



超精密行星减速机

Ultra-precision planetary reducer

品质 · 性能 · 精密 · 创新



江苏胜牌科技有限公司
JIANGSU WINROLLER TECHNOLOGY CO.,LTD



Enterprise CULTURE

企业文化

共赢共生，服务社会；积极主动了解客户的需要，预测市场变化，提出创新的解决方案；运用创造性思维和先进的技术。

Win-win coexistence, serve the society; Proactively understand customer needs, anticipate market changes and propose innovative solutions; Use creative thinking and advanced technology

企业愿景 Enterprise vision

全球先进传动技术的领跑者
Leader of Global Advanced Driving Technology

企业使命 Corporate mission

一点一滴铸胜牌，同心同德创辉煌
Create the winning card one by one, create brilliance with one heart and one virtue

核心价值观 Core values

专注创新，精益求精，诚信务实，团结感恩
Focus on innovation, excellence, honesty and pragmatism, unity and gratitude



先进传动技术的制造专家

胜牌科技

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产品系列分类表

PL	PLF	TPL	TPLF	TPH	WPL	WPH
直齿	直齿	斜齿	斜齿	斜齿	斜齿	斜齿
PL60	PLF60	TPL50	TPLF50	TPH50	WPL70	WPH70
PL80	PLF80	TPL70	TPLF70	TPH70	WPL90	WPH90
PL115	PLF115	TPL90	TPLF90	TPH90	WPL120	WPH120
		TPL120	TPLF120	TPH120	WPL160	WPH160
		TPL160	TPLF160	TPH160		
		TPL205	TPLF205	TPH205		



胜牌科技



Introduction COMPANY

公司简介

江苏胜牌科技有限公司 坐落于风景秀丽的吴文华发源地——江苏无锡。公司专注于运动控制和集成研究，是微型电动滚筒、超精密伺服减速机生产的专家型企业。

公司自创立起，不断吸引和吸收瑞士、德国、日本先进的开发理念、管理方法和生产技术，通过十余年的不断学习和研究，已经掌握了具有自我知识产权的核心技术。

近年来江苏胜牌持续引进国际尖端的加工设备，依托公司专业人才，致力于超精度3弧行星减速机的生产，打破了日本、德国产品垄断格局。产品广泛应用于印刷加工、齿轮齿条驱动、机器人自动化、数控加工设备、伺服控制、机场物流、邮政服务、电子装配、物流分拣等所有自动化行业，得到了广大客户的高度信任，拥有较高的市场地位，同时也具有一定的品牌影响力。

胜牌科技用高品质产品，最快地响应服务，为客户在市场竞争中创造更多的价值。一直以传承、创新、创作为企业发展理念，我们始终坚信品质为企业的生存根本，且一直保持着对更高品质的追求，为客户提供放心高质的产品。一个产品的生命其价值的体现是让每一个使用它的客户满意。致此，我们真诚地感谢您在我司的成长过程中给予我们的信任及陪伴，为了您的选择，我们会尽最大的努力给您提供满意的产品和服务。在未来的日子里胜牌将不断开拓创新，为您提供终极解决方案，我们将秉承这些理念陪伴您一直走下去。

Jiangsu Shengpai Technology Co., Ltd. is located in Wuxi, Jiangsu Province, the birthplace of Wu Wenhua with beautiful scenery. Focusing on motion control and integration research, the company is an expert enterprise in the production of miniature electric drums and ultra-precision servo reducers.

Since its inception, the company has continuously attracted and absorbed advanced development concepts, management methods and production technology from Switzerland, Germany and Japan. Through more than ten years of continuous learning and research, it has mastered the core technology with self-intellectual property rights.

In recent years, Jiangsu Shengpai has continuously introduced international cutting-edge processing equipment, relying on company professionals, committed to the production of super-precision 3-arc planetary reducer, breaking the monopoly pattern of Japanese and German products. Products are widely used in printing, rack and pinion drive, robotic automation, CNC processing equipment, servo control, Airport logistics, postal services, electronic assembly, logistics sorting and other automation industries. They have won the high trust of customers, have a high market position, but also have a certain brand influence.

Winning Brand Technology uses high-quality products to respond to service as quickly as possible and create more value for customers in the market competition. We always take inheritance, innovation and creation as the



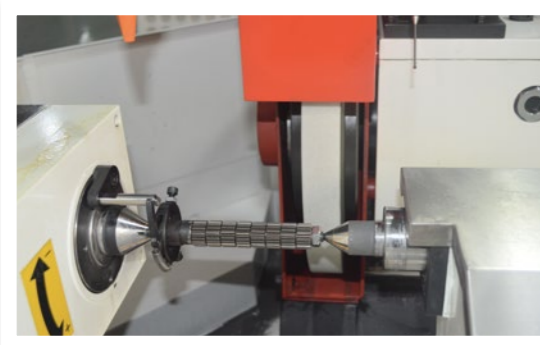
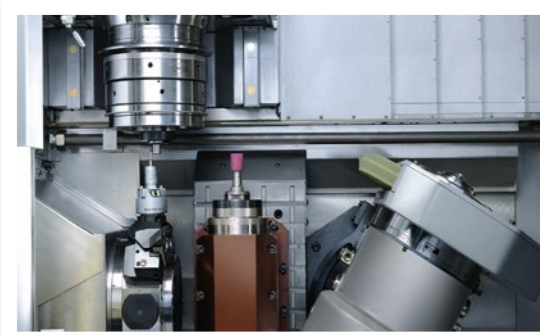
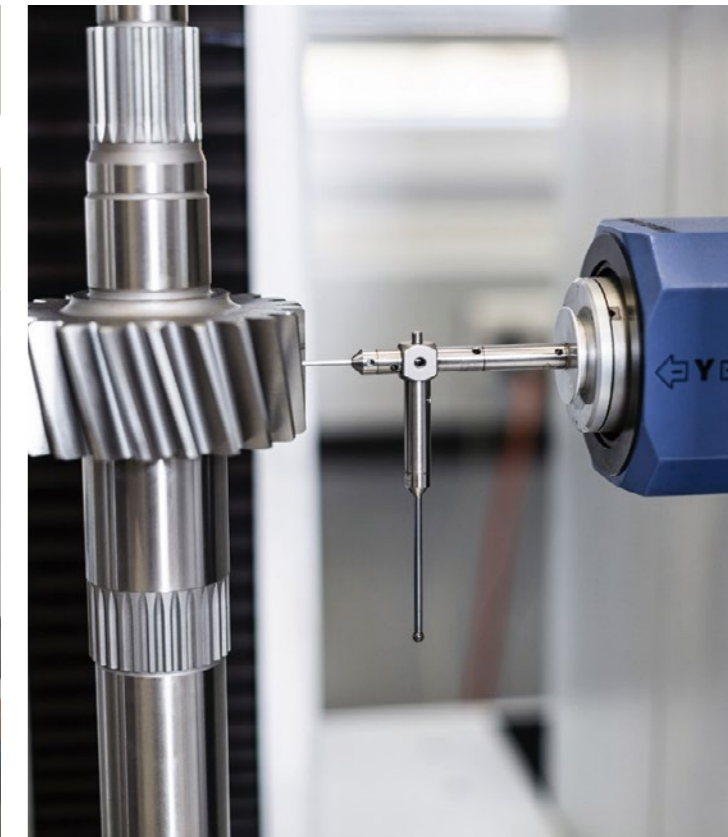
concept of enterprise development. We always firmly believe that quality is the basis for the survival of the enterprise, and always maintain the pursuit of higher quality, providing customers with assured high-quality products. The value of a product's life is to satisfy every customer who uses it. Therefore, we sincerely thank you for your trust and companionship in our growth process. For your choice, we will do our best to provide you with satisfactory products and services. In the future, Winner Brand will continue to develop and innovate, providing you with the ultimate solution, we will uphold these concepts to accompany you along.

胜牌科技

江苏胜牌科技热忱欢迎业界朋友光临指导

Jiangsu Shengpai Technology warmly welcomes friends from the industry to visit and guide us

先进生产设备 Advanced Generation Equipment



我们的研发部，负责给客户最新最快的方案。我们拥有多台大型减速机专业生产设备，并且拥有独立的质量检测部。我们的宗旨是每一个产品零瑕疵，这促使我们在生产和组装上更加严格的质量把控。追求质量是企业的精神核心，我们的质量检测标准已远超过同行业水平。由于产品经过质量严格把控，确保能够为客户提供使用寿命更长的行星减速机。通过 ISO9001 质量认证，获得了更多客户的认可和反馈，促使我们不断改进，不断超越。

与全球合作伙伴分享我们的专业知识对于我来说是一种荣誉，根据客户对产品的特殊要求，我们研发部为您提供特定产品，性价比合理。遵循这个理念，我们分析重要参数例如工作条件，运行持续时间，速度或负荷，总结出相对应的解决方案。我们的服务宗旨是，当你需要我们时我们会在最短的时间内为您提供部件或技术支持。



Our R&D department is responsible for providing customers with the latest and fastest solutions. We have 90 sets of professional production equipment for large reducers, and have an independent quality inspection department. Our aim is to make every product zero defect, which makes us more strict quality control in production and assembly. The pursuit of quality is the spiritual core of enterprises, and our quality testing standards have far exceeded the level of the same industry. Due to the strict quality control of the products, we can ensure that we can provide customers with planetary reducers with longer service life. Through the quality certification of ISO 9001, we have gained more customers' recognition and feedback, prompting us to constantly improve and surpass.

It's an honor for me to share our professional knowledge with global partners. According to the special requirements of customers for products, our R&D department provides you with specific products with reasonable cost performance. Following this concept, we analyze important parameters such as working conditions, operation duration, speed or load, and summarize the corresponding solutions. Our service aim is to provide you with components or technical support in the shortest time when you need us.

三维分解图

3-D decomposition map



我们的产品所有零部件都是经过严格的质量体系把关，通过先进的生产设备，和完善的工作体系，确保每一件产品都达到国家标准认证。

All parts of our products are strictly controlled by the quality system, through advanced production equipment and perfect working system, to ensure that each product meets the national standard certification.

胜牌科技

TPL120 分解 (斜齿)

应用领域

Application area

纺织行业



汽车生产行业



高铁



关节机器人



水平多关节机器人



环保工程



印刷行业



食品加工行业

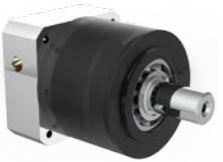



陶瓷加工

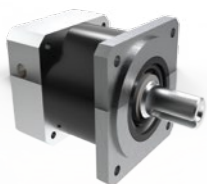
目前我们的产品已经运用于工业领域的各个行业，适用于机床，机械手，印刷设备，纺织机械，非标自动化，医疗设备，检测设备，汽车制造，卫星通讯，金属加工，制药行业等工业领域。


At present, our products have been applied to various industries in the industrial field, such as machine tools, manipulators, printing equipment, textile machinery, non-standard automation, medical equipment, testing equipment, automobile manufacturing, satellite communications, metal processing, pharmaceutical industry and so on.


产品系列
Product series

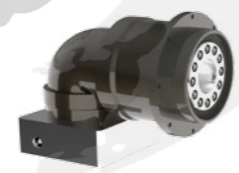
PL 直齿系列 	可选尺寸	060-115		P018-025
	减速比 (Reduction ratio)	I Stage	3-10	
		II Stage	12-100	
	背隙 (arcmin)	I Stage	3arc-min	
		II Stage	5arc-min	
扭矩 (Nm)	28-210			


TPH 斜齿系列 	可选尺寸	050-205		P062-075
	减速比 (Reduction ratio)	I Stage	3-10	
		II Stage	12-100	
	背隙 (arcmin)	I Stage	3arc-min	
		II Stage	3arc-min	
扭矩 (Nm)	15-1100			

PLF 直齿系列 	可选尺寸	060-115		P026-033
	减速比 (Reduction ratio)	I Stage	3-10	
		II Stage	12-100	
	背隙 (arcmin)	I Stage	3arc-min	
		II Stage	5arc-min	
扭矩 (Nm)	28-210			

WPL 斜齿系列 	可选尺寸	070-160		P076-085
	减速比 (Reduction ratio)	I Stage	3-10	
		II Stage	12-100	
	背隙 (arcmin)	I Stage	5arc-min	
		II Stage	8arc-min	
扭矩 (Nm)	38-610			

TPL 斜齿系列 	可选尺寸	050-205		P034-047
	减速比 (Reduction ratio)	I Stage	3-10	
		II Stage	12-100	
	背隙 (arcmin)	I Stage	3arc-min	
		II Stage	3arc-min	
扭矩 (Nm)	15-1100			

WPH 斜齿系列 	可选尺寸	070-160		P086-095
	减速比 (Reduction ratio)	I Stage	3-10	
		II Stage	12-100	
	背隙 (arcmin)	I Stage	5arc-min	
		II Stage	8arc-min	
扭矩 (Nm)	38-610			

TPLF 斜齿系列 	可选尺寸	050-205		P048-061
	减速比 (Reduction ratio)	I Stage	3-10	
		II Stage	12-100	
	背隙 (arcmin)	I Stage	3arc-min	
		II Stage	3arc-min	
扭矩 (Nm)	15-1100			

产品特点

Product features

减速机专用名词解释

Reducer special terms to explain

额定输入转速 n_1 (prm)

Rated input speed n_1 (PRM)

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 20°C 的条件下测得的，环境温度较高时请降低转速 n_1 。

The driving speed of the reducer, if the reducer is directly connected to the motor, the speed value is the same as the motor speed.

Book of rated input speed is obtained under the condition of the environment temperature 20°C , environment temperature is higher, please reduce the speed n_1 .

输出转速 n_2 (rpm)

Output speed n_2 (RPM)

输出转速按照下列公式通过出入转速 n_1 和传动比 i 计算出来。 $N_2 = n_1 / i$

The output speed is calculated according to the following formula through the input speed n_1 and the transmission ratio i . $N_2 = n_1 / i$

额定输出扭矩

T_n (Nm) Output speed n_2 (RPM)

指减速机长时间（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 $S=1$ ，理论寿命为 20000 小时：

Refers to the deceleration captain time (continuous working system) can be loaded torque

(no wear), the condition should meet the load uniform, safeFull coefficient $S=1$, theoretical life of 20000 hours:

最大扭矩 $T_{2\max}$ (Nm)

Maximum torque $T_{2\max}$ (Nm)

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。

Refers to the output torque the reducer can withstand under static conditions or frequent startup conditions, usually refers to the peak load or startup load.

实际所需扭矩 T_2 (Nm)

Actual required torque T_2 (Nm)

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_n 必须大于这个扭矩。

Refers to the output torque the reducer can withstand under static conditions or frequent startup conditions, usually refers to the peak load or startup load.

加速扭矩 T_{2b} (Nm)

Acceleration torque T_{2b} (Nm)

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，须考虑使用因素。

最大加速扭矩等于故障停止扭矩 60。

Refers to the maximum torque that can be loaded to the output end in a short time when the working cycle is less than 1000 times per hour. The working cycle is large per hourUse factor should be taken into account at 1000 times. The maximum acceleration torque is equal to the fault stop torque 60.

故障停止扭矩 T_{2dnt} (Nm)

Acceleration torque T_{2b} (Nm)

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内加载 1000 次，绝对不能超过 1000 次

Refers to the maximum torque that can be loaded at the output end of the reducer. This torque can be loaded 1000 times within the life of the reducer. Absolutely notMore than 1000 times

转动惯量 J (Kgcm²)

Moment of inertia J (Kgcm²)

3 弧分 · 超精密齿轮箱专业生产商

表示一个物体尽力保持自己转动或静止状态特性的一个值。样本中的值均指输入端。

A value indicating that an object is trying to maintain its rotational or static properties. The values in the sample refer to the input end.

弧分 (arcmin)

Arc (arcmin)

一度分为 60 弧分 ($1^{\circ} = 60\text{arcmin}$)，如回程间隙为 1 arcmin 时，意思是说减速机转一圈，输出端的角偏差为 $1^{\circ}/60$ 。

Once divided into 60 arc ($1^{\circ} = 60\text{arcmin}$), such as the return gap to 1 arcmin, mean one revolution of the speed reducer, loseOut of the side Angle of deviation of $1^{\circ} / 60$

惯量比 λ

Inertia ratio λ

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制。 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 <4 。此轮箱可以将负载惯量降低 $1/i^2$ 。

Refers to the load inertia and transmission system inertia (motor plus reducer) ratio between. This ratio determines the controllability of the system.

The bigger the lambda is, The greater the difference in moment of inertia is, the more difficult it is to accurately control the highly dynamic course of motion, with lambda likely to be <4 . This box can beTo reduce the load inertia by $1/i^2$.

扭转刚度 C_{t21} (Nm/Arcmin)

Torsional stiffness C_{t21} (Nm/Arcmin)

由加载力矩和所生产的扭转角之间的比率来定义， $C_{t21} = \Delta T / \Delta \Phi$ 它说明需要用多大的力矩才能把输出轴转动一弧分。

Production by the load moment and torsion Angle defined by the ratio between, $C_{t21} = \Delta T / \Delta \Phi$ that need to use how much torque to the output shaftStudent: one arc minute.

迟滞曲线

Return clearance

迟滞检测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} 最大加速力矩，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的回程间隙 (J_t) 和扭转刚度 (C_{t21}) 见图 (1)。

Hysteresis detection is in order to get torsional rigidity of the speed reducer, hysteresis curve is obtained by testing, testing, reducer input in place first, and then two direction of rotation on the output end continuously loaded into the T_{2b} maximum acceleration torque, then gradually unloading, record the moment with instruments of difference Angle, the curve is a closed curve, we can calculate the return clearance speed reducer (J_t) and torsional rigidity (C_{t21}) as shown in figure (1).

回程间隙

Return clearance

指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，然后在输出轴用力矩仪加载一定力矩 ($2\% T_{2b}$)，以克服减速机内的摩擦力见图 (2)。

Refers to the maximum deviation Angle between the output shaft of the reducer and the input shaft. When measuring, fix the gear input shaft first and then load it with a torque meter on the output shaftTorque ($2\% T_{2b}$) to overcome the friction in the reducer is shown in figure (2).

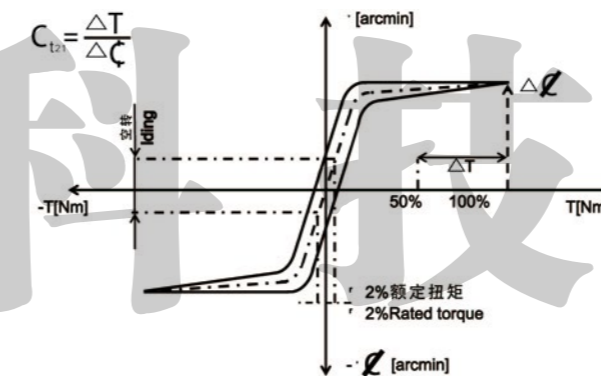


图 (1)

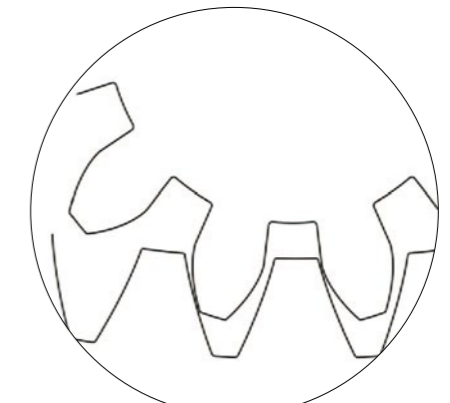
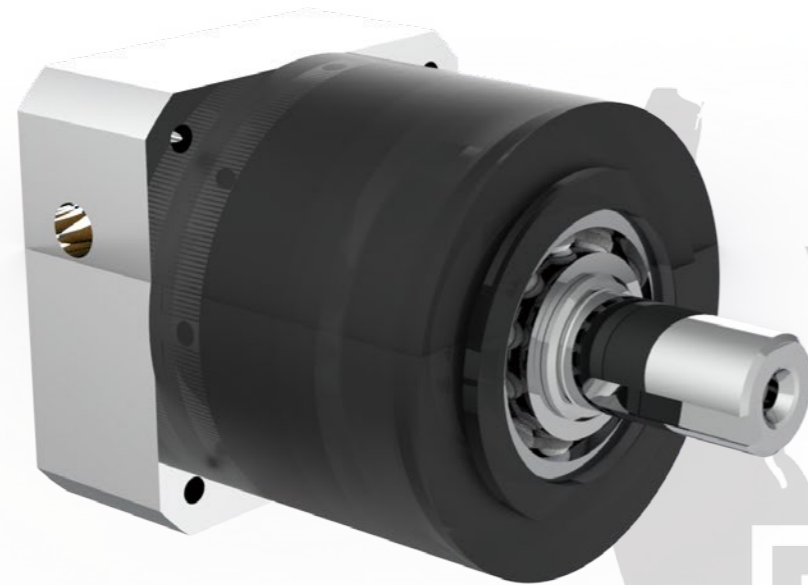


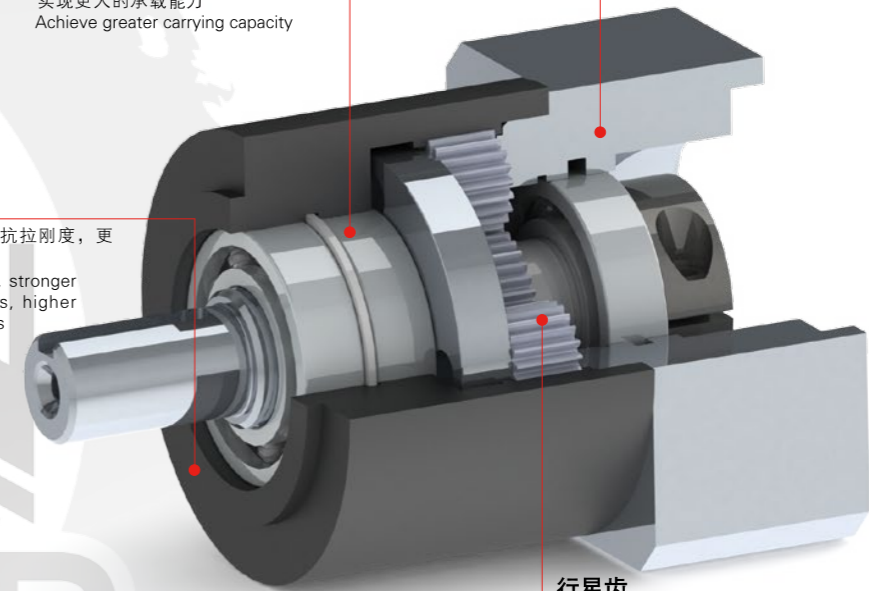
图 (2)

PL SERIES



深沟球轴承
Deep groove ball bearing
实现更大的承载能力
Achieve greater carrying capacity

一体化外壳
Integrative Shell
更高精度，更强抗拉刚度，更高抗扭刚度
Higher accuracy, stronger tensile stiffness, higher torsional stiffness



特种材料输入连接法兰
Special Material Input Connection Flange
减轻自重
Lower gearbox weight

行星齿
Planetary gear
提高传动效率，低噪音，精度高
Improve transmission efficiency, low noise, high accuracy

高精度
背隙 3arcmin 以下，定位更精准

减速比
速比 3-100，选型更方便

高效率
单级 97% 以上 / 双级 93% 以上

静音
齿轮采用修形工艺加工而成

免维修
在产品寿命期内无需要更换润滑油

High-precision
Backlash less than 3 arcmin, more accurate positioning

Reduction ratio
Speed ratio 3-100, more convenient selection

High- efficiency
Over 97% of single stage/over 93% of double stage

Mute
Gears are machined by modification process.

Maintenance free
No need to replace lubricating oil during product life

PL

系列名称
Series name

PL 直齿系列
PL Straight tooth series

080

系列尺寸
Series size

060 080 115

8

减速比
Ratio

I Single 3/4/5/8/10
II Single 12/15/16/20/25/
32/40/64/100

K

输出方式
Output style

⊕ 输出轴带键槽
⊖ 光轴

3

背隙
Backlash

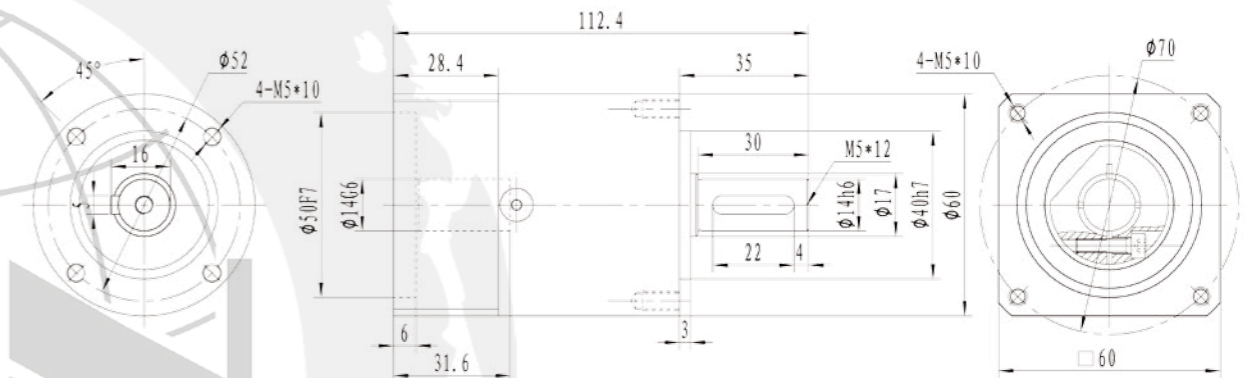
3-3arc-min
5-5arc-min

胜牌科技

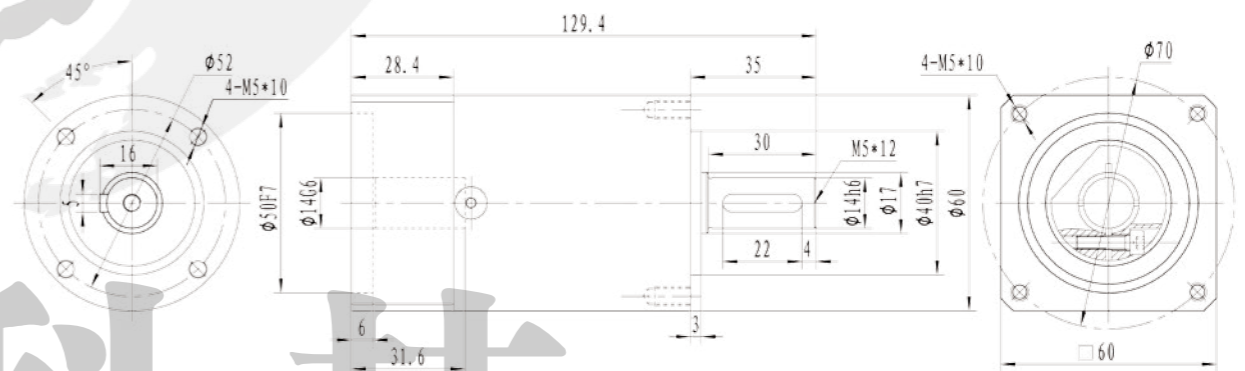
减速机性能资料——PL-060
Performance Data of Reducer-PL-060

级数	减速比	额定输出 扭矩	输出最大 扭矩	额定输入 转速	输入最大 转速	容许径向 负荷	容许轴向 负荷	最大径向 负荷	最大轴向 负荷	背隙	惯性力矩 14
		1	※2	3	4	5	6	7	8		
Stage	Ratio	Nominal output torque	Maximum output torque	Nominal input speed	Maximum input speed	Permitted radial load	Permitted axial load	Maximum radial load	Maximum axial load	Backlash	Moment of inertia 14
		(Nm)	(Nm)	(rpm)	(rpm)	(N)	(N)	(N)	(N)	(arcmin)	(kgcm ²)
I Single	3	28	56	3000	6000	430	360	1100	900	≤ 3	0.22
	4	28	56			430	360			0.17	
	5	28	56			430	360			0.16	
	8	19	38			430	360			0.14	
	10	19	28			430	360			0.14	
II Single	12	28	56	3000	6000	430	360	1100	900	≤ 5	0.14
	15	28	56			430	360			0.14	
	16	28	56			430	360			0.13	
	20	28	56			430	360			0.13	
	25	28	56			430	360			0.14	
	32	28	56			430	360			0.13	
	40	28	56			600	530			0.13	
	64	19	38			600	530			0.13	
	100	19	38			600	530			0.13	

PL-060 I Single



PL-060 II Single



- ※1 输入转速为定额转速时，使用寿命为 20000 小时的值
- ※2 启动、停止时容许的最大值
- ※3 运转过程中，定额输入转速的容许最大值
- ※4 在非连续运转条件下容许的最高输入转速
- ※5 输入转速为定额转速时，使用寿命为 20000 小时的值
- ※6 输入转速为定额转速时，使用寿命为 20000 小时的值
- ※7 径向负荷的容许最大值
- ※8 轴向负荷的容许最大值

(作用于轴中央，轴向负荷为 0 时)
(作用于轴芯，径向负荷为 0 时)

- ※1 With nominal input speed, service life is 20000 hours.
- ※2 The maximum torque when starting and stopping.
- ※3 The maximum average input speed.
- ※4 The maximum momentary input speed.
- ※5 With this load and nominal input speed, service life will be 20000 hours (Applied to the output shaft center, at axial load)
- ※6 With this load and nominal input speed, service life will be 20000 hours (Applied to the output side bearing, at axial load)
- ※7 The maximum radial load the reducer can accept.
- ※8 The maximum axial load the reducer can accept.

胜牌科技

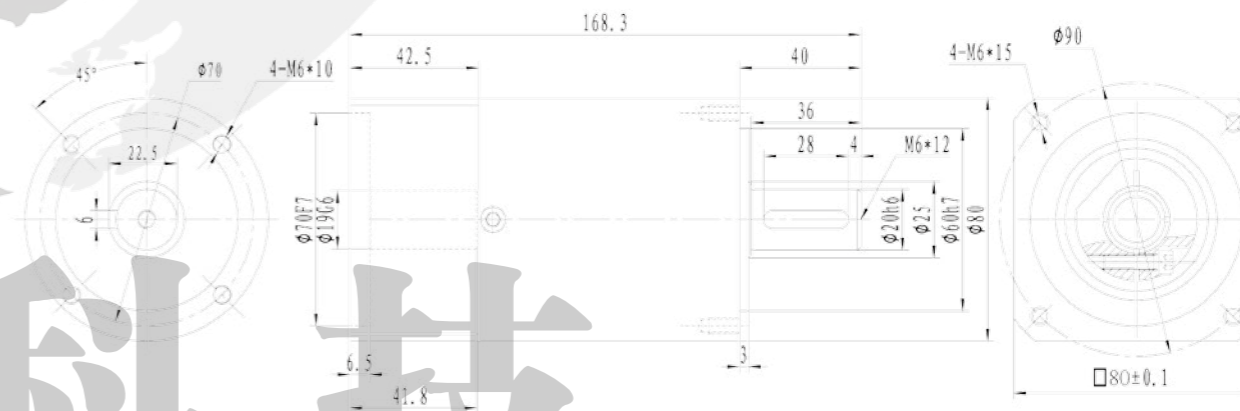
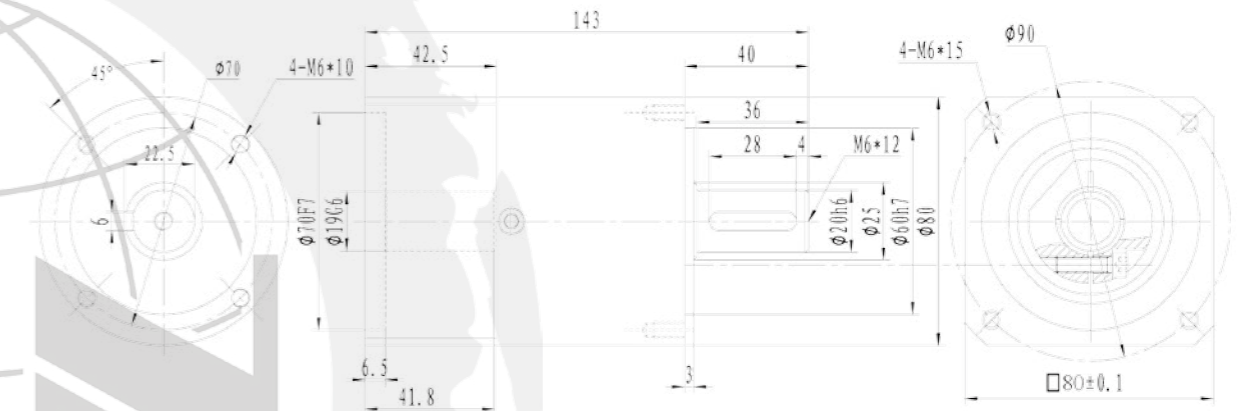
备注：部分尺寸可根据客户需求去定制，如需要，请联系我们！
Note: Some sizes can be customized according to customer needs. If necessary, please contact us!

减速机性能资料——PL-080
Performance Data of Reducer-PL-080

级数	减速比	额定输出 扭矩	输出最大 扭矩	额定输入 转速	输入最大 转速	容许径向 负荷	容许轴向 负荷	最大径向 负荷	最大轴向 负荷	背隙	惯性力矩 14
		1	2	3	4	5	6	7	8		
Stage	Ratio	Nominal output torque	Maximum output torque	Nominal input speed	Maximum input speed	Permitted radial load	Permitted axial load	Maximum radial load	Maximum axial load	Backlash	Moment of inertia 14
		(Nm)	(Nm)	(rpm)	(rpm)	(N)	(N)	(N)	(N)	(arcmin)	(kgcm ²)
I Single	3	78	156	3000	6000	950	800	1600	1400	≤ 3	1.10
	4	78	156			950	800			0.93	
	5	78	156			950	800			0.85	
	8	52	104			950	800			0.76	
	10	52	104			950	800			0.75	
II Single	12	78	156	3000	6000	950	800	1600	1400	≤ 5	0.72
	15	78	156			950	800			0.74	
	16	78	156			950	800			0.72	
	20	78	156			950	800			0.71	
	25	78	156			950	800			0.73	
	32	78	156			950	800			0.70	
	40	78	156			1200	1000			0.71	
	64	52	104			1200	1000			0.70	
	100	52	104			1200	1000			0.69	

PL-080 I Single

PL-080 II Single



- ※1 输入转速为定额转速时，使用寿命为 20000 小时的值
- ※2 启动、停止时容许的最大值
- ※3 运转过程中，定额输入转速的容许最大值
- ※4 在非连续运转条件下容许的最高输入转速
- ※5 输入转速为定额转速时，使用寿命为 20000 小时的值
- ※6 输入转速为定额转速时，使用寿命为 20000 小时的值
- ※7 径向负荷的容许最大值
- ※8 轴向负荷的容许最大值

(作用于轴中央，轴向负荷为 0 时)
(作用于轴芯，径向负荷为 0 时)

- ※1 With nominal input speed, service life is 20000 hours.
- ※2 The maximum torque when starting and stopping.
- ※3 The maximum average input speed.
- ※4 The maximum momentary input speed.
- ※5 With this load and nominal input speed, service life will be 20000 hours (Applied to the output shaft center, at axial load 0)
- ※6 With this load and nominal input speed, service life will be 20000 hours (Applied to the output side bearing, at axial load 0)
- ※7 The maximum radial load the reducer can accept.
- ※8 The maximum axial load the reducer can accept.

备注：部分尺寸可根据客户需求去定制，如需要，请联系我们！
Note: Some sizes can be customized according to customer needs. If necessary, please contact us!

减速机性能资料——PL-115
Performance Data of Reducer-PL-115

PL-115 I Single

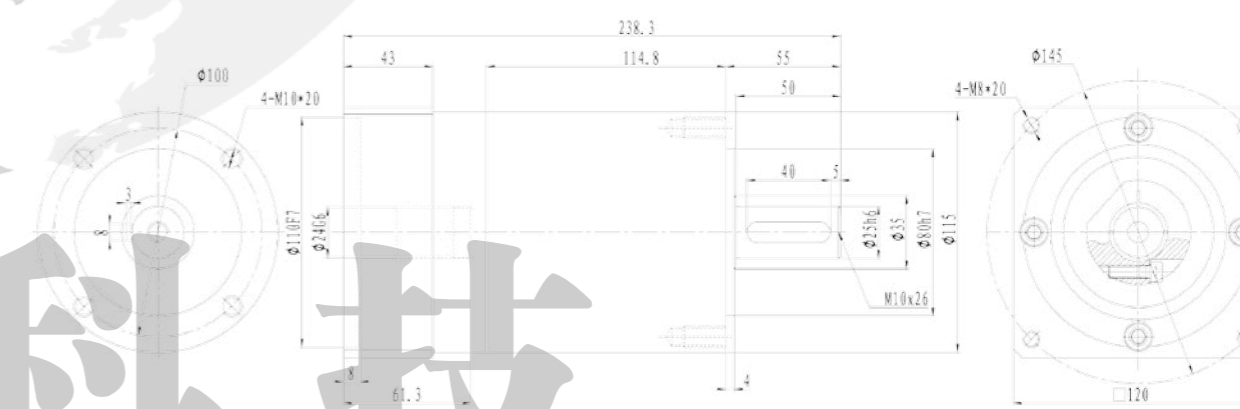
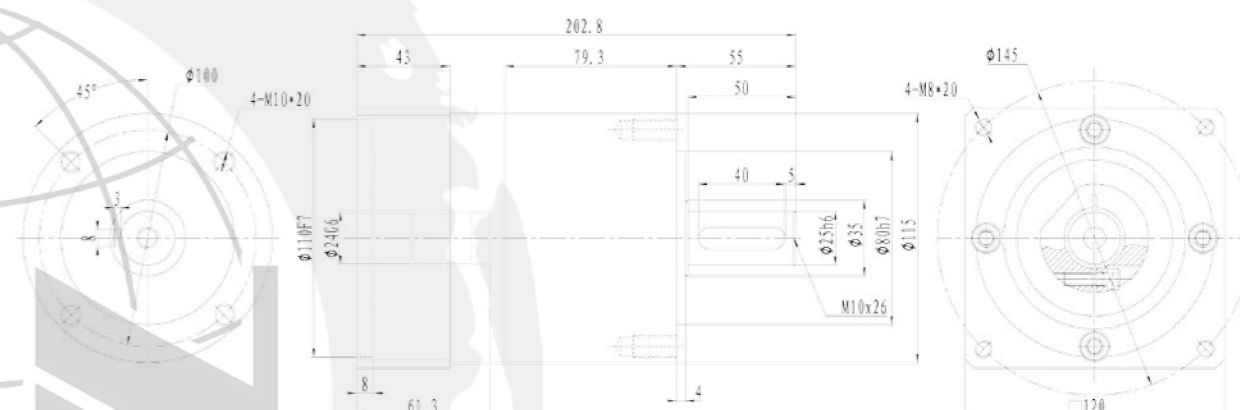
级数	减速比	额定输出扭矩	输出最大扭矩	额定输入转速	输入最大转速	容许径向负荷	容许轴向负荷	最大径向负荷	最大轴向负荷	背隙	惯性力矩 14
		1	2	3	4	5	6	7	8		
Stage	Ratio	Nominal output torque	Maximum output torque	Nominal input speed	Maximum input speed	Permitted radial load	Permitted axial load	Maximum radial load	Maximum axial load	Backlash	Moment of inertia 14
		(Nm)	(Nm)	(rpm)	(rpm)	(N)	(N)	(N)	(N)	(arcmin)	(kgcm ²)
I Single	3	210	420	3000	6000	1500	1300	2600	2200	≤ 3	5.3
	4	210	420			1500	1300				4.1
	5	210	420			1500	1300				3.6
	8	126	252			1500	1300				3.1
	10	126	252			1500	1300				3.0
II Single	12	210	420	3000	6000	1500	1300	2600	2200	≤ 5	2.8
	15	210	420			1500	1300				2.9
	16	210	420			1500	1300				2.8
	20	210	420			1500	1300				2.8
	25	210	420			1500	1300				2.8
	32	210	420			1500	1300				2.7
	40	210	420			1900	1700				2.7
	64	126	252			1900	1700				2.7
	100	126	252			1900	1700				2.7

PL-115 II Single

- ※1 输入转速为定额转速时，使用寿命为 20000 小时的值
- ※2 启动、停止时容许的最大值
- ※3 运转过程中，定额输入转速的容许最大值
- ※4 在非连续运转条件下容许的最高输入转速
- ※5 输入转速为定额转速时，使用寿命为 20000 小时的值
- ※6 输入转速为定额转速时，使用寿命为 20000 小时的值
- ※7 径向负荷的容许最大值
- ※8 轴向负荷的容许最大值

(作用于轴中央，轴向负荷为 0 时)
(作用于轴芯，径向负荷为 0 时)

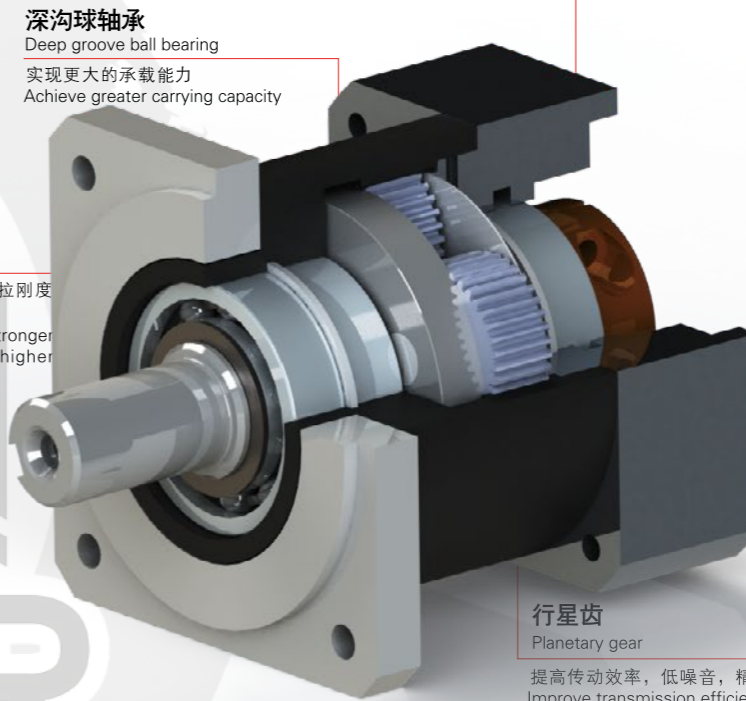
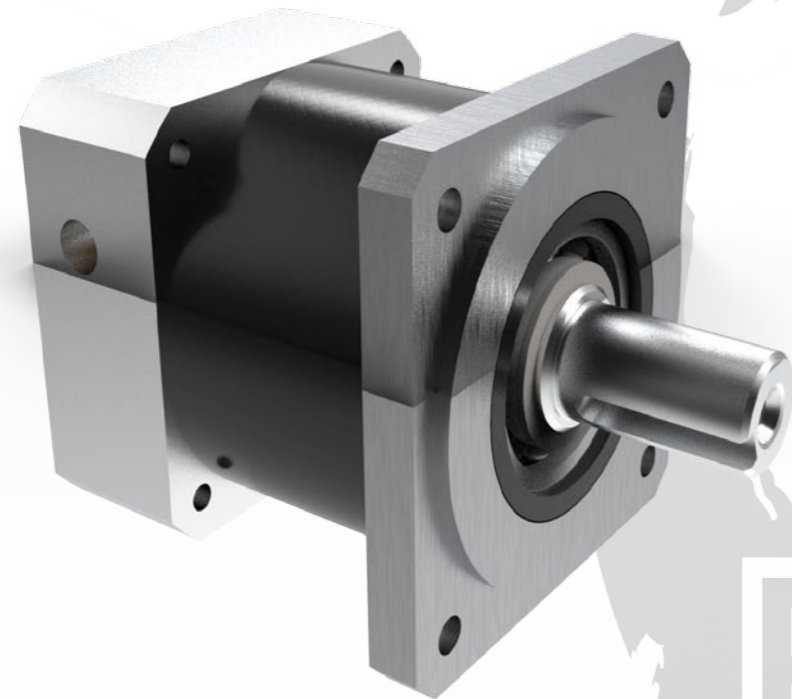
- ※1 With nominal input speed, service life is 20000 hours.
- ※2 The maximum torque when starting and stopping.
- ※3 The maximum average input speed.
- ※4 The maximum momentary input speed.
- ※5 With this load and nominal input speed, service life will be 20000 hours (Applied to the output shaft center, at axial load 0)
- ※6 With this load and nominal input speed, service life will be 20000 hours (Applied to the output side bearing, at axial load 0)
- ※7 The maximum radial load the reducer can accept.
- ※8 The maximum axial load the reducer can accept.



胜牌科技

备注：部分尺寸可根据客户需求去定制，如需要，请联系我们！
Note: Some sizes can be customized according to customer needs. If necessary, please contact us!

PLF SERIES



一体化外壳
Integrative Shell
更高精度，更强抗拉刚度
高抗扭刚度
Higher accuracy, stronger
tensile stiffness, higher
torsional stiffness

深沟球轴承
Deep groove ball bearing
实现更大的承载能力
Achieve greater carrying capacity

特种材料输入连接法兰
Special Material Input Connection Flange
减轻自重
Lower gearbox weight

行星齿
Planetary gear
提高传动效率，低噪音，精度高
Improve transmission efficiency, low noise, high accuracy

- 高精度**
背隙 3arcmin 以下，定位更精准
- 减速比**
速比 3-100，选型更方便
- 高效率**
单级 97% 以上 / 双级 93% 以上
- 静音**
齿轮采用修形工艺加工而成
- 免维修**
在产品寿命期内无需要更换润滑油

- High-precision**
Backlash less than 3 arcmin, more accurate positioning
- Reduction ratio**
Speed ratio 3-100, more convenient selection
- High- efficiency**
Over 97% of single stage/over 93% of double stage
- Mute**
Gears are machined by modification process.
- Maintenance free**
No need to replace lubricating oil during product life

PLF	080	8	K	3
系列名称 Series name	系列尺寸 Series size	减速比 Ratop	输出方式 Output stike	背隙 Backlash
PLF 直齿系列	060 080 115	I Single 3/4/5/8/10 II Single 12/15/16/20/25/ 32/40/64/100	⊙ 输出轴带键槽 ⊙ 光轴	3-3arc-min 5-5arc-min

胜牌科技

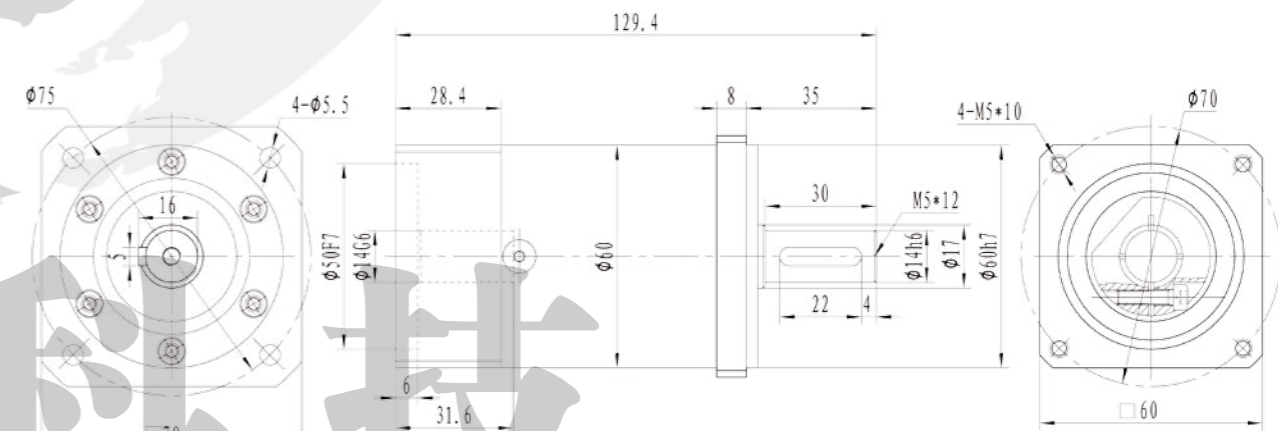
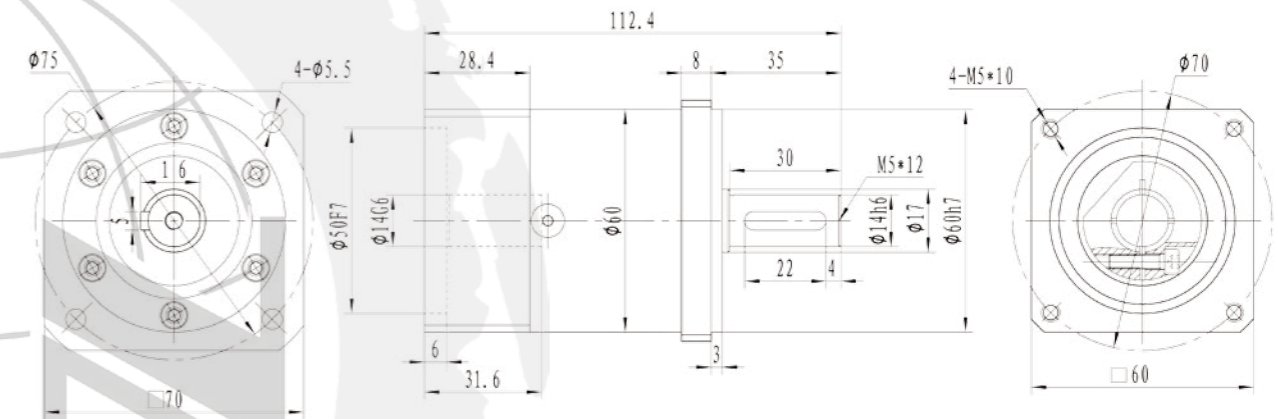
减速机性能资料——PLF-060

Performance Data of Reducer-PLF-060

级数	减速比	额定输出 扭矩	输出最大 扭矩	额定输入 转速	输入最大 转速	容许径向 负荷	容许轴向 负荷	最大径向 负荷	最大轴向 负荷	背隙	惯性力矩 14
		1	2	3	4	5	6	7	8		
Stage	Ratio	Nominal output torque	Maximum output torque	Nominal input speed	Maximum input speed	Permitted radial load	Permitted axial load	Maximum radial load	Maximum axial load	Backlash	Moment of inertia 14
		(Nm)	(Nm)	(rpm)	(rpm)	(N)	(N)	(N)	(N)	(arcmin)	(kgcm ²)
I Single	3	28	56	3000	6000	430	360	1100	900	≤ 3	0.22
	4	28	56			430	360				0.17
	5	28	56			430	360				0.16
	8	19	38			430	360				0.14
	10	19	28			430	360				0.14
II Single	12	28	56	3000	6000	430	360	1100	900	≤ 5	0.14
	15	28	56			430	360				0.14
	16	28	56			430	360				0.13
	20	28	56			430	360				0.13
	25	28	56			430	360				0.14
	32	28	56			430	360				0.13
	40	28	56			600	530				0.13
	64	19	38			600	530				0.13
	100	19	38			600	530				0.13

PLF-060 I Single

PLF-060 II Single



※1 输入转速为定额转速时, 使用寿命为 20000 小时的值

※2 启动、停止时容许的最大值

※3 运转过程中, 定额输入转速的容许最大值

※4 在非连续运转条件下容许的最高输入转速

※5 输入转速为定额转速时, 使用寿命为 20000 小时的值

(作用于轴中央, 轴向负荷为 0 时)

※6 输入转速为定额转速时, 使用寿命为 20000 小时的值

(作用于轴芯, 径向负荷为 0 时)

※7 径向负荷的容许最大值

※8 轴向负荷的容许最大值

※1 With nominal input speed, service life is 20000 hours.

※2 The maximum torque when starting and stopping.

※3 The maximum average input speed.

※4 The maximum momentary input speed.

※5 With this load and nominal input speed, service life will be 20000 hours (Applied to the output shaft center, at axial load 0)

※6 With this load and nominal input speed, service life will be 20000 hours (Applied to the output side bearing, at axial load 0)

※7 The maximum radial load the reducer can accept.

※8 The maximum axial load the reducer can accept.

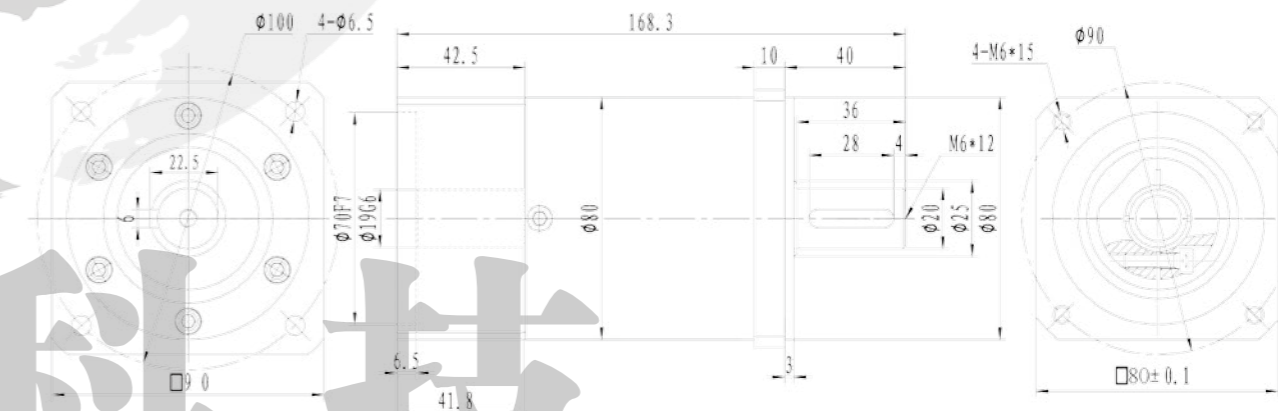
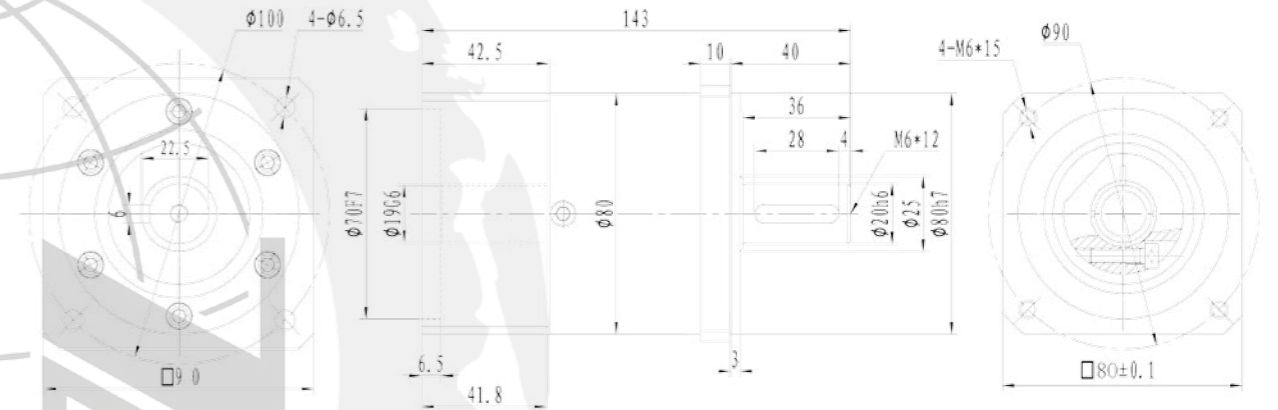
减速机性能资料——PLF-080

Performance Data of Reducer-PLF-080

级数	减速比	额定输出 扭矩	输出最大 扭矩	额定输入 转速	输入最大 转速	容许径向 负荷	容许轴向 负荷	最大径向 负荷	最大轴向 负荷	背隙	惯性力矩 19
		1	2	3	4	5	6	7	8		
Stage	Ratio	Nominal outpot torque	Maximum outpot torque	Nominal input speed	Maximum input speed	Permitted radial load	Permitted axial load	Maximum radial load	Maximum axial load	Backlash	Moment of inertia 19
		(Nm)	(Nm)	(rpm)	(rpm)	(N)	(N)	(N)	(N)	(arcmin)	(kgcm2)
I Single	3	78	156	3000	6000	950	800	1600	1400	≈ 3	1.10
	4	78	156			950	800				0.93
	5	78	156			950	800				0.85
	8	52	104			950	800				0.76
	10	52	104			950	800				0.75
II Single	12	78	156	3000	6000	950	800	1600	1400	≈ 5	0.72
	15	78	156			950	800				0.74
	16	78	156			950	800				0.72
	20	78	156			950	800				0.71
	25	78	156			950	800				0.73
	32	78	156			950	800				0.70
	40	78	156			1200	1000				0.71
	64	52	104			1200	1000				0.70
	100	52	104			1200	1000				0.69

PLF-080 I Single

PLF-080 II Single



※1 输入转速为定额转速时，使用寿命为 20000 小时的值

※2 启动、停止时容许的最大值

※3 运转过程中，定额输入转速的容许最大值

※4 在非连续运转条件下容许的最高输入转速

※5 输入转速为定额转速时，使用寿命为 20000 小时的值

(作用于轴中央，轴向负荷为 0 时)

※6 输入转速为定额转速时，使用寿命为 20000 小时的值

(作用于轴芯，径向负荷为 0 时)

※7 径向负荷的容许最大值

※8 轴向负荷的容许最大值

※1 With nominal input speed, service life is 20000 hours.

※2 The maximum torque when starting and stopping.

※3 The maximum average input speed.

※4 The maximum momentary input speed.

※5 With this load and nominal input speed, service life will be 20000 hours (Applied to the output shaft center, at axial load 0)

※6 With this load and nominal input speed, service life will be 20000 hours (Applied to the output side bearing, at axial load 0)

※7 The maximum radial load the reducer can accept.

※8 The maximum axial load the reducer can accept.

备注：部分尺寸可根据客户需求去定制，如需要，请联系我们！
Note: Some sizes can be customized according to customer needs. If necessary, please contact us!

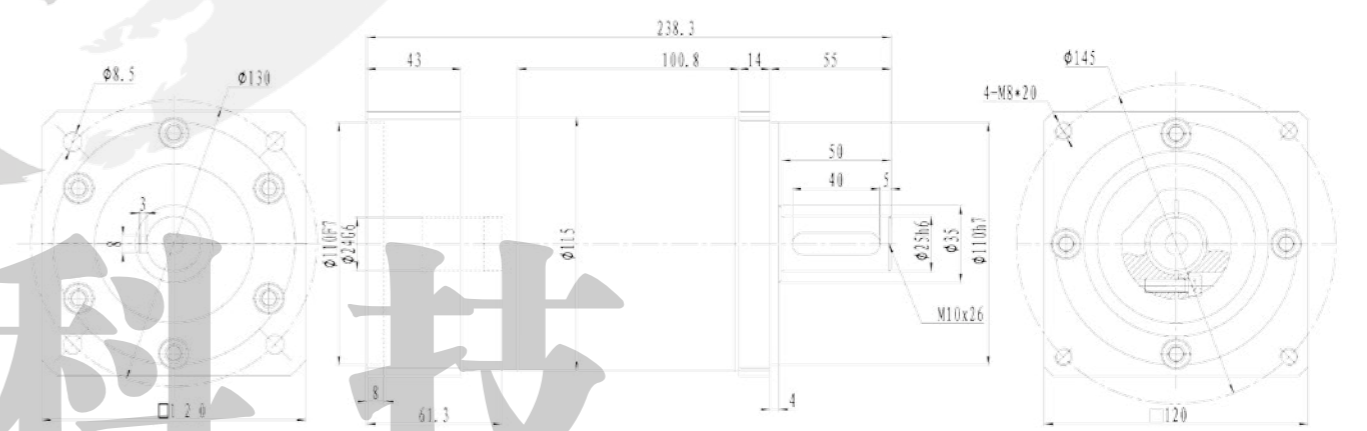
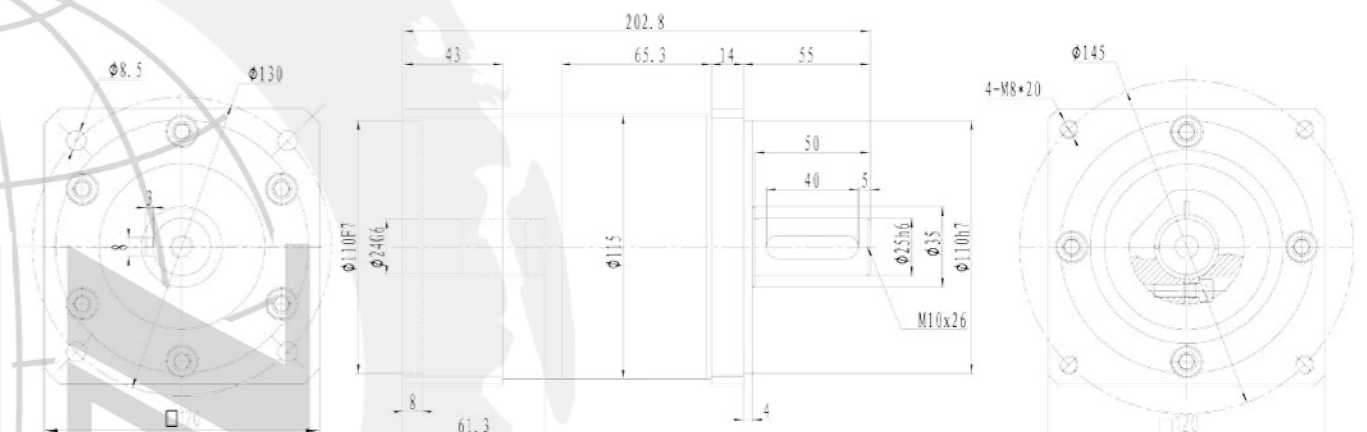
减速机性能资料——PLF-115

Performance Data of Reducer-PLF-115

级数	减速比	额定输出 扭矩	输出最大 扭矩	额定输入 转速	输入最大 转速	容许径向 负荷	容许轴向 负荷	最大径向 负荷	最大轴向 负荷	背隙	惯性力矩 28
		1	2	3	4	5	6	7	8		
Stage	Ratio	Nominal output torque	Maximum output torque	Nominal input speed	Maximum input speed	Permitted radial load	Permitted axial load	Maximum radial load	Maximum axial load	Backlash	Moment of inertia 28
		(Nm)	(Nm)	(rpm)	(rpm)	(N)	(N)	(N)	(N)	(arcmin)	(kgcm ²)
I Single	3	210	420	3000	6000	1500	1300	2600	2200	≤ 3	5.3
	4	210	420			1500	1300				4.1
	5	210	420			1500	1300				3.6
	8	126	252			1500	1300				3.1
	10	126	252			1500	1300				3.0
II Single	12	210	420	3000	6000	1500	1300	2600	2200	≤ 5	2.8
	15	210	420			1500	1300				2.9
	16	210	420			1500	1300				2.8
	20	210	420			1500	1300				2.8
	25	210	420			1500	1300				2.8
	32	210	420			1500	1300				2.7
	40	210	420			1900	1700				2.7
	64	126	252			1900	1700				2.7
100	126	252	1900	1700	2.7						

PLF-115 I Single

PLF-115 II Single



※1 输入转速为定额转速时，使用寿命为 20000 小时的值

※2 启动、停止时容许的最大值

※3 运转过程中，定额输入转速的容许最大值

※4 在非连续运转条件下容许的最高输入转速

※5 输入转速为定额转速时，使用寿命为 20000 小时的值

(作用于轴中央，轴向负荷为 0 时)

※6 输入转速为定额转速时，使用寿命为 20000 小时的值

(作用于轴芯，径向负荷为 0 时)

※7 径向负荷的容许最大值

※8 轴向负荷的容许最大值

※1 With nominal input speed, service life is 20000 hours.

※2 The maximum torque when starting and stopping.

※3 The maximum average input speed.

※4 The maximum momentary input speed.

※5 With this load and nominal input speed, service life will be 20000 hours (Applied to the output shaft center, at axial load 0)

※6 With this load and nominal input speed, service life will be 20000 hours (Applied to the output side bearing, at axial load 0)

※7 The maximum radial load the reducer can accept.

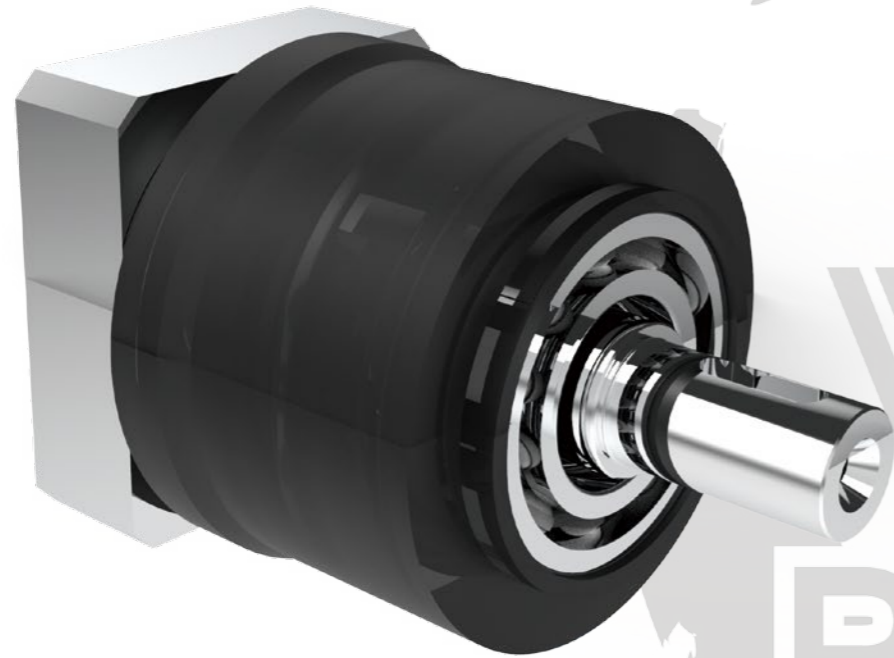
※8 The maximum axial load the reducer can accept.

胜牌科技

备注：部分尺寸可根据客户需求去定制，如需要，请联系我们！
Note: Some sizes can be customized according to customer needs. If necessary, please contact us!



TPL SERIES



一体化外壳
Integrative Shell

更高精度，更强抗拉刚度，更高抗扭刚度
Higher accuracy, stronger tensile stiffness, higher torsional stiffness

行星齿
Planetary gear

提高传动效率，低噪音，精度高
Improve transmission efficiency, low noise, high accuracy

特种材料输入连接法兰
Special Material Input Connection Flange

减轻自重
Lower gearbox weight

深沟球轴承
Deep groove ball bearing

实现更大的承载能力
Achieve greater carrying capacity

高精度

背隙 3arcmin 以下，定位更精准

减速比

速比 3-100，选型更方便

高效率

单级 97% 以上 / 双级 93% 以上

静音

齿轮采用斜齿设计并采用修形工艺加工而成

免维修

在产品寿命期内无需要更换润滑油

High-precision

Backlash less than 3 arcmin, more accurate positioning

Reduction ratio

Speed ratio 3-100, more convenient selection

High- efficiency

Over 97% of single stage/over 93% of double stage

Mute

Gears are designed with helical teeth and processed by modification process

Maintenance free

No need to replace lubricating oil during product life

TPL

系列名称
Series name

TPL 斜齿系列
Helical series

070

系列尺寸
Series size

050 070 090
120 160 205

7

减速比
Ratop

I Single 3/4/5/6/7/8/9/10
II Single 15/16/20/25/28/
30/35/40/45/50
64/70/80/90/100

K

输出方式
Output stkie

⊗ 输出轴带键槽
s: 光轴

3

背隙
Backlash

3-3arc-min
5-5arc-min

胜牌科技

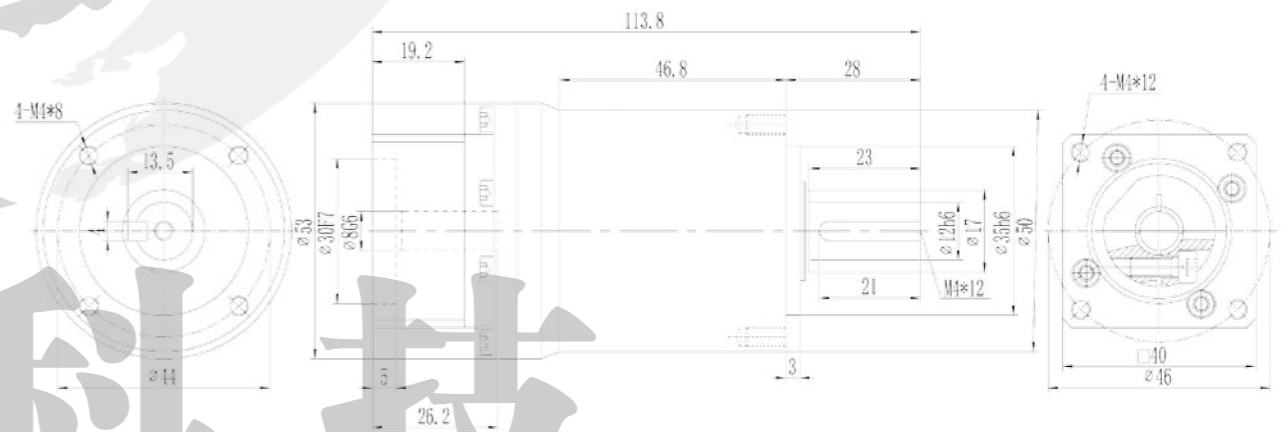
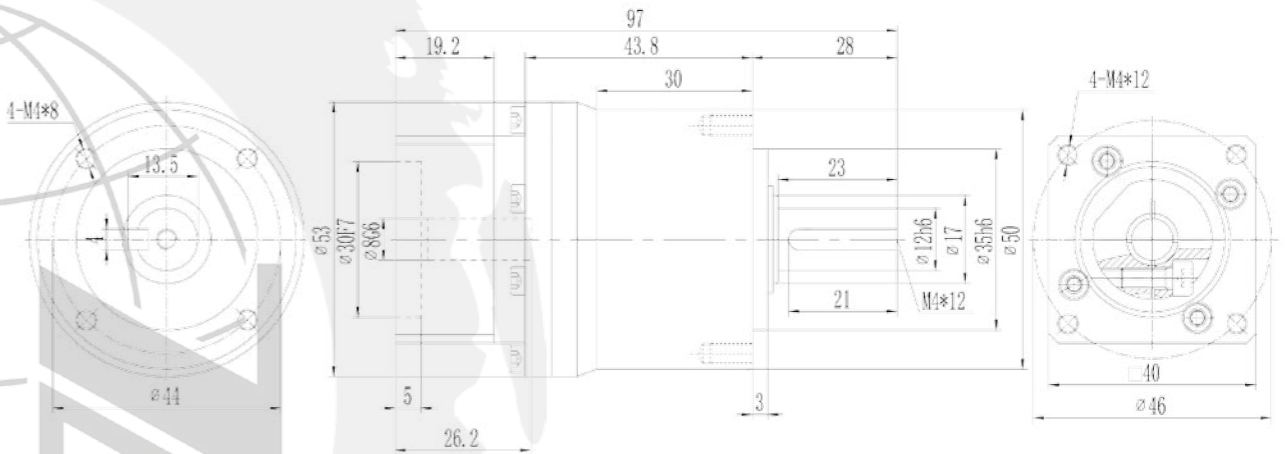
减速机性能资料——TPL-050

Performance Data of Reducer-TPL-050

级数	减速比	额定输出扭矩	输出最大扭矩	额定输入转速	输入最大转速	容许径向负荷	容许轴向负荷	最大径向负荷	最大轴向负荷	背隙	惯性力矩 14
		1	2	3	4	5	6	7	8		
Stage	Ratio	Nominal output torque	Maximum output torque	Nominal input speed	Maximum input speed	Permitted radial load	Permitted axial load	Maximum radial load	Maximum axial load	Backlash	Moment of inertia 14
		(Nm)	(Nm)	(rpm)	(rpm)	(N)	(N)	(N)	(N)	(arcmin)	(kgcm ²)
I Single	3	15	30	4000	8000	240	270	710	640	≤ 3	0.03
	4	15	30			270	300				
	5	15	30			290	330				
	6	15	30			310	360				
	7	12	24			320	3850				
	8	12	24			340	410				
	9	10	20			350	430				
	10	10	20			360	450				
II Single	15	15	30	4000	8000	410	540	710	640	≤ 5	0.03
	16	15	30			420	550				
	40	15	30			570	640				
	45	15	30			600	640				
	50	15	30			620	640				
	64	12	24			660	640				
	70	12	24			690	640				
	80	12	24			710	640				
	90	10	20			710	640				
	100	10	20			710	640				

TPL-050 I Single

TPL-050 II Single



※1 输入转速为定额转速时，使用寿命为 20000 小时的值

※2 启动、停止时容许的最大值

※3 运转过程中，定额输入转速的容许最大值

※4 在非连续运转条件下容许的最高输入转速

※5 输入转速为定额转速时，使用寿命为 20000 小时的值

※6 输入转速为定额转速时，使用寿命为 20000 小时的值

※7 径向负荷的容许最大值

※8 轴向负荷的容许最大值

(作用于轴中央，轴向负荷为 0 时)

(作用于轴芯，径向负荷为 0 时)

※1 With nominal input speed, service life is 20000 hours.

※2 The maximum torque when starting and stopping.

※3 The maximum average input speed.

※4 The maximum momentary input speed.

※5 With this load and nominal input speed, service life will be 20000 hours (Applied to the output shaft center, at axial load 0)

※6 With this load and nominal input speed, service life will be 20000 hours (Applied to the output side bearing, at axial load 0)

※7 The maximum radial load the reducer can accept.

※8 The maximum axial load the reducer can accept.

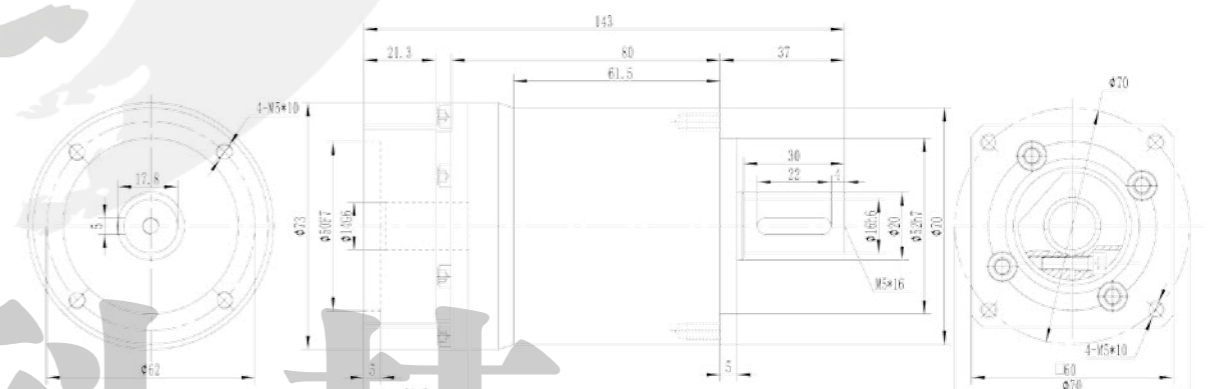
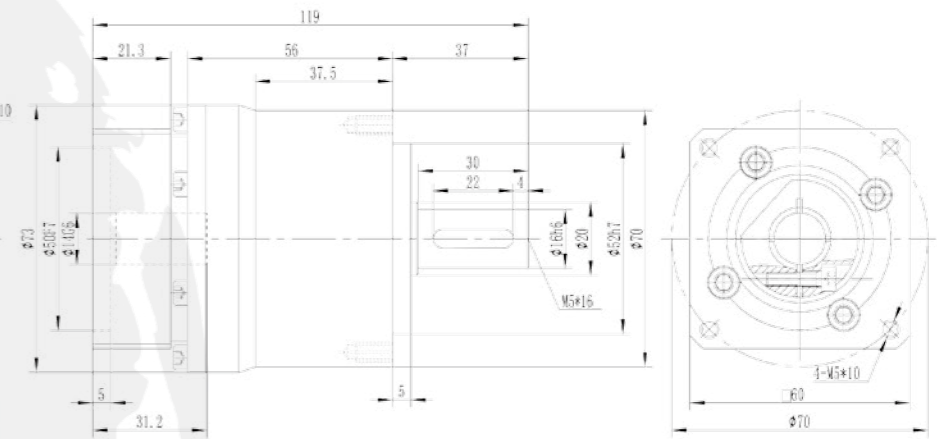
减速机性能资料——TPL-070

Performance Data of Reducer-TPL-070

级数	减速比	额定输出 扭矩	输出最大 扭矩	额定输入 转速	输入最大 转速	容许径向 负荷	容许轴向 负荷	最大径向 负荷	最大轴向 负荷	背隙	惯性力矩 14
		1	2	3	4	5	6	7	8		
Stage	Ratio	Nominal output torque	Maximum output torque	Nominal input speed	Maximum input speed	Permitted radial load	Permitted axial load	Maximum radial load	Maximum axial load	Backlash	Moment of inertia 14
		(Nm)	(Nm)	(rpm)	(rpm)	(N)	(N)	(N)	(N)	(arcmin)	(kgcm ²)
I Single	3	38	76	3000	6000	570	460	1200	1100	≤ 3	0.22
	4	38	76			570	460				0.17
	5	38	76			570	460				0.16
	6	38	76			570	460				0.15
	7	32	64			570	460				0.14
	8	32	64			570	460				0.14
	9	28	56			570	460				0.14
	10	28	56			570	460				0.14
II Single	15	38	76	3000	6000	570	460	1200	1100	≤ 3	0.14
	16	38	76			570	460				0.14
	20	38	76			570	460				0.13
	25	38	76			570	460				0.13
	28	38	76			570	460				0.14
	30	38	76			570	460				0.13
	35	38	76			570	460				0.13
	40	38	76			740	630				0.13
	45	38	76			740	630				0.13
	50	38	76			740	630				0.13
	64	32	64			1100	980				0.13
	70	32	64			1100	980				0.13
80	32	64	1100	980	0.13						
90	28	52	1100	980	0.13						
100	28	52	1100	980	0.13						

TPL-070 I Single

TPL-070 II Single



- ※1 输入转速为定额转速时，使用寿命为 20000 小时的值
- ※2 启动、停止时容许的最大值
- ※3 运转过程中，定额输入转速的容许最大值
- ※4 在非连续运转条件下容许的最高输入转速
- ※5 输入转速为定额转速时，使用寿命为 20000 小时的值
- ※6 输入转速为定额转速时，使用寿命为 20000 小时的值
- ※7 径向负荷的容许最大值
- ※8 轴向负荷的容许最大值

(作用于轴中央，轴向负荷为 0 时)
(作用于轴芯，径向负荷为 0 时)

- ※1 With nominal input speed, service life is 20000 hours.
- ※2 The maximum torque when starting and stopping.
- ※3 The maximum average inout speed.
- ※4 The maximum momentary inpu speed.
- ※5 With this lond and niminal iput speed, service life will be 20000 hours (Applied to the output shaft center, at axial load o)
- ※6 With this lond and niminal iput speed, service life will be 20000 hours (Applied to the output side bearing, at axial loado)
- ※7 The maximum radial load the reducer can accept.
- ※8 The maximum axial load the reducer can accept.

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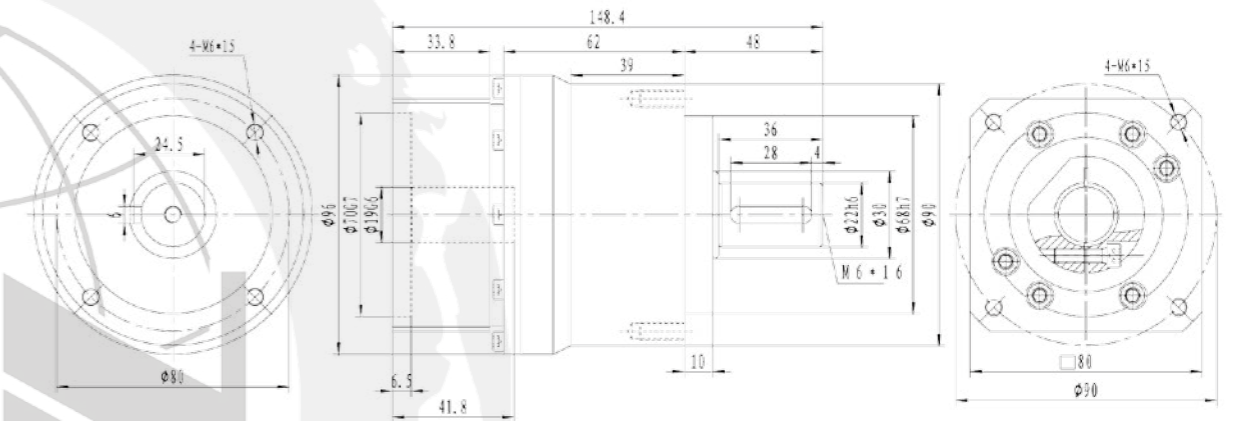
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减速机性能资料——TPL-090

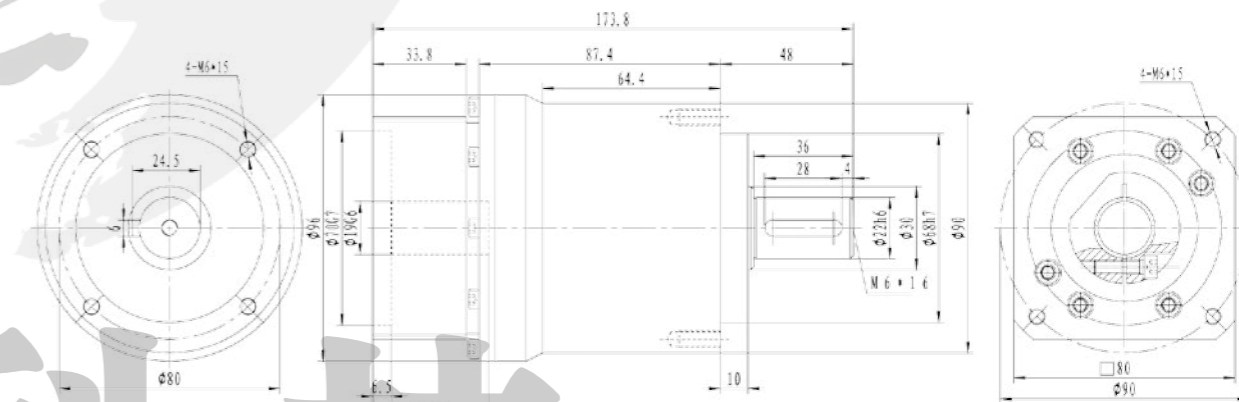
Performance Data of Reducer-TPL-090

级数	减速比	额定输出 扭矩	输出最大 扭矩	额定输入 转速	输入最大 转速	容许径向 负荷	容许轴向 负荷	最大径向 负荷	最大轴向 负荷	背隙	惯性力矩 19		
		1	2	3	4	5	6	7	8				
Stage	Ratio	Nominal output torque (Nm)	Maximum output torque (Nm)	Nominal input speed (rpm)	Maximum input speed (rpm)	Permitted radial load (N)	Permitted axial load (N)	Maximum radial load (N)	Maximum axial load (N)	Backlash (arcmin)	Moment of inertia 19 (kgcm ²)		
I Single	3	85	170	3000	6000	960	930	2400	2200	≤ 3	1.20		
	4	85	170			960	930				0.95		
	5	85	170			960	930				0.86		
	6	85	170			960	930				0.82		
	7	78	156			960	930				0.79		
	8	78	156			960	930				0.77		
	9	65	130			960	930				0.76		
	10	65	130			960	930				0.75		
II Single	15	85	170	3000	6000	960	930	2400	2200	≤ 3	0.72		
	16	85	170			960	930				0.74		
	20	85	170			960	930				0.72		
	25	85	170			960	930				0.71		
	28	85	170			960	930				0.73		
	30	85	170			960	930				0.70		
	35	85	170			960	930				0.71		
	40	85	170			1800	1500				1800	1500	0.70
	45	85	170			1800	1500				1800	1500	0.71
	50	85	170			1800	1500				1800	1500	0.69
	64	78	156			2200	1800				2200	1800	0.69
	70	78	156			2200	1800				2200	1800	0.69
	80	78	156			2200	1800				2200	1800	0.69
	90	65	130			2200	1800				2200	1800	0.69
100	65	130	2200	1800	2200	1800	0.69						

TPL-090 I Single



TPL-090 II Single



※1 输入转速为定额转速时，使用寿命为 20000 小时的值

※2 启动、停止时容许的最大值

※3 运转过程中，定额输入转速的容许最大值

※4 在非连续运转条件下容许的最高输入转速

※5 输入转速为定额转速时，使用寿命为 20000 小时的值

(作用于轴中央，轴向负荷为 0 时)

※6 输入转速为定额转速时，使用寿命为 20000 小时的值

(作用于轴芯，径向负荷为 0 时)

※7 径向负荷的容许最大值

※8 轴向负荷的容许最大值

※1 With nominal input speed, service life is 20000 hours.

※2 The maximum torque when starting and stopping.

※3 The maximum average input speed.

※4 The maximum momentary input speed.

※5 With this load and nominal input speed, service life will be 20000 hours (Applied to the output shaft center, at axial load 0)

※6 With this load and nominal input speed, service life will be 20000 hours (Applied to the output side bearing, at axial load 0)

※7 The maximum radial load the reducer can accept.

※8 The maximum axial load the reducer can accept.

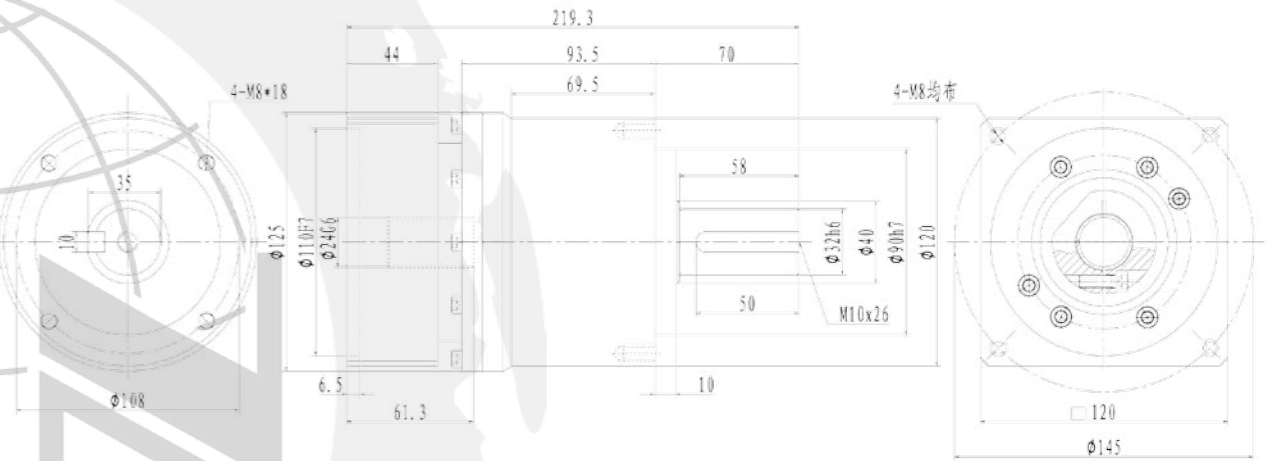
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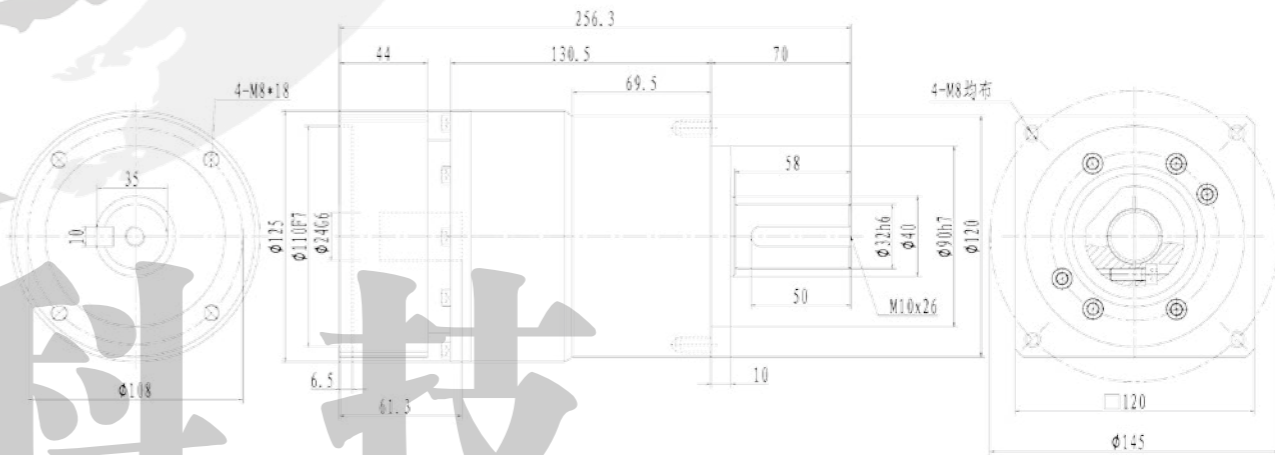
减速机性能资料——TPL-120
Performance Data of Reducer-TPL-120

级数	减速比	额定输出	输出最大	额定输入	输入最大	容许径向	容许轴向	最大径向	最大轴向	背隙	惯性力矩 28
		扭矩	扭矩	转速	转速	负荷	负荷	负荷	负荷		
Stage	Ratio	Nominal output torque	Maximum output torque	Nominal input speed	Maximum input speed	Permitted radial load	Permitted axial load	Maximum radial load	Maximum axial load	Backlash	Moment of inertia 28
		(Nm)	(Nm)	(rpm)	(rpm)	(N)	(N)	(N)	(N)	(arcmin)	(kgcm ²)
I Single	3	230	460	3000	6000	4200	5600	8300	7800	≤ 3	5.3
	4	230	460			4200	5600				4.1
	5	230	460			4200	5600				3.6
	6	230	460			4200	5600				3.3
	7	189	370			4200	5600				3.2
	8	189	370			4200	5600				3.1
	9	160	320			4200	5600				3.0
II Single	10	160	320	3000	6000	4200	5600	8300	7800	≤ 3	3.0
	15	230	460			4200	5600				2.8
	16	230	460			4200	5600				2.9
	20	230	460			4200	5600				2.8
	25	230	460			4200	5600				2.8
	28	230	460			4200	5600				2.8
	30	230	460			5600	5600				2.7
	35	230	460			5600	6300				2.7
	40	230	460			5600	6300				2.7
	45	230	460			5600	6300				2.7
	50	230	460			5600	6300				2.7
	64	189	370			6400	7000				2.7
	70	189	370			6400	7000				2.7
80	189	370	6400	7000	2.7						
90	160	320	6400	7000	2.7						
100	160	320	6400	7000	2.7						

TPL-120 I Single



TPL-120 II Single



※1 输入转速为定额转速时，使用寿命为 20000 小时的值

※2 启动、停止时容许的最大值

※3 运转过程中，定额输入转速的容许最大值

※4 在非连续运转条件下容许的最高输入转速

※5 输入转速为定额转速时，使用寿命为 20000 小时的值

※6 输入转速为定额转速时，使用寿命为 20000 小时的值

※7 径向负荷的容许最大值

※8 轴向负荷的容许最大值

(作用于轴中央，轴向负荷为 0 时)

(作用于轴芯，径向负荷为 0 时)

※1 With nominal input speed, service life is 20000 hours.

※2 The maximum torque when starting and stopping.

※3 The maximum average input speed.

※4 The maximum momentary input speed.

※5 With this load and nominal input speed, service life will be 20000 hours (Applied to the output shaft center, at axial load 0)

※6 With this load and nominal input speed, service life will be 20000 hours (Applied to the output side bearing, at axial load 0)

※7 The maximum radial load the reducer can accept.

※8 The maximum axial load the reducer can accept.

备注：部分尺寸可根据客户需求去定制，如需要，请联系我们！
Note: Some sizes can be customized according to customer needs. If necessary, please contact us!

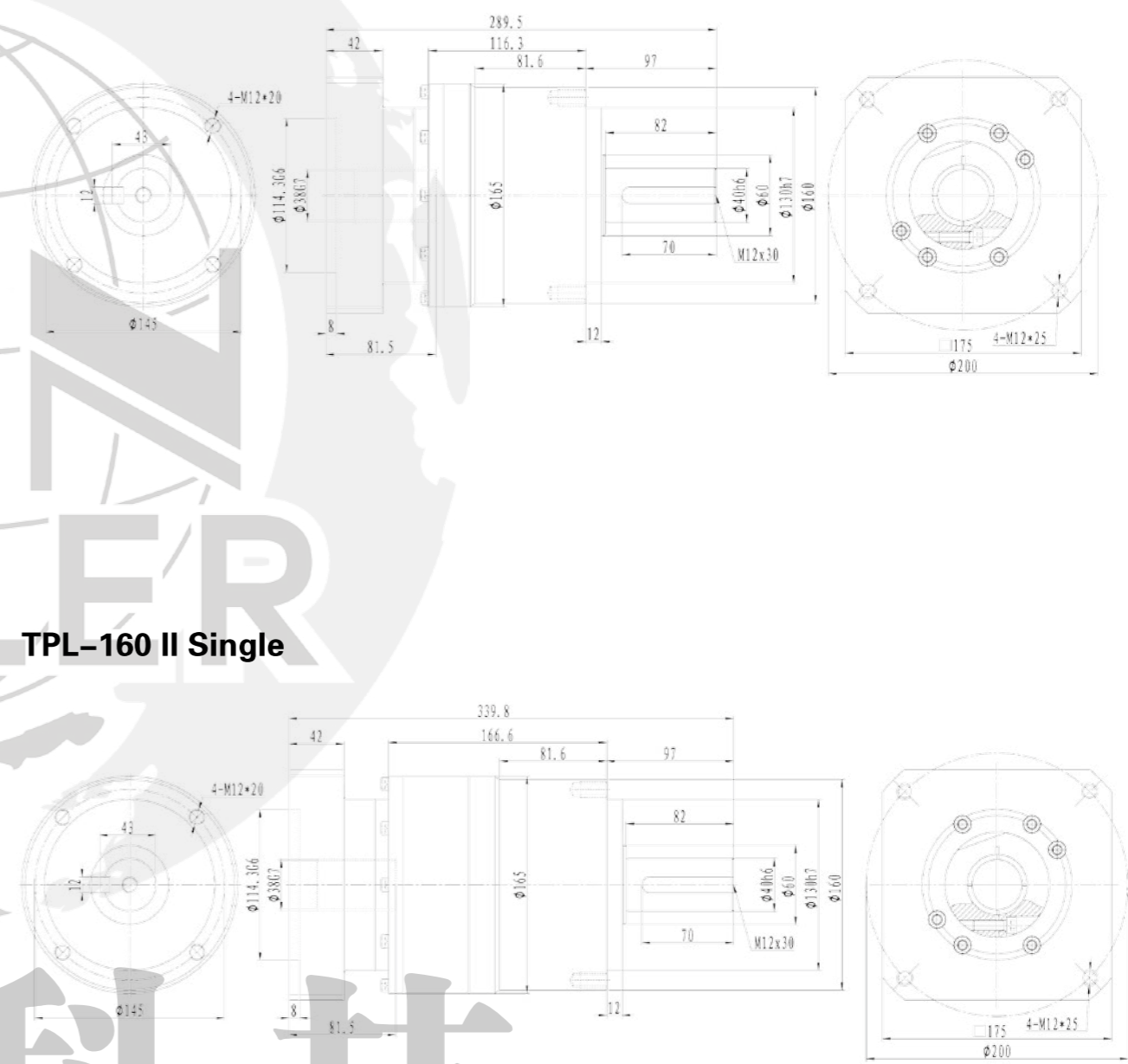
减速机性能资料——TPL-160

Performance Data of Reducer-TPL-160

级数	减速比	额定输出 扭矩	输出最大 扭矩	额定输入 转速	输入最大 转速	容许径向 负荷	容许轴向 负荷	最大径向 负荷	最大轴向 负荷	背隙	惯性力矩 38
		1	2	3	4	5	6	7	8		
Stage	Ratio	Nominal outpot torque	Maximum outpot torque	Nominal input speed	Maximum input speed	Permitted radial load	Permitted axial load	Maximum radial load	Maximum axial load	Backlash	Moment of inertia 38
		(Nm)	(Nm)	(rpm)	(rpm)	(N)	(N)	(N)	(N)	(arcmin)	(kgcm ²)
I Single	3	610	1220	2000	4000	7900	8300	12000	10000	≤ 3	20
	4	610	1220			7900	8300				15
	5	610	1220			7900	8300				14
	6	610	1220			7900	8300				13
	7	550	1100			7900	8300				12
	8	550	1100			7900	8300				12
	9	410	820			7900	8300				11
	10	410	820			7900	8300				11
II Single	15	610	1220	2000	4000	7900	8300	12000	10000	≤ 3	11
	16	610	1220			7900	8300				11
	20	610	1220			7900	8300				11
	25	610	1220			7900	8300				11
	28	610	1220			7900	8300				11
	30	610	1220			7900	8300				10
	35	610	1220			7900	8300				11
	40	610	1220			8300	9700				10
	45	610	1220			8300	9700				11
	50	610	1220			8300	9700				10
	64	550	1100			9700	9700				10
	70	550	1100			9700	9700				10
80	550	1100	9700	9700	10						
90	410	820	9700	9700	10						
100	410	820	9700	9700	10						

TPL-160 I Single

TPL-160 II Single



※1 输入转速为定额转速时，使用寿命为 20000 小时的值

※2 启动、停止时容许的最大值

※3 运转过程中，定额输入转速的容许最大值

※4 在非连续运转条件下容许的最高输入转速

※5 输入转速为定额转速时，使用寿命为 20000 小时的值

(作用于轴中央，轴向负荷为 0 时)

※6 输入转速为定额转速时，使用寿命为 20000 小时的值

(作用于轴芯，径向负荷为 0 时)

※7 径向负荷的容许最大值

※8 轴向负荷的容许最大值

※1 With nominal input speed, service life is 20000 hours.

※2 The maximum torque when starting and stopping.

※3 The maximum average input speed.

※4 The maximum momentary input speed.

※5 With this load and nominal input speed, service life will be 20000 hours (Applied to the output shaft center, at axial load 0)

※6 With this load and nominal input speed, service life will be 20000 hours (Applied to the output side bearing, at axial load 0)

※7 The maximum radial load the reducer can accept.

※8 The maximum axial load the reducer can accept.

胜牌科技

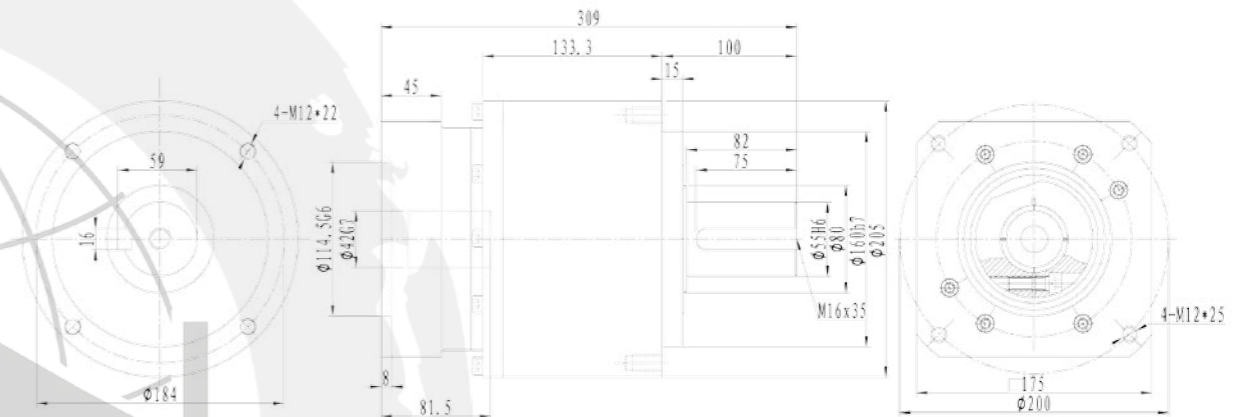
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减速机性能资料——TPL-205

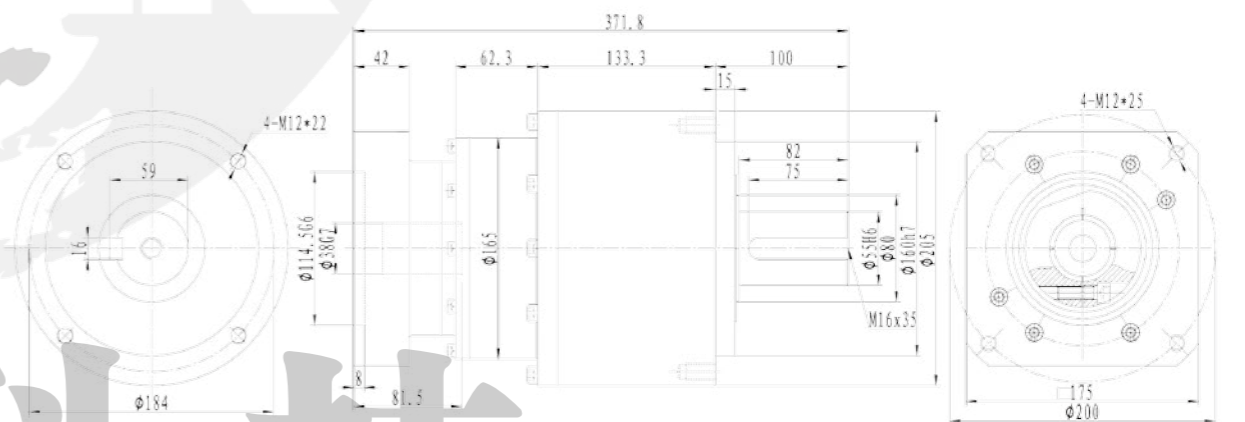
Performance Data of Reducer-TPL-205

级数	减速比	额定输出扭矩	输出最大扭矩	额定输入转速	输入最大转速	容许径向负荷	容许轴向负荷	最大径向负荷	最大轴向负荷	背隙	惯性力矩 38						
		1	2	3	4	5	6	7	8								
Stage	Ratio	Nominal output torque	Maximum output torque	Nominal input speed	Maximum input speed	Permitted radial load	Permitted axial load	Maximum radial load	Maximum axial load	Backlash	Moment of inertia 38						
		(Nm)	(Nm)	(rpm)	(rpm)	(N)	(N)	(N)	(N)	(arcmin)	(kgcm ²)						
I Single	3	1100	2200	1500	3000	17000	18000	21000	20000	≤ 3	66						
	4	1100	2200			17000	18000				50						
	5	1100	2200			17000	18000				44						
	6	1100	2200			17000	18000				41						
	7	900	1800			17000	18000				38						
	8	900	1800			17000	18000				37						
	9	750	1500			17000	18000				36						
	10	750	1500			17000	18000				36						
	II Single	15	1100			2200	1500				3000	17000	18000	21000	20000	≤ 3	34
		16	1100			2200						17000	18000				35
20		1100	2200	17000	18000	34											
25		1100	2200	17000	18000	34											
28		1100	2200	17000	18000	35											
30		1100	2200	17000	18000	33											
35		1100	2200	19000	18000	34											
40		1100	2200	19000	19000	33											
45		1100	2200	19000	19000	34											
50		1100	2200	19000	19000	33											
64		900	1800	19000	19000	33											
70		900	1800	19000	19000	33											
80		900	1800	19000	19000	33											
90		750	1500	19000	19000	33											
100	750	1500	19000	19000	33												

TPL-205 I Single



TPL-205 II Single



※1 输入转速为定额转速时, 使用寿命为 20000 小时的值

※2 启动、停止时容许的最大值

※3 运转过程中, 定额输入转速的容许最大值

※4 在非连续运转条件下容许的最高输入转速

※5 输入转速为定额转速时, 使用寿命为 20000 小时的值

(作用于轴中央, 轴向负荷为 0 时)

※6 输入转速为定额转速时, 使用寿命为 20000 小时的值

(作用于轴芯, 径向负荷为 0 时)

※7 径向负荷的容许最大值

※8 轴向负荷的容许最大值

※1 With nominal input speed, service life is 20000 hours.

※2 The maximum torque when starting and stopping.

※3 The maximum average input speed.

※4 The maximum momentary input speed.

※5 With this load and nominal input speed, service life will be 20000 hours (Applied to the output shaft center, at axial load 0)

※6 With this load and nominal input speed, service life will be 20000 hours (Applied to the output side bearing, at axial load 0)

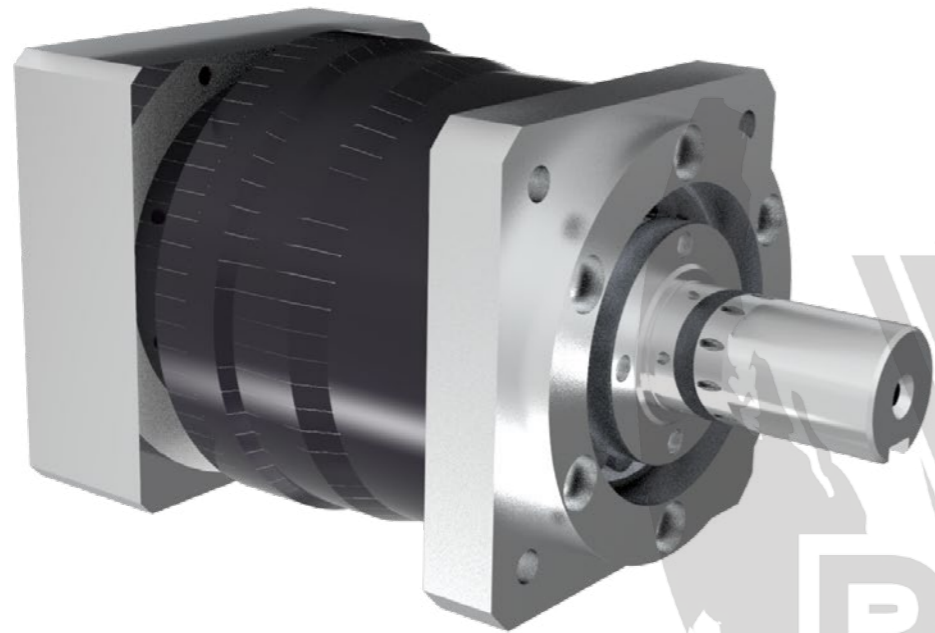
※7 The maximum radial load the reducer can accept.

※8 The maximum axial load the reducer can accept.

胜牌科技

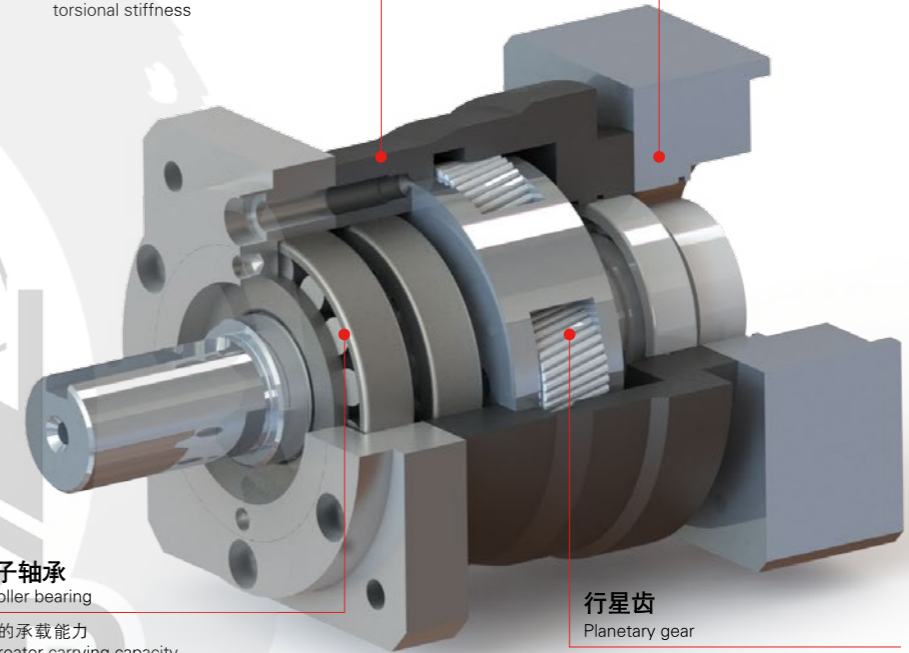
备注: 部分尺寸可根据客户需求去定制, 如需要, 请联系我们!
Note: Some sizes can be customized according to customer needs. If necessary, please contact us!

TPLF SERIES



一体化外壳
Integrative Shell
更高精度，更强抗拉刚度，更高抗扭刚度
Higher accuracy, stronger tensile stiffness, higher torsional stiffness

特种材料输入连接法兰
Special Material Input Connection Flange
减轻自重
Lower gearbox weight



圆锥滚子轴承
Tapered roller bearing
实现更大的承载能力
Achieve greater carrying capacity

行星齿
Planetary gear
提高传动效率，低噪音，精度高
Improve transmission efficiency, low noise, high accuracy

高精度

背隙 3arcmin 以下，定位更精准

减速比

速比 3-100，选型更方便

高效率

单级 97% 以上 / 双级 93% 以上

静音

齿轮采用斜齿设计并采用修形工艺加工而成

免维修

在产品寿命期内无需要更换润滑油

High-precision

Backlash less than 3 arcmin, more accurate positioning

Reduction ratio

Speed ratio 3-100, more convenient selection

High- efficiency

Over 97% of single stage/over 93% of double stage

Mute

Gears are designed with helical teeth and processed by modification process

Maintenance free

No need to replace lubricating oil during product life

TPLF

系列名称
Series name

TPLF 斜齿系列
Helical series

070

系列尺寸
Series size

050 070 090
120 160 205

7

减速比
Ratop

I Single 3/4/5/6/7/8/9/10
II Single 15/16/20/25/28/
30/35/40/45/50
64/70/80/90/100

K

输出方式
Output stke

⊕ 输出轴带键槽
⊖ 光轴

3

背隙
Backlash

3-3arc-min
5-5arc-min

胜牌科技

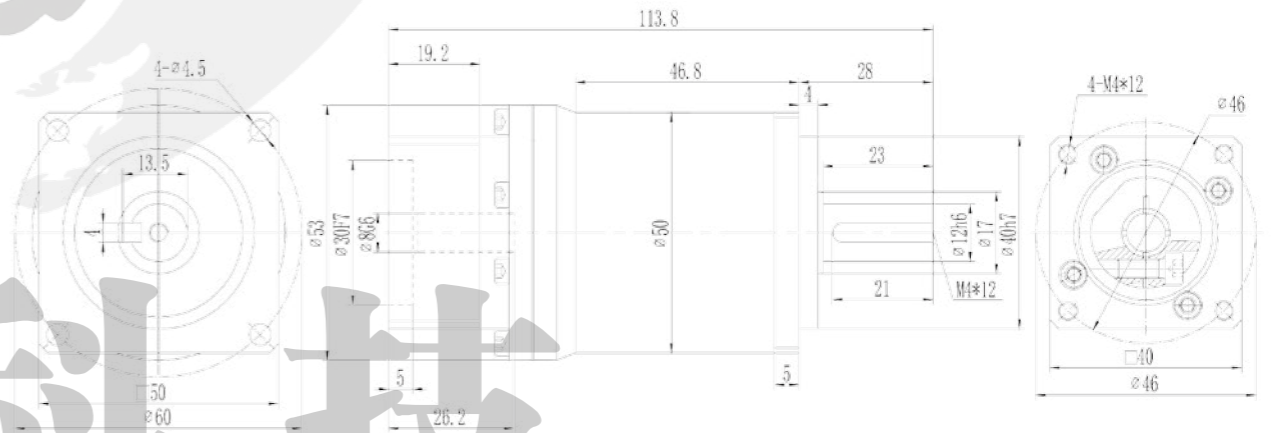
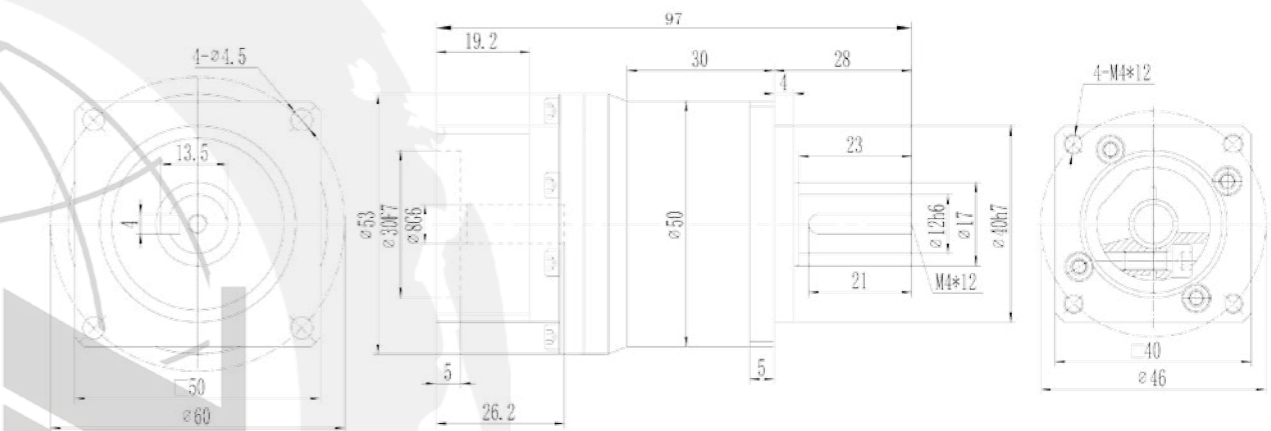
减速机性能资料——TPLF-050

Performance Data of Reducer-TPLF-050

级数	减速比	额定输出扭矩	输出最大扭矩	额定输入转速	输入最大转速	容许径向负荷	容许轴向负荷	最大径向负荷	最大轴向负荷	背隙	惯性力矩 ₈							
		1	2	3	4	5	6	7	8									
Stage	Ratio	Nominal output torque	Maximum output torque	Nominal input speed	Maximum input speed	Permitted radial load	Permitted axial load	Maximum radial load	Maximum axial load	Backlash	Moment of inertia ₈							
		(Nm)	(Nm)	(rpm)	(rpm)	(N)	(N)	(N)	(N)	(arcmin)	(kgcm ²)							
I Single	3	15	30	4000	8000	240	270	710	640	≦ 3	0.03							
	4	15	30			270	300											
	5	15	30			290	330											
	6	15	30			310	360											
	7	12	24			320	380											
	8	12	24			340	410											
	9	10	20			350	430											
	10	10	20			360	450											
	II Single	15	15			30	4000					8000	410	540	710	640	≦ 3	0.03
		16	15			30							420	550				
40		15	30	570	640													
45		15	30	600	640													
50		15	30	620	640													
64		12	24	660	640													
70		12	24	690	640													
80		12	24	710	640													
90		10	20	710	640													
100		10	20	710	640													

TPLF-050 I Single

TPLF-050 II Single



※1 输入转速为定额转速时，使用寿命为 20000 小时的值

※2 启动、停止时容许的最大值

※3 运转过程中，定额输入转速的容许最大值

※4 在非连续运转条件下容许的最高输入转速

※5 输入转速为定额转速时，使用寿命为 20000 小时的值

(作用于轴中央，轴向负荷为 0 时)

※6 输入转速为定额转速时，使用寿命为 20000 小时的值

(作用于轴芯，径向负荷为 0 时)

※7 径向负荷的容许最大值

※8 轴向负荷的容许最大值

※1 With nominal input speed, service life is 20000 hours.

※2 The maximum torque when starting and stopping.

※3 The maximum average input speed.

※4 The maximum momentary input speed.

※5 With this load and nominal input speed, service life will be 20000 hours (Applied to the output shaft center, at axial load 0)

※6 With this load and nominal input speed, service life will be 20000 hours (Applied to the output side bearing, at axial load 0)

※7 The maximum radial load the reducer can accept.

※8 The maximum axial load the reducer can accept.

备注：部分尺寸可根据客户需求去定制，如需要，请联系我们！
Note: Some sizes can be customized according to customer needs. If necessary, please contact us!

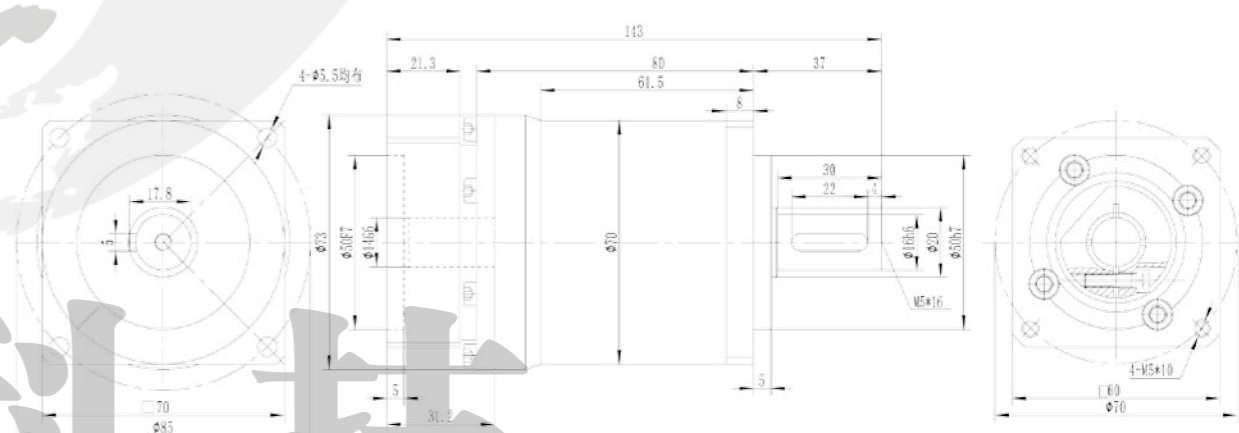
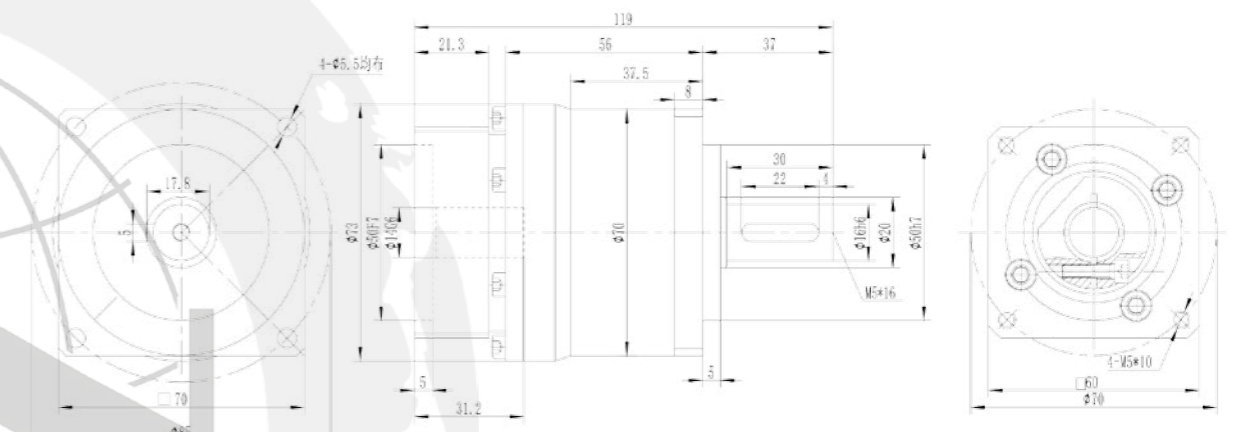
减速机性能资料——TPLF-070

Performance Data of Reducer-TPLF-070

级数	减速比	额定输出扭矩	输出最大扭矩	额定输入转速	输入最大转速	容许径向负荷	容许轴向负荷	最大径向负荷	最大轴向负荷	背隙	惯性力矩 14								
		1	2	3	4	5	6	7	8										
I Single	3	38	76	3000	6000	570	460	1200	1100	≤ 3	0.22								
	4	38	76								0.17								
	5	38	76								0.16								
	6	38	76								0.15								
	7	32	64								0.14								
	8	32	64								0.14								
	9	28	56								0.14								
	10	28	56								0.14								
	II Single	15	38								76	3000	6000	570	460	1200	1100	≤ 3	0.14
		16	38								76								0.14
20		38	76	0.13															
25		38	76	0.13															
28		38	76	0.14															
30		38	76	0.13															
35		38	76	0.13															
40		38	76	0.13															
45		38	76	0.13															
50		38	76	0.13															
64		32	64	0.13															
70		32	64	0.13															
80		32	64	0.13															
90	28	52	0.13																
100	28	52	0.13																

TPLF-070 I Single

TPLF-070 II Single



※1 输入转速为定额转速时，使用寿命为 20000 小时的值

※2 启动、停止时容许的最大值

※3 运转过程中，定额输入转速的容许最大值

※4 在非连续运转条件下容许的最高输入转速

※5 输入转速为定额转速时，使用寿命为 20000 小时的值

(作用于轴中央，轴向负荷为 0 时)

※6 输入转速为定额转速时，使用寿命为 20000 小时的值

(作用于轴芯，径向负荷为 0 时)

※7 径向负荷的容许最大值

※8 轴向负荷的容许最大值

※1 With nominal input speed, service life is 20000 hours.

※2 The maximum torque when starting and stopping.

※3 The maximum average inout speed.

※4 The maximum momentary inpu speed.

※5 With this lond and niminal iput speed, service life will be 20000 hours (Applied to the output shaft center, at axial load o)

※6 With this lond and niminal iput speed, service life will be 20000 hours (Applied to the output side bearing, at axial load o)

※7 The maximum radial load the reducer can accept.

※8 The maximum axial load the reducer can accept.

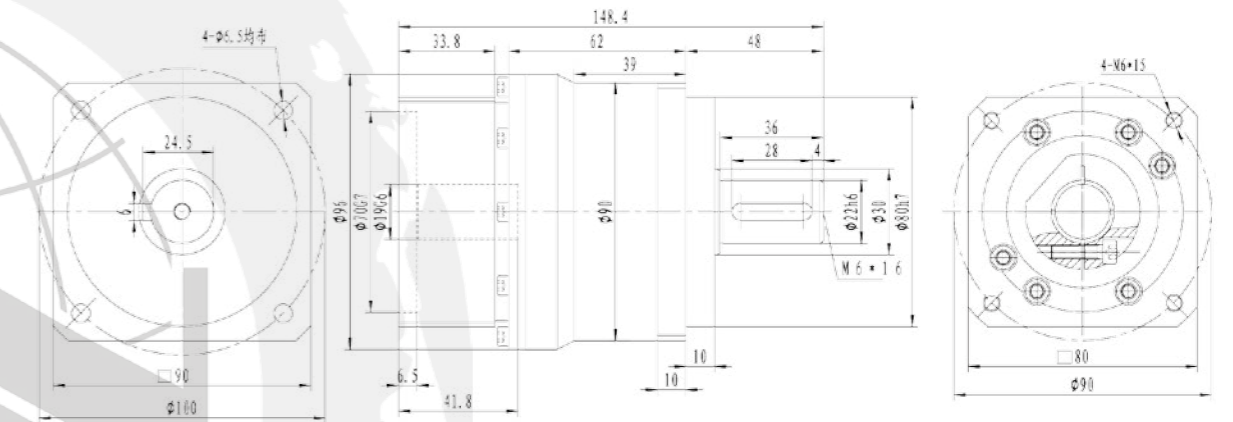
备注：部分尺寸可根据客户需求去定制，如需要，请联系我们！
Note: Some sizes can be customized according to customer needs. If necessary, please contact us!

减速机性能资料——TPLF-090

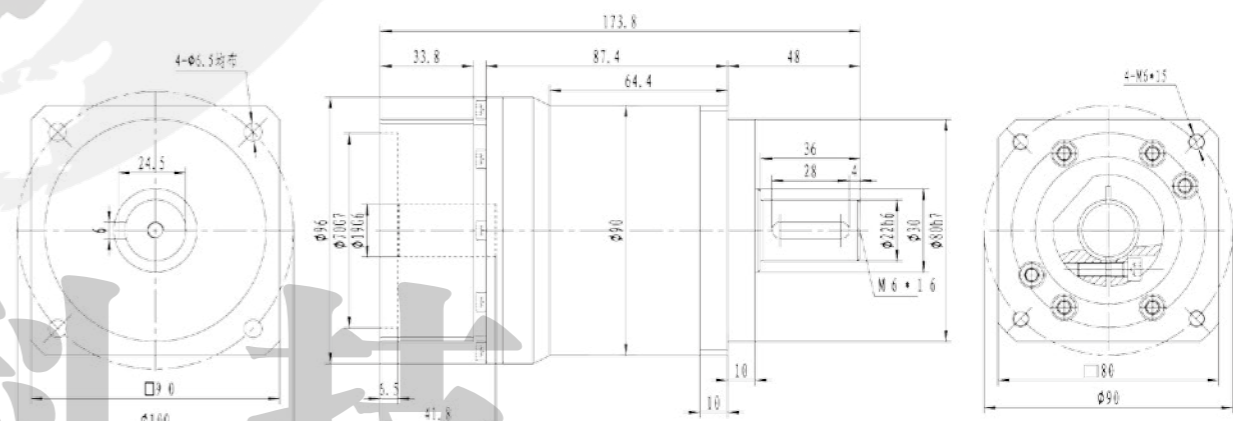
Performance Data of Reducer-TPLF-090

级数	减速比	额定输出扭矩	输出最大扭矩	额定输入转速	输入最大转速	容许径向负荷	容许轴向负荷	最大径向负荷	最大轴向负荷	背隙	惯性力矩 19
		1	2	3	4	5	6	7	8		
Stage	Ratio	Nominal output torque	Maximum output torque	Nominal input speed	Maximum input speed	Permitted radial load	Permitted axial load	Maximum radial load	Maximum axial load	Backlash	Moment of inertia 19
		(Nm)	(Nm)	(rpm)	(rpm)	(N)	(N)	(N)	(N)	(arcmin)	(kgcm ²)
I Single	3	85	170	3000	6000	960	930	2400	2200	≤ 3	1.20
	4	85	170			960	930				0.95
	5	85	170			960	930				0.86
	6	85	170			960	930				0.82
	7	78	156			960	930				0.79
	8	78	156			960	930				0.77
	9	65	130			960	930				0.76
	10	65	130			960	930				0.75
II Single	15	85	170	3000	6000	960	930	2400	2200	≤ 3	0.72
	16	85	170			960	930				0.74
	20	85	170			960	930				0.72
	25	85	170			960	930				0.71
	28	85	170			960	930				0.73
	30	85	170			960	930				0.70
	35	85	170			960	930				0.71
	40	85	170			1800	1500				0.70
	45	85	170			1800	1500				0.71
	50	85	170			1800	1500				0.69
	64	78	156			2200	1800				0.69
	70	78	156			2200	1800				0.69
80	78	156	2200	1800	0.69						
90	65	130	2200	1800	0.69						
100	65	130	2200	1800	0.69						

TPLF-090 I Single



TPLF-090 II Single



※1 输入转速为定额转速时，使用寿命为 20000 小时的值

※2 启动、停止时容许的最大值

※3 运转过程中，定额输入转速的容许最大值

※4 在非连续运转条件下容许的最高输入转速

※5 输入转速为定额转速时，使用寿命为 20000 小时的值

(作用于轴中央，轴向负荷为 0 时)

※6 输入转速为定额转速时，使用寿命为 20000 小时的值

(作用于轴芯，径向负荷为 0 时)

※7 径向负荷的容许最大值

※8 轴向负荷的容许最大值

※1 With nominal input speed, service life is 20000 hours.

※2 The maximum torque when starting and stopping.

※3 The maximum average input speed.

※4 The maximum momentary input speed.

※5 With this load and nominal input speed, service life will be 20000 hours (Applied to the output shaft center, at axial load 0)

※6 With this load and nominal input speed, service life will be 20000 hours (Applied to the output side bearing, at axial load 0)

※7 The maximum radial load the reducer can accept.

※8 The maximum axial load the reducer can accept.

胜牌科技

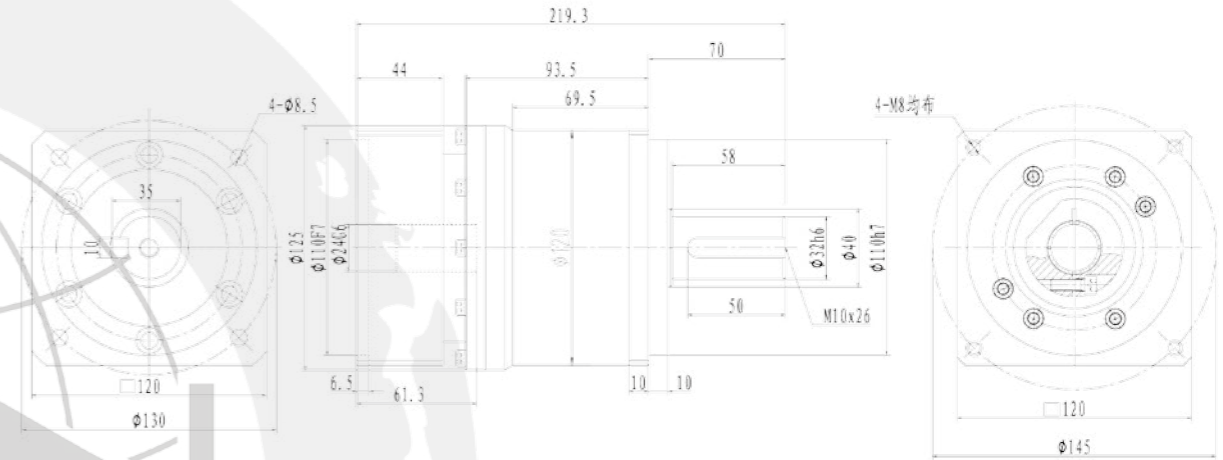
备注：部分尺寸可根据客户需求去定制，如需要，请联系我们！
Note: Some sizes can be customized according to customer needs. If necessary, please contact us!

减速机性能资料——TPLF-120

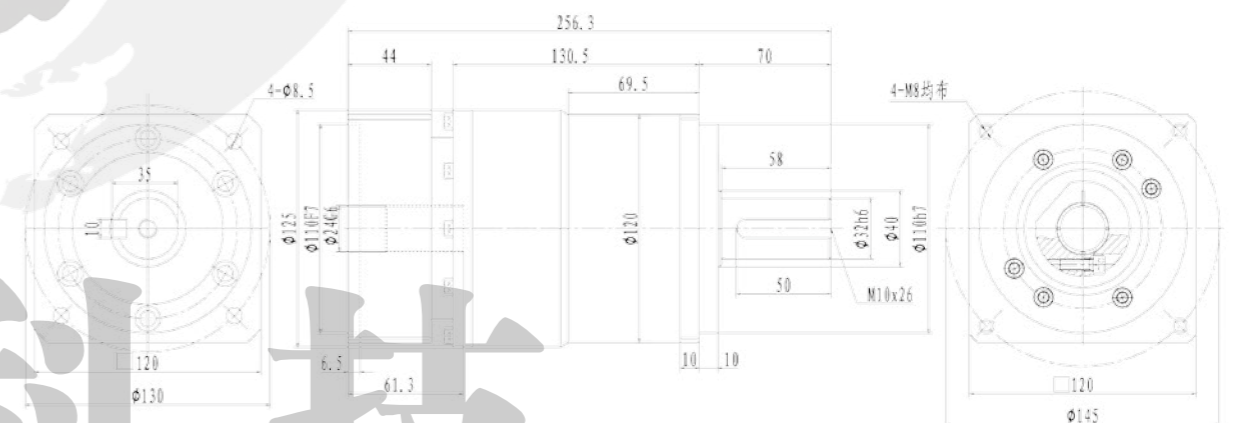
Performance Data of Reducer-TPLF-120

级数	减速比	额定输出扭矩	输出最大扭矩	额定输入转速	输入最大转速	容许径向负荷	容许轴向负荷	最大径向负荷	最大轴向负荷	背隙	惯性力矩 28
		1	2	3	4	5	6	7	8		
Stage	Ratio	Nominal output torque (Nm)	Maximum output torque (Nm)	Nominal input speed (rpm)	Maximum input speed (rpm)	Permitted radial load (N)	Permitted axial load (N)	Maximum radial load (N)	Maximum axial load (N)	Backlash (arcmin)	Moment of inertia 28 (kgcm ²)
I Single	3	230	460	3000	6000	4200	5600	8300	7800	≤ 3	5.3
	4	230	460			4.1					
	5	230	460			3.6					
	6	230	460			3.3					
	7	189	370			3.2					
	8	189	370			3.1					
	9	160	320			3.0					
	10	160	320			3.0					
II Single	15	230	460	3000	6000	4200	5600	8300	7800	≤ 3	2.8
	16	230	460			2.9					
	20	230	460			2.8					
	25	230	460			2.8					
	28	230	460			2.8					
	30	230	460			2.7					
	35	230	460			2.7					
	40	230	460			2.7					
	45	230	460			2.7					
	50	230	460			2.7					
	64	189	370			2.7					
	70	189	370			2.7					
	80	189	370			2.7					
	90	160	320			2.7					
100	160	320	2.7								

TPLF-120 I Single



TPLF-120 II Single



※1 输入转速为定额转速时，使用寿命为 20000 小时的值

※2 启动、停止时容许的最大值

※3 运转过程中，定额输入转速的容许最大值

※4 在非连续运转条件下容许的最高输入转速

※5 输入转速为定额转速时，使用寿命为 20000 小时的值

(作用于轴中央，轴向负荷为 0 时)

※6 输入转速为定额转速时，使用寿命为 20000 小时的值

(作用于轴芯，径向负荷为 0 时)

※7 径向负荷的容许最大值

※8 轴向负荷的容许最大值

※1 With nominal input speed, service life is 20000 hours.

※2 The maximum torque when starting and stopping.

※3 The maximum average input speed.

※4 The maximum momentary input speed.

※5 With this load and nominal input speed, service life will be 20000 hours (Applied to the output shaft center, at axial load 0)

※6 With this load and nominal input speed, service life will be 20000 hours (Applied to the output side bearing, at axial load 0)

※7 The maximum radial load the reducer can accept.

※8 The maximum axial load the reducer can accept.

胜牌科技

备注：部分尺寸可根据客户需求去定制，如需要，请联系我们！
Note: Some sizes can be customized according to customer needs. If necessary, please contact us!

减速机性能资料——TPLF-160

Performance Data of Reducer-TPLF-160

级数	减速比	额定输出扭矩	输出最大扭矩	额定输入转速	输入最大转速	容许径向负荷	容许轴向负荷	最大径向负荷	最大轴向负荷	背隙	惯性力矩 38
		1	2	3	4	5	6	7	8		
Stage	Ratio	Nominal output torque	Maximum output torque	Nominal input speed	Maximum input speed	Permitted radial load	Permitted axial load	Maximum radial load	Maximum axial load	Backlash	Moment of inertia 38
		(Nm)	(Nm)	(rpm)	(rpm)	(N)	(N)	(N)	(N)	(arcmin)	(kgcm ²)
I Single	3	610	1220	2000	4000	7900	8300	12000	10000	≤ 3	20
	4	610	1220			7900	8300				15
	5	610	1220			7900	8300				14
	6	610	1220			7900	8300				13
	7	550	1100			7900	8300				12
	8	550	1100			7900	8300				12
	9	410	820			7900	8300				11
	10	410	820			7900	8300				11
II Single	15	610	1220	2000	4000	7900	8300	12000	10000	≤ 3	11
	16	610	1220			7900	8300				11
	20	610	1220			7900	8300				11
	25	610	1220			7900	8300				11
	28	610	1220			7900	8300				11
	30	610	1220			7900	8300				10
	35	610	1220			7900	8300				11
	40	610	1220			8300	9700				10
	45	610	1220			8300	9700				11
	50	610	1220			8300	9700				10
	64	550	1100			9700	9700				10
	70	550	1100			9700	9700				10
	80	550	1100			9700	9700				10
	90	410	820			9700	9700				10
100	410	820	9700	9700	10						

※1 输入转速为定额转速时, 使用寿命为 20000 小时的值

※2 启动、停止时容许的最大值

※3 运转过程中, 定额输入转速的容许最大值

※4 在非连续运转条件下容许的最高输入转速

※5 输入转速为定额转速时, 使用寿命为 20000 小时的值

(作用于轴中央, 轴向负荷为 0 时)

※6 输入转速为定额转速时, 使用寿命为 20000 小时的值

(作用于轴芯, 径向负荷为 0 时)

※7 径向负荷的容许最大值

※8 轴向负荷的容许最大值

※1 With nominal input speed, service life is 20000 hours.

※2 The maximum torque when starting and stopping.

※3 The maximum average input speed.

※4 The maximum momentary input speed.

※5 With this load and nominal input speed, service life will be 20000 hours (Applied to the output shaft center, at axial load 0)

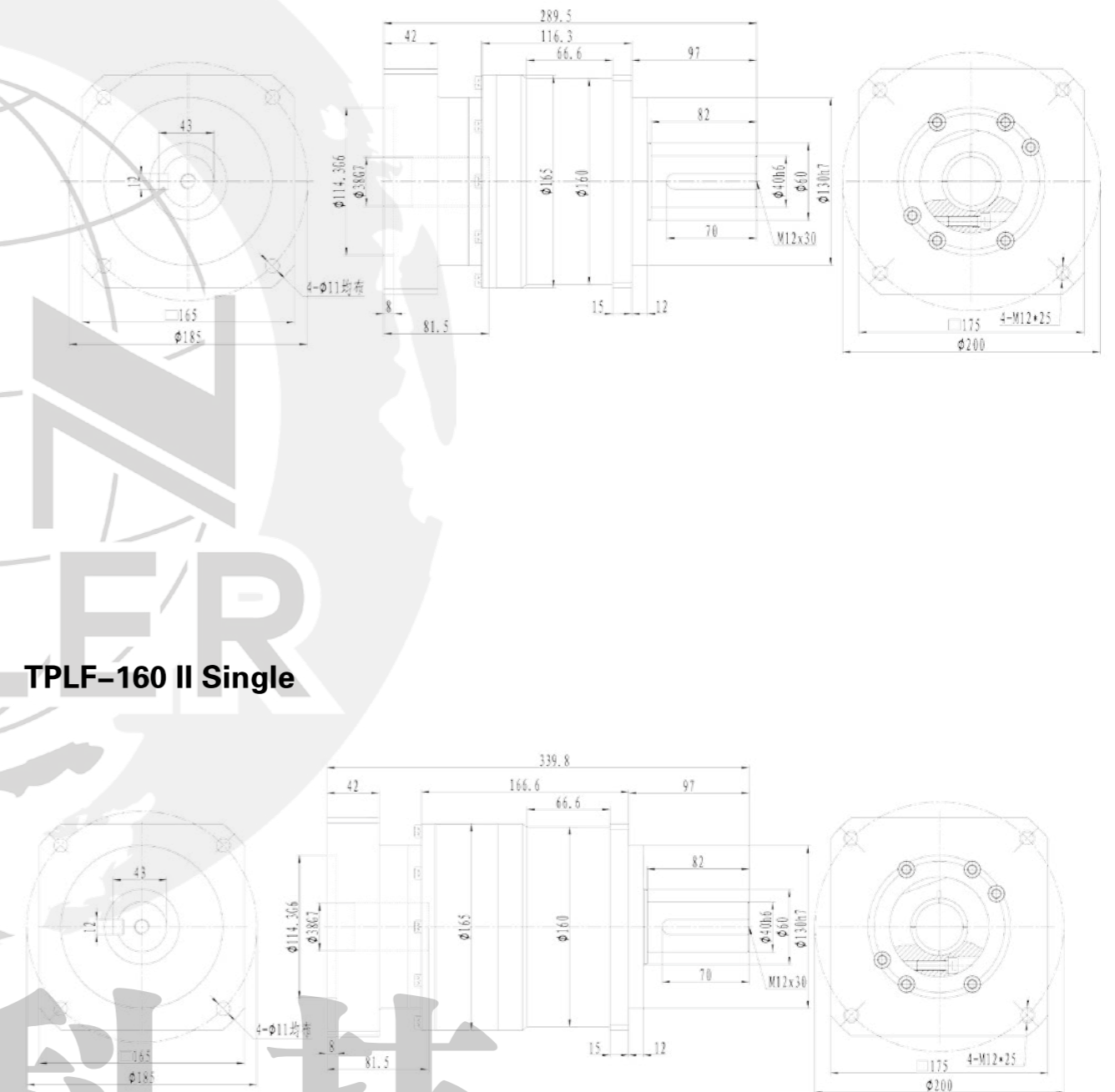
※6 With this load and nominal input speed, service life will be 20000 hours (Applied to the output side bearing, at axial load 0)

※7 The maximum radial load the reducer can accept.

※8 The maximum axial load the reducer can accept.

TPLF-160 I Single

TPLF-160 II Single



胜牌科技

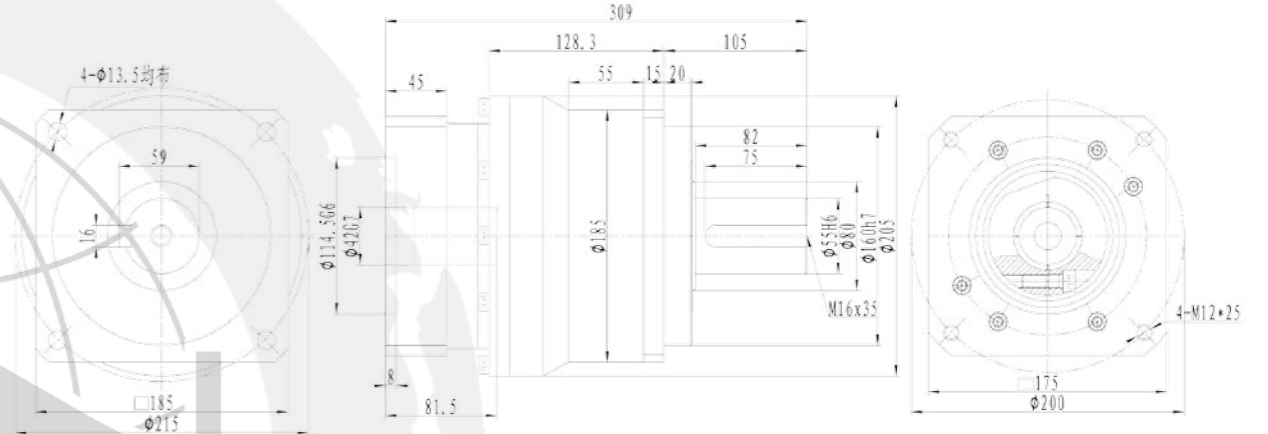
备注: 部分尺寸可根据客户需求去定制, 如需要, 请联系我们!
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减速机性能资料——TPLF-205

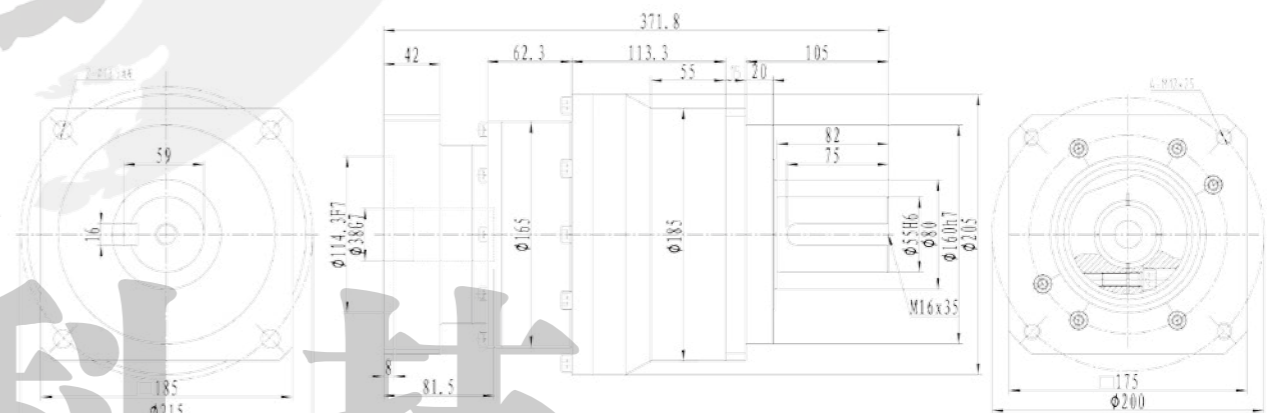
Performance Data of Reducer-TPLF-205

级数	减速比	额定输出扭矩	输出最大扭矩	额定输入转速	输入最大转速	容许径向负荷	容许轴向负荷	最大径向负荷	最大轴向负荷	背隙	惯性力矩 48
		1	2	3	4	5	6	7	8		
Stage	Ratio	Nominal output torque	Maximum output torque	Nominal input speed	Maximum input speed	Permitted radial load	Permitted axial load	Maximum radial load	Maximum axial load	Backlash	Moment of inertia
		(Nm)	(Nm)	(rpm)	(rpm)	(N)	(N)	(N)	(N)	(arcmin)	(kgcm ²)
I Single	3	1100	2200	1500	3000	17000	18000	21000	20000	≤ 3	66
	4	1100	2200			17000	18000				50
	5	1100	2200			17000	18000				44
	6	1100	2200			17000	18000				41
	7	900	1800			17000	18000				38
	8	900	1800			17000	18000				37
	9	750	1500			17000	18000				36
	10	750	1500			17000	18000				36
II Single	15	1100	2200	1500	3000	17000	18000	21000	20000	≤ 3	34
	16	1100	2200			17000	18000				35
	20	1100	2200			17000	18000				34
	25	1100	2200			17000	18000				34
	28	1100	2200			17000	18000				35
	30	1100	2200			17000	18000				33
	35	1100	2200			19000	18000				34
	40	1100	2200			19000	19000				33
	45	1100	2200			19000	19000				34
	50	1100	2200			19000	19000				33
	64	900	1800			19000	19000				33
	70	900	1800			19000	19000				33
80	900	1800	19000	19000	33						
90	750	1500	19000	19000	33						
100	750	1500	19000	19000	33						

TPLF-205 I Single



TPLF-205 II Single



※1 输入转速为定额转速时，使用寿命为 20000 小时的值

※2 启动、停止时容许的最大值

※3 运转过程中，定额输入转速的容许最大值

※4 在非连续运转条件下容许的最高输入转速

※5 输入转速为定额转速时，使用寿命为 20000 小时的值

(作用于轴中央，轴向负荷为 0 时)

※6 输入转速为定额转速时，使用寿命为 20000 小时的值

(作用于轴芯，径向负荷为 0 时)

※7 径向负荷的容许最大值

※8 轴向负荷的容许最大值

※1 With nominal input speed, service life is 20000 hours.

※2 The maximum torque when starting and stopping.

※3 The maximum average input speed.

※4 The maximum momentary input speed.

※5 With this load and nominal input speed, service life will be 20000 hours (Applied to the output shaft center, at axial load 0)

※6 With this load and nominal input speed, service life will be 20000 hours (Applied to the output side bearing, at axial load 0)

※7 The maximum radial load the reducer can accept.

※8 The maximum axial load the reducer can accept.

胜牌科技

备注：部分尺寸可根据客户需求去定制，如需要，请联系我们！
Note: Some sizes can be customized according to customer needs. If necessary, please contact us!

TPH SERIES

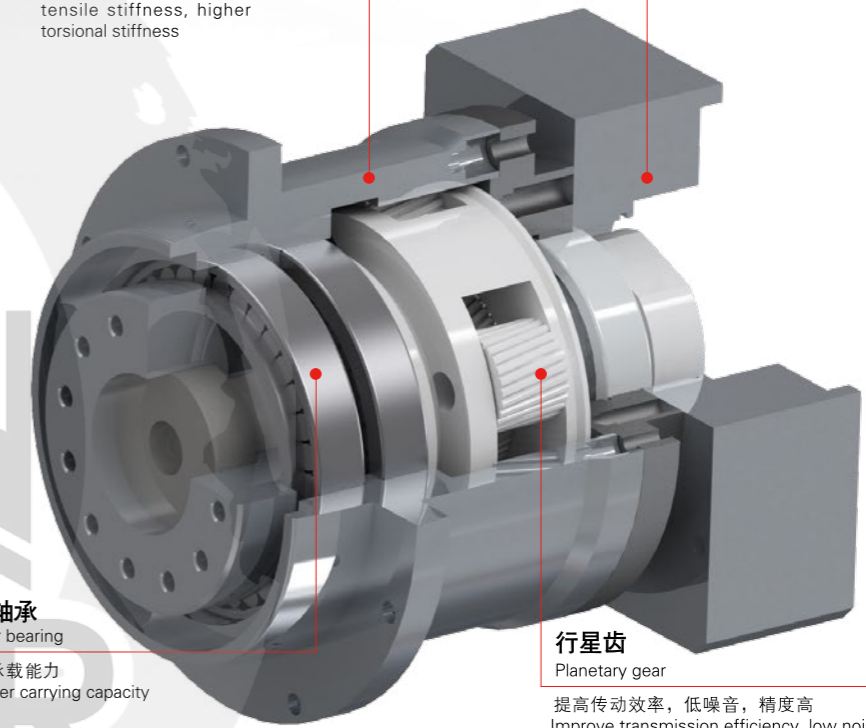


一体化外壳
Integrative Shell

更高精度，更强抗拉刚度，更高抗扭刚度
Higher accuracy, stronger tensile stiffness, higher torsional stiffness

特种材料输入连接法兰
Special Material Input Connection Flange

减轻自重
Lower gearbox weight



圆锥滚子轴承
Tapered roller bearing

实现更大的承载能力
Achieve greater carrying capacity

行星齿
Planetary gear

提高传动效率，低噪音，精度高
Improve transmission efficiency, low noise, high accuracy

高精度

背隙 3arcmin 以下，定位更精准

减速比

速比 3-100，选型更方便

高效率

单级 97% 以上 / 双级 93% 以上

静音

齿轮采用斜齿设计并采用修形工艺加工而成

免维修

在产品寿命期内无需要更换润滑油

High-precision

Backlash less than 3 arcmin, more accurate positioning

Reduction ratio

Speed ratio 3-100, more convenient selection

High- efficiency

Over 97% of single stage/over 93% of double stage

Mute

Gears are designed with helical teeth and processed by modification process

Maintenance free

No need to replace lubricating oil during product life

TPH

系列名称
Series name

TPH 斜齿系列
TPH Helical series

070

系列尺寸
Series size

050 070 090
120 160 205

7

减速比
Ratop

I Single 3/4/5/6/7/8/9/10
II Single 16/20/25/28/30
35/40/45/50/64
70/80/90/100

F

输出方式
Output stke

F: 法兰输出

3

背隙
Backlash

3-3arc-min
5-5arc-min

胜牌科技

减速机性能资料——TPH-050

Performance Data of Reducer-TPH-050

级数	减速比	额定输出扭矩	输出最大扭矩	额定输入转速	输入最大转速	容许径向负荷	容许轴向负荷	最大径向负荷	最大轴向负荷	背隙	惯性力矩 ₈
		1	2	3	4	5	6	7	8		
Stage	Ratio	Nominal output torque	Maximum output torque	Nominal input speed	Maximum input speed	Permitted radial load	Permitted axial load	Maximum radial load	Maximum axial load	Backlash	Moment of inertia ₈
		(Nm)	(Nm)	(rpm)	(rpm)	(N)	(N)	(N)	(N)	(arcmin)	(kgcm ²)
I Single	3	15	30	4000	8000	240	270	1000	800	≤ 3	0.03
	4	15	30			270	300				
	5	15	30			290	330				
	6	15	30			310	360				
	7	12	24			320	3850				
	8	12	24			340	410				
	9	10	20			350	430				
	10	10	20			360	450				
II Single	15	15	30	4000	8000	410	540	1000	800	≤ 3	0.03
	16	15	30			420	550				
	40	15	30			570	640				
	45	15	30			600	640				
	50	15	30			620	640				
	64	12	24			660	640				
	70	12	24			690	640				
	80	12	24			710	640				
	90	10	20			710	640				
	100	10	20			710	640				

※1 输入转速为定额转速时，使用寿命为 20000 小时的值

※2 启动、停止时容许的最大值

※3 运转过程中，定额输入转速的容许最大值

※4 在非连续运转条件下容许的最高输入转速

※5 输入转速为定额转速时，使用寿命为 20000 小时的值

(作用于轴中央，轴向负荷为 0 时)

※6 输入转速为定额转速时，使用寿命为 20000 小时的值

(作用于轴芯，径向负荷为 0 时)

※7 径向负荷的容许最大值

※8 轴向负荷的容许最大值

※1 With nominal input speed, service life is 20000 hours.

※2 The maximum torque when starting and stopping.

※3 The maximum average input speed.

※4 The maximum momentary input speed.

※5 With this load and nominal input speed, service life will be 20000 hours (Applied to the output shaft center, at axial load 0)

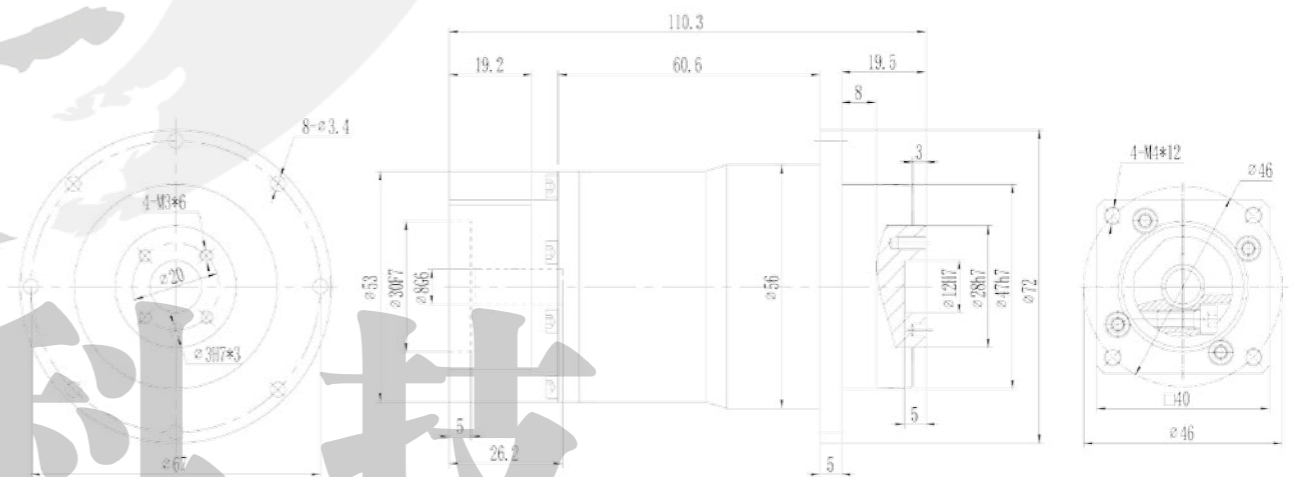
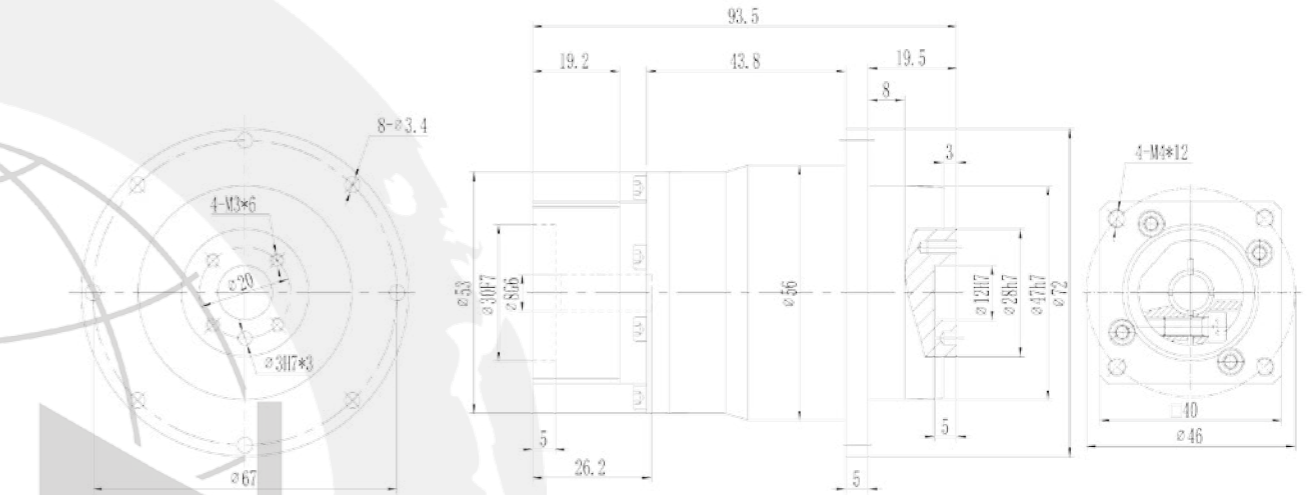
※6 With this load and nominal input speed, service life will be 20000 hours (Applied to the output side bearing, at axial load 0)

※7 The maximum radial load the reducer can accept.

※8 The maximum axial load the reducer can accept.

TPH-050 I Single

TPH-050 II Single



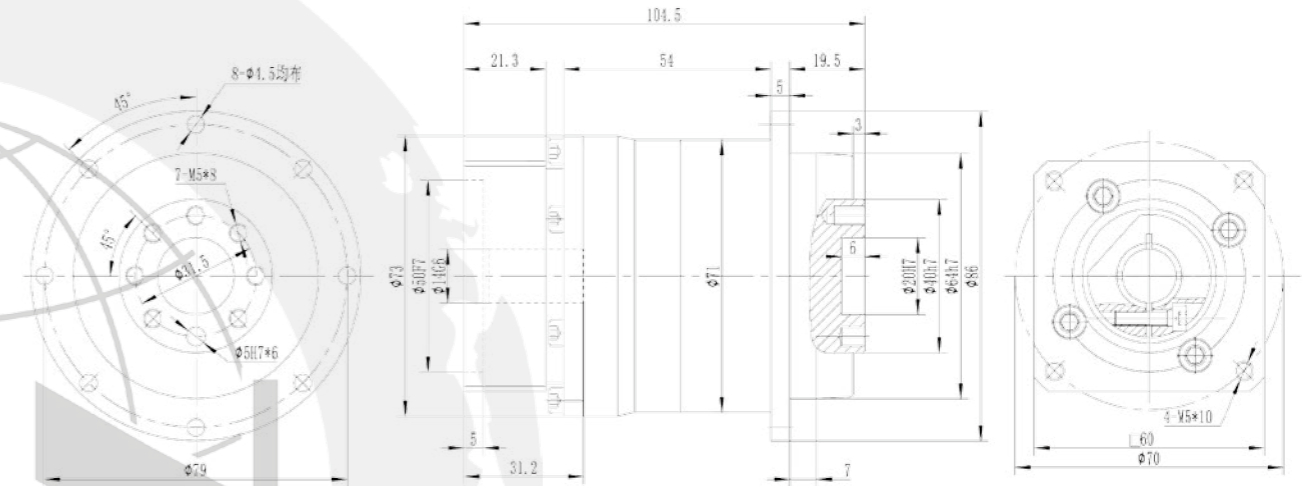
备注：部分尺寸可根据客户需求去定制，如需要，请联系我们！
Note: Some sizes can be customized according to customer needs. If necessary, please contact us!

减速机性能资料——TPH-070

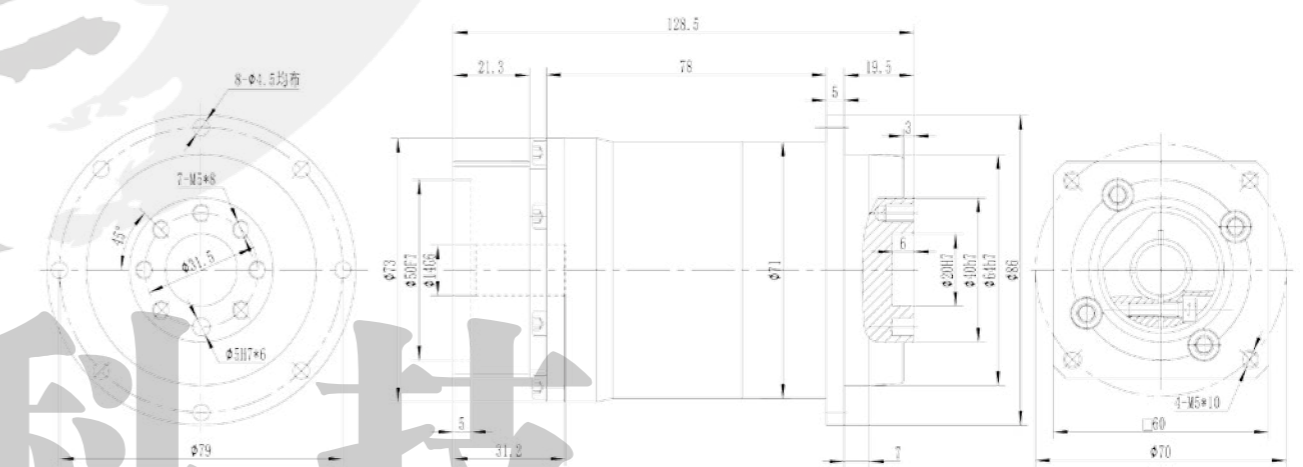
Performance Data of Reducer-TPH-070

级数	减速比	额定输出扭矩	输出最大扭矩	额定输入转速	输入最大转速	容许径向负荷	容许轴向负荷	最大径向负荷	最大轴向负荷	背隙	惯性力矩 14
		1	2	3	4	5	6	7	8		
Stage	Ratio	Nominal output torque (Nm)	Maximum output torque (Nm)	Nominal input speed (rpm)	Maximum input speed (rpm)	Permitted radial load (N)	Permitted axial load (N)	Maximum radial load (N)	Maximum axial load (N)	Backlash (arcmin)	Moment of inertia 14 (kgcm ²)
I Single	3	38	76	3000	6000	1200	1000	2300	1600	≤ 3	0.22
	4	38	76			1200	1000				0.17
	5	38	76			1200	1000				0.16
	6	38	76			1200	1000				0.15
	7	32	64			1200	1000				0.14
	8	32	64			1200	1000				0.14
	9	28	56			1200	1000				0.14
	10	28	56			1200	1000				0.14
II Single	15	38	76	3000	6000	1200	1000	2300	1600	≤ 3	0.14
	16	38	76			1200	1000				0.14
	20	38	76			1200	1000				0.13
	25	38	76			1200	1000				0.13
	28	38	76			1200	1000				0.14
	30	38	76			1200	1000				0.13
	35	38	76			1200	1000				0.13
	40	38	76			1200	1000				0.13
	45	38	76			1200	1000				0.13
	50	38	76			1200	1000				0.13
	64	32	64			1200	1000				0.13
	70	32	64			1200	1000				0.13
80	32	64	1200	1000	0.13						
90	28	52	1200	1000	0.13						
100	28	52	1200	1000	0.13						

TPH-070 I Single



TPH-070 II Single



※1 输入转速为定额转速时，使用寿命为 20000 小时的值

※2 启动、停止时容许的最大值

※3 运转过程中，定额输入转速的容许最大值

※4 在非连续运转条件下容许的最高输入转速

※5 输入转速为定额转速时，使用寿命为 20000 小时的值

(作用于轴中央，轴向负荷为 0 时)

※6 输入转速为定额转速时，使用寿命为 20000 小时的值

(作用于轴芯，径向负荷为 0 时)

※7 径向负荷的容许最大值

※8 轴向负荷的容许最大值

※1 With nominal input speed, service life is 20000 hours.

※2 The maximum torque when starting and stopping.

※3 The maximum average input speed.

※4 The maximum momentary input speed.

※5 With this load and nominal input speed, service life will be 20000 hours (Applied to the output shaft center, at axial load 0)

※6 With this load and nominal input speed, service life will be 20000 hours (Applied to the output side bearing, at axial load 0)

※7 The maximum radial load the reducer can accept.

※8 The maximum axial load the reducer can accept.

3 弧分 · 超精密齿轮箱专业生产商

胜牌科技

备注：部分尺寸可根据客户需求去定制，如需要，请联系我们！
Note: Some sizes can be customized according to customer needs. If necessary, please contact us!

减速机性能资料——TPH-090

Performance Data of Reducer-TPH-090

级数	减速比	额定输出 扭矩	输出最大 扭矩	额定输入 转速	输入最大 转速	容许径向 负荷	容许轴向 负荷	最大径向 负荷	最大轴向 负荷	背隙	惯性力矩 19						
		1	2	3	4	5	6	7	8								
Stage	Ratio	Nominal output torque (Nm)	Maximum output torque (Nm)	Nominal input speed (rpm)	Maximum input speed (rpm)	Permitted radial load (N)	Permitted axial load (N)	Maximum radial load (N)	Maximum axial load (N)	Backlash (arcmin)	Moment of inertia (kgcm ²)						
I Single	3	85	170	3000	6000	2600	1800	4300	3500	≤ 3	1.20						
	4	85	170			2600	1800				0.95						
	5	85	170			2600	1800				0.86						
	6	85	170			2600	1800				0.82						
	7	78	156			2600	1800				0.79						
	8	78	156			2600	1800				0.77						
	9	65	130			2600	1800				0.76						
	10	65	130			2600	1800				0.75						
	II Single	15	85			170	3000				6000	2600	1800	4300	3500	≤ 3	0.72
		16	85			170						2600	1800				0.74
20		85	170	2600	1800	0.72											
25		85	170	2600	1800	0.74											
28		85	170	2600	1800	0.72											
30		85	170	2600	1800	0.71											
35		85	170	2600	1800	0.73											
40		85	170	2600	1800	0.70											
45		85	170	2600	1800	0.71											
50		85 78	170	2600	1800	0.70											
64		78	156	2600	1800	0.71											
70		78	156	2600	1800	0.69											
80		78	156	2600	1800	0.69											
90		65	130	2600	1800	0.69											
100	65	130	2600	1800	0.69												

※1 输入转速为定额转速时，使用寿命为 20000 小时的值

※2 启动、停止时容许的最大值

※3 运转过程中，定额输入转速的容许最大值

※4 在非连续运转条件下容许的最高输入转速

※5 输入转速为定额转速时，使用寿命为 20000 小时的值

※6 输入转速为定额转速时，使用寿命为 20000 小时的值

※7 径向负荷的容许最大值

※8 轴向负荷的容许最大值

※1 With nominal input speed, service life is 20000 hours.

※2 The maximum torque when starting and stopping.

※3 The maximum average input speed.

※4 The maximum momentary input speed.

※5 With this load and nominal input speed, service life will be 20000 hours (Applied to the output shaft center, at axial load 0)

※6 With this load and nominal input speed, service life will be 20000 hours (Applied to the output side bearing, at axial load 0)

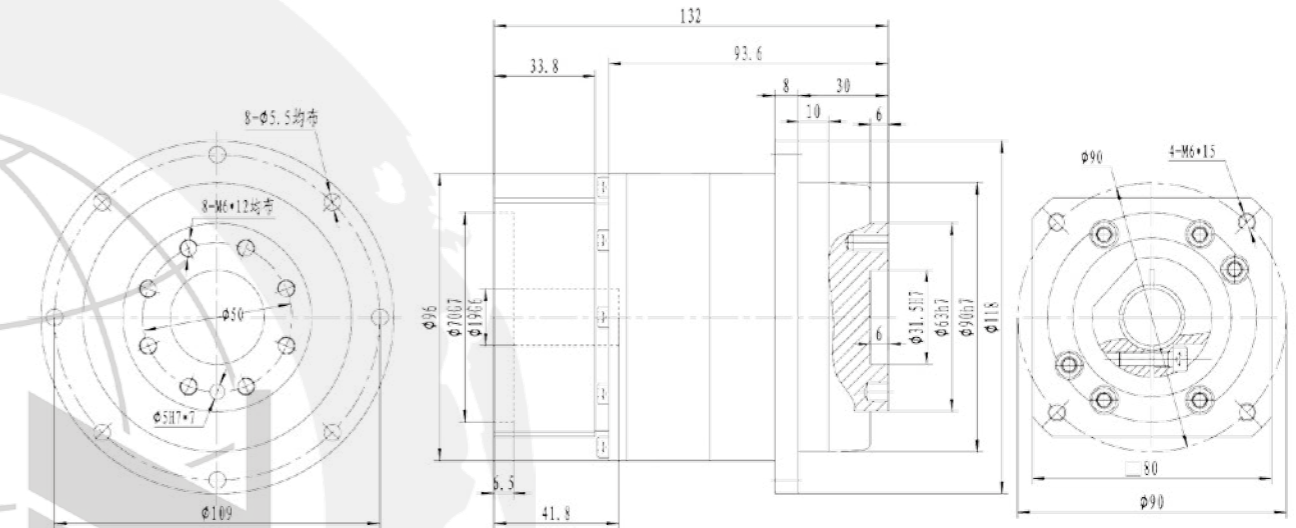
※7 The maximum radial load the reducer can accept.

※8 The maximum axial load the reducer can accept.

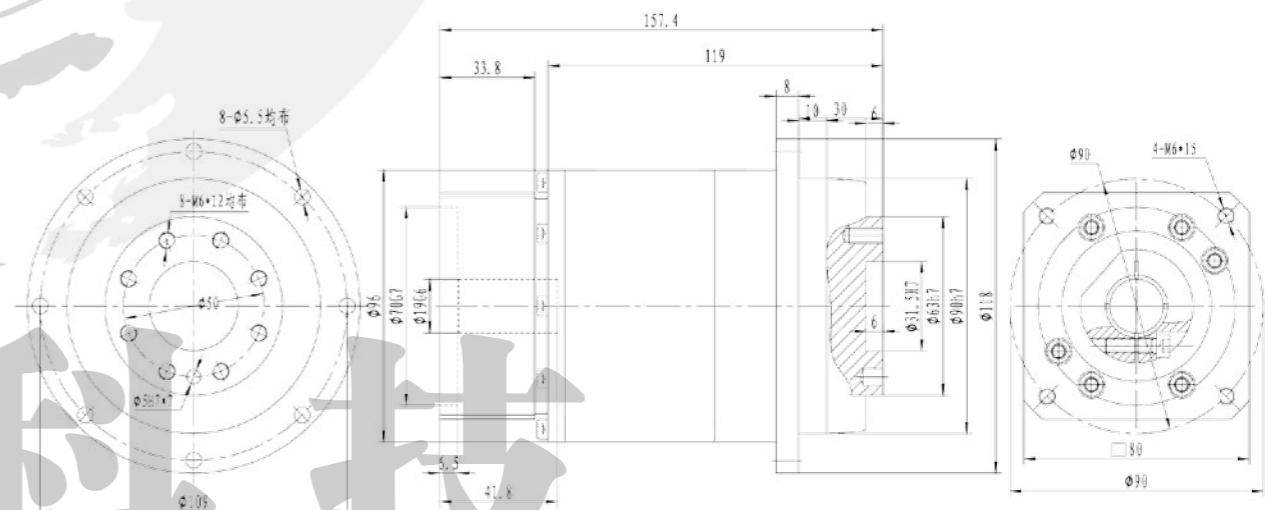
(作用于轴中央，轴向负荷为 0 时)

(作用于轴芯，径向负荷为 0 时)

TPH-090 I Single



TPH-090 II Single



备注：部分尺寸可根据客户需求去定制，如需要，请联系我们！
Note: Some sizes can be customized according to customer needs. If necessary, please contact us!

减速机性能资料——TPH-120

Performance Data of Reducer-TPH-120

级数	减速比	额定输出扭矩	输出最大扭矩	额定输入转速	输入最大转速	容许径向负荷	容许轴向负荷	最大径向负荷	最大轴向负荷	背隙	惯性力矩 28						
		1	2	3	4	5	6	7	8								
Stage	Ratio	Nominal output torque	Maximum output torque	Nominal input speed	Maximum input speed	Permitted radial load	Permitted axial load	Maximum radial load	Maximum axial load	Backlash	Moment of inertia 28						
		(Nm)	(Nm)	(rpm)	(rpm)	(N)	(N)	(N)	(N)	(arcmin)	(kgcm ²)						
I Single	3	230	460	3000	6000	5300	5600	9000	7800	≤ 3	5.3						
	4	230	460			5300	5600				4.1						
	5	230	460			5300	5600				3.6						
	6	230	460			5300	5600				3.3						
	7	189	370			5300	5600				3.2						
	8	189	370			5300	5600				3.1						
	9	160	320			5300	5600				3.0						
	10	160	320			5300	5600				3.0						
	II Single	15	230			460	3000				6000	5300	5600	9000	7800	≤ 3	2.8
		16	230			460						5300	5600				2.9
20		230	460	5300	5600	2.8											
25		230	460	5300	5600	2.8											
28		230	460	5300	5600	2.8											
30		230	460	5300	5600	2.7											
35		230	460	6600	6300	2.7											
40		230	460	6600	6300	2.7											
45		230	460	6600	6300	2.7											
50		230	460	6600	6300	2.7											
64		189	370	8000	7000	2.7											
70		189	370	8000	7000	2.7											
80		189	370	8000	7000	2.7											
90		160	320	8000	7000	2.7											
100		160	320	8000	7000	2.7											

※1 输入转速为定额转速时, 使用寿命为 20000 小时的值

※2 启动、停止时容许的最大值

※3 运转过程中, 定额输入转速的容许最大值

※4 在非连续运转条件下容许的最高输入转速

※5 输入转速为定额转速时, 使用寿命为 20000 小时的值

(作用于轴中央, 轴向负荷为 0 时)

※6 输入转速为定额转速时, 使用寿命为 20000 小时的值

(作用于轴芯, 径向负荷为 0 时)

※7 径向负荷的容许最大值

※8 轴向负荷的容许最大值

※1 With nominal input speed, service life is 20000 hours.

※2 The maximum torque when starting and stopping.

※3 The maximum average input speed.

※4 The maximum momentary input speed.

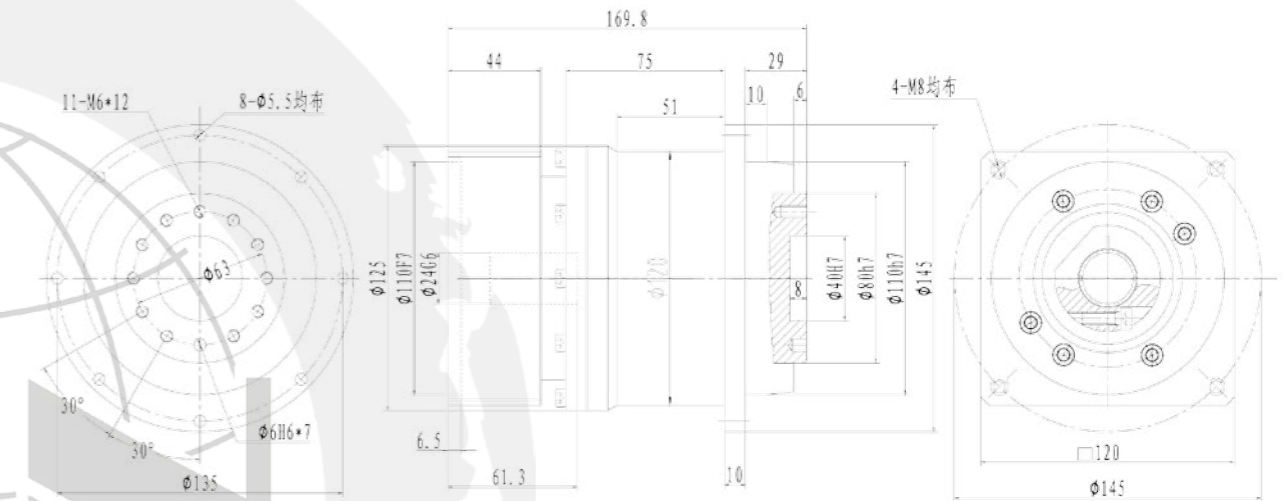
※5 With this load and nominal input speed, service life will be 20000 hours (Applied to the output shaft center, at axial load 0)

※6 With this load and nominal input speed, service life will be 20000 hours (Applied to the output side bearing, at axial load 0)

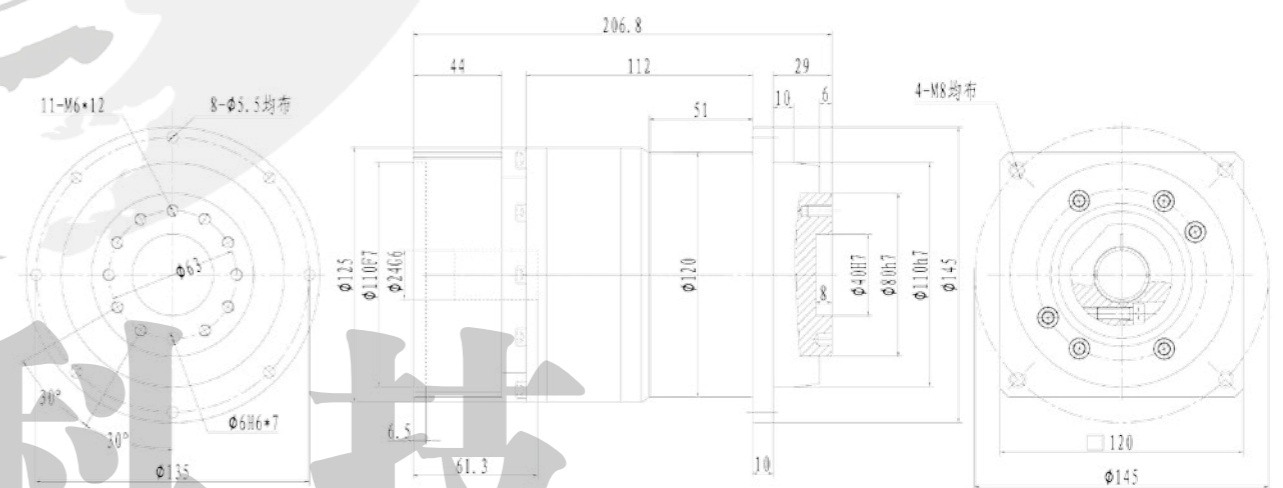
※7 The maximum radial load the reducer can accept.

※8 The maximum axial load the reducer can accept.

TPH-120 I Single



TPH-120 II Single



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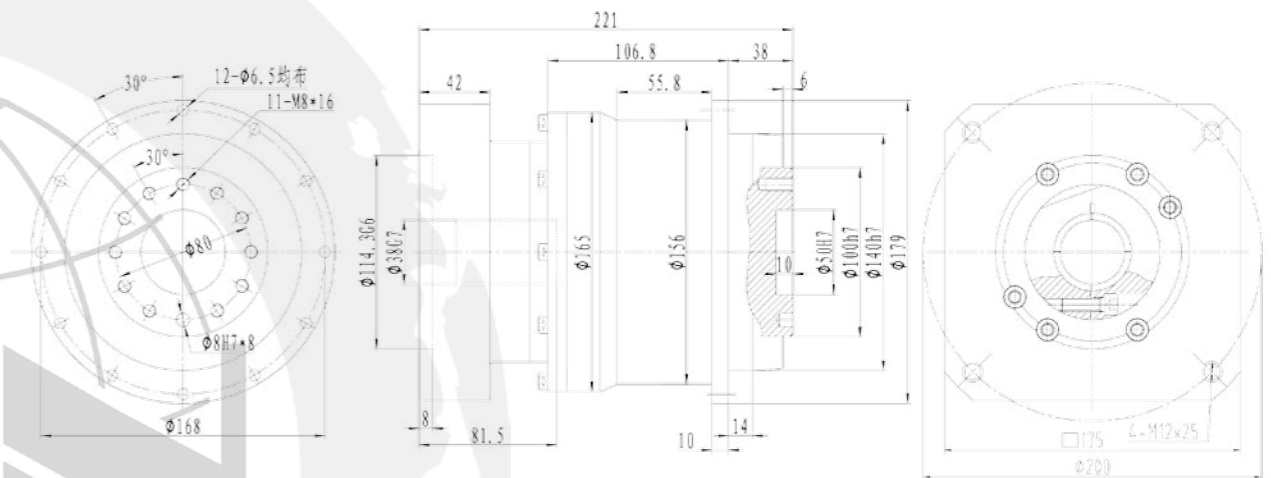
备注: 部分尺寸可根据客户需求去定制, 如需要, 请联系我们!
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减速机性能资料——TPH-160

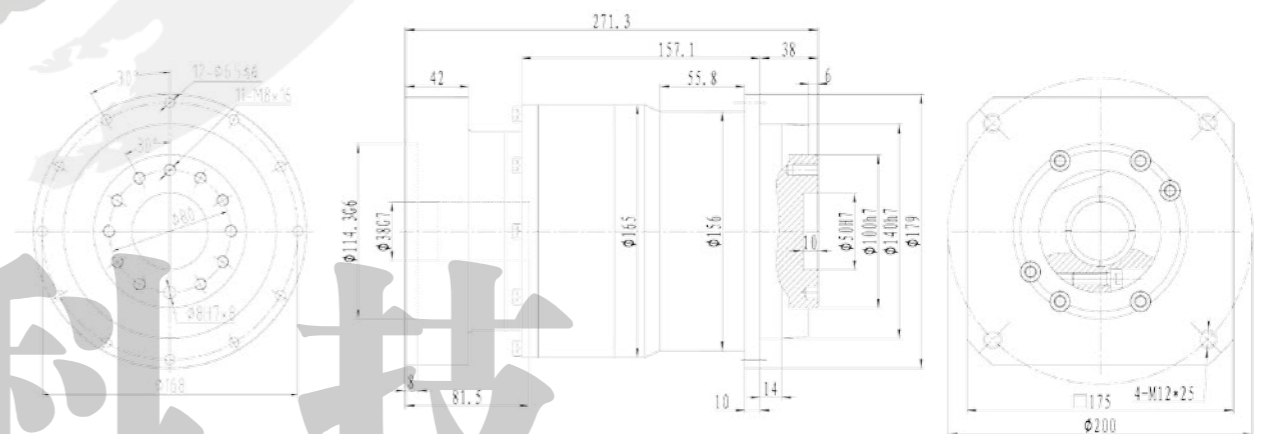
Performance Data of Reducer-TPH-160

级数	减速比	额定输出 扭矩	输出最大 扭矩	额定输入 转速	输入最大 转速	容许径向 负荷	容许轴向 负荷	最大径向 负荷	最大轴向 负荷	背隙	惯性力矩 38
		1	2	3	4	5	6	7	8		
Stage	Ratio	Nominal output torque	Maximum output torque	Nominal input speed	Maximum input speed	Permitted radial load	Permitted axial load	Maximum radial load	Maximum axial load	Backlash	Moment of inertia 38
		(Nm)	(Nm)	(rpm)	(rpm)	(N)	(N)	(N)	(N)	(arcmin)	(kgcm ²)
I Single	3	610	1220	2000	4000	7900	8300	23000	15000	≤ 3	20
	4	610	1220			7900	8300				15
	5	610	1220			7900	8300				14
	6	610	1220			7900	8300				13
	7	550	1100			7900	8300				12
	8	550	1100			7900	8300				12
	9	410	820			7900	8300				11
	10	410	820			7900	8300				11
II Single	15	610	1220	2000	4000	7900	8300	23000	15000	≤ 3	11
	16	610	1220			7900	8300				11
	20	610	1220			7900	8300				11
	25	610	1220			7900	8300				11
	28	610	1220			7900	8300				11
	30	610	1220			7900	8300				10
	35	610	1220			7900	8300				11
	40	610	1220			8300	9700				10
	45	610	1220			8300	9700				11
	50	610	1220			8300	9700				10
	64	550	1100			9700	9700				10
	70	550	1100			9700	9700				10
80	550	1100	9700	9700	10						
90	410	820	9700	9700	10						
100	410	820	9700	9700	10						

TPH-160 I Single



TPH-160 II Single



※1 输入转速为定额转速时，使用寿命为 20000 小时的值

※2 启动、停止时容许的最大值

※3 运转过程中，定额输入转速的容许最大值

※4 在非连续运转条件下容许的最高输入转速

※5 输入转速为定额转速时，使用寿命为 20000 小时的值

※6 输入转速为定额转速时，使用寿命为 20000 小时的值

※7 径向负荷的容许最大值

※8 轴向负荷的容许最大值

(作用于轴中央，轴向负荷为 0 时)

(作用于轴芯，径向负荷为 0 时)

※1 With nominal input speed, service life is 20000 hours.

※2 The maximum torque when starting and stopping.

※3 The maximum average input speed.

※4 The maximum momentary input speed.

※5 With this load and nominal input speed, service life will be 20000 hours (Applied to the output shaft center, at axial load 0)

※6 With this load and nominal input speed, service life will be 20000 hours (Applied to the output side bearing, at axial load 0)

※7 The maximum radial load the reducer can accept.

※8 The maximum axial load the reducer can accept.

3 弧分 · 超精密齿轮箱专业生产商

备注：部分尺寸可根据客户需求去定制，如需要，请联系我们！
Note: Some sizes can be customized according to customer needs. If necessary, please contact us!

减速机性能资料——TPH-205

Performance Data of Reducer-TPH-205

级数	减速比	额定输出 扭矩	输出最大 扭矩	额定输入 转速	输入最大 转速	容许径向 负荷	容许轴向 负荷	最大径向 负荷	最大轴向 负荷	背隙	惯性力矩 48
		1	2	3	4	5	6	7	8		
Stage	Ratio	Nominal output torque	Maximum output torque	Nominal input speed	Maximum input speed	Permitted radial load	Permitted axial load	Maximum radial load	Maximum axial load	Backlash	Moment of inertia 48
		(Nm)	(Nm)	(rpm)	(rpm)	(N)	(N)	(N)	(N)	(arcmin)	(kgcm ²)
I Single	3	1100	2200	1500	3000	23000	18000	40000	31000	≤ 3	66
	4	1100	2200			23000	18000				50
	5	1100	2200			23000	18000				44
	6	1100	2200			23000	18000				41
	7	900	1800			23000	18000				38
	8	900	1800			23000	18000				37
	9	750	1500			23000	18000				36
	10	750	1500			23000	18000				36
II Single	15	1100	2200	1500	3000	23000	18000	40000	31000	≤ 3	34
	16	1100	2200			23000	18000				35
	20	1100	2200			23000	18000				34
	25	1100	2200			23000	18000				34
	28	1100	2200			23000	18000				35
	30	1100	2200			23000	18000				33
	35	1100	2200			31000	18000				34
	40	1100	2200			31000	24000				33
	45	1100	2200			31000	24000				34
	50	1100	2200			31000	24000				33
	64	900	1800			37000	24000				33
	70	900	1800			37000	24000				33
80	900	1800	37000	24000	33						
90	750	1500	37000	24000	33						
100	750	1500	37000	24000	33						

※1 输入转速为定额转速时，使用寿命为 20000 小时的值

※2 启动、停止时容许的最大值

※3 运转过程中，定额输入转速的容许最大值

※4 在非连续运转条件下容许的最高输入转速

※5 输入转速为定额转速时，使用寿命为 20000 小时的值

(作用于轴中央，轴向负荷为 0 时)

※6 输入转速为定额转速时，使用寿命为 20000 小时的值

(作用于轴芯，径向负荷为 0 时)

※7 径向负荷的容许最大值

※8 轴向负荷的容许最大值

※1 With nominal input speed, service life is 20000 hours.

※2 The maximum torque when starting and stopping.

※3 The maximum average input speed.

※4 The maximum momentary input speed.

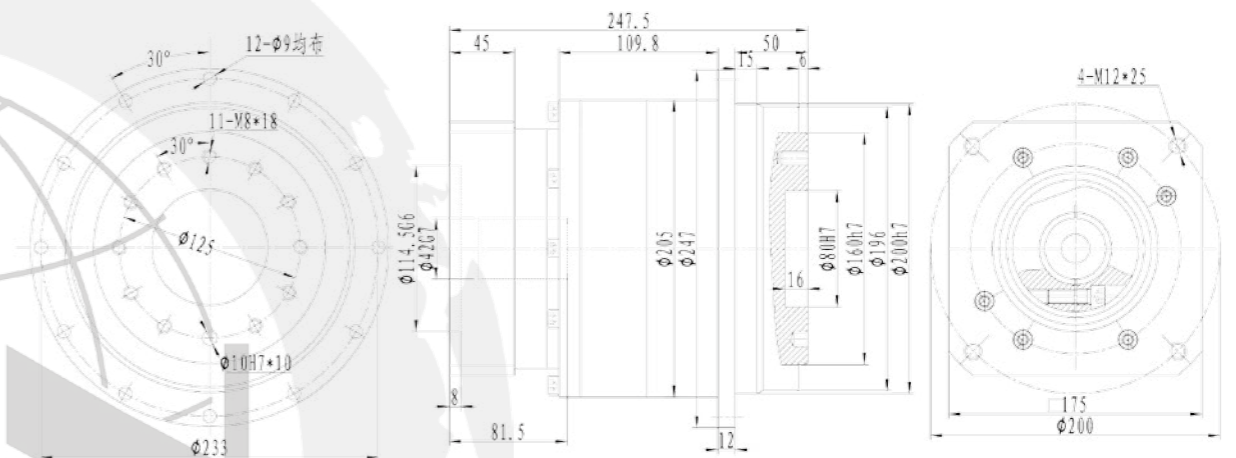
※5 With this load and nominal input speed, service life will be 20000 hours (Applied to the output shaft center, at axial load 0)

※6 With this load and nominal input speed, service life will be 20000 hours (Applied to the output side bearing, at axial load 0)

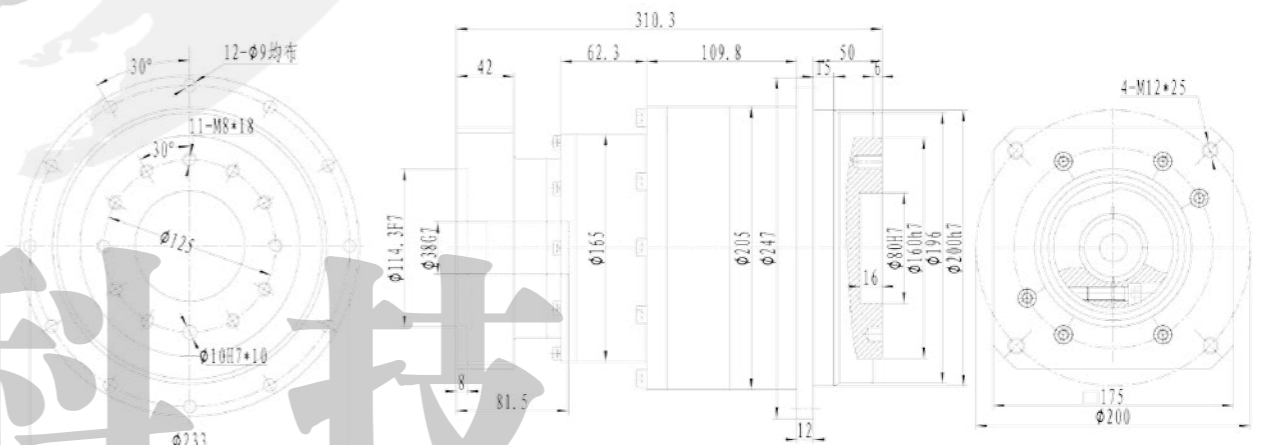
※7 The maximum radial load the reducer can accept.

※8 The maximum axial load the reducer can accept.

TPH-205 I Single



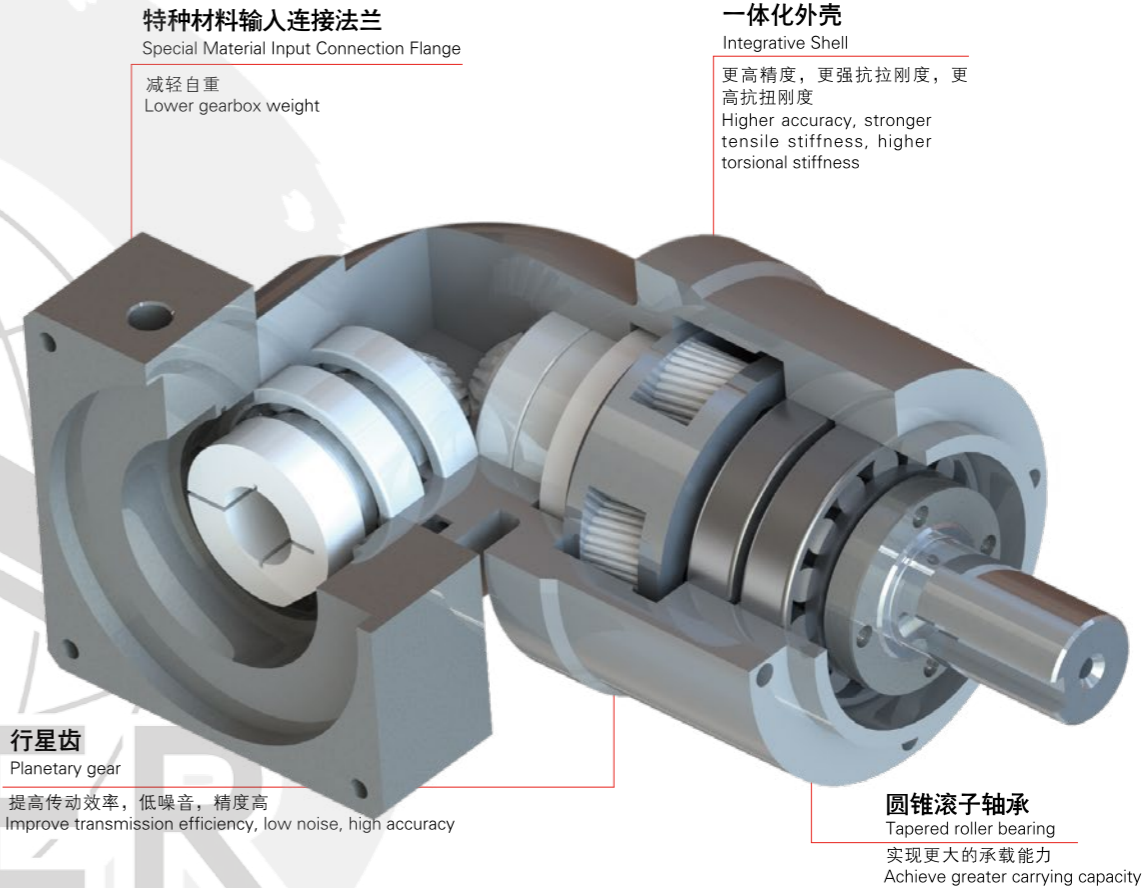
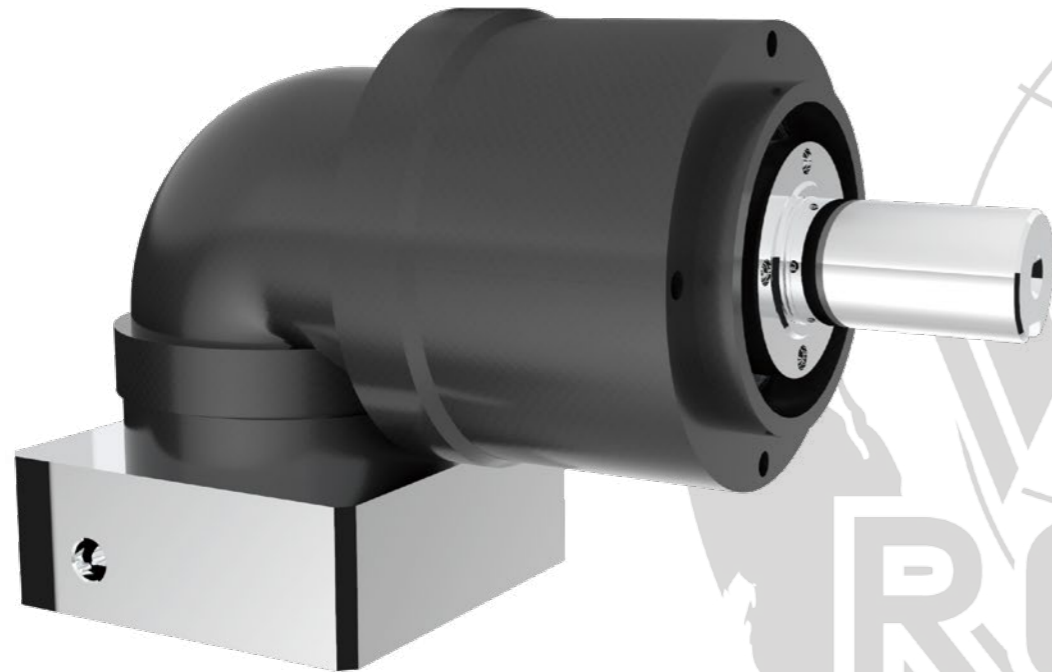
TPH-205 II Single



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Note: Some sizes can be customized according to customer needs. If necessary, please contact us!

WPL SERIES



特种材料输入连接法兰
Special Material Input Connection Flange
减轻自重
Lower gearbox weight

一体化外壳
Integrative Shell
更高精度, 更强抗拉刚度, 更高抗扭刚度
Higher accuracy, stronger tensile stiffness, higher torsional stiffness

行星齿
Planetary gear
提高传动效率, 低噪音, 精度高
Improve transmission efficiency, low noise, high accuracy

圆锥滚子轴承
Tapered roller bearing
实现更大的承载能力
Achieve greater carrying capacity

高精度

背隙 3arcmin 以下, 定位更精准

减速比

速比 3-100, 选型更方便

高效率

单级 97% 以上 / 双级 93% 以上

静音

齿轮采用斜齿设计并采用修形工艺加工而成

免维修

在产品寿命期内无需要更换润滑油

High-precision

Backlash less than 3 arcmin, more accurate positioning

Reduction ratio

Speed ratio 3-100, more convenient selection

High- efficiency

Over 97% of single stage/over 93% of double stage

Mute

Gears are designed with helical teeth and processed by modification process

Maintenance free

No need to replace lubricating oil during product life

WPL

系列名称
Series name

WPL 斜齿系列
WPL Helical series

070

系列尺寸
Series size

070 090 120 160

7

减速比
Ratop

I Single 3/4/5/6/7/8/9/10
II Single 15/16/20/25/28/30
35/40/45/50/64
70/80/90/100

K

输出方式
Output stike

☐ 输出轴带键槽
S: 光轴

3

背隙
Backlash

5-5arc-min
8-8arc-min

减速机性能资料——WPL-070

Performance Data of Reducer-WPL-070

级数	减速比	额定输出	输出最大	额定输入	输入最大	容许径向	容许轴向	最大径向	最大轴向	背隙	惯性力矩 14
		扭矩	扭矩	转速	转速	负荷	负荷	负荷	负荷		
Stage	Ratio	Nominal output torque	Maximum output torque	Nominal input speed	Maximum input speed	Permitted radial load	Permitted axial load	Maximum radial load	Maximum axial load	Backlash	Moment of inertia 14
		(Nm)	(Nm)	(rpm)	(rpm)	(N)	(N)	(N)	(N)	(arcmin)	(kgcm ²)
I Single	3	38	76	3000	6000	570	460	1200	1100	≦ 3	0.22
	4	38	76			570	460				0.17
	5	38	76			570	460				0.16
	6	38	76			570	460				0.15
	7	32	64			570	460				0.14
	8	32	64			570	460				0.14
	9	28	56			570	460				0.14
	10	28	56			570	460				0.14
II Single	15	38	76	3000	6000	570	460	1200	1100	≦ 3	0.14
	16	38	76			570	460				0.14
	20	38	76			570	460				0.13
	25	38	76			570	460				0.13
	28	38	76			570	460				0.14
	30	38	76			570	460				0.13
	35	38	76			570	460				0.13
	40	38	76			740	630				0.13
	45	38	76			740	630				0.13
	50	38	76			740	630				0.13
	64	32	64			1100	980				0.13
	70	32	64			1100	980				0.13
	80	32	64			1100	980				0.13
	90	28	52			1100	980				0.13
100	28	52	1100	980	0.13						

WPL-070 I Single

WPL-070 II Single

※1 输入转速为定额转速时, 使用寿命为 20000 小时的值

※2 启动、停止时容许的最大值

※3 运转过程中, 定额输入转速的容许最大值

※4 在非连续运转条件下容许的最高输入转速

※5 输入转速为定额转速时, 使用寿命为 20000 小时的值

(作用于轴中央, 轴向负荷为 0 时)

※6 输入转速为定额转速时, 使用寿命为 20000 小时的值

(作用于轴芯, 径向负荷为 0 时)

※7 径向负荷的容许最大值

※8 轴向负荷的容许最大值

※1 With nominal input speed, service life is 20000 hours.

※2 The maximum torque when starting and stopping.

※3 The maximum average input speed.

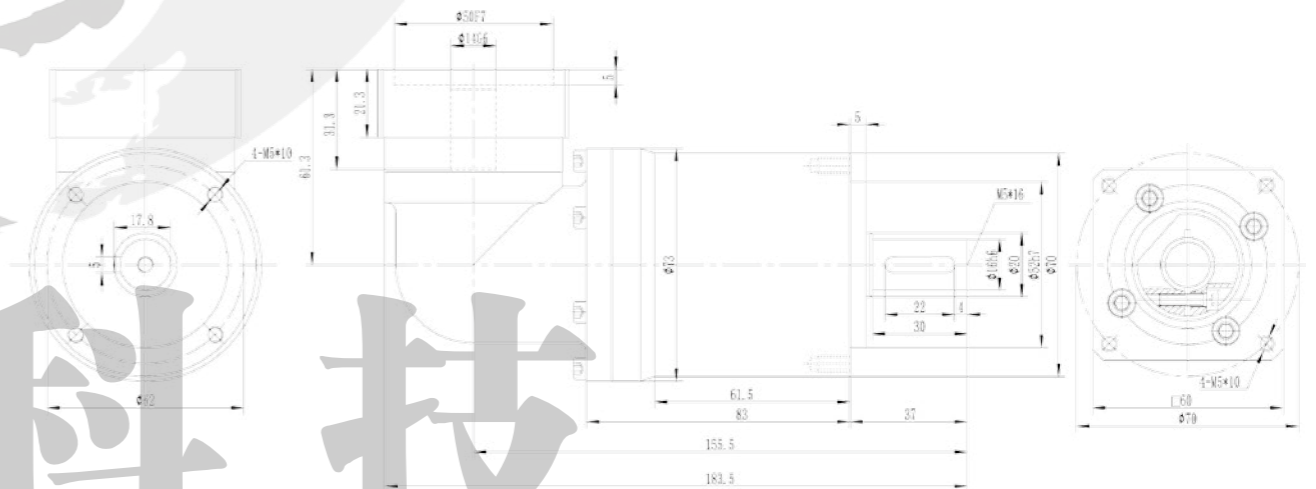
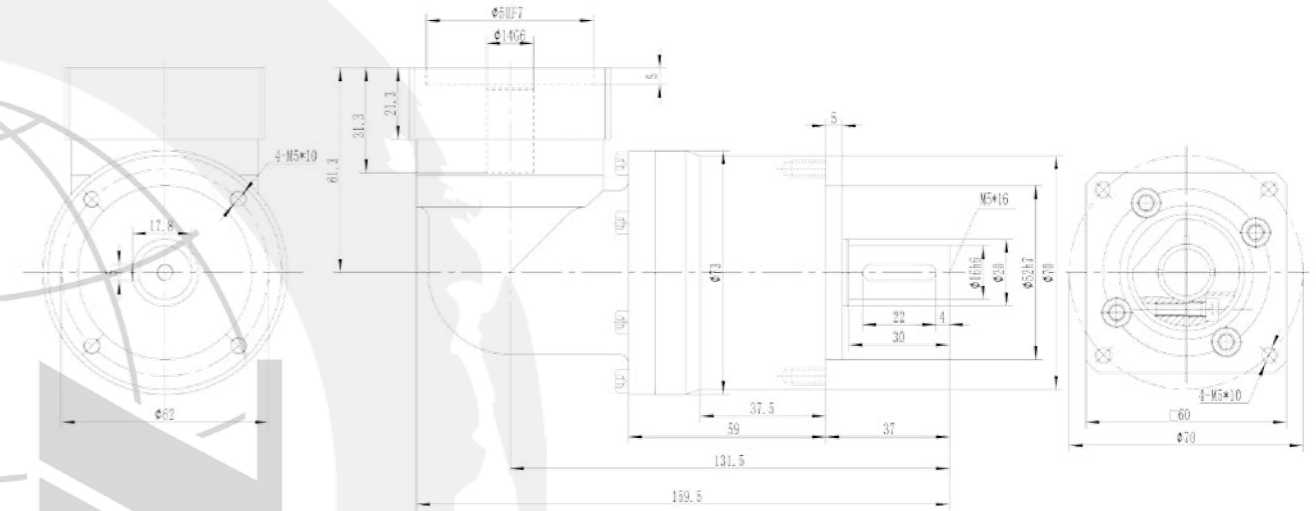
※4 The maximum momentary input speed.

※5 With this load and nominal input speed, service life will be 20000 hours (Applied to the output shaft center, at axial load 0)

※6 With this load and nominal input speed, service life will be 20000 hours (Applied to the output side bearing, at axial load 0)

※7 The maximum radial load the reducer can accept.

※8 The maximum axial load the reducer can accept.



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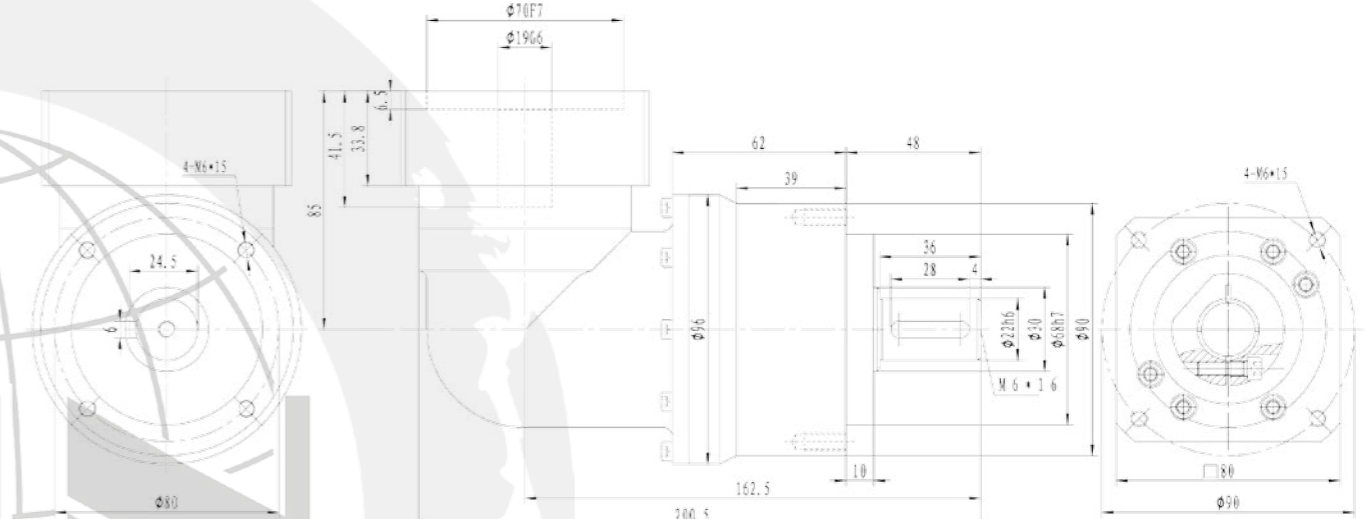
备注: 部分尺寸可根据客户需求去定制, 如需要, 请联系我们!
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减速机性能资料——WPL-090

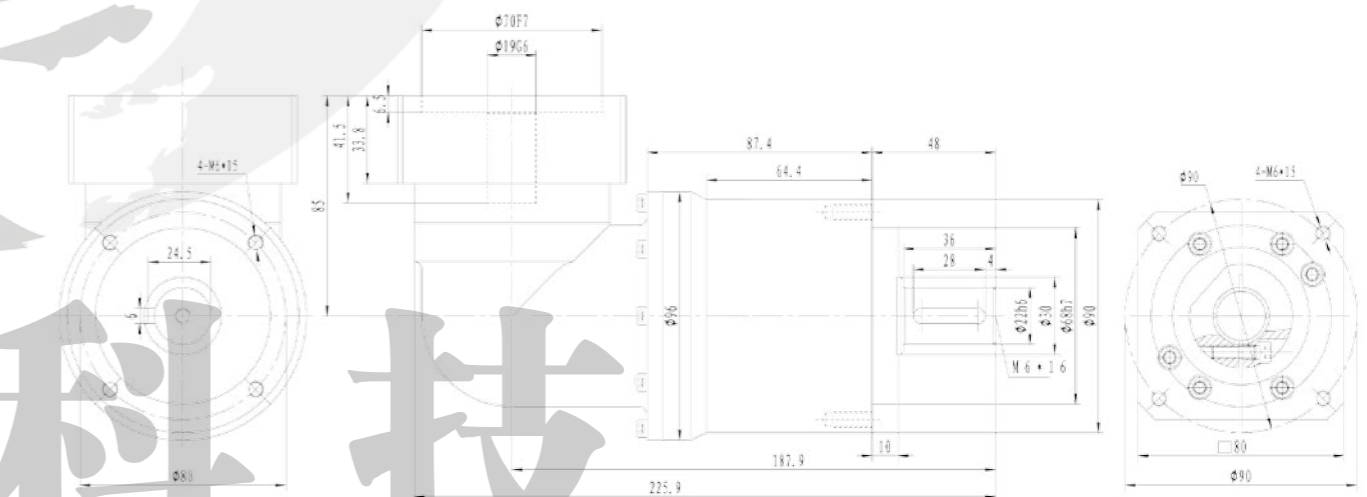
Performance Data of Reducer-WPL-090

级数	减速比	额定输出扭矩	输出最大扭矩	额定输入转速	输入最大转速	容许径向负荷	容许轴向负荷	最大径向负荷	最大轴向负荷	背隙	惯性力矩 19
		1	2	3	4	5	6	7	8		
Stage	Ratio	Nominal output torque (Nm)	Maximum output torque (Nm)	Nominal input speed (rpm)	Maximum input speed (rpm)	Permitted radial load (N)	Permitted axial load (N)	Maximum radial load (N)	Maximum axial load (N)	Backlash (arcmin)	Moment of inertia 19 (kgcm ²)
I Single	3	85	170	3000	6000	960	930	2400	2200	≤ 5	1.20
	4	85	170			960	930				0.95
	5	85	170			960	930				0.86
	6	85	170			960	930				0.82
	7	78	156			960	930				0.79
	8	78	156			960	930				0.77
	9	65	130			960	930				0.76
	10	65	130			960	930				0.75
II Single	15	85	170	3000	6000	960	930	2400	2200	≤ 8	0.72
	16	85	170			960	930				0.74
	20	85	170			960	930				0.72
	25	85	170			960	930				0.74
	28	85	170			960	930				0.72
	30	85	170			960	930				0.71
	35	85	170			960	930				0.73
	40	85	170			1800	1500				0.70
	45	85	170			1800	1500				0.71
	50	85 78	170			1800	1500				0.70
	64	78	156			2200	1800				0.71
	70	78	156			2200	1800				0.69
80	78	156	2200	1800	0.69						
90	65	130	2200	1800	0.69						
100	65	130	2200	1800	0.69						

WPL-090 I Single



WPL-090 II Single



※1 输入转速为定额转速时，使用寿命为 20000 小时的值

※2 启动、停止时容许的最大值

※3 运转过程中，定额输入转速的容许最大值

※4 在非连续运转条件下容许的最高输入转速

※5 输入转速为定额转速时，使用寿命为 20000 小时的值

(作用于轴中央，轴向负荷为 0 时)

※6 输入转速为定额转速时，使用寿命为 20000 小时的值

(作用于轴芯，径向负荷为 0 时)

※7 径向负荷的容许最大值

※8 轴向负荷的容许最大值

※1 With nominal input speed, service life is 20000 hours.

※2 The maximum torque when starting and stopping.

※3 The maximum average input speed.

※4 The maximum momentary input speed.

※5 With this load and nominal input speed, service life will be 20000 hours (Applied to the output shaft center, at axial load 0)

※6 With this load and nominal input speed, service life will be 20000 hours (Applied to the output side bearing, at axial load 0)

※7 The maximum radial load the reducer can accept.

※8 The maximum axial load the reducer can accept.

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减速机性能资料——WPL-120

Performance Data of Reducer-WPL-120

级数	减速比	额定输出	输出最大	额定输入	输入最大	容许径向	容许轴向	最大径向	最大轴向	背隙	惯性力矩 28
		扭矩	扭矩	转速	转速	负荷	负荷	负荷	负荷		
Stage	Ratio	Nominal output torque	Maximum output torque	Nominal input speed	Maximum input speed	Permitted radial load	Permitted axial load	Maximum radial load	Maximum axial load	Backlash	Moment of inertia 28
		(Nm)	(Nm)	(rpm)	(rpm)	(N)	(N)	(N)	(N)	(arcmin)	(kgcm ²)
I Single	3	230	460	3000	6000	4200	5600	8300	7800	5	5.3
	4	230	460			4200	5600				4.1
	5	230	460			4200	5600				3.6
	6	230	460			4200	5600				3.3
	7	189	370			4200	5600				3.2
	8	189	370			4200	5600				3.1
	9	160	320			4200	5600				3.0
	10	160	320			4200	5600				3.0
II Single	15	230	460	3000	6000	4200	5600	8300	7800	8	2.8
	16	230	460			4200	5600				2.9
	20	230	460			4200	5600				2.8
	25	230	460			4200	5600				2.8
	28	230	460			4200	5600				2.8
	30	230	460			4200	5600				2.7
	35	230	460			5600	6300				2.7
	40	230	460			5600	6300				2.7
	45	230	460			5600	6300				2.7
	50	230	460			5600	6300				2.7
	64	189	370			6400	7000				2.7
	70	189	370			6400	7000				2.7
	80	189	370			6400	7000				2.7
	90	160	320			6400	7000				2.7
100	160	320	6400	7000	2.7						

WPL-120 I Single

WPL-120 II Single



※1 输入转速为定额转速时, 使用寿命为 20000 小时的值

※2 启动、停止时容许的最大值

※3 运转过程中, 定额输入转速的容许最大值

※4 在非连续运转条件下容许的最高输入转速

※5 输入转速为定额转速时, 使用寿命为 20000 小时的值

(作用于轴中央, 轴向负荷为 0 时)

※6 输入转速为定额转速时, 使用寿命为 20000 小时的值

(作用于轴芯, 径向负荷为 0 时)

※7 径向负荷的容许最大值

※8 轴向负荷的容许最大值

※1 With nominal input speed, service life is 20000 hours.

※2 The maximum torque when starting and stopping.

※3 The maximum average input speed.

※4 The maximum momentary input speed.

※5 With this load and nominal input speed, service life will be 20000 hours (Applied to the output shaft center, at axial load 0)

※6 With this load and nominal input speed, service life will be 20000 hours (Applied to the output side bearing, at axial load 0)

※7 The maximum radial load the reducer can accept.

※8 The maximum axial load the reducer can accept.

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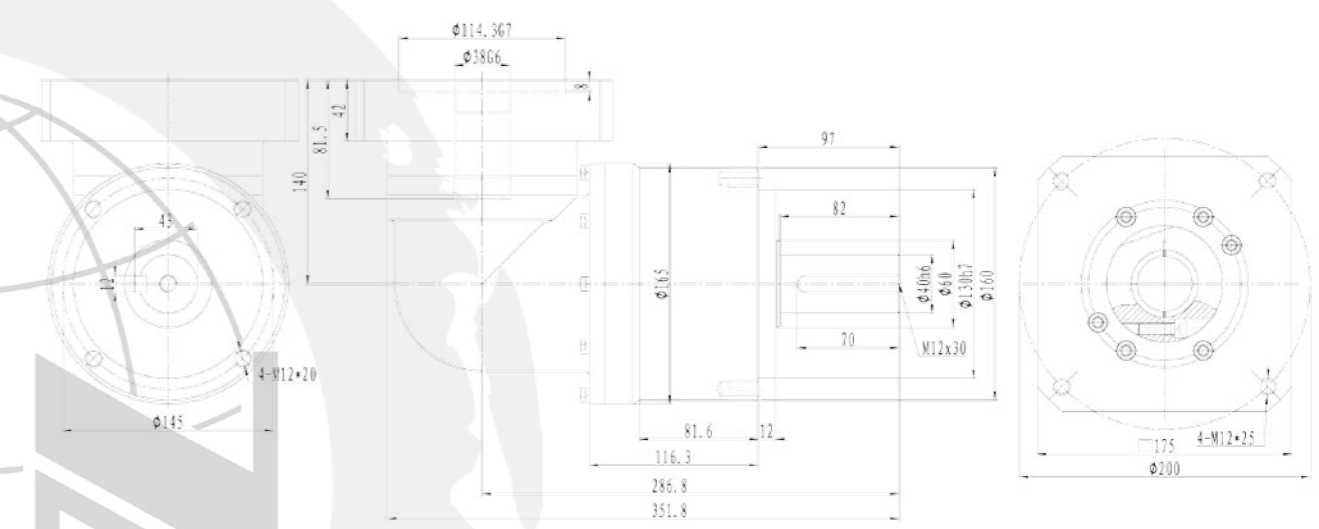
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减速机性能资料——WPL-160

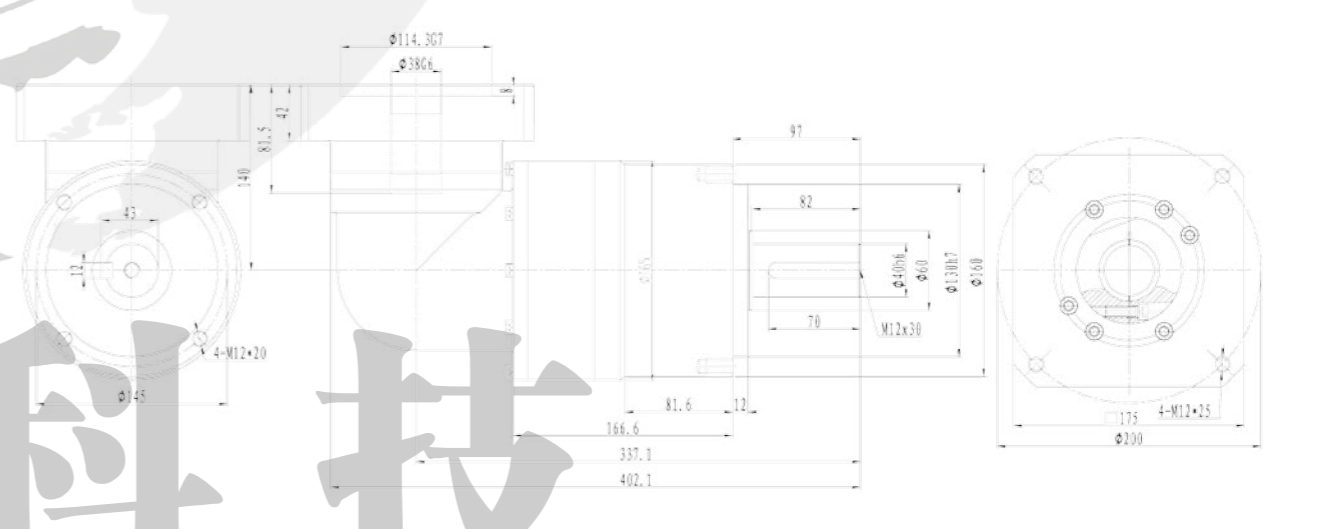
Performance Data of Reducer-WPL-160

级数	减速比	额定输出	输出最大	额定输入	输入最大	容许径向	容许轴向	最大径向	最大轴向	背隙	惯性力矩 38
		扭矩	扭矩	转速	转速	负荷	负荷	负荷	负荷		
Stage	Ratio	Nominal output torque	Maximum output torque	Nominal input speed	Maximum input speed	Permitted radial load	Permitted axial load	Maximum radial load	Maximum axial load	Backlash	Moment of inertia 38
		(Nm)	(Nm)	(rpm)	(rpm)	(N)	(N)	(N)	(N)	(arcmin)	(kgcm ²)
I Single	3	610	1220	2000	4000	7900	8300	12000	10000	5	20
	4	610	1220			7900	8300				15
	5	610	1220			7900	8300				14
	6	610	1220			7900	8300				13
	7	550	1100			7900	8300				12
	8	550	1100			7900	8300				12
	9	410	820			7900	8300				11
	10	410	820			7900	8300				11
II Single	15	610	1220	2000	4000	7900	8300	12000	10000	8	11
	16	610	1220			7900	8300				11
	20	610	1220			7900	8300				11
	25	610	1220			7900	8300				11
	28	610	1220			7900	8300				11
	30	610	1220			7900	8300				10
	35	610	1220			7900	8300				11
	40	610	1220			8300	9700				10
	45	610	1220			8300	9700				11
	50	610	1220			8300	9700				10
	64	550	1100			9700	9700				10
	70	550	1100			9700	9700				10
80	550	1100	9700	9700	10						
90	410	820	9700	9700	10						
100	410	820	9700	9700	10						

WPL-160 I Single



WPL-160 II Single



※1 输入转速为定额转速时, 使用寿命为 20000 小时的值

※2 启动、停止时容许的最大值

※3 运转过程中, 定额输入转速的容许最大值

※4 在非连续运转条件下容许的最高输入转速

※5 输入转速为定额转速时, 使用寿命为 20000 小时的值

(作用于轴中央, 轴向负荷为 0 时)

※6 输入转速为定额转速时, 使用寿命为 20000 小时的值

(作用于轴芯, 径向负荷为 0 时)

※7 径向负荷的容许最大值

※8 轴向负荷的容许最大值

※1 With nominal input speed, service life is 20000 hours.

※2 The maximum torque when starting and stopping.

※3 The maximum average input speed.

※4 The maximum momentary input speed.

※5 With this load and nominal input speed, service life will be 20000 hours (Applied to the output shaft center, at axial load 0)

※6 With this load and nominal input speed, service life will be 20000 hours (Applied to the output side bearing, at axial load 0)

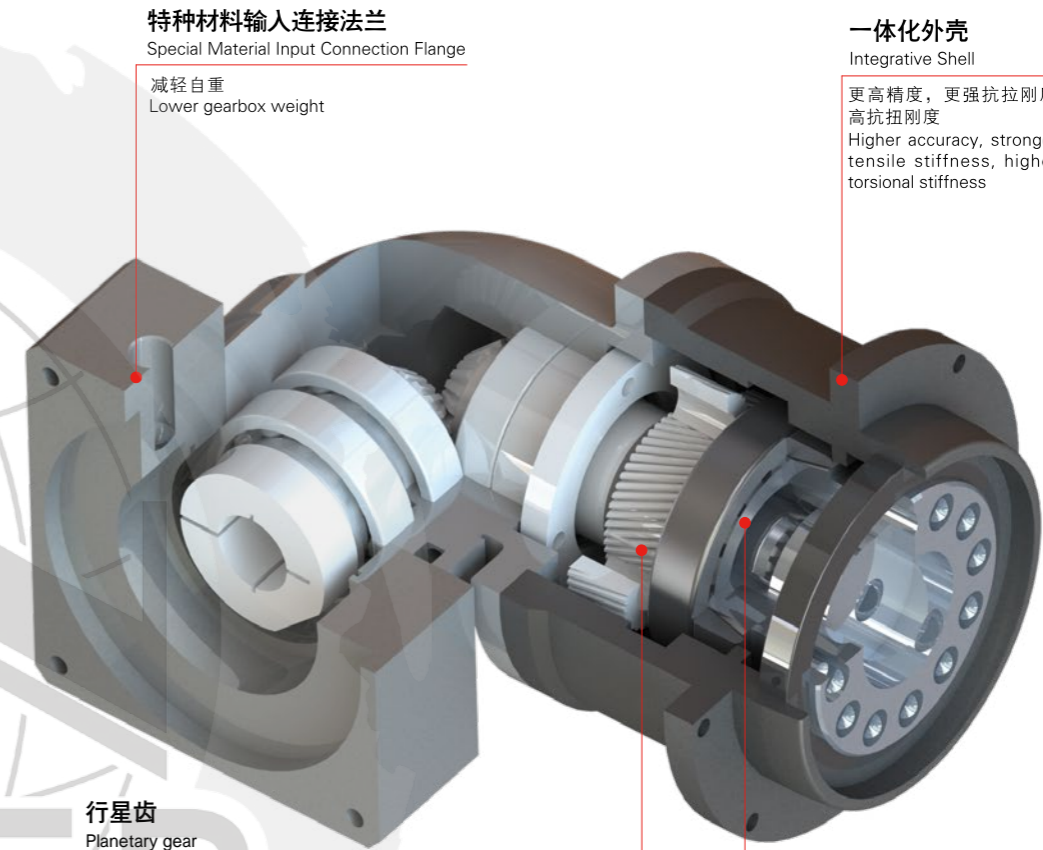
※7 The maximum radial load the reducer can accept.

※8 The maximum axial load the reducer can accept.

胜牌科技

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WPH SERIES



特种材料输入连接法兰
Special Material Input Connection Flange
减轻自重
Lower gearbox weight

一体化外壳
Integrative Shell
更高精度，更强抗拉刚度，更高抗扭刚度
Higher accuracy, stronger tensile stiffness, higher torsional stiffness

行星齿
Planetary gear
提高传动效率，低噪音，精度高
Improve transmission efficiency, low noise, high accuracy

圆锥滚子轴承
Tapered roller bearing
实现更大的承载能力
Achieve greater carrying capacity

高精度

背隙 3arcmin 以下，定位更精准

减速比

速比 3-100，选型更方便

高效率

单级 97% 以上 / 双级 93% 以上

静音

齿轮采用斜齿设计并采用修形工艺加工而成

免维修

在产品寿命期内无需要更换润滑油

High-precision

Backlash less than 3 arcmin, more accurate positioning

Reduction ratio

Speed ratio 3-100, more convenient selection

High- efficiency

Over 97% of single stage/over 93% of double stage

Mute

Gears are designed with helical teeth and processed by modification process

Maintenance free

No need to replace lubricating oil during product life

WPH

系列名称
Series name

WPH 斜齿系列
WPH Helical series

070

系列尺寸
Series size

070 090 120 160

7

减速比
Ratop

I Single 3/4/5/6/7/8/9/10
II Single 15/16/20/25/28/30
35/40/45/50/64
70/80/90/100

F

输出方式
Output style

F: 法兰输出

3

背隙
Backlash

5-5arc-min
8-8arc-min

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减速机性能资料——WPH-070

Performance Data of Reducer-WPH-70

级数	减速比	额定输出 扭矩	输出最大 扭矩	额定输入 转速	输入最大 转速	容许径向 负荷	容许轴向 负荷	最大径向 负荷	最大轴向 负荷	背隙	惯性力矩 14
		1	2	3	4	5	6	7	8		
Stage	Ratio	Nominal output torque	Maximum output torque	Nominal input speed	Maximum input speed	Permitted radial load	Permitted axial load	Maximum radial load	Maximum axial load	Backlash	Moment of inertia 14
		(Nm)	(Nm)	(rpm)	(rpm)	(N)	(N)	(N)	(N)	(arcmin)	(kgcm ²)
I Single	3	38	76	3000	6000	1200	1000	2300	1600	≤ 5	0.22
	4	38	76			1200	1000				0.17
	5	38	76			1200	1000				0.16
	6	38	76			1200	1000				0.15
	7	32	64			1200	1000				0.14
	8	32	64			1200	1000				0.14
	9	28	56			1200	1000				0.14
	10	28	56			1200	1000				0.14
II Single	15	38	76	3000	6000	1200	1000	2300	1600	≤ 8	0.14
	16	38	76			1200	1000				0.14
	20	38	76			1200	1000				0.13
	25	38	76			1200	1000				0.13
	28	38	76			1200	1000				0.14
	30	38	76			1200	1000				0.13
	35	38	76			1200	1000				0.13
	40	38	76			1200	1000				0.13
	45	38	76			1200	1000				0.13
	50	38	76			1200	1000				0.13
	64	32	64			1200	1000				0.13
	70	32	64			1200	1000				0.13
80	32	64	1200	1000	0.13						
90	28	52	1200	1000	0.13						
100	28	52	1200	1000	0.13						

WPH-070 I Single

WPH-070 II Single

※1 输入转速为定额转速时，使用寿命为 20000 小时的值

※2 启动、停止时容许的最大值

※3 运转过程中，定额输入转速的容许最大值

※4 在非连续运转条件下容许的最高输入转速

※5 输入转速为定额转速时，使用寿命为 20000 小时的值

(作用于轴中央，轴向负荷为 0 时)

※6 输入转速为定额转速时，使用寿命为 20000 小时的值

(作用于轴芯，径向负荷为 0 时)

※7 径向负荷的容许最大值

※8 轴向负荷的容许最大值

※1 With nominal input speed, service life is 20000 hours.

※2 The maximum torque when starting and stopping.

※3 The maximum average input speed.

※4 The maximum momentary input speed.

※5 With this load and nominal input speed, service life will be 20000 hours (Applied to the output shaft center, at axial load 0)

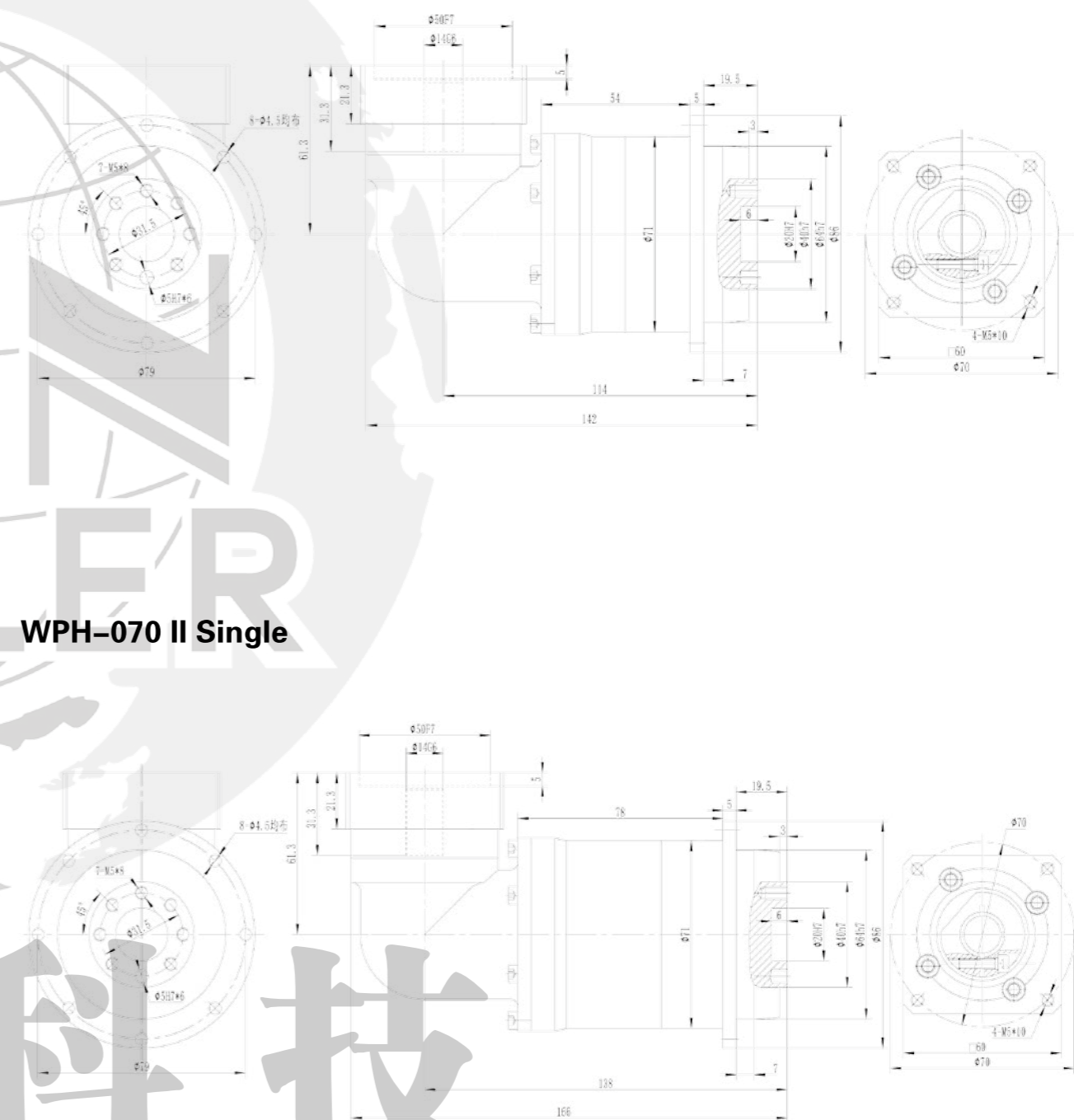
※6 With this load and nominal input speed, service life will be 20000 hours (Applied to the output side bearing, at axial load 0)

※7 The maximum radial load the reducer can accept.

※8 The maximum axial load the reducer can accept.

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Note: Some sizes can be customized according to customer needs. If necessary, please contact us!

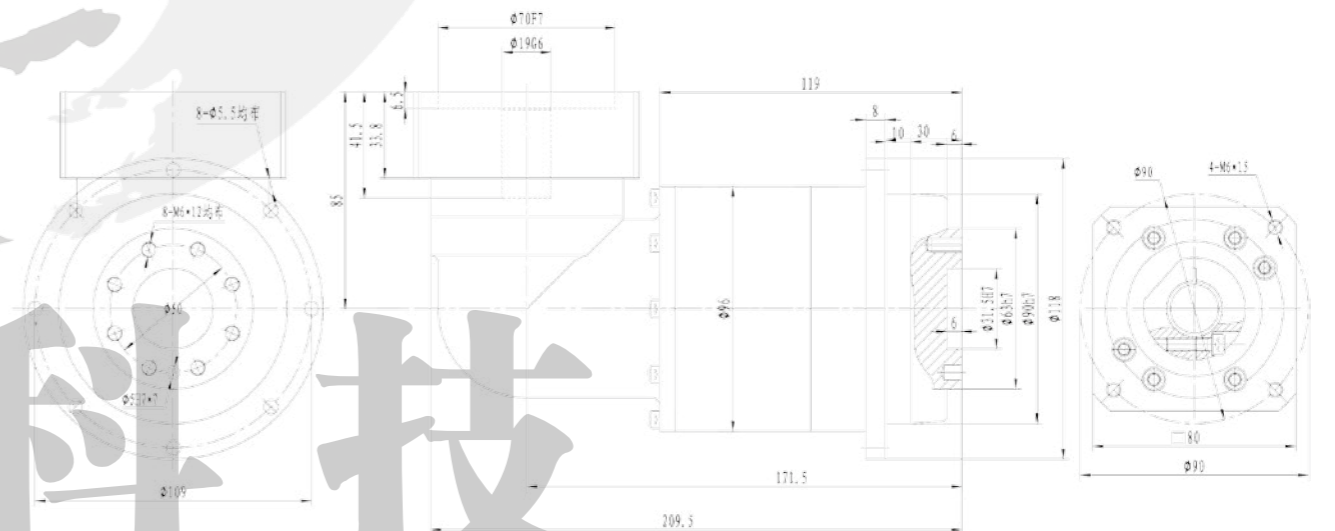
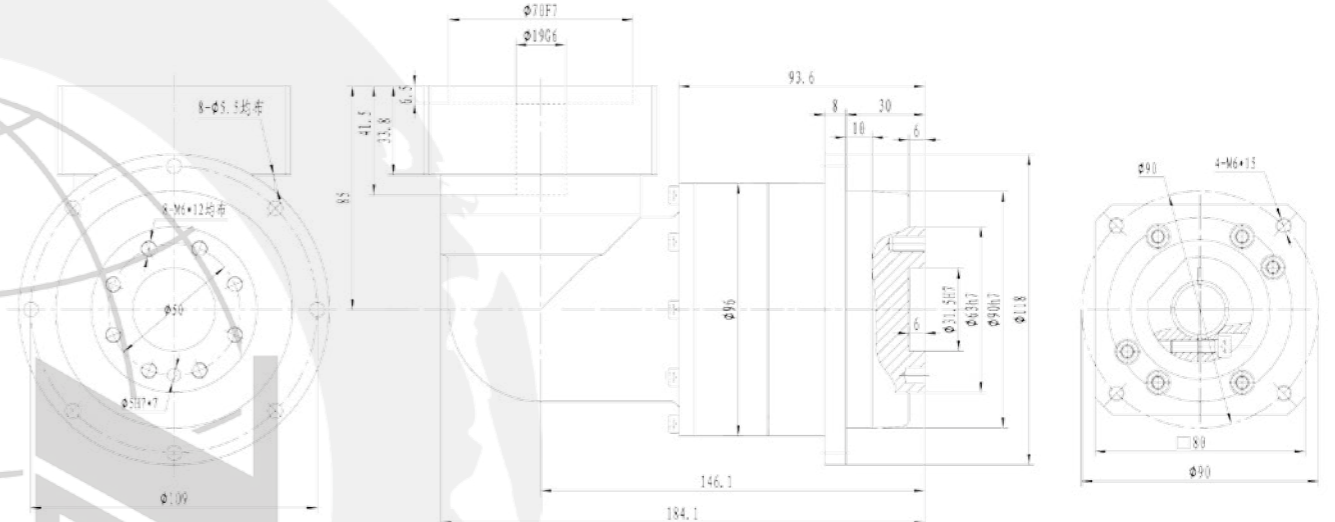
减速机性能资料——WPH-090

Performance Data of Reducer-WPH-090

级数	减速比	额定输出 扭矩	输出最大 扭矩	额定输入 转速	输入最大 转速	容许径向 负荷	容许轴向 负荷	最大径向 负荷	最大轴向 负荷	背隙	惯性力矩 19
		1	2	3	4	5	6	7	8		
Stage	Ratio	Nominal outpot torque	Maximum outpot torque	Nominal input speed	Maximum input speed	Permitted radial load	Permitted axial load	Maximum radial load	Maximum axial load	Backlash	Moment of inertia 19
I Single	3	85	170	3000	6000	2600	1800	4300	3500	≤ 5	1.20
	4	85	170			2600	1800				0.95
	5	85	170			2600	1800				0.86
	6	85	170			2600	1800				0.82
	7	78	156			2600	1800				0.79
	8	78	156			2600	1800				0.77
	9	65	130			2600	1800				0.76
	10	65	130			2600	1800				0.75
II Single	15	85	170	3000	6000	2600	1800	4300	3500	≤ 8	0.72
	16	85	170			2600	1800				0.74
	20	85	170			2600	1800				0.72
	25	85	170			2600	1800				0.74
	28	85	170			2600	1800				0.72
	30	85	170			2600	1800				0.71
	35	85	170			2600	1800				0.73
	40	85	170			2600	1800				0.70
	45	85	170			2600	1800				0.71
	50	85	170			2600	1800				0.70
	78	156	2600			1800	0.71				
	64	78	156			2600	1800				0.69
	70	78	156			2600	1800				0.69
	80	78	156			2600	1800				0.69
	90	65	130			2600	1800				0.69
	100	65	130			2600	1800				0.69

WPH-090 I Single

WPH-090 II Single



※1 输入转速为定额转速时，使用寿命为 20000 小时的值

※2 启动、停止时容许的最大值

※3 运转过程中，定额输入转速的容许最大值

※4 在非连续运转条件下容许的最高输入转速

※5 输入转速为定额转速时，使用寿命为 20000 小时的值

※6 输入转速为定额转速时，使用寿命为 20000 小时的值

※7 径向负荷的容许最大值

※8 轴向负荷的容许最大值

(作用于轴中央，轴向负荷为 0 时)

(作用于轴芯，径向负荷为 0 时)

※1 With nominal input speed, service life is 20000 hours.

※2 The maximum torque when starting and stopping.

※3 The maximum average input speed.

※4 The maximum momentary input speed.

※5 With this load and nominal input speed, service life will be 20000 hours (Applied to the output shaft center, at axial load 0)

※6 With this load and nominal input speed, service life will be 20000 hours (Applied to the output side bearing, at axial load 0)

※7 The maximum radial load the reducer can accept.

※8 The maximum axial load the reducer can accept.

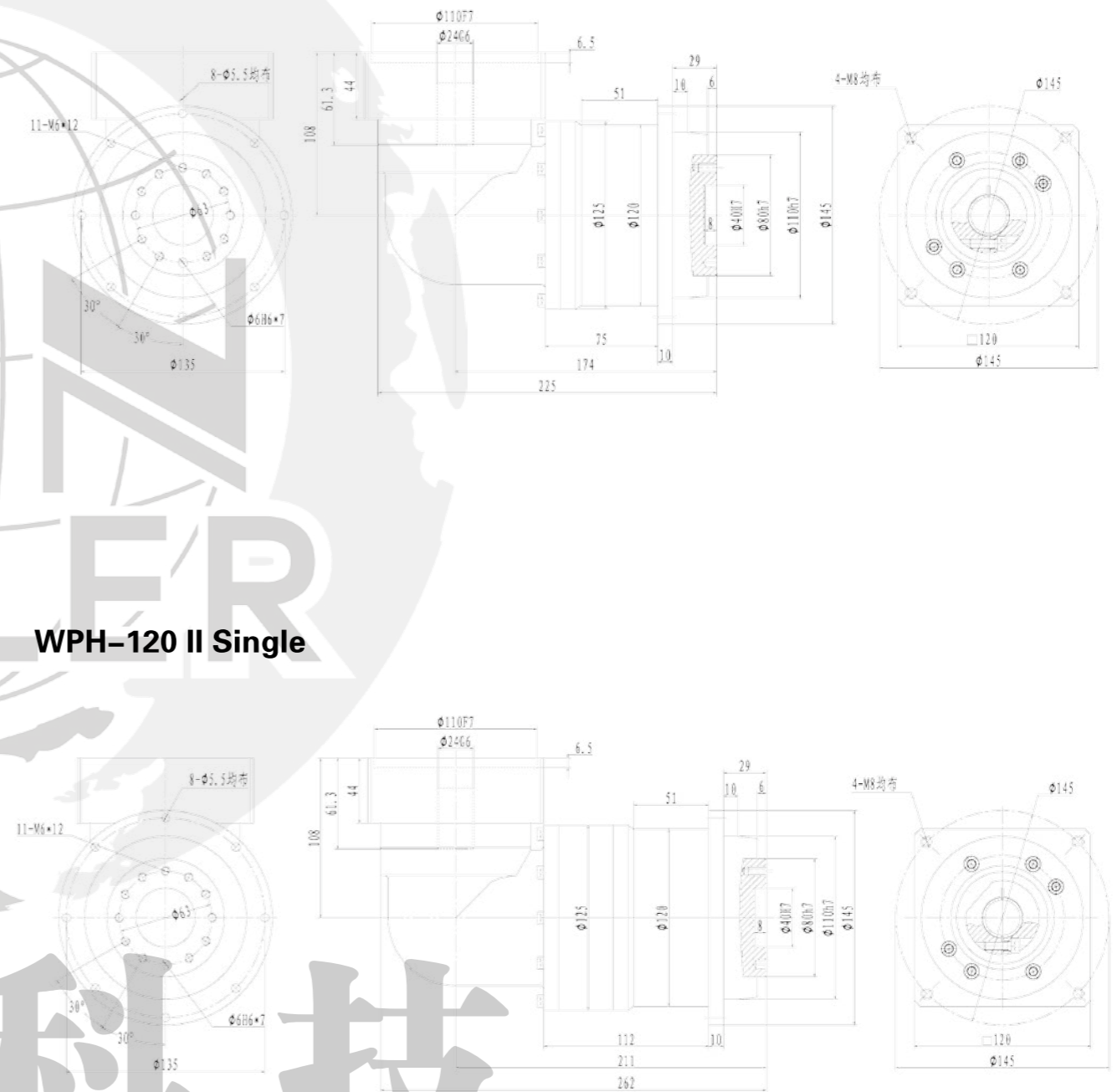
减速机性能资料——WPH-120

Performance Data of Reducer-WPH-120

级数	减速比	额定输出	输出最大	额定输入	输入最大	容许径向	容许轴向	最大径向	最大轴向	背隙	惯性力矩 28
		扭矩	扭矩	转速	转速	负荷	负荷	负荷	负荷		
Stage	Ratio	Nominal output torque	Maximum output torque	Nominal input speed	Maximum input speed	Permitted radial load	Permitted axial load	Maximum radial load	Maximum axial load	Backlash	Moment of inertia 28
		(Nm)	(Nm)	(rpm)	(rpm)	(N)	(N)	(N)	(N)	(arcmin)	(kgcm ²)
I Single	3	230	460	3000	6000	5300	5600	9000	7800	≈ 3	5.3
	4	230	460			5300	5600				4.1
	5	230	460			5300	5600				3.6
	6	230	460			5300	5600				3.3
	7	189	370			5300	5600				3.2
	8	189	370			5300	5600				3.1
	9	160	320			5300	5600				3.0
	10	160	320			5300	5600				3.0
II Single	15	230	460	3000	6000	5300	5600	9000	7800	≈ 3	2.8
	16	230	460			5300	5600				2.9
	20	230	460			5300	5600				2.8
	25	230	460			5300	5600				2.8
	28	230	460			5300	5600				2.8
	30	230	460			5300	5600				2.7
	35	230	460			6600	6300				2.7
	40	230	460			6600	6300				2.7
	45	230	460			6600	6300				2.7
	50	230	460			6600	6300				2.7
	64	189	370			8000	7000				2.7
	70	189	370			8000	7000				2.7
80	189	370	8000	7000	2.7						
90	160	320	8000	7000	2.7						
100	160	320	8000	7000	2.7						

WPH-120 I Single

WPH-120 II Single



※1 输入转速为定额转速时，使用寿命为 20000 小时的值

※2 启动、停止时容许的最大值

※3 运转过程中，定额输入转速的容许最大值

※4 在非连续运转条件下容许的最高输入转速

※5 输入转速为定额转速时，使用寿命为 20000 小时的值 (作用于轴中央，轴向负荷为 0 时)

※6 输入转速为定额转速时，使用寿命为 20000 小时的值 (作用于轴芯，径向负荷为 0 时)

※7 径向负荷的容许最大值

※8 轴向负荷的容许最大值

※1 With nominal input speed, service life is 20000 hours.

※2 The maximum torque when starting and stopping.

※3 The maximum average input speed.

※4 The maximum momentary input speed.

※5 With this load and nominal input speed, service life will be 20000 hours (Applied to the output shaft center, at axial load 0)

※6 With this load and nominal input speed, service life will be 20000 hours (Applied to the output side bearing, at axial load 0)

※7 The maximum radial load the reducer can accept.

※8 The maximum axial load the reducer can accept.

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备注：部分尺寸可根据客户需求去定制，如需要，请联系我们！
Note: Some sizes can be customized according to customer needs. If necessary, please contact us!

减速机性能资料——WPH-160

Performance Data of Reducer-WPH-160

级数	减速比	额定输出	输出最大	额定输入	输入最大	容许径向	容许轴向	最大径向	最大轴向	背隙	惯性力矩 38						
		扭矩	扭矩	转速	转速	负荷	负荷	负荷	负荷								
		1	2	3	4	5	6	7	8								
Stage	Ratio	Nominal output torque	Maximum output torque	Nominal input speed	Maximum input speed	Permitted radial load	Permitted axial load	Maximum radial load	Maximum axial load	Backlash	Moment of inertia 38						
		(Nm)	(Nm)	(rpm)	(rpm)	(N)	(N)	(N)	(N)	(arcmin)	(kgcm ²)						
I Single	3	610	1220	2000	4000	9700	8300	23000	15000	≤ 5	20						
	4	610	1220			9700	8300				15						
	5	610	1220			9700	8300				14						
	6	610	1220			9700	8300				13						
	7	550	1100			9700	8300				12						
	8	550	1100			9700	8300				12						
	9	410	820			9700	8300				11						
	10	410	820			9700	8300				11						
	II Single	15	610			1220	2000				4000	9700	8300	23000	15000	≤ 8	11
		16	610			1220						9700	8300				11
20		610	1220	9700	8300	11											
25		610	1220	9700	8300	11											
28		610	1220	9700	8300	11											
30		610	1220	9700	8300	10											
35		610	1220	9700	8300	11											
40		610	1220	13000	9700	10											
45		610	1220	13000	9700	11											
50		610	1220	13000	9700	10											
64		550	1100	17000	9700	10											
70		550	1100	17000	9700	10											
80		550	1100	17000	9700	10											
90		410	820	17000	9700	10											
100	410	820	17000	9700	10												

※1 输入转速为定额转速时，使用寿命为 20000 小时的值

※2 启动、停止时容许的最大值

※3 运转过程中，额定输入转速的容许最大值

※4 在非连续运转条件下容许的最高输入转速

※5 输入转速为定额转速时，使用寿命为 20000 小时的值

(作用于轴中央，轴向负荷为 0 时)

※6 输入转速为定额转速时，使用寿命为 20000 小时的值

(作用于轴芯，径向负荷为 0 时)

※7 径向负荷的容许最大值

※8 轴向负荷的容许最大值

※1 With nominal input speed, service life is 20000 hours.

※2 The maximum torque when starting and stopping.

※3 The maximum average input speed.

※4 The maximum momentary input speed.

※5 With this load and nominal input speed, service life will be 20000 hours (Applied to the output shaft center, at axial load 0)

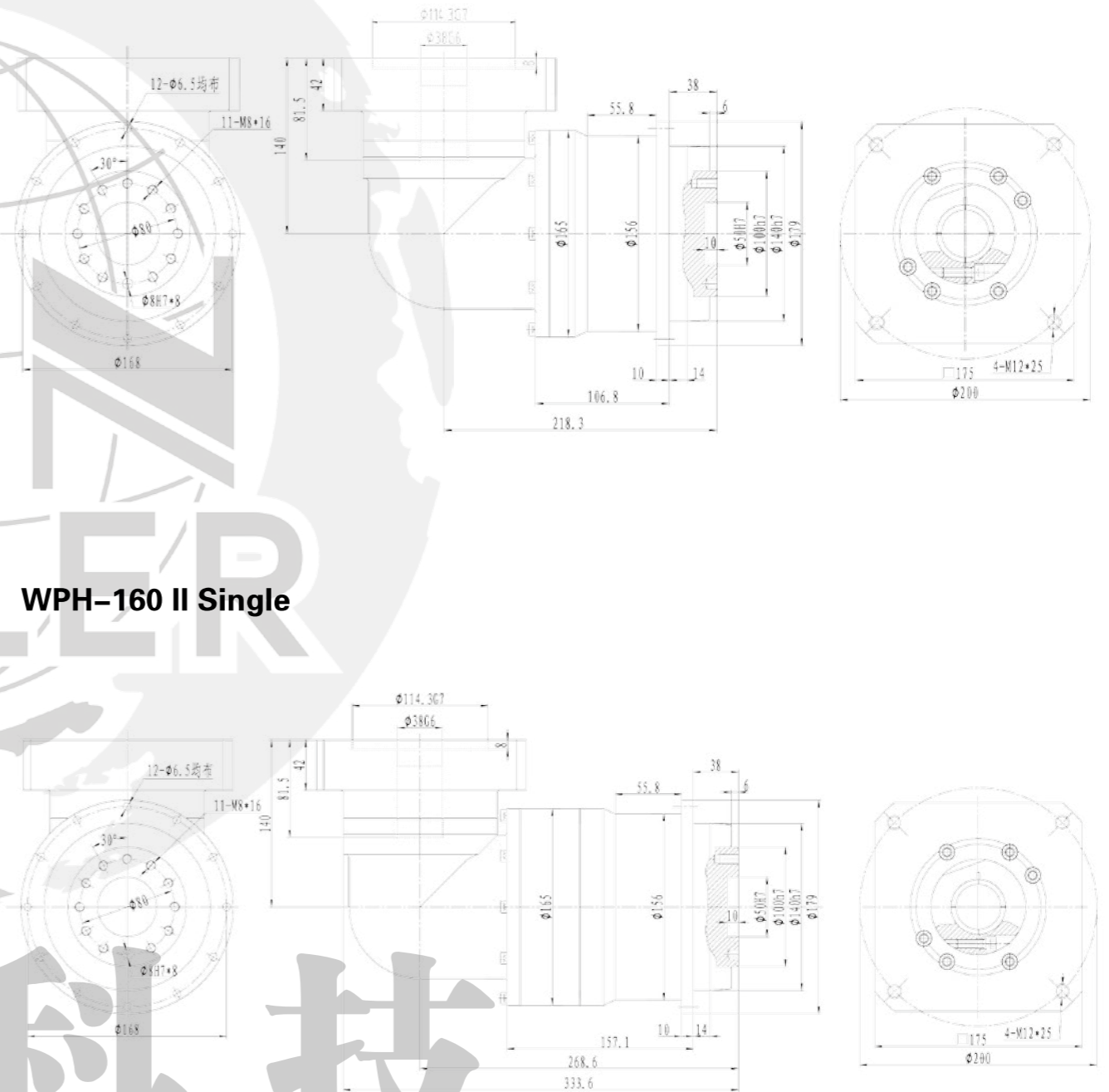
※6 With this load and nominal input speed, service life will be 20000 hours (Applied to the output side bearing, at axial load 0)

※7 The maximum radial load the reducer can accept.

※8 The maximum axial load the reducer can accept.

WPH-160 I Single

WPH-160 II Single



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备注：部分尺寸可根据客户需求去定制，如需要，请联系我们！
Note: Some sizes can be customized according to customer needs. If necessary, please contact us!

安全注意事项 Safety precautions

使用安装时的注意事项

1. 进行设计时，请务必阅读产品目录。
2. 请勿在会直接淋雨或水的场所中使用。
3. 周围环境温度设置在 0—40℃ 的环境中使用。
(如超出上述范围内的环境温度，请联系我们!)
4. 螺丝的拧紧方法，请遵守本公司的建议，以避免出现松动、打滑等现象。
5. 请小心使用本产品，在破损状态下，无法保证产品的性能。

运行前注意事项

1. 进行运转时，请勿施加额定以上的扭矩值，否则可能造成产品故障。
2. 输入转速请勿超出规定以上的转速要求，否则可能造成产品故障。
3. 产品出厂前填充了定量的润滑油，无需添加。

运行中的注意事项

1. 初次运转时，先确认输出轴方向后再慢慢施加负载。
2. 发现以下异常时，请停止运行。(请第一时间和我们取得联系)
 - (1) 温度突然升高
 - (2) 出现尖锐的异常声音
 - (3) 转速不稳定或不能运转

日常点检

1. 润滑油有无泄漏。
2. 运行中，减速机表面温度有无异常增高。(环境温度 +50℃ 以内)
3. 减速机有无异常震动。
4. 轴承、齿轮部有无异常声音。

保修规定

1. 交付后 1 年内免费保修。
2. 以下情况不在保修范围内。
 - (1) 超出保修年限
 - (2) 产品被分解
 - (3) 使用不当(超负载、超转速等)
 - (4) 安装过程中出现自由摔落、撞击、敲击等外界因素造成的破损

废弃方法

报废时，请按照当地的工业废弃标准进行处理

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Cautions in Use and Installation

1. Be sure to read the catalogue when designing.
2. Do not use it in places where it will rain or water directly.
3. The ambient temperature is set at 0-40 C. (If the ambient temperature exceeds the above range, please contact us!)
4. The tightening method of the screw, please follow our company's suggestions to avoid loosening, slipping and other phenomena.
5. Please use this product carefully. Under the condition of breakage, the performance of the product can not be guaranteed.

Precautions before operation

1. When running, do not apply more than rated torque value, otherwise it may cause product failure.
2. Input speed should not exceed the required speed, otherwise it may cause product failure.
3. The product is filled with a certain amount of lubricating oil before leaving the factory, without adding.

Matters needing attention in operation

1. In the initial operation, the direction of the output axis is confirmed first and then the load is applied slowly.
2. Stop running if you find the following exception. (Please contact us at the first time)
 - (1) Temperature suddenly rises
 - (2) Appearance of abnormal sharp sounds
 - (3) The speed is unstable or unable to operate.

Daily spot check

1. Leakage of lubricating oil.
2. Whether the surface temperature of reducer increases abnormally during operation. (ambient temperature + less than 50 C)
3. Whether the reducer has abnormal vibration or not.
4. Whether there is any abnormal sound in the bearing and gear parts.

Warranty requirements

1. Free warranty within 1 year after delivery.
2. The following circumstances are not covered by the warranty.
 - (1) Over the Warranty Period
 - (2) Products are decomposed
 - (3) improper use (over-load, over-speed, etc.)
 - (4) Damage caused by external factors such as free fall, impact and knock during installation

Waste method


When discarding, please treat it according to the local industrial waste standard.



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快捷周到的服务



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TEL: 0510-80220138 0810-80220230

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http: www.winroller.com