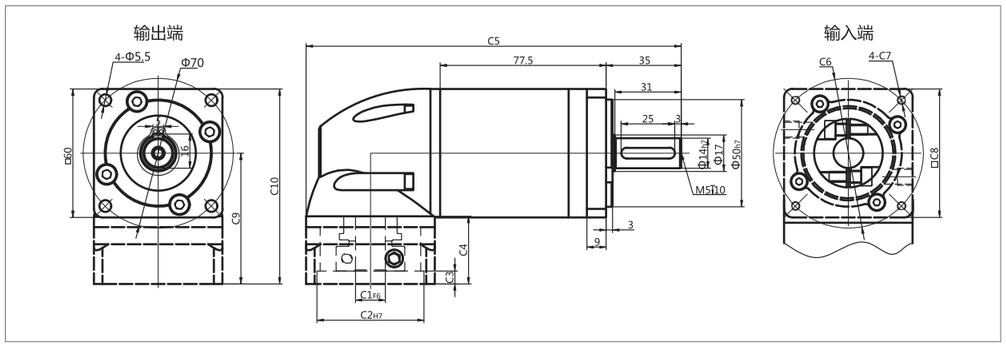
SFR060-L1



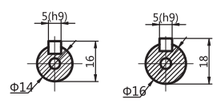
SFR060-L2



SFR060-L3

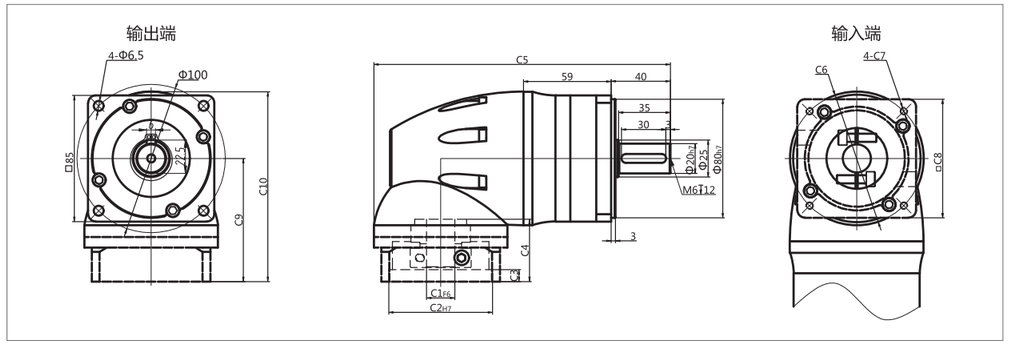


输出轴径

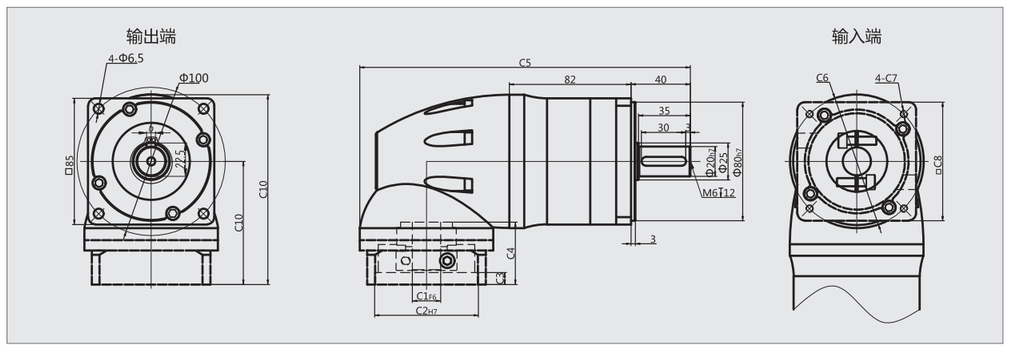


					L1	L2	L3					
适配电机	C1	C2	C3	C4	C5			C6	C7	C8	C9	C10
50/100W	Φ8	Φ30	5	31.5	143	159	175	Φ45/Φ46	M3牙深6/M4牙深8	60	61	91
400W	Φ14	Φ50	6	31.5	143	159	175	Φ70	M4牙深8/M5牙深10	60	61	91
750W	Φ19	Φ70	6	36.5	150.5	166.5	182.5	Φ90	M5牙深10/M6牙深12	80	63.5	93.5
57步进	Φ8	Φ38.1	5	31.5	143	159	175	Φ66.67	M4牙深8	60	61	91
86步进	Φ14	Φ73	6	39	150.5	169.5	185.5	Φ98.4	M5牙深10	86	63.5	93.5

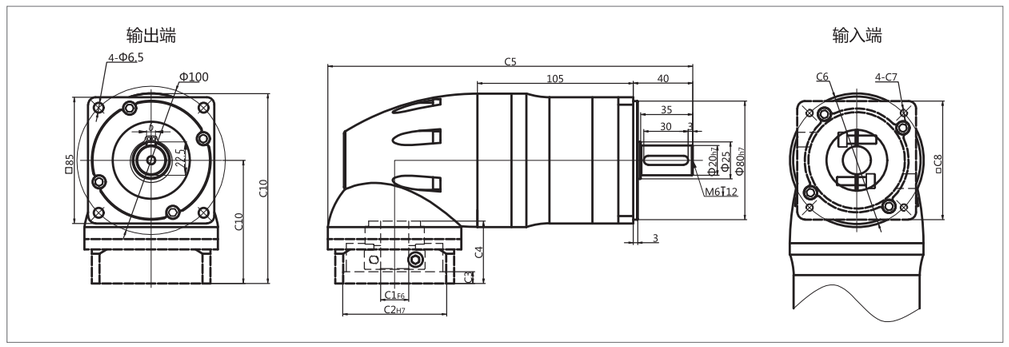
SFR090-L1



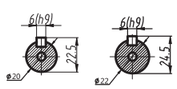
SFR090-L2



SFR090-L3

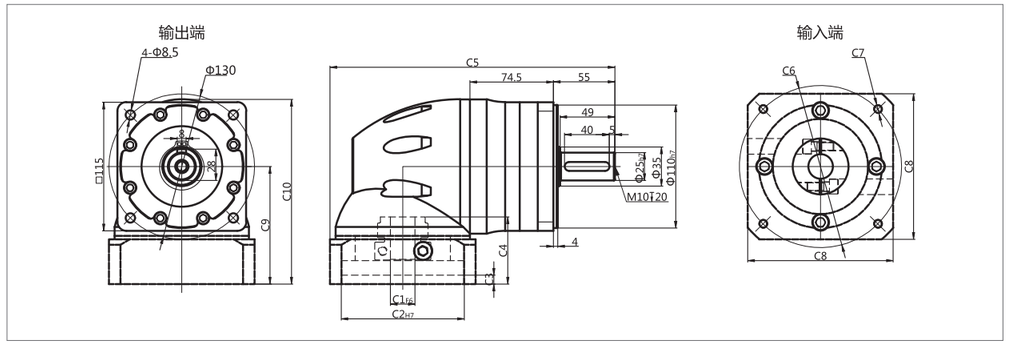


输出轴径

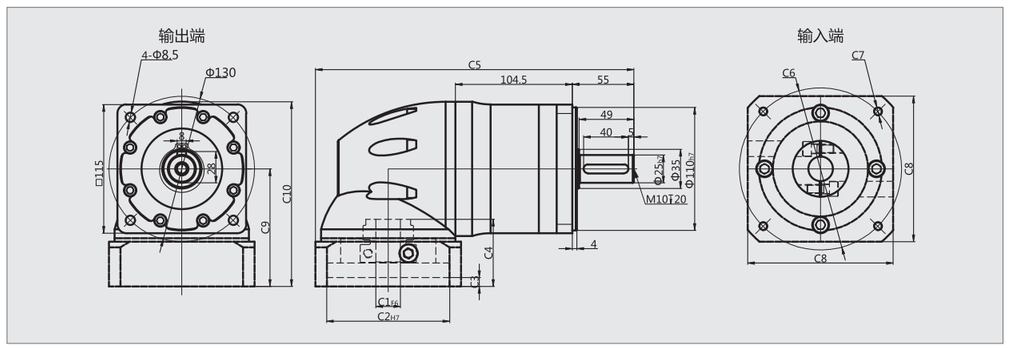


适配电机	C1	C2	C3	C4	L1 / L2 / L3 → C5			C6	C7	C8	C9	C10
400W	Φ14	Φ50	5	39	199.8	222.8	245.8	Φ70	M4牙深8/M5牙深10	60	80	125
750W	Φ19	Φ70	8	42	199.8	222.8	245.8	Φ90	M5牙深10/M6牙深12	80	83	128
1500W	Φ22	Φ110	8	57	214.8	237.8	260.8	Φ145	M8牙深16	120	98	143
2000W	Φ24	Φ95	8	47	214.8	237.8	260.8	Φ115	M6牙深12/M8牙深16	100	98	143
86步进	Φ14/Φ19	Φ73	6	42	199.8	222.8	245.8	Φ98.4	M5牙深10/M6牙深12	86	83	128
110步进	Φ19	Φ85	8	57	214.8	237.8	260.8	Φ132	M8牙深16	120	98	143

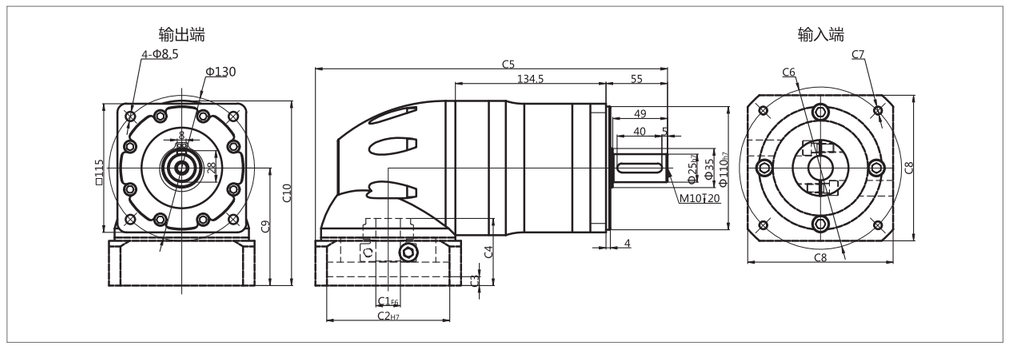
SFR120-L1



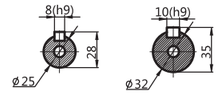
SFR120-L2



SFR120-L3

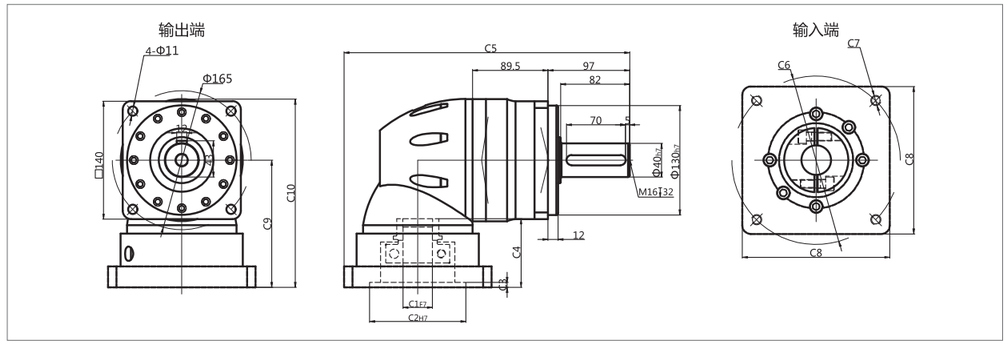


输出轴径

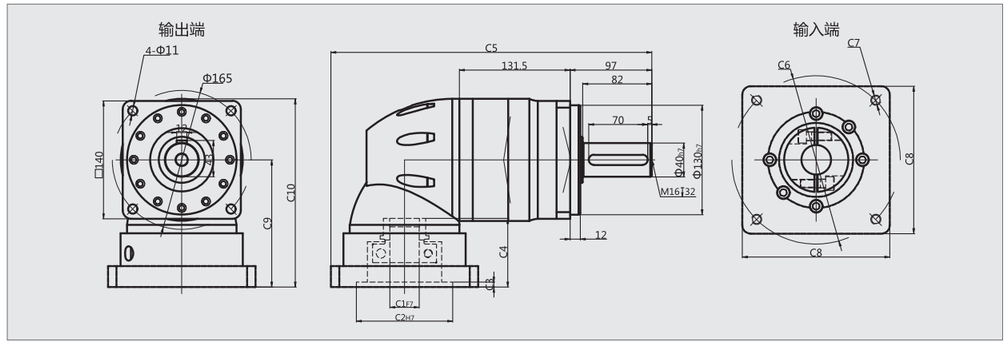


适配电机	C1	C2	C3	C4	L1 / L2 / L3 → C5			C6	C7	C8	C9	C10
750W	Φ19	Φ70	8	47	202.5	232.5	262.5	Φ90	M5牙深10/M6牙深12	120	92	152
1500W	Φ22	Φ110	8	60	207.5	237.5	267.5	Φ145	M8牙深16	130	105	165
2000W	Φ24	Φ95	8	60	202.5	232.5	262.5	Φ115	M6牙深12/M8牙深16	120	105	165
3000W	Φ28	Φ110	8	72	207.5	237.5	267.5	Φ145	M8牙深16	130	117	177
110步进	Φ19	Φ85	8	60	202.5	232.5	262.5	Φ132	M8牙深16	120	105	165
130步进	Φ19	Φ100	8	60	207.5	237.5	267.5	Φ155	M8牙深16	130	101	165

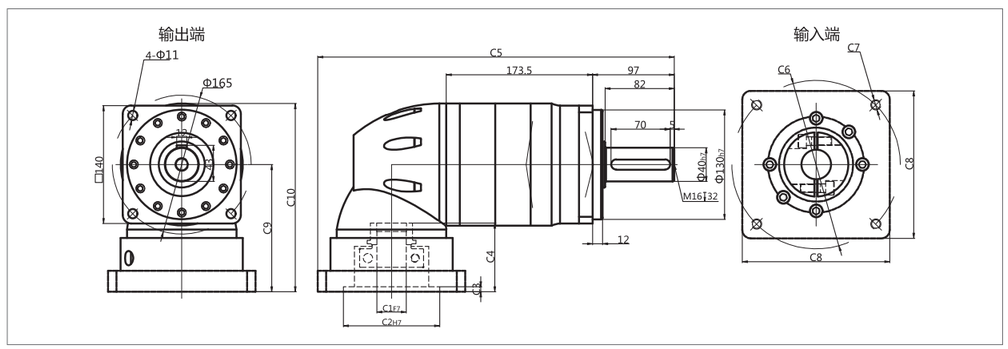
SFR140B-L1



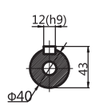
SFR140B-L2



SFR140B-L3

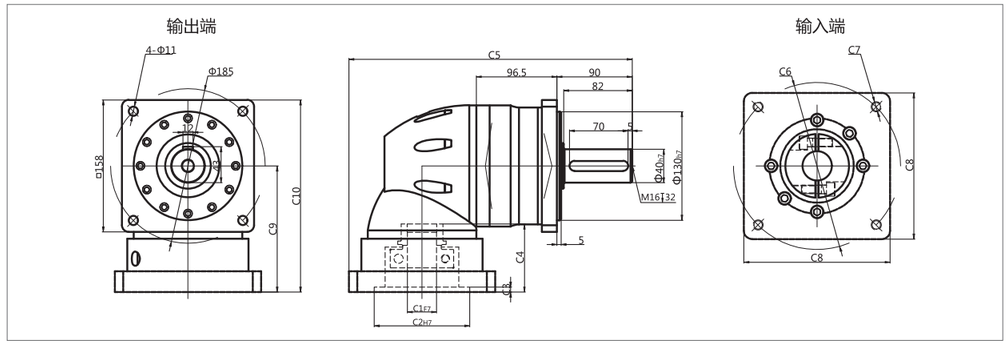


输出轴径

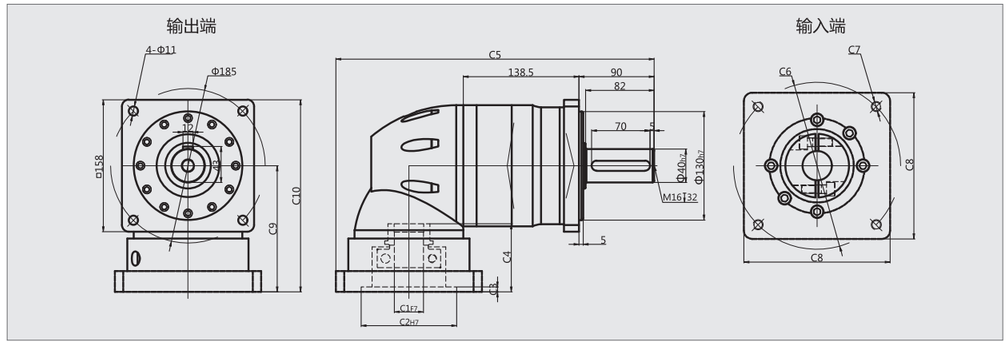


适配电机	C1	C2	C3	C4	L1 C5	L2 C5	L3 C5	C6	C7	C8	C9	C10
3000W	Φ35	Φ114.3	6	81.5	339	381	423	Φ200	M12牙深24	175	151	223.5
3500W	Φ28	Φ130	8	81.5	326	368	410	Φ174	M10牙深20	149	151	223.5
3800W	Φ28	Φ130	8	67	324	366	408	Φ165	M10牙深20	145	136.5	209
5500W	Φ38	Φ180	6	215	346.5	388.5	430.5	Φ215	M12牙深24	190	151	223.5
7500W	Φ42	Φ114.3	6	113.5	339	381	423	Φ200	M12牙深24	175	183	255.5

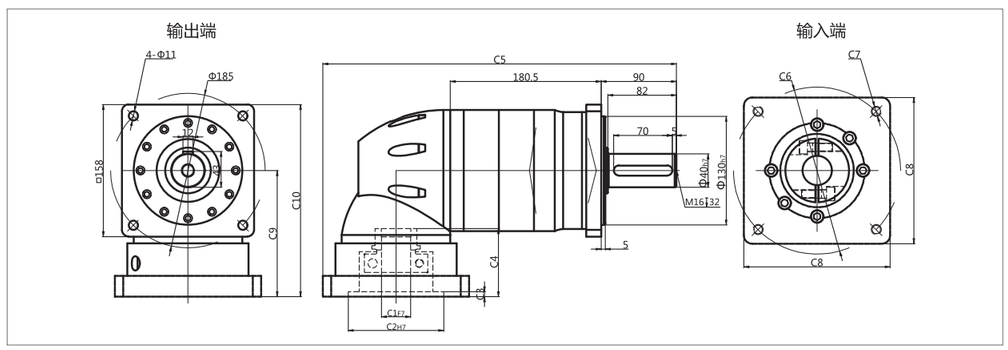
SFR160B-L1



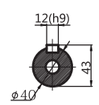
SFR160B-L2



SFR160B-L3



输出轴径



适配电机	C1	C2	C3	C4	L1 C5	L2 C5	L3 C5	C6	C7	C8	C9	C10
3000W	Φ35	Φ114.3	6	81.5	339	381	423	Φ200	M12牙深24	175	151	230
3500W	Φ28	Φ130	8	81.5	326	368	410	Φ174	M10牙深20	149	151	230
3800W	Φ28	Φ130	8	67	324	366	408	Φ165	M10牙深20	145	136.5	215.5
5500W	Φ38	Φ180	6	215	346.5	388.5	430.5	Φ215	M12牙深24	190	151	230
7500W	Φ42	Φ114.3	6	113.5	339	381	423	Φ200	M12牙深24	175	183	261

SFKR

JunsRise®

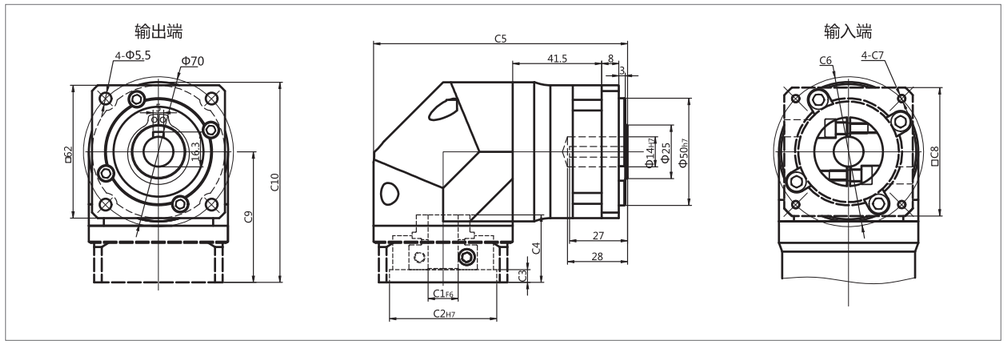
直齿行星减速机型号订购说明/Straight-tooth planetary gearbox model illuminate

SFKR090	L1	10	K20	P2	RS	J	T	C
SF:方法兰 K: 孔输出 R: 直角/转角 090: 规格 型号:SFK060/SFK090/ SFK120/SFK140/SFK160	级数： L1:单级 L2:双级 L3:三级	减速比: 单级(L1):3,4,5,6,7,8,10 双级(L2):12,15,16,20, 25,28,30,35,40,50,70, 80,100 三级(L3):80,100,125, 140,175,200,250,280 350,400,500,700,1000	K:孔带键槽输出 20:输出孔径	背隙: P2:标准背隙	RS:电机代号	J:输入开键 无代号:输入不开键	T:非标 无代号:不是非标	温度: C1:-40°C C2:-60°C 无代号:常温

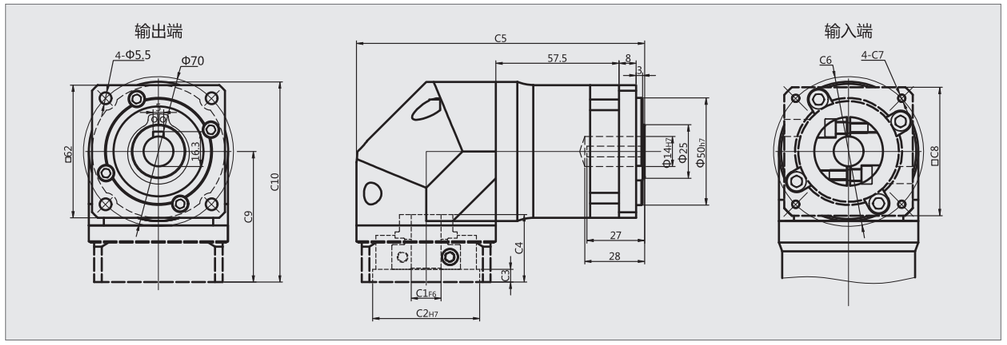
选型范例：SFKR090-L1-10-S22-P2-RS-J-T-C



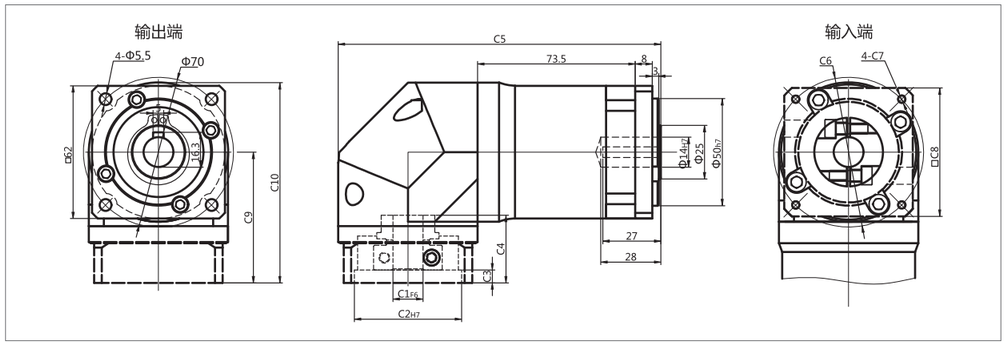
SFKR060-L1



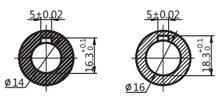
SFKR060-L2



SFKR060-L3

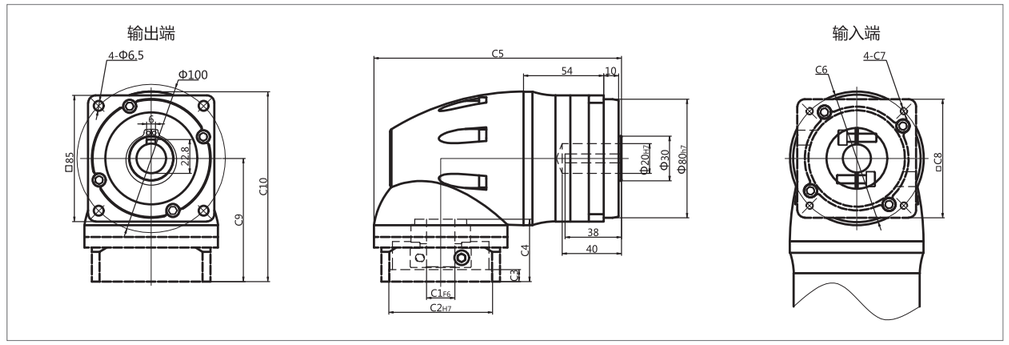


输出轴径

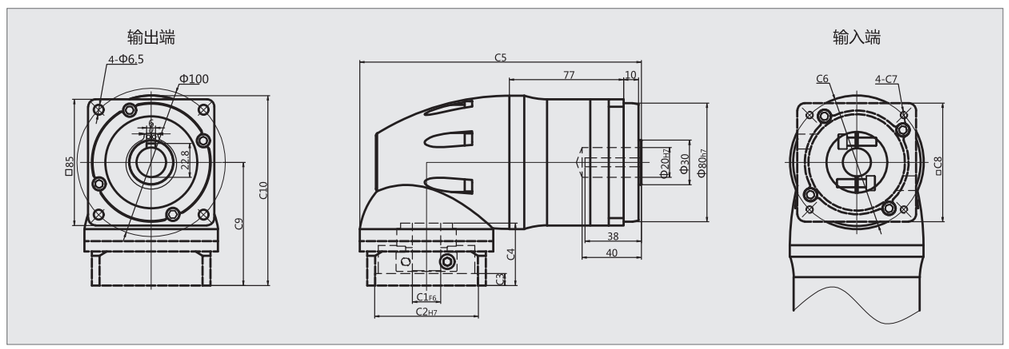


					L1	L2	L3					
适配电机	C1	C2	C3	C4	C5			C6	C7	C8	C9	C10
50/100W	Φ8	Φ30	5	31.5	118.5	134.5	150.5	Φ45/Φ46	M3牙深6/M4牙深8	60	61	91
400W	Φ14	Φ50	6	31.5	118.5	134.5	150.5	Φ70	M4牙深8/M5牙深10	60	61	91
750W	Φ19	Φ70	6	36.5	126	142	158	Φ90	M5牙深10/M6牙深12	80	63.5	93.5
57步进	Φ8	Φ38.1	5	31.5	118.5	134.5	150.5	Φ66.67	M4牙深8	60	61	91
86步进	Φ14	Φ73	6	39	129	145	161	Φ98.4	M5牙深10	86	63.5	93.5

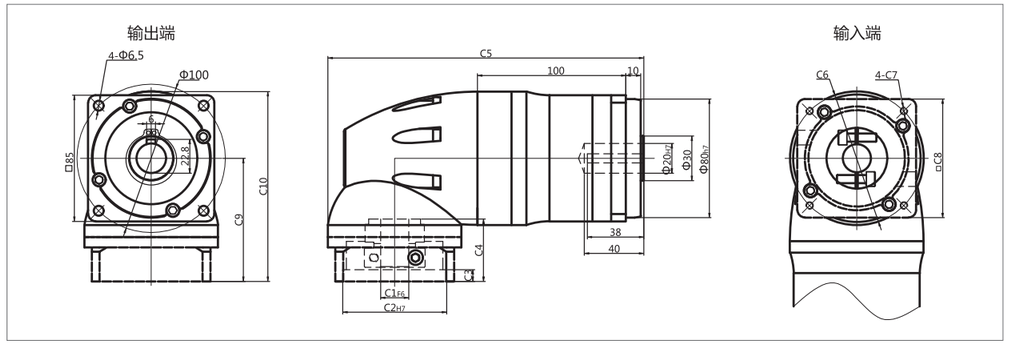
SFKR090-L1



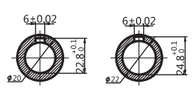
SFKR090-L2



SFKR090-L3



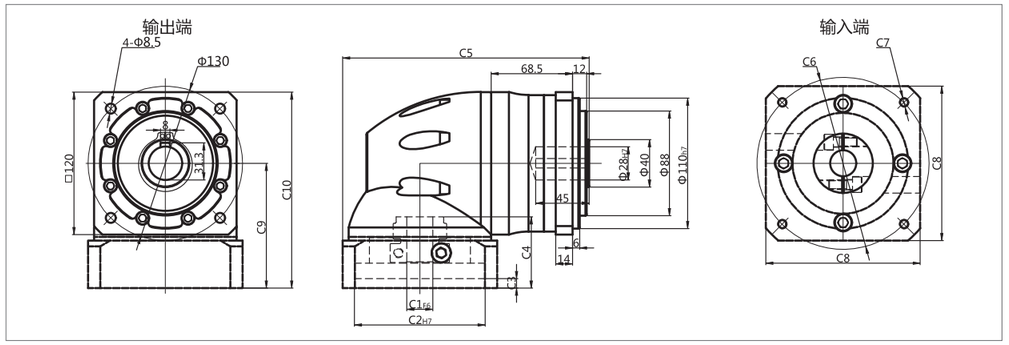
输出轴径



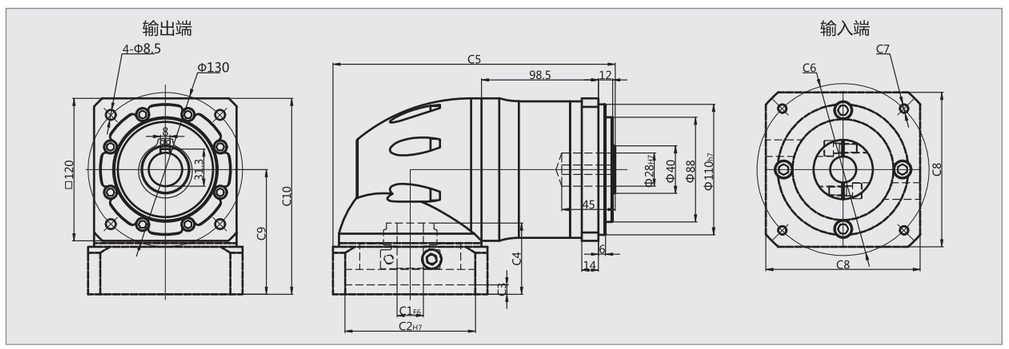
适配电机	C1	C2	C3	C4	L1 C5	L2 C5	L3 C5	C6	C7	C8	C9	C10
400W	Φ14	Φ50	5	39	166.8	189.8	212.8	Φ70	M4牙深8/M5牙深10	60	80	125
750W	Φ19	Φ70	8	42	166.8	189.9	212.8	Φ90	M5牙深10/M6牙深12	80	83	128
1500W	Φ22	Φ110	8	57	181.8	204.8	227.8	Φ145	M8牙深16	120	98	143
2000W	Φ24	Φ95	8	47	181.8	204.8	227.8	Φ115	M6牙深12/M8牙深16	100	88	133
86步进	Φ14/Φ19	Φ73	6	42	169.8	192.8	215.8	Φ98.4	M5牙深10/M6牙深12	86	83	128
110步进	Φ19	Φ85	8	57	181.8	204.8	227.8	Φ132	M8牙深16	120	98	143

JunsRise®

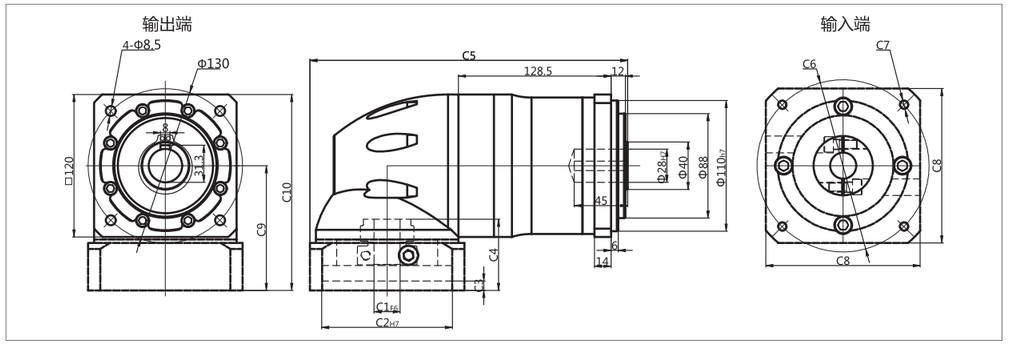
SFKR120-L1



SFKR120-L2



SFKR120-L3

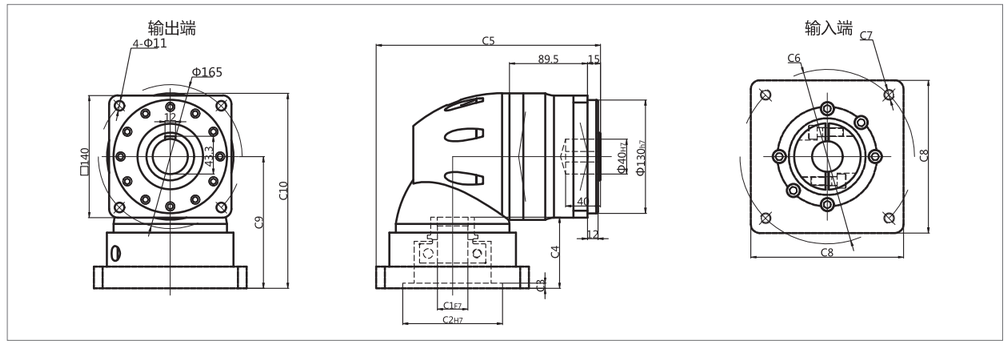


输出轴径

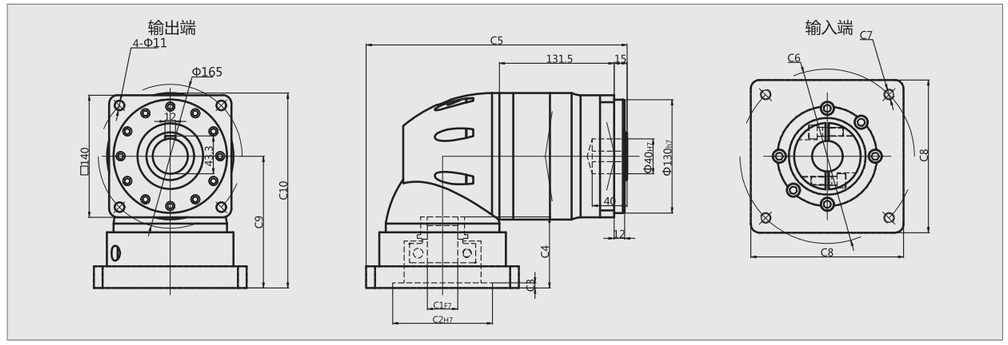


适配电机	C1	C2	C3	C4	L1 C5	L2 C5	L3 C5	C6	C7	C8	C9	C10
750W	Φ19	Φ70	8	47	202.5	232.5	262.5	Φ90	M5牙深10/M6牙深12	120	92	152
1500W	Φ22	Φ110	8	60	207.5	237.5	267.5	Φ145	M8牙深16	130	105	165
2000W	Φ24	Φ95	8	60	202.5	232.5	262.5	Φ115	M6牙深12/M8牙深16	120	105	165
3000W	Φ28	Φ110	8	72	207.5	237.5	267.5	Φ145	M8牙深16	130	117	177
110步进	Φ19	Φ85	8	60	202.5	232.5	262.5	Φ132	M8牙深16	120	105	165
130步进	Φ19	Φ100	8	60	207.5	237.5	267.5	Φ155	M8牙深16	130	101	165

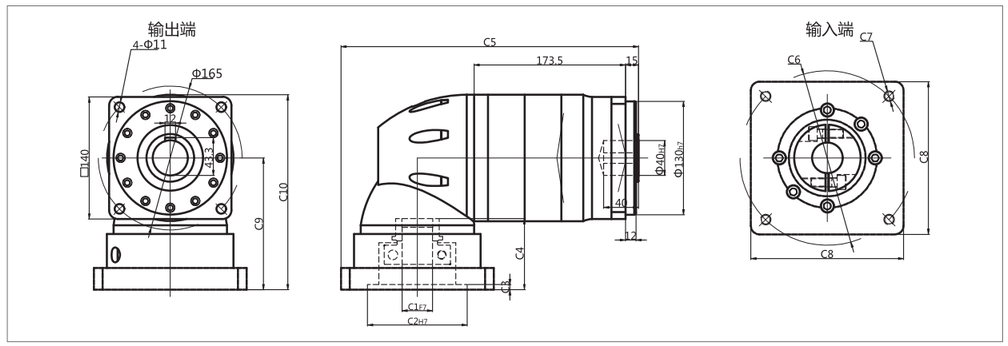
SFKR140B-L1



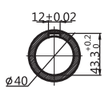
SFKR140B-L2



SFKR140B-L3

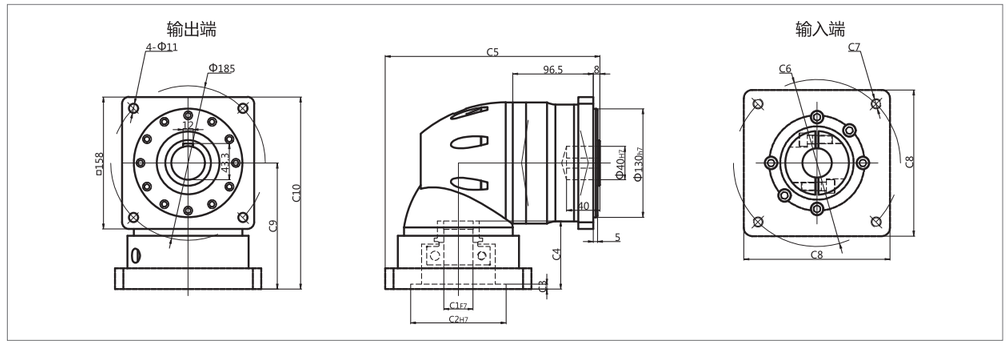


输出轴径

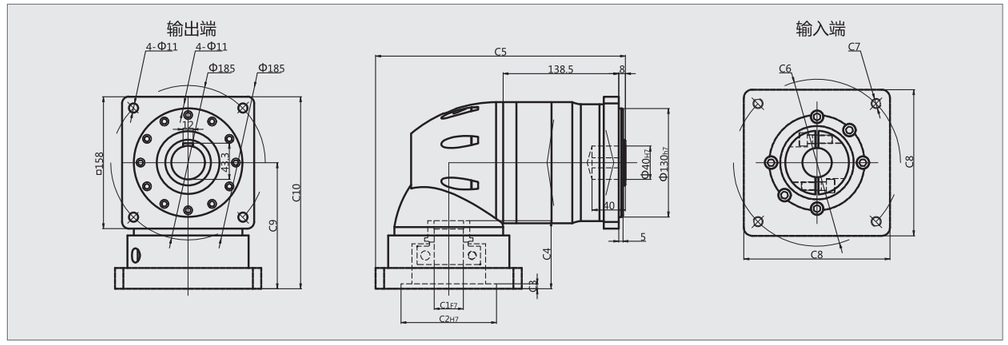


					L1	L2	L3					
适配电机	C1	C2	C3	C4	C5			C6	C7	C8	C9	C10
3000W	Φ35	Φ114.3	6	81.5	339	381	423	Φ200	M12牙深24	175	151	223.5
3500W	Φ28	Φ130	8	81.5	326	368	410	Φ174	M10牙深20	149	151	223.5
3800W	Φ28	Φ130	8	67	324	366	408	Φ165	M10牙深20	145	136.5	209
5500W	Φ38	Φ180	6	215	346.5	388.5	430.5	Φ215	M12牙深24	190	151	223.5
7500W	Φ42	Φ114.3	6	113.5	339	381	423	Φ200	M12牙深24	175	183	255.5

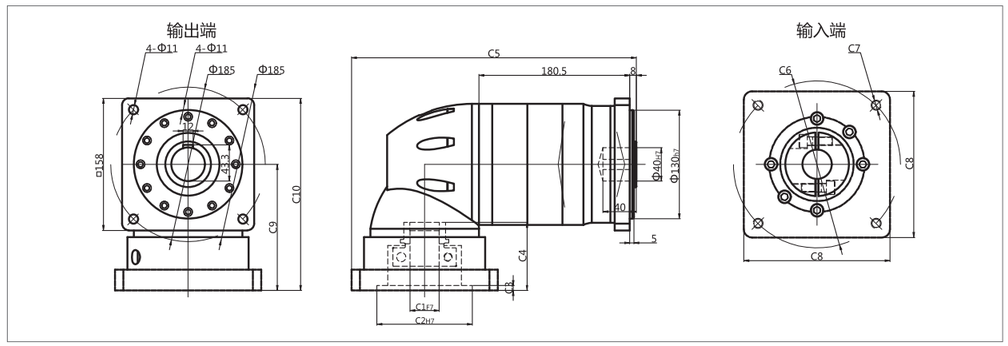
SFKR160B-L1



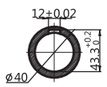
SFKR160B-L2



SFKR160B-L3



输出轴径



					L1	L2	L3					
适配电机	C1	C2	C3	C4	C5			C6	C7	C8	C9	C10
3000W	Φ35	Φ114.3	6	81.5	339	381	423	Φ200	M12牙深24	175	151	230
3500W	Φ28	Φ130	8	81.5	326	368	410	Φ174	M10牙深20	149	151	230
3800W	Φ28	Φ130	8	67	324	366	408	Φ165	M10牙深20	145	136.5	215.5
5500W	Φ38	Φ180	6	215	346.5	388.5	430.5	Φ215	M12牙深24	190	151	230
7500W	Φ42	Φ114.3	6	113.5	339	381	423	Φ200	M12牙深24	175	183	261

JunsRise®

精密换向器

JunsRise®

精密换向器型号订购说明/Precision right angle gearbox model illuminate

D	T	090	J	L1	10	SS1	A	RS	J	M1	90°	T	C	P2

090:规格
型号:DT/ZT/ST/SDT
065/075/090/110/
140/170/210/240/
280

J
S:直齿行星
J:斜齿行星
JR:直角斜齿行星
SR:直角直齿行星

L1
级数:
L: 本体
L1:单级
L2:双级
L3:三级

RS:电机代号

J
J:输入开键
无代号:
输入不开键

M1
安装形式

90°
角度:0 ° /90 °
180 ° /270 ° /

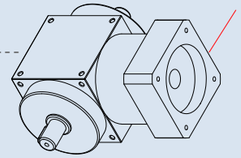
T
T:非标
无代号：
不是非标件

C
温度：
C1:-40°C
C2:-60°C
无代号:常温

P2
背隙：
P0:超精密背隙
P1:精密背隙
P2:标准背隙

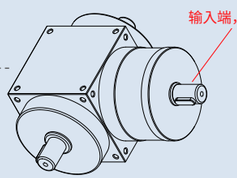
D
输入端,孔输入法兰

D:孔输入------



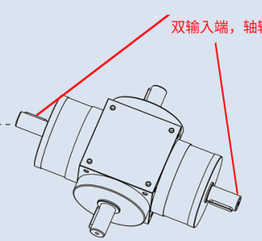
Z
输入端，轴输入

Z:轴输入------



S
双输入端，轴输入

S:双轴输入----



SD:电机带轴入----

10
减速比：
L(本体):1，1.5，2

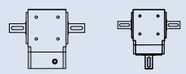
单级(L1)3，4，5，7，10

双级(L2)12，15，16，20，25
28，35，40，50，70，80，100

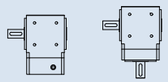
三级(L3)80，100，125，140
175，200，250，280，350
400，500，700，1000

注：如需三级（L3）速比可联系客服定制

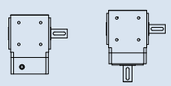
SS1
DS:双轴出



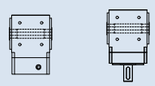
SS1:左单轴出



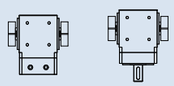
SS2:右单轴出



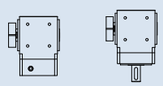
K:孔出



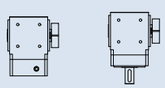
H:双锁紧



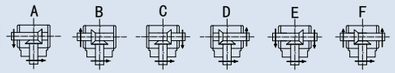
H1:左单锁紧



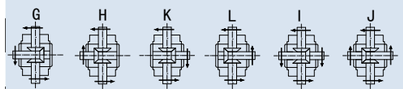
H2:右单锁紧



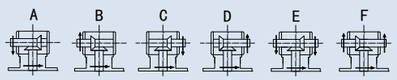
A
A:装配形式，旋转方向
输入单轴旋转方向:

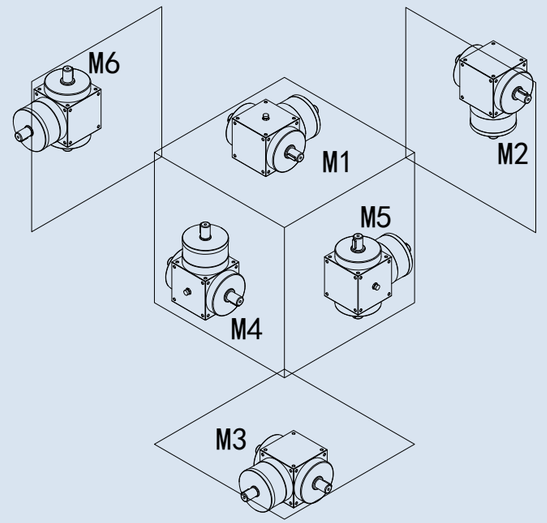


输入双轴旋转方向：



配电机旋转方向：





JunsRise®

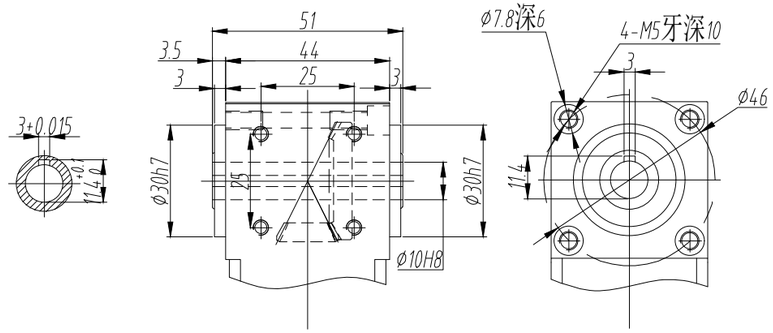
技术参数/ technical specification

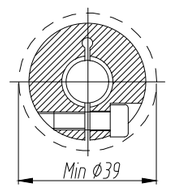
规格	级数/速比	042	额定扭矩	060	额定扭矩	065	额定扭矩	075	额定扭矩	090	额定扭矩	110	额定扭矩	140	额定扭矩	170	额定扭矩	210	额定扭矩	240	额定扭矩	280	额定扭矩
	L(本体)	2	9	1	25	1	25	1	45	1	78	1	150	1	360	1	585	1	1300	1	2150	1	3200
		3	8	2	30	2	25	1.5	45	1.5	78	1.5	150	2	360	2	585	2	1300	2	2150	2	3201
		5	5	3	20			2	45	2	78	2	150		360								
				5	15			3	45														
	L1(单级)	3	5	3	16.5	3	25	3	45	3	78	3	130	3	208	3	342	3	588	3	1140	3	2300
		4	10	4	26	4	25	4	45	4	78	4	140	4	290	4	540	4	1050	4	1700	4	2300
		5	9	5	28	5	25	5	45	5	78	5	150	5	330	5	585	5	1200	5	2000	5	2300
		8	5	7	20	6	25	6	45	6	78	6	150	6	310	6	585	6	1100	6	1200	6	2300
				10	12.5	7	25	7	35	7	78	7	140	7	300	7	550	7	1100	7	1100	7	2300
						8	25	8	35	8	78	8	120	8	260	8	500	8	1000	8	1000	8	2300
						10	23	10	23	10	48	10	100	10	140	10	370	10	520	10	900	10	2300
	L2(双级)	12	12	12	31.5	12	25	12	45	12	78	12	130	12	208	12	342	12	588	10	1040		
		16	12	16	31.5	15	25	15	45	15	78	15	130	15	208	15	342	15	588	20	1500		
		20	12	20	31.5	20	25	20	45	20	78	20	140	20	290	20	542	20	1050	24	1500		
		25	10.5	25	33.5	25	25	25	45	25	78	25	140	25	330	25	585	25	1200	30	1500		
				28	31.5	30	25	30	45	30	78	30	150										
		32	12	35	33.5	35	25	35	45	35	78	35	150	35	300	35	550	35	1100				
		40	10.5	40	31.5	40	25	40	45	40	78	40	140	40	290	40	542	40	1050	40	1500		
				50	33.5	50	25	50	45	50	78	50	150	50	330	50	585	50	1200	50	1500		
						60	25	60	45	60	78												
				70	24	70	25	70	35	70	78	70	140	70	300	70	585	70	1100	70	1500		
						80	25	80	35	80	78												
						100	23	100	23	100	48	100	100	100	300	100	585	100	520	100	1220		
	L3(三级)	注：如需三级（L3）速比可联系客服定制																					
最大输出力矩	Nm	1.5倍额定扭矩																					
额定输入转速 rpm	L	1500		1500		1500		1500		1500		1500		1500		1500		1500		1500		1500	
	L1	3000		3000		3000		3000		3000		3000		3000		3000		3000		2000		2000	
	L2	3000		3000		3000		3000		3000		3000		3000		3000		3000		2000		2000	
瞬时输入转速	L	1.5倍额定转速																					
回程间隙 (arcmin)		P1	P2	P1	P2	P1	P2	P1	P2	P1	P2	P1	P2	P1	P2	P1	P2	P1	P2	P1	P2	P1	P2
	L1		≤10		≤10		≤10		≤10		≤10		≤10		≤10		≤10		≤12		≤12		≤12
	L2		≤15		≤15		≤15		≤15		≤15		≤15		≤15		≤15		≤15		≤15		≤15
	L3	注：如需了解L3（三级）回程间隙可联系客服																					
最大径向力	N	400		850		900		1100		1700		2700		4800		6600		11500		16000		18000	
最大轴向力	N	200		400		450		550		850		1350		2400		3300		5750		8000		9000	
平均寿命	hr	20000h																					
满载效率（%）	L1	96%																					
	L2/L3	94%																					
重量kg	L1	0.5		1.2		2.3		4.2		7		11.5		19		33		64		93		146	
	L2	0.85		2.3		3.6		5.2		8.5		14.6		26		48		79		115		198	
	L3									11		16.5		29		52		85		132		223	
噪音dB	L																						
	L1																						

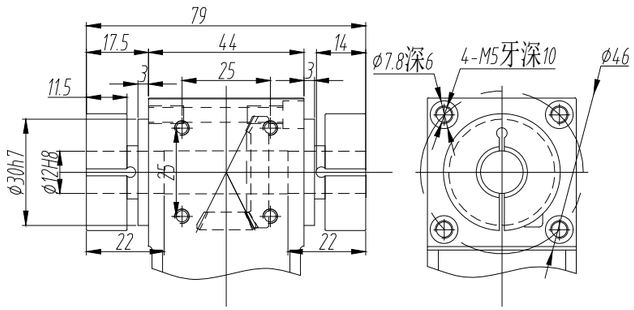
注：输入端和输出端可进行任意搭配选择

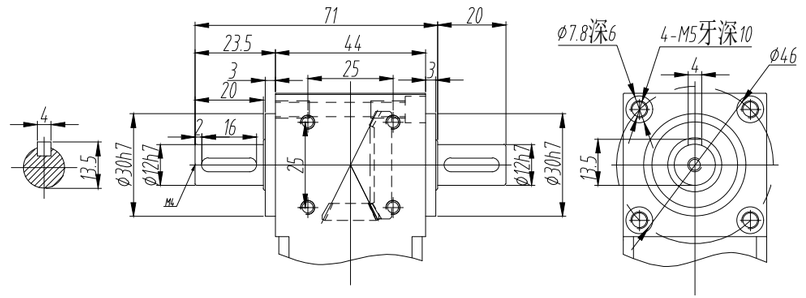
外形尺寸图表 / OUTLINE DIMENSION SHEET

输出端	K：孔出	DS: 双轴出	SS1:左单轴出	SS2:右单轴出	H:双锁紧	H1:左单锁紧	H2:右单锁紧

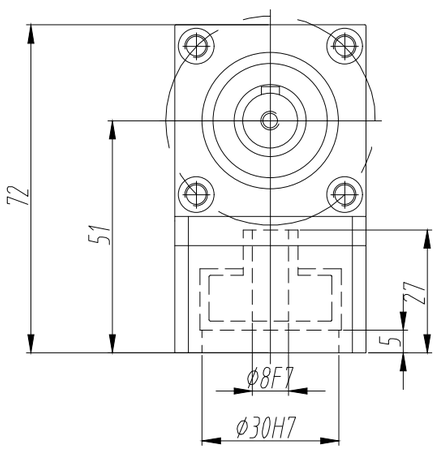


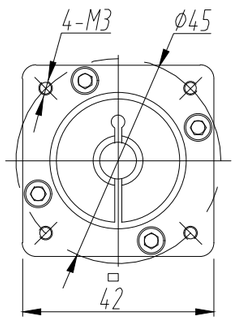


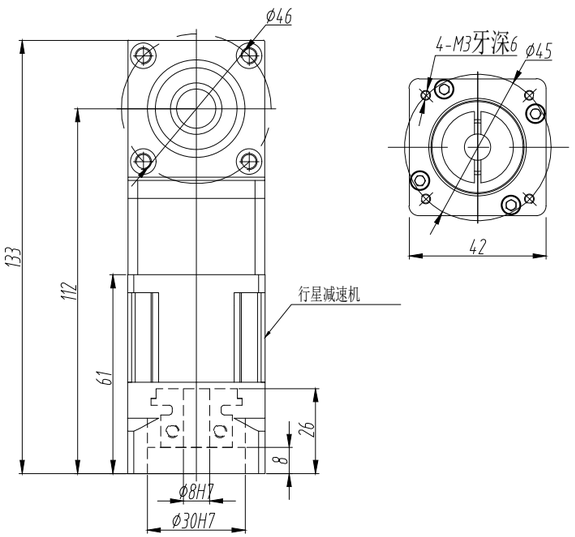




输入端	DT-L：孔输入（本体）	DT-L1/L2:孔输入（带行星）





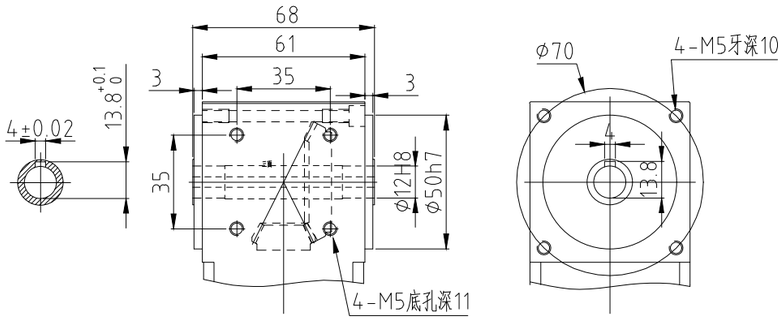


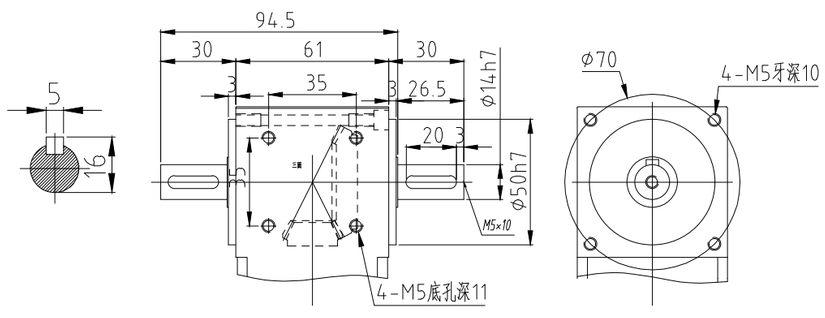
✳ 如需配其他电机请致电我司

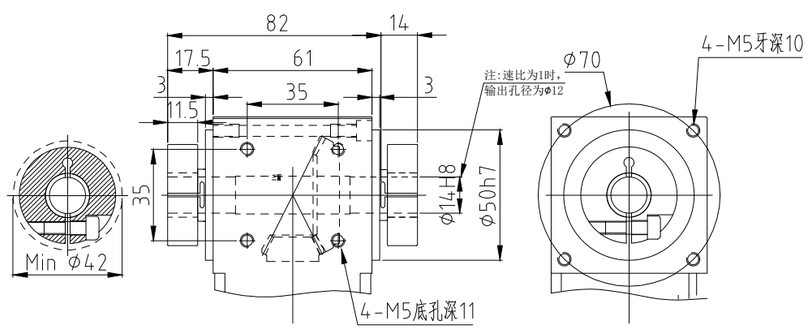
注：输入端和输出端可进行任意搭配选择

外形尺寸图表 / OUTLINE DIMENSION SHEET

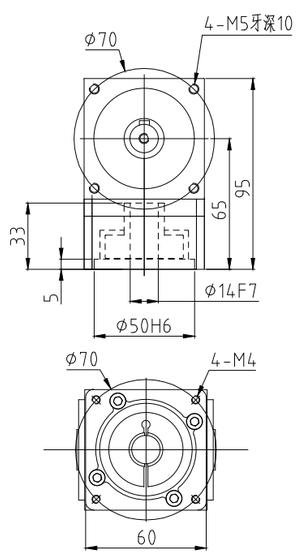
输出端	K：孔出	DS: 双轴出	SS1:左单轴出	SS2:右单轴出	H:双锁紧	H1:左单锁紧	H2:右单锁紧

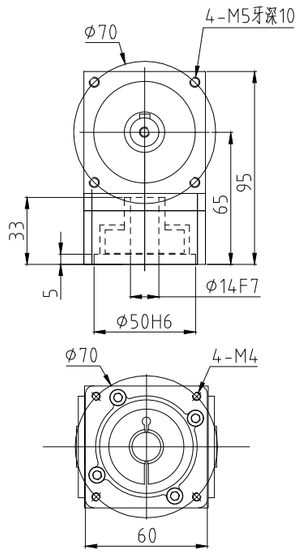


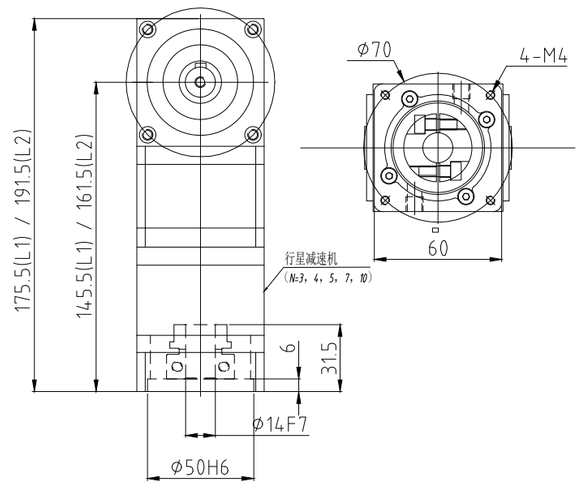




输入端	ZT：轴入	DT-L：孔输入（本体）	DT-L1/L2:孔输入（带行星）





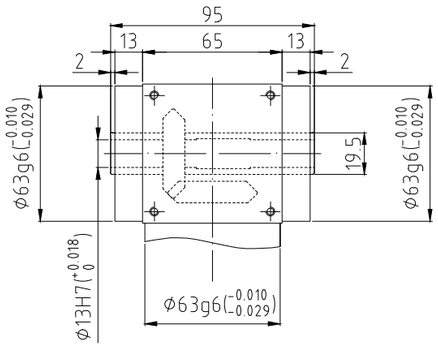


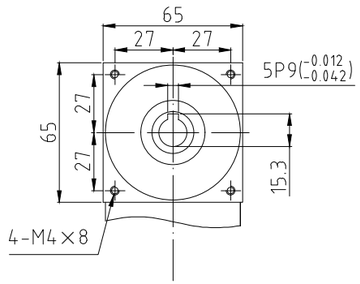
✳ 如需配其他电机请致电我司

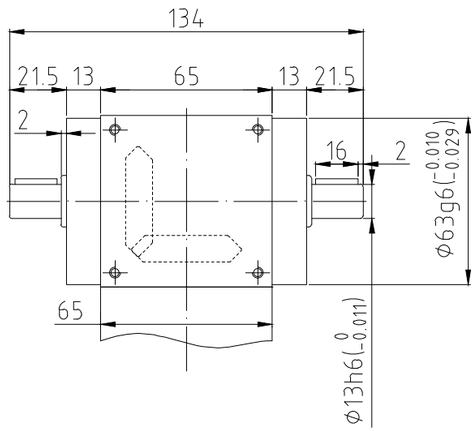
注：输入端和输出端可进行任意搭配选择

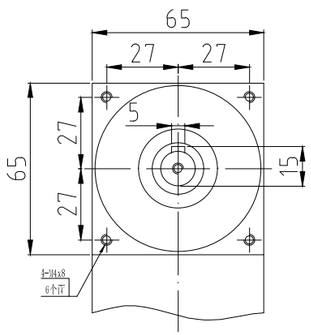
外形尺寸图表 / OUTLINE DIMENSION SHEET

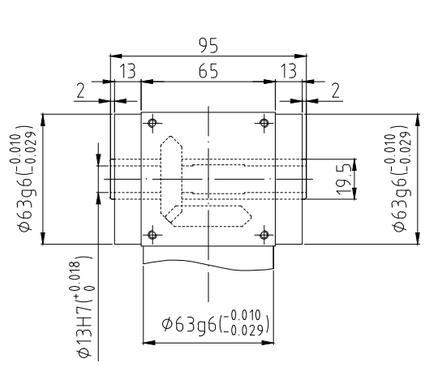
输出端	K：孔出	DS: 双轴出	SS1:左单轴出	SS2:右单轴出	H:双锁紧	H1:左单锁紧	H2:右单锁紧

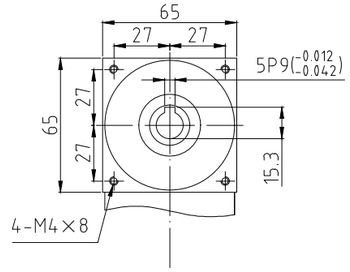




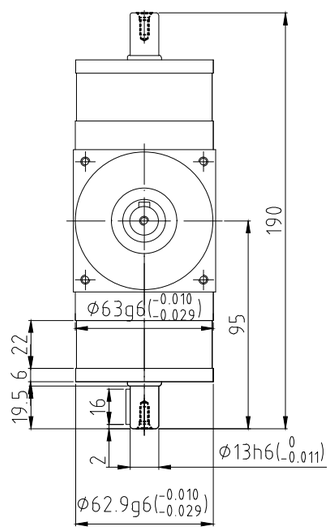


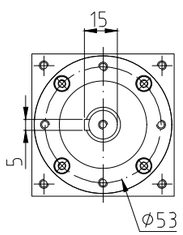


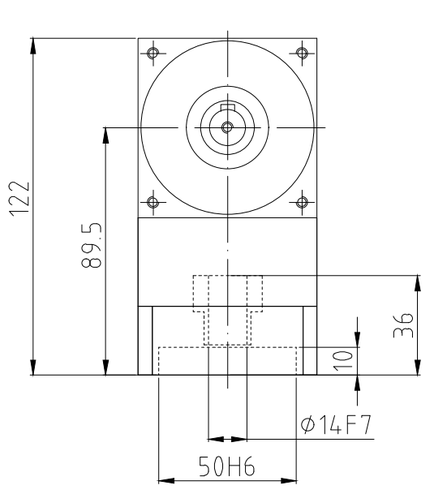


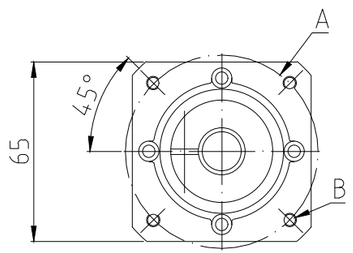


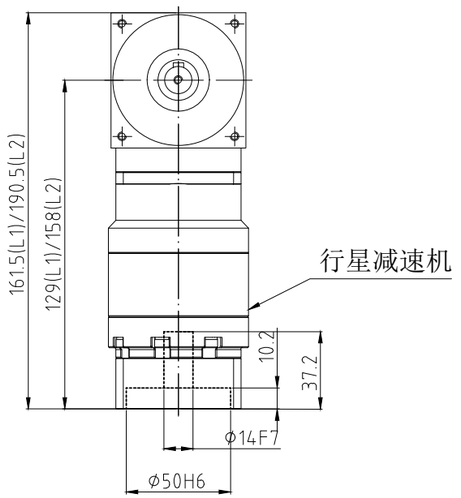
输入端	ZT/ST：轴入/双轴入	DT-L：孔输入（本体）	DT-L1/L2:孔输入（带行星）

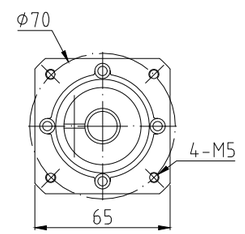










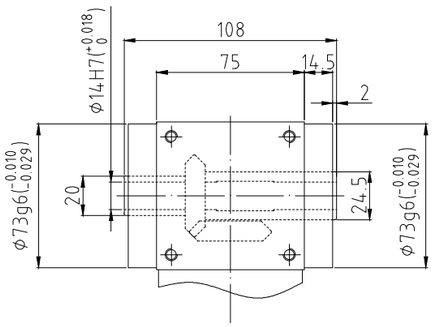


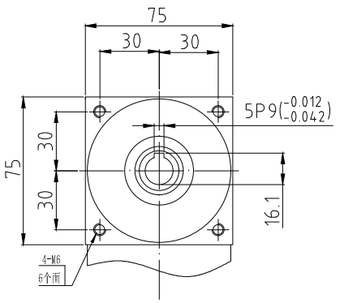
✳ 如需配其他电机请致电我司

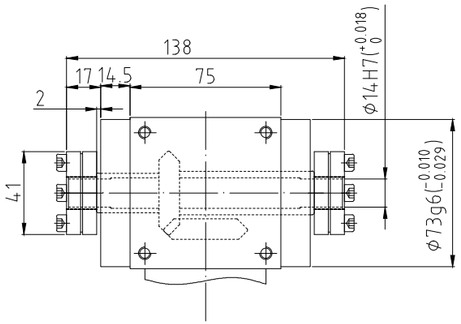
注：输入端和输出端可进行任意搭配选择

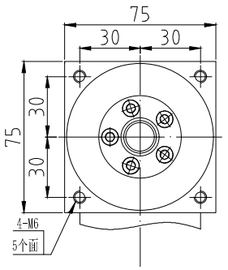
外形尺寸图表 / OUTLINE DIMENSION SHEET

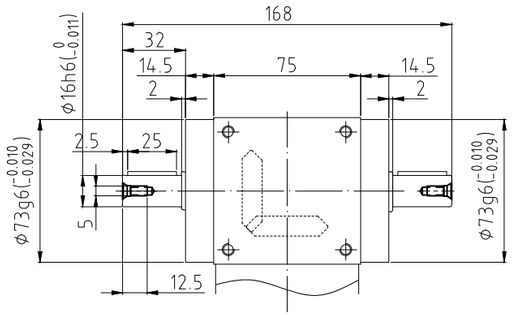
输出端	K：孔出	DS: 双轴出	SS1:左单轴出	SS2:右单轴出	H:双锁紧	H1:左单锁紧	H2:右单锁紧

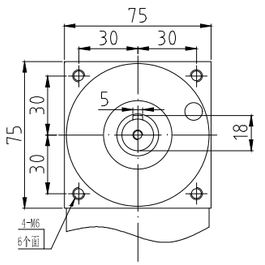




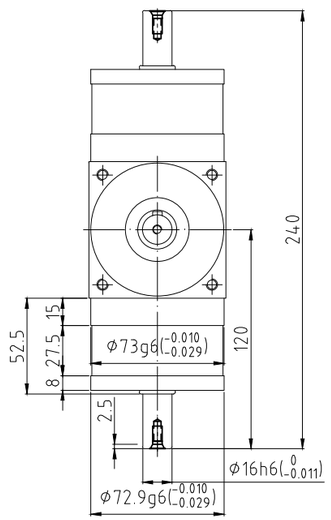


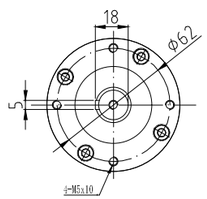


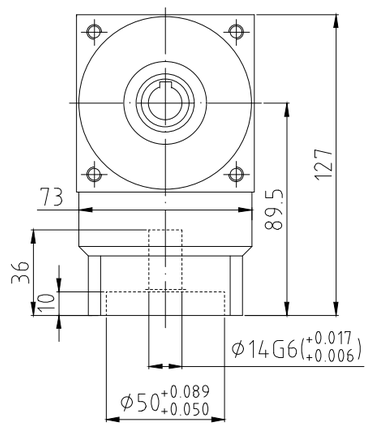


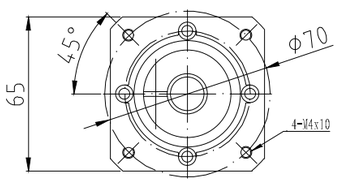


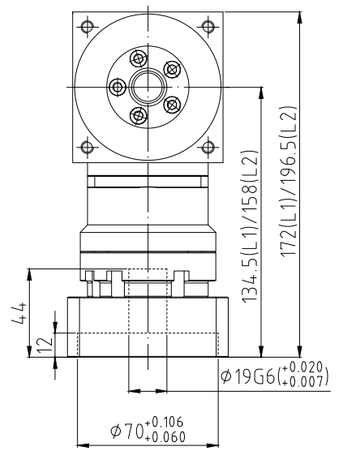
输入端	ZT/ST：轴入/双轴入	DT-L：孔输入（本体）	DT-L1/L2:孔输入（带行星）

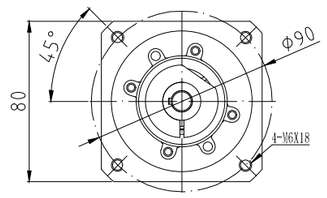










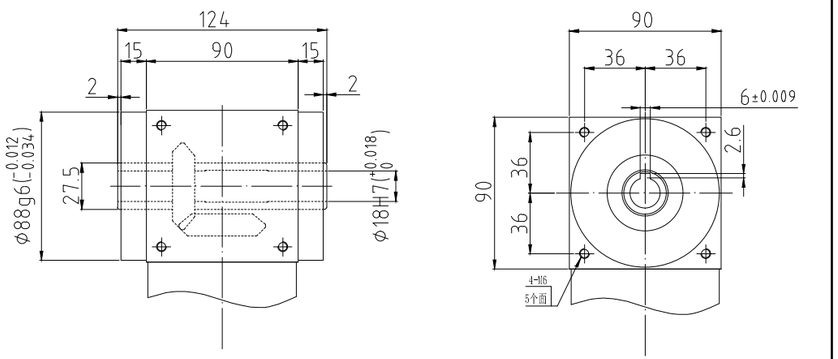


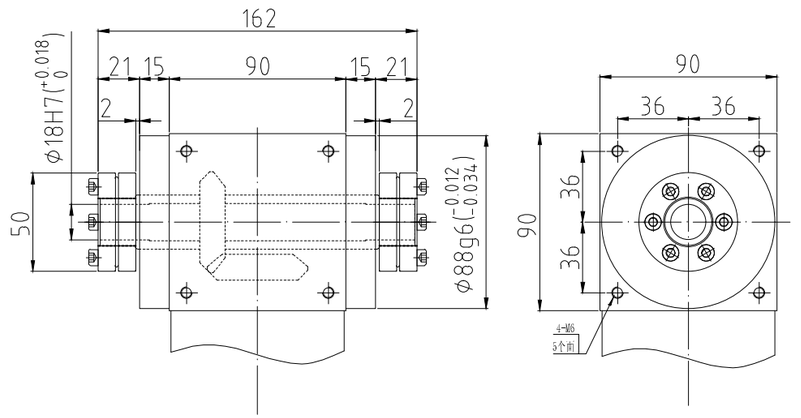
✳ 如需配其他电机请致电我司

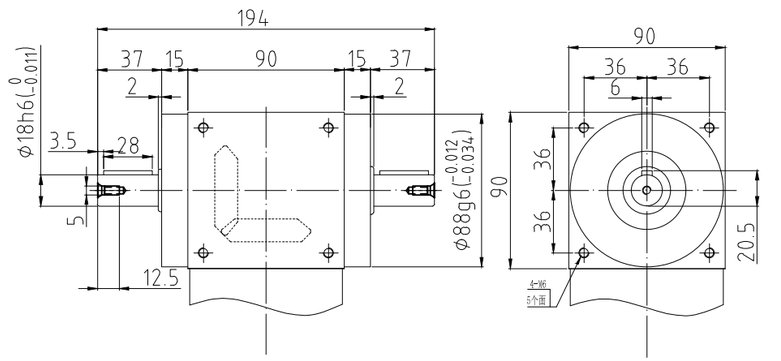
注：输入端和输出端可进行任意搭配选择

外形尺寸图表 / OUTLINE DIMENSION SHEET

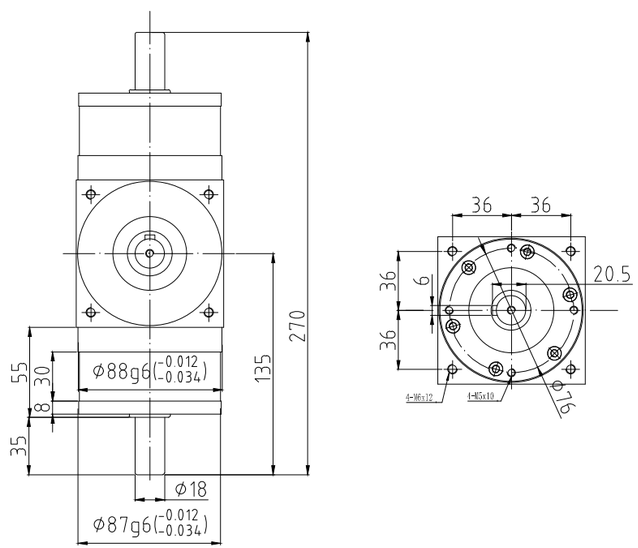
输出端	K：孔出	DS: 双轴出	SS1:左单轴出	SS2:右单轴出	H:双锁紧	H1:左单锁紧	H2:右单锁紧

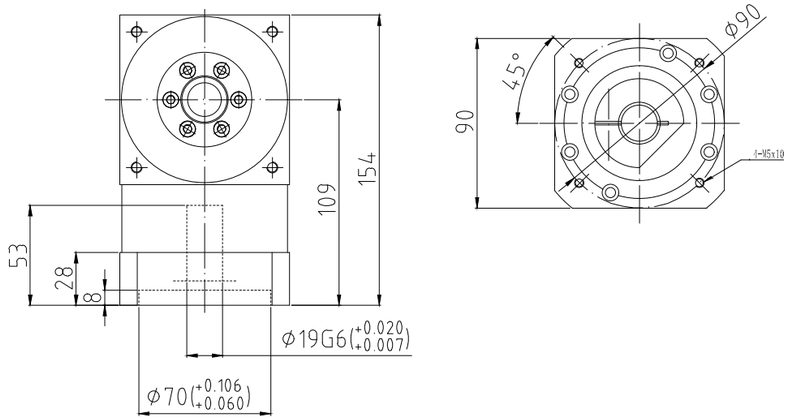


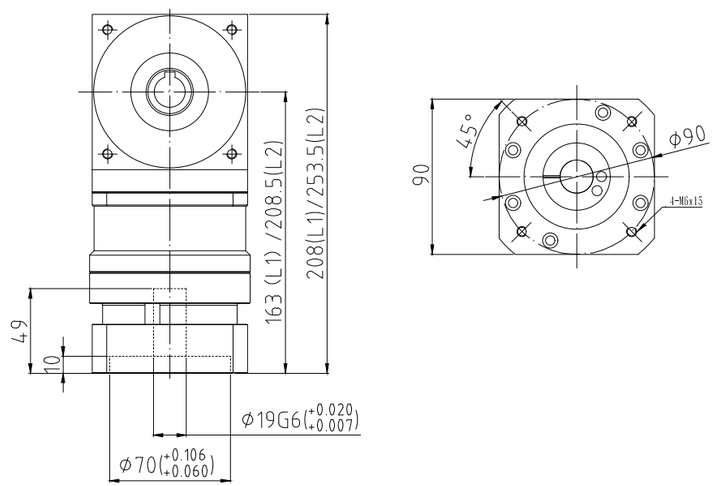




输入端	ZT/ST：轴入/双轴入	DT-L：孔输入（本体）	DT-L1/L2:孔输入（带行星）





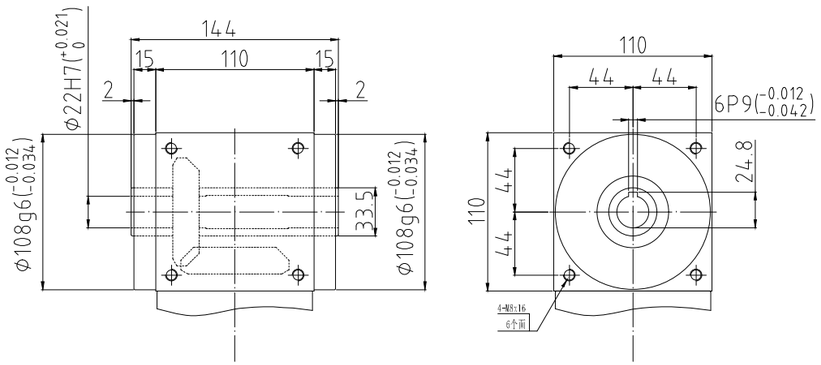


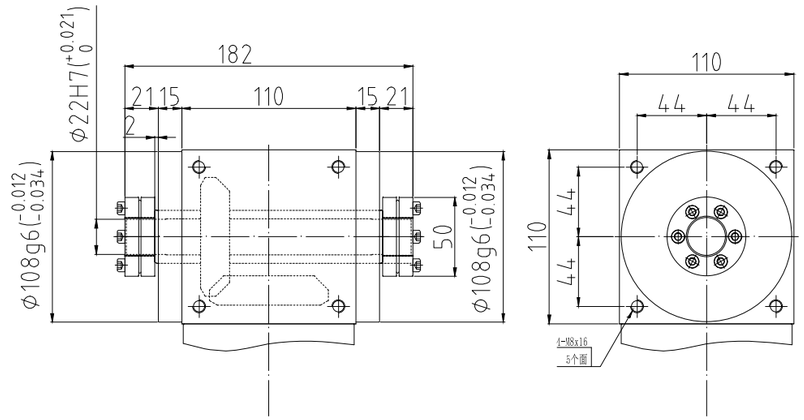
米 如需配其他电机请致电我司

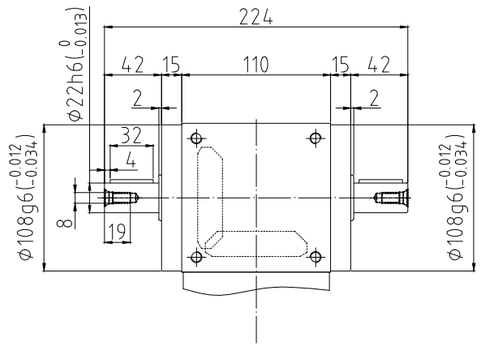
注：输入端和输出端可进行任意搭配选择

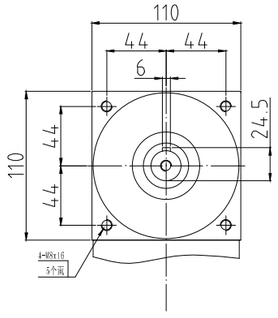
外形尺寸图表 / OUTLINE DIMENSION SHEET

输出端	K：孔出	DS: 双轴出	SS1:左单轴出	SS2:右单轴出	H:双锁紧	H1:左单锁紧	H2:右单锁紧

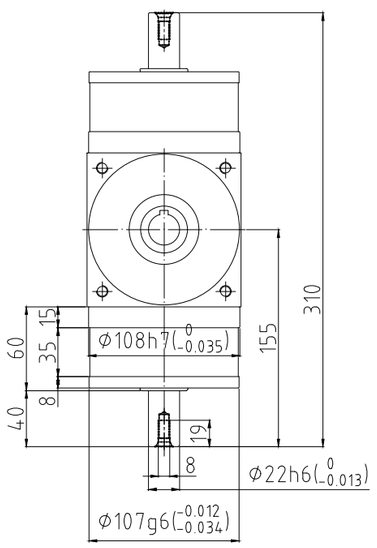


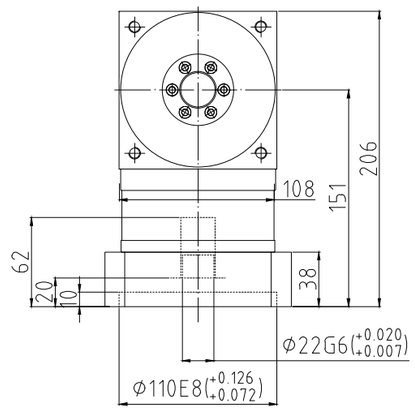


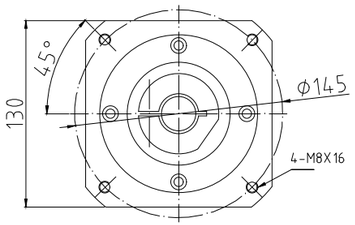


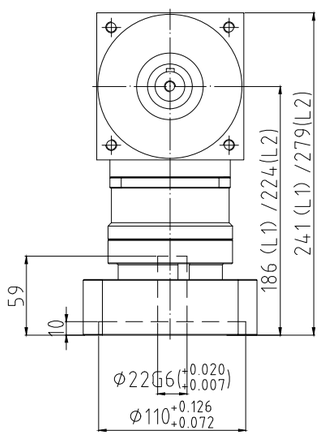


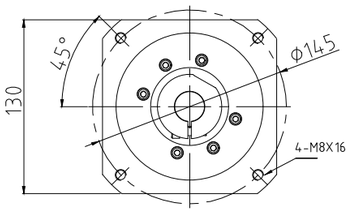
输入端	ZT/ST：轴入/双轴入	DT-L：孔输入（本体）	DT-L1/L2:孔输入（带行星）









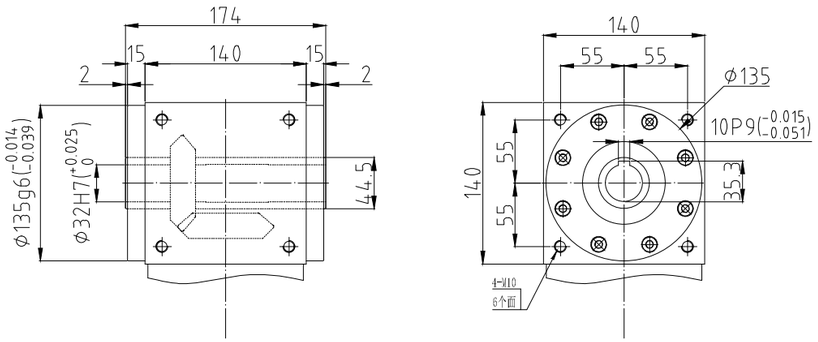


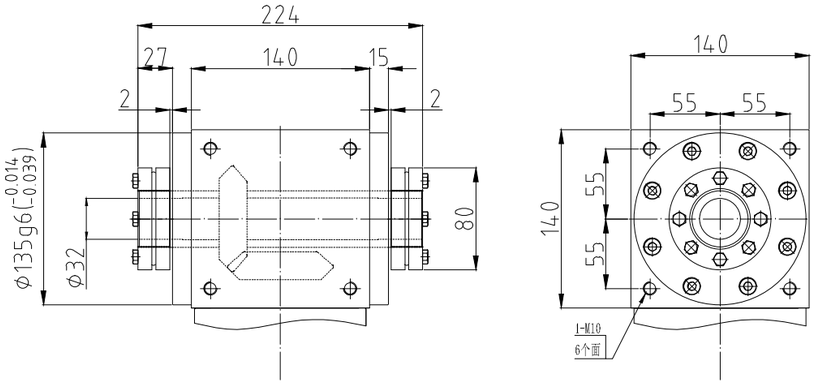
✳ 如需配其他电机请致电我司

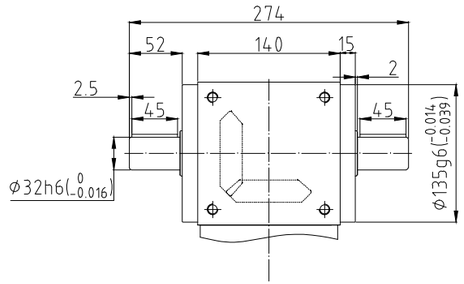
注：输入端和输出端可进行任意搭配选择

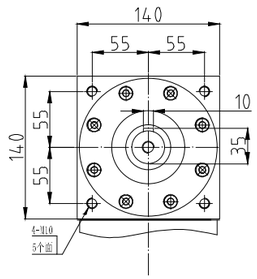
外形尺寸图表 / OUTLINE DIMENSION SHEET

输出端	K：孔出	DS: 双轴出	SS1:左单轴出	SS2:右单轴出	H:双锁紧	H1:左单锁紧	H2:右单锁紧

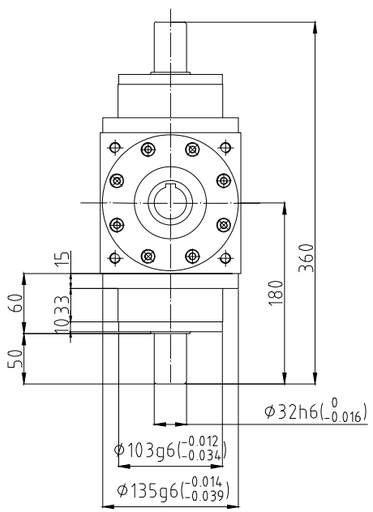


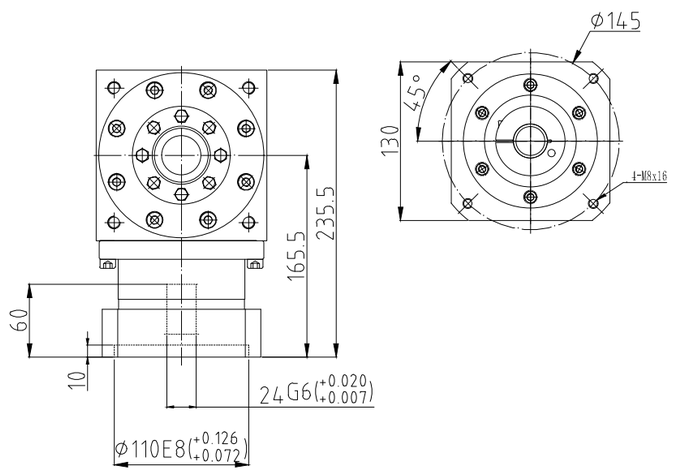


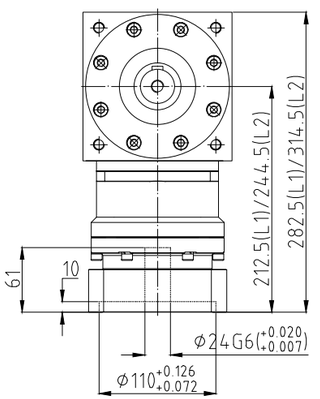


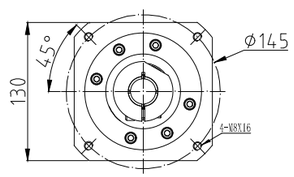


输入端	ZT/ST：轴入/双轴入	DT-L：孔输入（本体）	DT-L1/L2:孔输入（带行星）







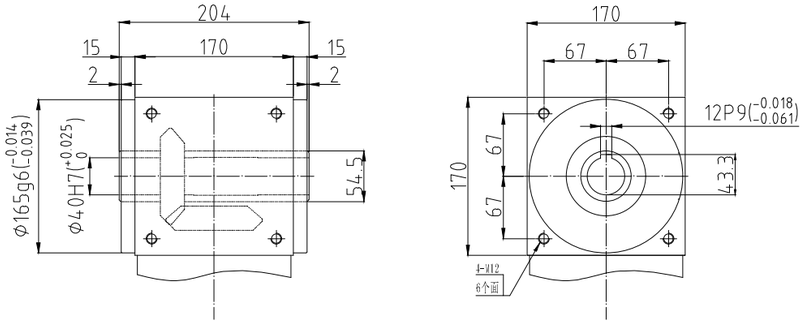


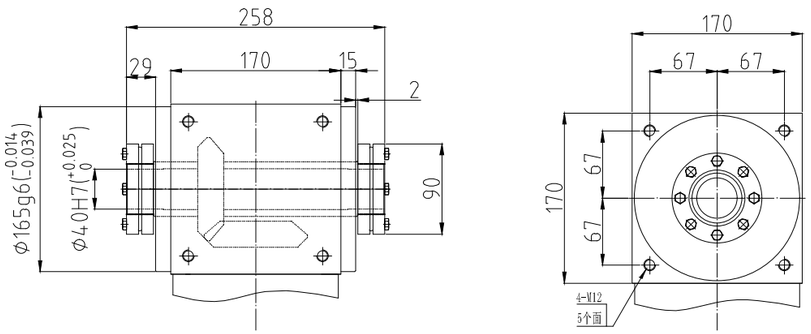
✳ 如需配其他电机请致电我司

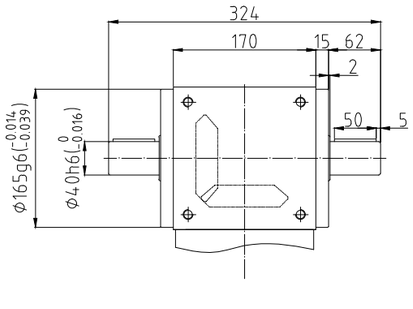
注：输入端和输出端可进行任意搭配选择

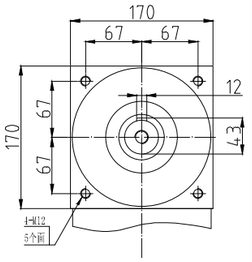
外形尺寸图表 / OUTLINE DIMENSION SHEET

输出端	K：孔出	DS: 双轴出	SS1:左单轴出	SS2:右单轴出	H:双锁紧	H1:左单锁紧	H2:右单锁紧

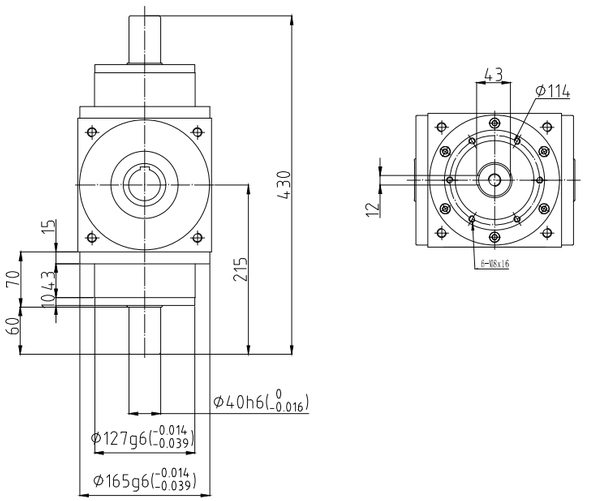


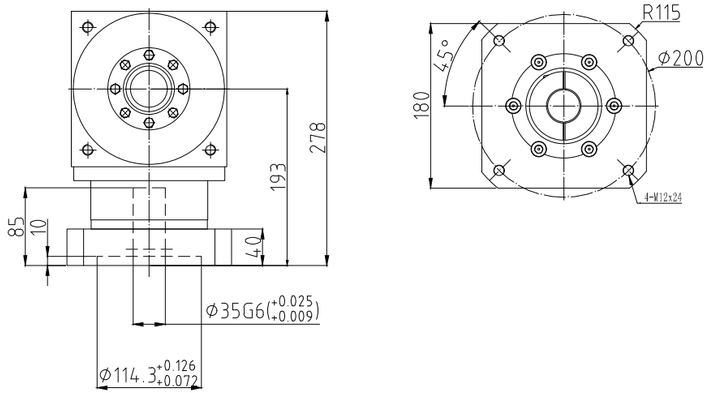


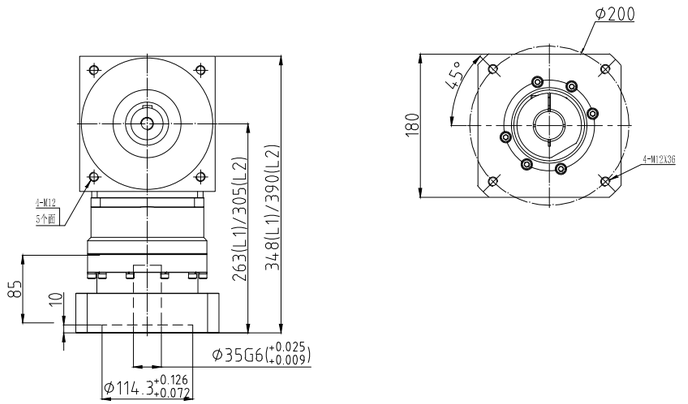




输入端	ZT/ST：轴入/双轴入	DT-L：孔输入（本体）	DT-L1/L2:孔输入（带行星）





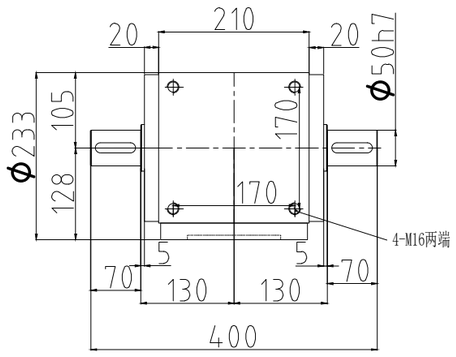


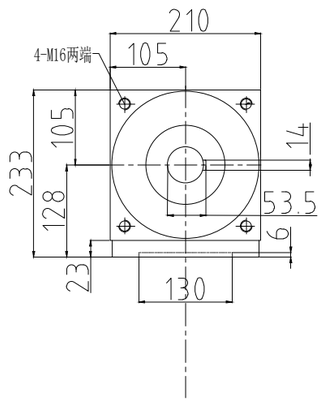
✳ 如需配其他电机请致电我司

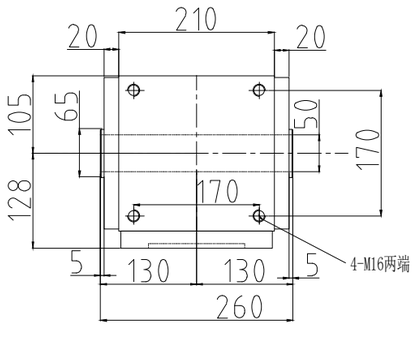
注：输入端和输出端可进行任意搭配选择

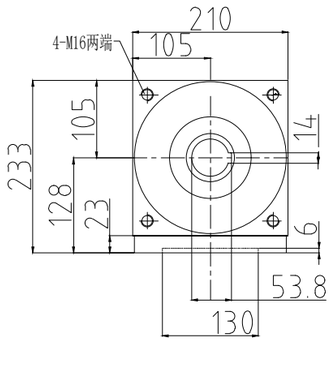
外形尺寸图表 / OUTLINE DIMENSION SHEET

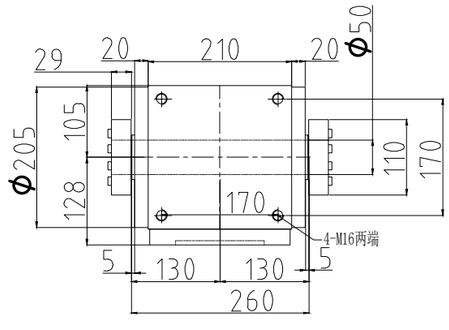
输出端	K：孔出	DS: 双轴出	SS1:左单轴出	SS2:右单轴出	H:双锁紧	H1:左单锁紧	H2:右单锁紧

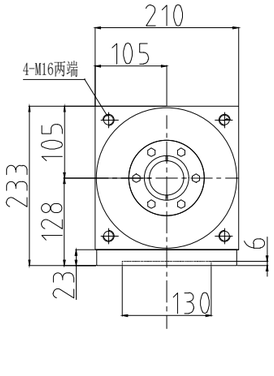




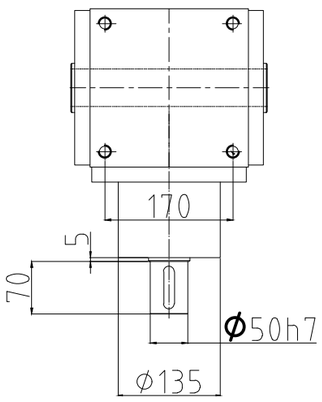


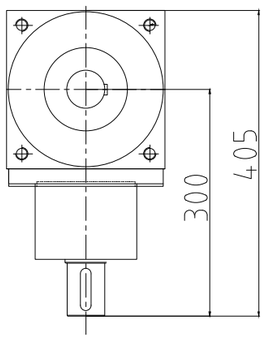


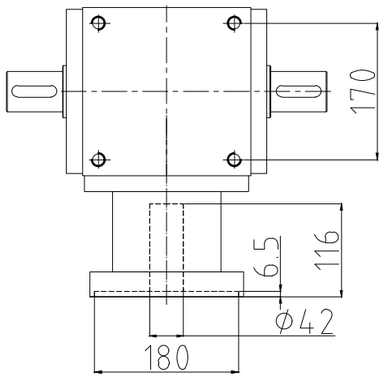


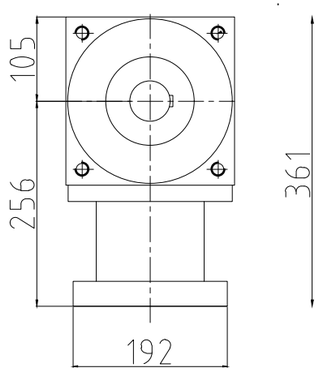


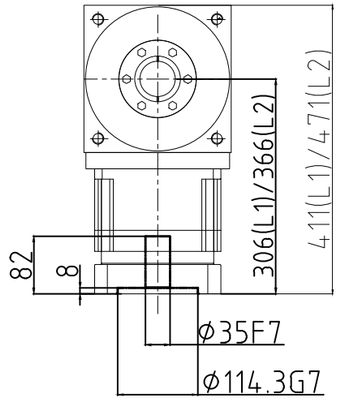
输入端	ZT/ST：轴入/双轴入	DT-L：孔输入（本体）	DT-L1/L2:孔输入（带行星）

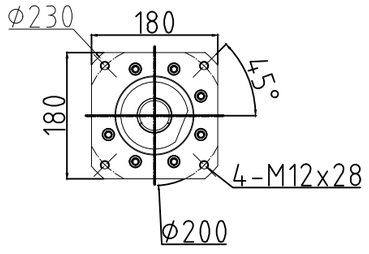










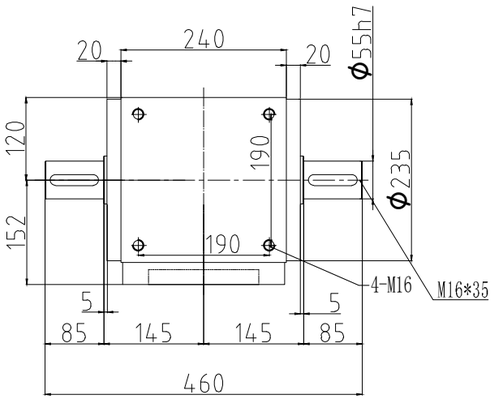


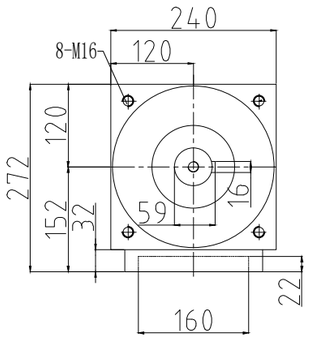
✳ 如需配其他电机请致电我司

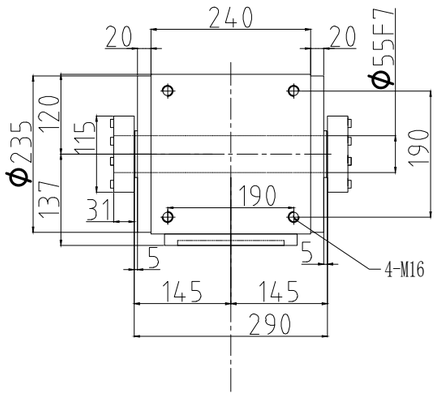
注：输入端和输入端可进行任意搭配选择

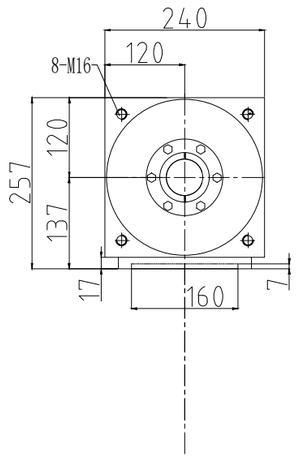
外形尺寸图表 / OUTLINE DIMENSION SHEET

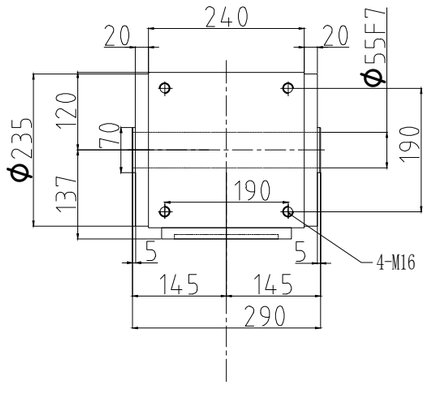
输出端	K：孔出	DS: 双轴出	SS1:左单轴出	SS2:右单轴出	H:双锁紧	H1:左单锁紧	H2:右单锁紧

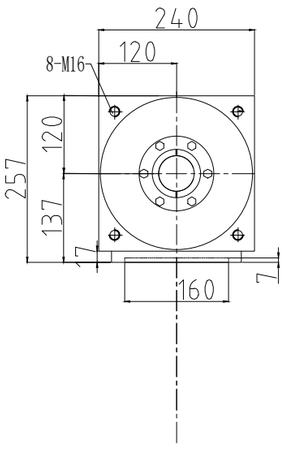




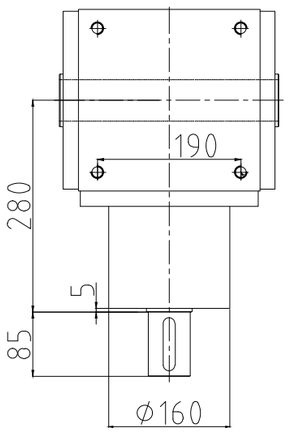


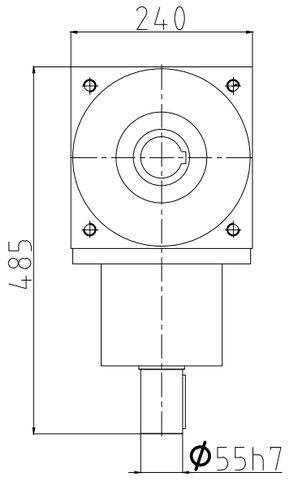


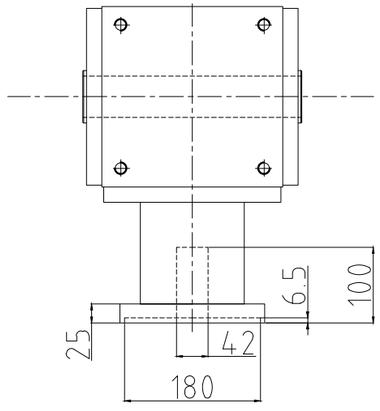


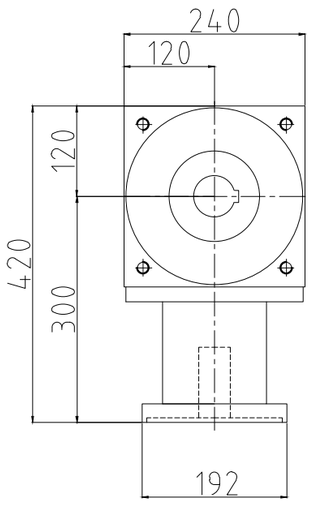


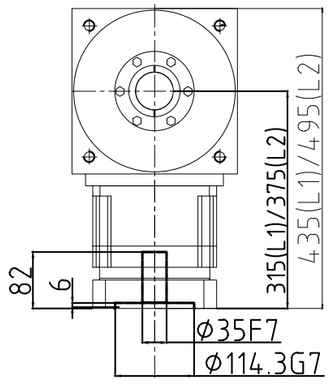
输入端	ZT/ST：轴入/双轴入	DT-L：孔输入（本体）	DT-L1/L2:孔输入（带行星）

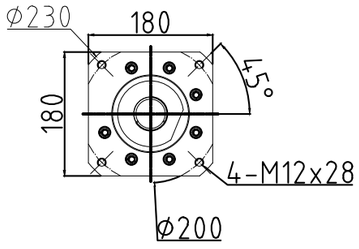










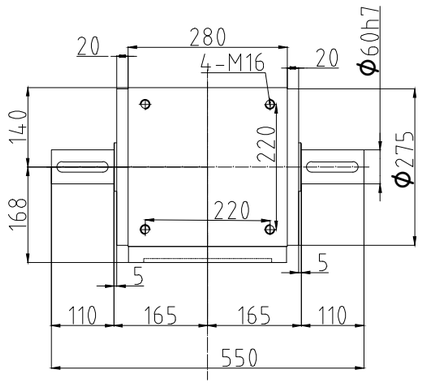


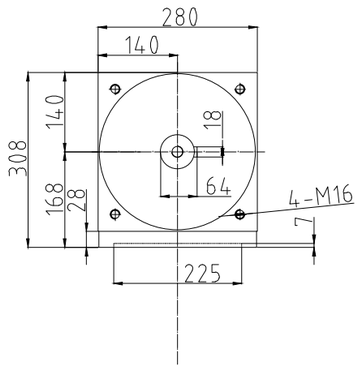
✳ 如需配其他电机请致电我司

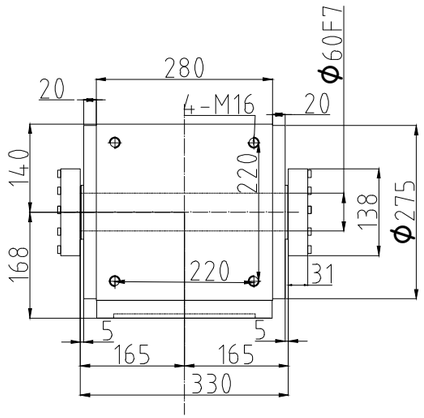
注：输入端和输出端可进行任意搭配选择

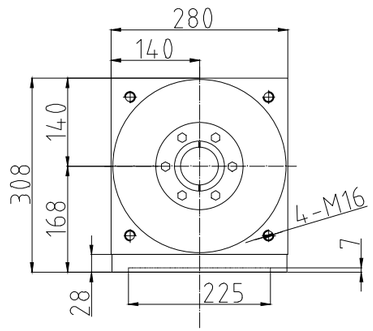
外形尺寸图表 / OUTLINE DIMENSION SHEET

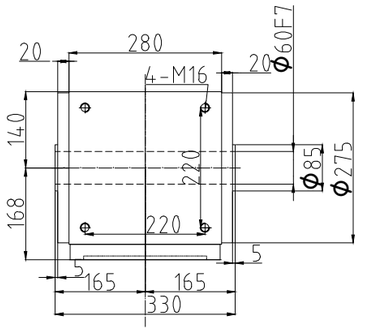
输出端	K：孔出	DS: 双轴出	SS1:左单轴出	SS2:右单轴出	H:双锁紧	H1:左单锁紧	H2:右单锁紧

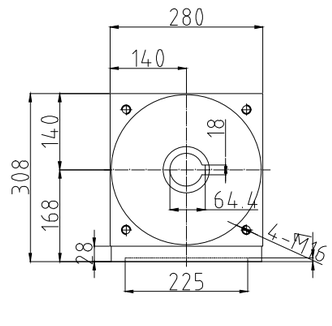




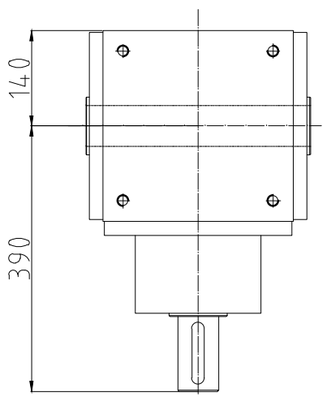


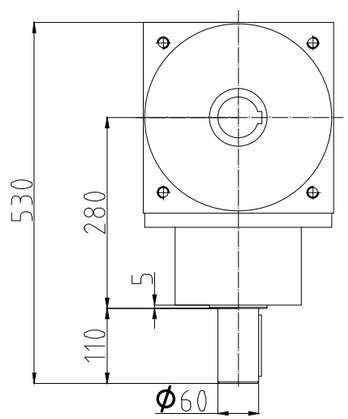


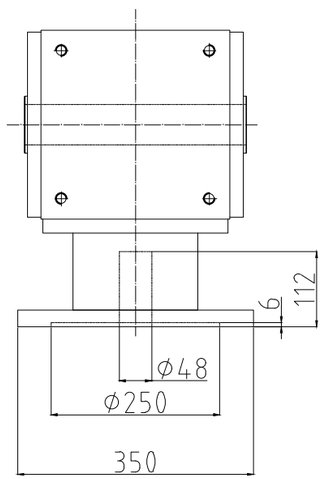


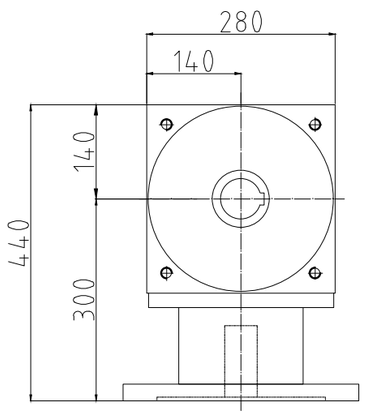


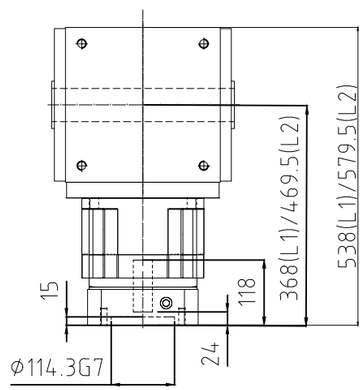
输入端	ZT/ST：轴入/双轴入	DT-L：孔输入（本体）	DT-L1/L2:孔输入（带行星）

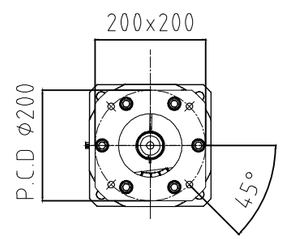












✳ 如需配其他电机请致电我司

安装说明 / INSTALLATION INSTRUCTION

表一　马达锁紧螺丝扭力建议表 Suggested torque table for motor locking screws

螺丝尺寸	六角头尺寸 Hexagon head size	强度8.8 Strength 8.8		强度10.9 Strength 10.9		强度12.9 Strength 12.9	
	[mm]	[Nm]	[In-lbs]	[Nm]	[In-lbs]	[Nm]	[In-lbs]
M3x0.5P	2.5	1.3	12	1.8	16	2.1	19
M4x0.7P	3	3	27	4.1	37	4.9	44
M5x0.8P	4	6.1	55	8.2	73	9.8	87
M6x1P	5	11	98	14	124	17	151
M8x1.25P	6	25	222	34	302	41	364
M10x1.5P	8	49	434	67	594	80	709
M12x1.75P	10	85	753	116	1028	139	1232
M14x2P	12	137	1214	186	1648	223	1976
M16x2P	14	210	1860	286	2534	343	3038

表二　减速机锁紧螺丝扭力建议表 Suggested torque table for the locking screw of the gearbox

减速机型号 Reducer model					马达轴径 Motor shaft diameter	螺丝尺寸 Screw Size	六角头尺寸 Hexagon head size	锁紧扭力 Locking torque	
					[mm]	[mm]	[mm]	[Nm]	[In-lbs]
JS042	JSR042	JD047	JDR047	单级 Single stage	≤12	M3x0.5Px10L	2.5	2.1	19
				双级 Dual stages	≤12	M3x0.5Px10L	2.5	2.1	19
JS060 JF060 JAF060	JSR060 JFR060 JAF060	JD064 JL070 JAR060	JDR064 JLR070 JAR060	单级 Single stage	≤19	M5x0.8Px14L	4	9.8	87
				双级 Dual stages	≤19	M5x0.8Px14L	4	9.8	87
JS090 JF090 JAF070	JSR090 JFR090 JAF070	JD090 JL090 JAR070	JDR090 JLR090 JAR070	单级 Single stage	≤24	M6x1Px20L	5	17	151
				双级 Dual stages	≤19	M5x0.8Px14L	4	9.8	87
JS115 JF115 JAF100	JSR115 JFR115 JAF100	JD110 JL120 JAR100	JDR110 JLR120 JAR100	单级 Single stage	≤35	M8x1.25Px25L	6	41	364
				双级 Dual stages	≤24	M6x1Px20L	5	17	151
JS142 JF142 JAF140	JSR142 JFR142 JAF140	JD140 JL155 JAR140	JDR140 JLR155 JAR140	单级 Single stage	≤38	M10x1.5Px30L	8	80	709
				双级 Dual stages	≤35	M8x1.25Px25L	6	41	364
JS180 JF180 JAF180	JSR180 JL205 JAF180	JD200 JAF180	JDR200 JAR180	单级 Single stage	≤50	M12x1.75Px35L	10	139	1232
				双级 Dual stages	≤38	M10x1.5Px30L	8	80	709
JS220 JL235	JSR220 JF220	JD255	JDR255	单级 Single stage	≤55	M16x2Px40L	14	343	3038
				双级 Dual stages	≤50	M12x1.75Px35L	10	139	1232

备注：螺丝锁紧扭力必须大于上述值。若有需要时，可将锁紧扭力多增加上述建议值之20%，以避免打滑。
Note: The screw tightening torque must be greater than the above value. If necessary, the tightening torque can be increased by 20% of the above recommended value to avoid slipping.

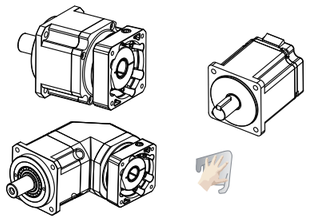
JunsRise®
传动装置专业制造商
PROFESSIONAL MANUFACTURER OF TRANSMISSION DEVICE
行星系列

安装说明 / INSTALLATION INSTRUCTION

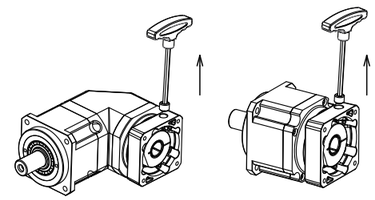
1 减速机外观的确认
*请先确认减速机型号是否正确
2 伺服马达的安装
* 伺服马达的安装根据以下步骤实施
* 请使用根据订单提供的伺服电机进行安装

1.Confirm the appearance of the reducer
Please confirm if the reducer model is correct
2.Installation of the servo motor
The installation of servo motor according to the following steps
Please proceed the installation of the servo motor according to the order

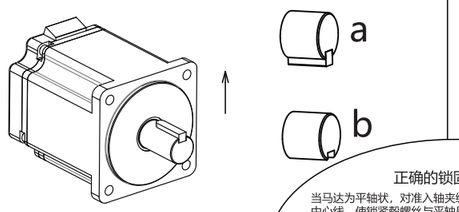
1 确认马达与减速机规格，并将马达及减速机之安装面擦拭干净。
Confirm the specifications of motor and reducer, and wipe the mounting surface of motor and reducer clean.



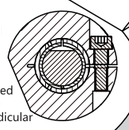
2 将入力法兰侧孔堵头螺丝取出，转动马达锁紧毂，直到锁紧毂螺丝对准法兰侧孔。
Take the plug screw out of the flange side hole,and rotate the motor locking hub until the locking hub screw is aligned with the flange side hole.



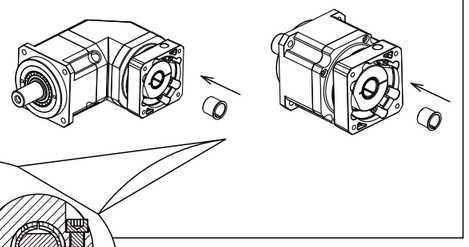
3 取下马达上原先之平键；如有必要，请安装平衡键。
Remove the original flat key from the motor; If necessary, install the balance key.



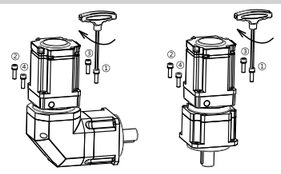
正确的锁固方式
当马达为平轴状，对准入轴夹缝在平轴中心线，使锁紧毂螺丝与平轴呈垂直。
Correct locking method
When the motor is in the shape of a flat shaft, the opposite shaft is clamped on the center line of the flat shaft, so that the locking hub screw is perpendicular to the flat shaft.



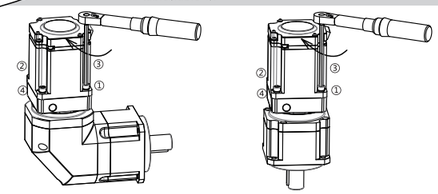
4 确认马达轴心尺寸，若有必要，装上轴套。
Confirm the axis size of the motor and install the sleeve if necessary.



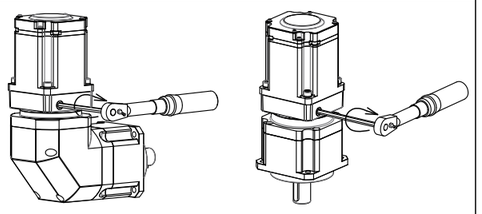
5 直立式的装入马达，以螺丝扭力表（表一）建议扭力值之5%，依1~4顺序，用扳手将附垫片之螺丝轻轻锁上。
Install the motor in a vertical position, and use a wrench to gently lock the screws with gasket according to the order of 1 ~ 4 with 5% of the recommended torque value in the screw torque table (Table 1).



6 将马达与减速机直立摆设，以螺丝扭力表（表一）建议扭力值，依1~4的顺序，用扭力扳手将螺丝锁紧。
Place the motor and reducer vertically.Lock the screws with torque wrench in the order of 1~4,according to the recommended torque value in the screw torque table(Table 1).



7 参照表二建议之扭力值，用扭力扳手将马达锁紧毂螺丝锁紧。
According to the recommended torque value in Table 2,lock the locking hub screw with torque wrench.



8 锁回法兰侧孔堵头螺丝。
Lock the flange side hole plug screw.

