行星减速机专业非标制造与方案服务厂商

PLANETARY REDUCER PROFESSIONAL NON-STANDARD MANUFACTURING
AND SERVICE MANUFACTURERS

微信公众号

微信在线客服

任工机械科技（苏州）有限公司
RIGHT GEAR MECHANICAL TECHNOLOGY(SUZHOU) CO.,LTD

地址：江苏省苏州市昆山市花桥镇徐公桥路2号
ADDRESS: NO. 2, XUGONGQIAO ROAD, HUAQIAO TOWN,
KUNSHAN CITY, SUZHOU PROVINCE

电话/T：0512-5525 7387
传真/F：0512-5525 7380

WWW.RENGONGKEJI.COM

任工机械科技（苏州）有限公司　高精密行星减速机　RIGHT GEAR MECHANICAL TECHNOLOGY(SUZHOU) CO.,LTD

任工机械科技
RIGHT GEAR MECHANICAL TECHNOLOGY

RIGHT GEAR



任重致远 工匠精神



减速机专业制造
REDUCER PROFESSIONAL MANUFACTURER
与服务厂家 AND SERVICE MANUFACTURER

任工机械科技（苏州）有限公司， 是江苏省民营科技企业成立于2016 年， 前身是上海荣齿机电设备有限公司成立于 2013 年， 于2018 年在无锡投建专业制造工厂任工智能科技（无锡）有限公司，已通过 ISO9001 质量管理体系认证。 拥有超过 10 年的行星齿轮减速机和换向器等专业非标制造与解决方案服务的经验。

公司高薪聘请多名日籍和台湾省工程师，引进国际高尖齿轮制造工艺和设备， 严格把控每个零部件的生产检验。

拥有多项实用型发明专利， 传承德国技术， 铸造高品质， 高精度， 低噪音， 长寿命的行星减速机。 核心产品： 精密行星减速机精密伺服减速机、 齿轮箱换向器等系列产品。 工厂目前拥有多台高精度的 CNC 加工中心， 多台数控车床、 抛光机、 喷砂机、 超声波清洗机、 数控插齿机、 滚齿机、 全自动锯床等配套设备。 还具有先进的检测手段和检测设备， 有齿轮检测仪三坐标、 二次元投影仪， 高度尺、 千分尺、 游标卡尺、 塞规等。 能够为客户提供和制造质量可靠的产品。

- 我们短时效近乎门到门。
- 我们高要求高于客户要求。
- 我们低价格低于客户价格。

ABOUT US

Right Gear

任工机械科技
RIGHT GEAR MECHANICAL TECHNOLOGY

行星减速机专业非标制造与服务厂商
PLANETARY REDUCER PROFESSIONAL NON-STANDARD MANUFACTURING AND SERVICE MANUFACTURERS

WWW.RENGONGKEJI.COM

行星减速机专业非标制造与服务厂商

PLANETARY REDUCER PROFESSIONAL NON-STANDARD MANUFACTURING
AND SERVICE MANUFACTURERS

生产车间

WORKSHOP

用专业的设备，配专业的人员，做专业的的事。
WITH PROFESSIONAL EQUIPMENT, WITH PROFESSIONAL PERSONNEL,
DO PROFESSIONAL THINGS









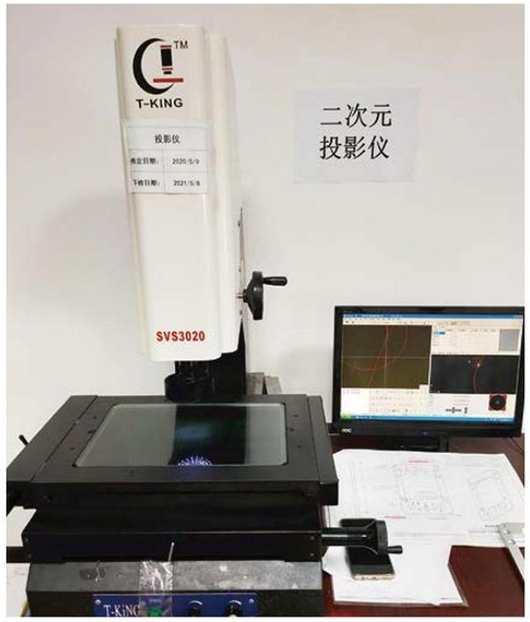


检测设备

TESTING EQUIPMENT

把控每个生产环节，拒绝不合格品流入市场
CONTROL EVERY PRODUCTION LINK, REJECT THE UNQUALIFIED
PRODUCTS INTO THE MARKET

任工机械科技
RIGHT GEAR MECHANICAL TECHNOLOGY











目录 CONTENTS

如何选用减速机/HOW TO SELECT REDUCER 01

产品型号说明/PRODUCT DESCRIPTION 02

电机推荐配置表/RECOMMENDED MOTOR CONFIGURATION LIST 03

斜齿高精度型
HELICAL TEETH SERIES

产品简介及结构/PRODUCT DESCRIPTION AND STRUCTURE 05-06

产品特性及选型/PRODUCT CHARACTERISTICS AND SELECTION 07-09

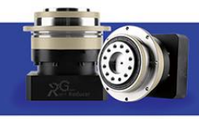
PGH系列/SERIES (轴输出/孔输出) SHAFT OUTPUT/HOLE OUTPUT 12-29



PGRH系列/SERIES 直角L型(轴输出/孔输出) RIGHT ANGLE L-SHAPED 30-45



PGF系列/SERIES 法兰盘式输出 FLANGE OUTPUT 46-55



PGFR系列/SERIES 直角L型法兰盘式输出 RIGHT ANGLE L-TYPE FLANGE OUTPUT 56-63



任工机械科技 | 行星减速机专业非标制造与服务厂商
RIGHT GEAR MECHANICAL TECHNOLOGY | PLANETARY REDUCER PROFESSIONAL NON-STANDARD MANUFACTURING AND SERVICE MANUFACTURERS
高精密行星齿轮减速机系列 Planetary Gear Reducer series 任重致远 工匠精神 www.rengongkeji.com

直齿高精密型
STRAIGHT TEETH SERIES

PLF系列/SERIES (轴输出/孔输出) SHAFT OUTPUT/HOLE OUTPUT 64-77



PLE系列/SERIES (轴输出/孔输出) SHAFT OUTPUT/HOLE OUTPUT 78-91



PLFR系列/SERIES 直角L型(轴输出/孔输出) RIGHT ANGLE L-SHAPED 92-105



PLER系列/SERIES 直角L型(轴输出/孔输出) RIGHT ANGLE L-SHAPED 106-119



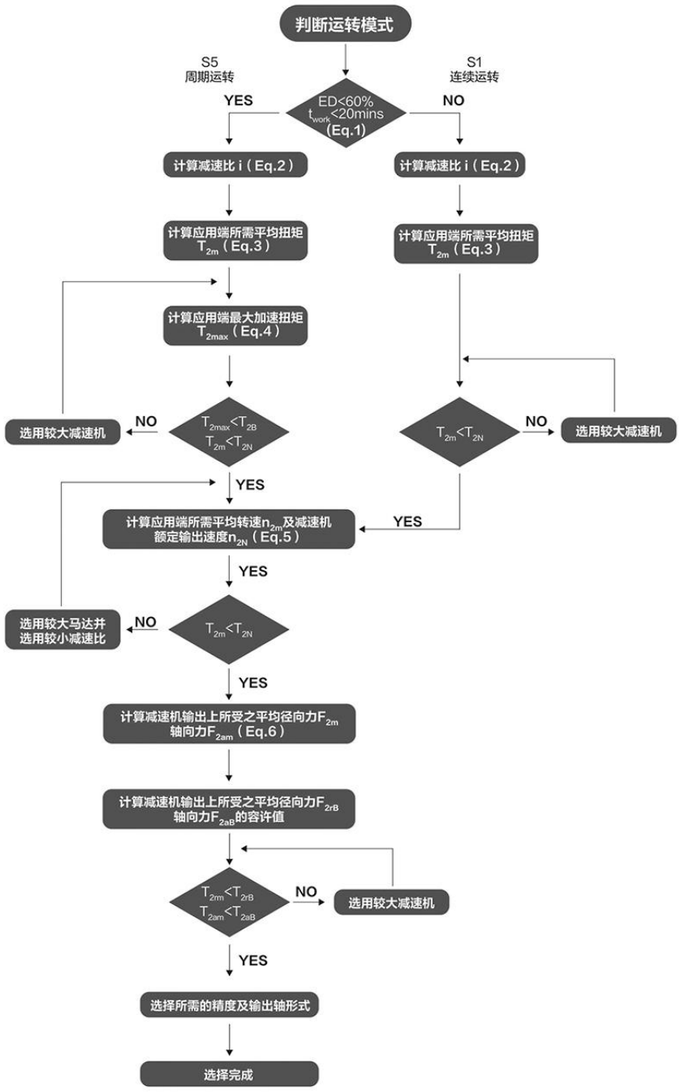
PG系列/SERIES 高精密型(轴输出/孔输出) HIGH PRECISION TYPE 120-137

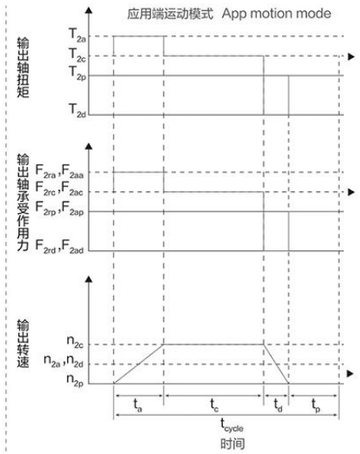


PGRL系列/SERIES 直角L型(轴输出/孔输出) RIGHT ANGLE L-SHAPED 138-152

安装注意事项/INSTALLATION NOTES 153-154

如何选用减速机? /HOW TO SELECT REDUCER?





1. $ED=\frac{t_a+t_c+t_d}{t_{cycle}} \times 100\%$，$t_{work}=t_a+t_c+t_d$

下标说明：a.减速，b.减速，c.等速，p.停止（Eq.1）

2. $i\approx\frac{n_m}{n_{work}}$

n_m 马达输出速度，n_{work} 实际应用速度 （Eq.2）

3. $T_{2m}=\sqrt[3]{\frac{n_{2a}\times t_a\times T_{2a}^3+n_{2c}\times t_c\times T_{2c}^3+n_{2d}\times t_d\times T_{2d}^3}{n_{2a}\times t_a+n_{2c}\times t_c+n_{2d}\times t_d}}$

（Eq.3）

4. $T_{2max}=T_{mB}\times i\times K_s\times \eta$

k_s 负载系数

k	周期次数/小时
1.0	0~1,000
1.1	1,000~1,500
1.3	1,500~2,000
1.6	2,000~3,000
1.8	3,000~5,000

T_{mB} 马达最大输出扭矩，η 减速机运转效率 （Eq.4）

5. $n_{2a}=n_{2d}=\frac{1}{2}\times n_{2c}$

$n_{2a}=\frac{n_{2a}\times t_a+n_{2c}\times t_c+n_{2d}\times t_d}{t_a+t_c+t_d}$

$n_{2N}=\frac{n_{tN}}{i}$

6. $T_{2m}=\sqrt[3]{\frac{n_{2a}\times t_a\times T_{2ra}^3+n_{2c}\times t_c\times T_{2rc}^3+n_{2d}\times t_d\times T_{2rd}^3}{n_{2a}\times t_a+n_{2c}\times t_c+n_{2d}\times t_d}}$

$T_{2am}=\sqrt[3]{\frac{n_{2a}\times t_a\times F_{2aa}^3+n_{2c}\times t_c\times F_{2ac}^3+n_{2d}\times t_d\times T_{2ad}^3}{n_{2a}\times t_a+n_{2c}\times t_c+n_{2d}\times t_d}}$

S5周期运转之建议事项 Suggestions for S5 cycle operation

一般的应用惯量须符合以下公式 The general applied inertia must conform to the following formula

$\frac{J_L}{i^2}\leqslant 4\times J_m$

最适当的应用惯量须符合以下公式
The most appropriate applied inertia must conform to the following formula

$\frac{J_L}{i^2}\approx J_m$

J_L 负载惯量 Load inertia J_m 马达惯量 Motor inertia

产品型号说明 /PRODUCT DESCRIPTION

以PGH系列为例：

PGH060	10	S2	P2	马达
减速机型式： PGH042/PGH060 PGH115/PGH142	减速比：单级（L1）:3、4、5、6、7、8、10 双级（L2）:12、15、20、25、30	输出轴型式选择： S1：平滑直轴 S2：附件直轴	背隙：P0:超精密背隙 P1:精密背隙 P2:标准背隙	马达型号： 马达制造及型号

选用范例：PGH060-10-S2-P2 / MHMD-082G1U

电机推荐配置表 /RECOMMENDED MOTOR CONFIGURATION LIST

行星减速机与电机功率配置表

规格		3	4	5	7	10	9	15	20	25	30	35	40	50	70	100	150	200	250	350	400	500	700	1000
60系列	0.1kw	●	●	●	●	●	●	●	●	●	●	●	●	●	●	◎	×	×	×	×	×	×	×	×
	0.2kw	●	●	●	●	●	●	●	●	●	●	●	●	◎	◎	×	×	×	×	×	×	×	×	×
	0.4kw	●	●	●	●	●	●	●	●	●	●	●	◎	◎	◎	×	×	×	×	×	×	×	×	×
	0.75kw	●	●	●	●	×	●	●	●	◎	◎	×	×	×	×	×	×	×	×	×	×	×	×	×
90系列	0.2kw	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	◎	◎	◎	◎	×	×	×	×
	0.4kw	●	●	●	●	●	●	●	●	●	●	●	●	●	●	◎	◎	◎	◎	◎	×	×	×	×
	0.75kw	●	●	●	●	●	●	●	●	●	●	●	●	◎	◎	×	×	×	×	×	×	×	×	×
	1.0kw	●	●	●	●	◎	●	●	●	●	●	●	◎	◎	◎	×	×	×	×	×	×	×	×	×
120系列	0.75kw	●	●	●	●	●	●	●	●	●	●	●	●	●	●	◎	◎	◎	◎	◎	◎	◎	◎	◎
	1.0kw	●	●	●	●	●	●	●	●	●	●	●	●	●	●	◎	◎	◎	◎	◎	◎	◎	◎	◎
	2.0kw	●	●	●	●	●	●	●	●	●	●	◎	◎	◎	◎	×	×	×	×	×	×	×	×	×
142系列	2.0kw	●	●	●	●	●	●	●	●	●	●	●	●	◎	◎	×	×	×	×	×	×	×	×	×
	3.0kw	●	●	●	●	●	●	●	●	●	●	●	◎	×	×	×	×	×	×	×	×	×	×	×
	5.0kw	●	●	●	●	●	●	●	●	◎	◎	×	×	×	×	×	×	×	×	×	×	×	×	×
	7.5kw	●	●	●	●	×	◎	◎	◎	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
190系列	3.0kw	●	●	●	●	●	●	●	●	●	●	●	●	●	●	×	×	×	×	×	×	×	×	×
	5.0kw	●	●	●	●	●	●	●	●	●	●	●	●	●	◎	×	×	×	×	×	×	×	×	×
	7.5kw	●	●	●	●	●	●	●	●	●	●	●	◎	◎	◎	×	×	×	×	×	×	×	×	×
	11.0kw	●	●	●	●	●	●	●	●	◎	◎	◎	◎	×	×	×	×	×	×	×	×	×	×	×
220系列	5.0kw	●	●	●	●	●	●	●	●	●	●	●	●	●	○	×	×	×	×	×	×	×	×	×
	7.5kw	●	●	●	●	●	●	●	●	●	●	●	●	○	○	×	×	×	×	×	×	×	×	×
	11.0kw	●	●	●	●	●	●	●	●	●	●	○	○	○	○	×	×	×	×	×	×	×	×	×
	15.0kw	●	●	●	●	●	●	●	●	○	○	○	○	×	×	×	×	×	×	×	×	×	×	×
	21.0kw	●	●	●	●	●	●	●	○	○	○	×	×	×	×	×	×	×	×	×	×	×	×	×
280系列	11.0kw	●	●	●	●	●	●	●	●	●	●	●	●	●	○	×	×	×	×	×	×	×	×	×
	15.0kw	●	●	●	●	●	●	●	●	●	●	●	○	○	○	×	×	×	×	×	×	×	×	×
	21.0kw	●	●	●	●	●	●	●	●	●	●	○	○	○	×	×	×	×	×	×	×	×	×	×

注：●表示可以选择以及推荐的配置，◎表示允许但不推荐的配置，×表示不允许的配置。计算公式：Tc2=T2×f1≤TN Tc2:计算扭矩 TN：减速机额定扭矩 f1:使用

斜齿高精度型



斜齿系列产品简介 /INTRODUCTION OF HELICAL TEETH SERIES PRODUCTS

PGH Series			
	7种可选尺寸		42mm-220mm
	额定输出力矩		14Nm-2000Nm
	减速比	单级	3/4/5/6/7/8/10
		双级	12/15/20/25/30/35 40/50/60/70/80/100
	背隙	单级	≤1,≤3,≤5 arcmin
		双级	≤3,≤5,≤7 arcmin

PGF Series			
	7种可选尺寸		47mm-255mm
	额定输出力矩		14Nm-2000Nm
	减速比	单级	4/5/6/7/8/10
		双级	20/25/30/35/40/50 60/70/80/100
	背隙	单级	≤1,≤3,≤5 arcmin
		双级	≤3,≤5,≤7 arcmin

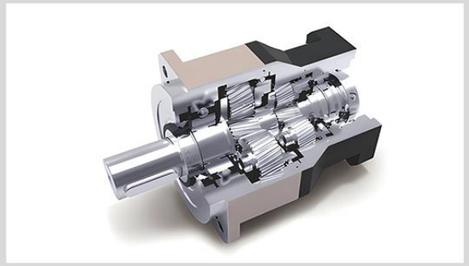
PGRH Series			
	7种可选尺寸		42mm-220mm
	额定输出力矩		14Nm-2000Nm
	减速比	单级	3/4/5/6/7/8/10
		双级	12/15/20/25/30/35/40/50/60 70/80/100/120/140/160/200
	背隙	单级	≤2,≤4,≤6 arcmin
		双级	≤4,≤7,≤9 arcmin

PGFR Series			
	7种可选尺寸		47mm-255mm
	额定输出力矩		14Nm-2000Nm
	减速比	单级	4/5/6/7/8/10/14/20
		双级	20/25/35/40/50/60/70 80/100/120/140/160/200
	背隙	单级	≤2,≤4,≤6 arcmin
		双级	≤4,≤7,≤9 arcmin

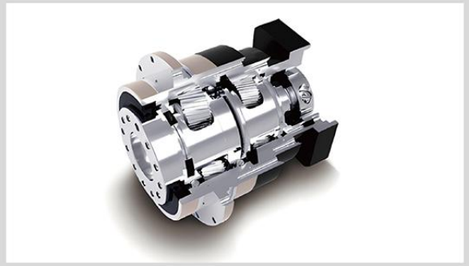
任工机械科技 | 行星减速机专业非标制造与服务厂商
RIGHT GEAR MECHANICAL TECHNOLOGY
PLANETARY REDUCER PROFESSIONAL NON-STANDARD MANUFACTURING AND SERVICE MANUFACTURERS
高精密行星齿轮减速机系列 Planetary Gear Reducer series
任重致远 工匠精神 www.rengongkeji.com

斜齿系列产品结构 /PRODUCT STRUCTURE OF HELICAL TEETH SERIES

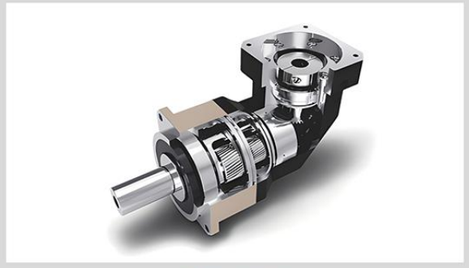

PGH单级


PGH双级


PGF单级


PGF双级


PGRH单级


PGRH双级


PGFR单级

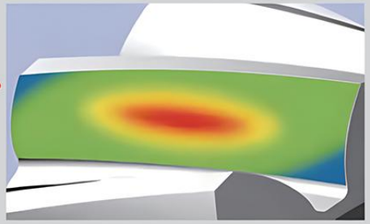

PGFR双级

斜齿高精度型

斜齿系列产品特性 /CHARACTERISTICS OF HELICAL TEETH SERIES PRODUCTS



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

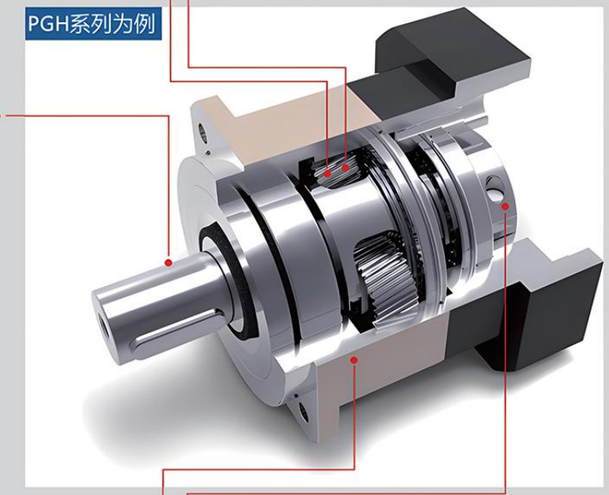


利用ANSYS技术对齿轮强度进行有限元分析，同时对齿面作齿形及导程修整，以减低齿轮啮合的冲击和噪音，增加齿轮系的使用寿命。

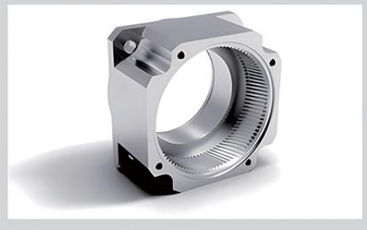


输出行星架采用一体式（双支撑）的结构设计，前后轴承大跨距分布于箱体内，形成稳定的一体式结构，以确保较高的扭转刚性和精度。

PGH系列为例



齿圈与输出壳体采用一体化设计，采用优质钢材，经热锻成形，从而获得较高的材料密度。一体化设计能保证所有几何尺寸一次性加工完成，与其它内嵌式、夹装式等结构相比具有更高的精度和强度。



输入轴与锁紧装置采用一体化设计，双螺栓对称分布，达到动平衡的同时，通过双螺栓的强力锁死，有效防止电机轴传动打滑，实现高精度零背隙的动力传送。



任工机械科技 | 行星减速机专业非标制造与服务厂商
RIGHT GEAR MECHANICAL TECHNOLOGY
PLANETARY REDUCER PROFESSIONAL NON-STANDARD MANUFACTURING AND SERVICE MANUFACTURERS
高精密行星齿轮减速机系列 Planetary Gear Reducer series
任重致远 工匠精神 www.rengongkeji.com

斜齿高精度型

斜齿系列产品概述 /PRODUCT STRUCTURE OF HELICAL TEETH SERIES

产品特点 /PRODUCT CHARACTERISTICS

精密行星齿轮减速机是我公司自主研发的新一代实用性产品，融合了国内外先进的技术，具有以下一些主要特点：

1、低噪音：低于65db。
2、低背隙：单级可达3弧分内，双级可达5弧分内。
3、高效率：单段式在95%以上，双段式在92%以上。
4、高输入转速：可达8000RPM。
5、高扭矩：比一般标准行星减速机扭矩高。
6、高稳定性：采用高强度合金钢材，整颗齿轮硬化处理，非只有表面硬化，确保使用寿命及长期使用仍保持最初的精密度。
7、高减速比：采用模组化设计，行星齿箱可相互连结，速比可达1/1000以上。

THE PRECISION PLANETARY GEAR REDUCER IS A NEW GENERATION OF PRACTICAL PRODUCTS INDEPENDENTLY DEVELOPED BY OUR COMPANY, WHICH INTEGRATES ADVANCED TECHNOLOGIES AT HOME AND ABROAD, AND HAS THE FOLLOWING MAIN CHARACTERISTICS:

1. LOW NOISE: LESS THAN 65DB.
2. LOW BACK CLEARANCE: SINGLE STAGE CAN REACH WITHIN 3 ARC MINUTES, DOUBLE STAGE CAN REACH WITHIN 5 ARC MINUTES.
3. HIGH EFFICIENCY: MORE THAN 95% FOR SINGLE SECTION TYPE AND MORE THAN 92% FOR DOUBLE SECTION TYPE.
4. HIGH INPUT SPEED: UP TO 8000 RPM.
5. HIGH TORQUE: HIGHER THAN THE TORQUE OF GENERAL STANDARD PLANETARY REDUCER.
6. HIGH STABILITY: HIGH STRENGTH ALLOY STEEL IS USED, AND THE WHOLE GEAR IS HARDENED, NOT ONLY THE SURFACE HARDENING, TO ENSURE THE INITIAL PRECISION IN SERVICE LIFE AND LONG-TERM USE.
7. HIGH REDUCTION RATIO: ADOPTING MODULAR DESIGN, THE PLANETARY GEAR BOXES CAN BE CONNECTED WITH EACH OTHER, AND THE SPEED RATIO CAN REACH MORE THAN 1/1000.

产品用途 /PRODUCT USE

精密行星齿轮减速机被广泛应用于以下领域：

1、航空航天、军事产业。
2、医疗卫生、电子信息技术产业。
3、工业机械人、生产自动化、数控机床制造产业。
4、汽车制造、纺织、印刷、食品、冶金、环保工程、仓储物流等产业。

PRECISION PLANETARY GEAR REDUCERS ARE WIDELY USED IN THE FOLLOWING FIELDS:

1. AEROSPACE AND MILITARY INDUSTRIES.
2. MEDICAL AND HEALTH CARE, ELECTRONIC INFORMATION TECHNOLOGY INDUSTRY.
3. INDUSTRIAL ROBOTS, PRODUCTION AUTOMATION, CNC MACHINE TOOL MANUFACTURING INDUSTRY.
4. AUTOMOBILE MANUFACTURING, TEXTILE, PRINTING, FOOD, METALLURGY, ENVIRONMENTAL PROTECTION ENGINEERING, WAREHOUSING AND LOGISTICS AND OTHER INDUSTRIES.

产品选型及注意事项 /PRODUCT SELECTION AND PRECAUTIONS

行星减速机的选型 /SELECTION OF PLANETARY REDUCER

选配行星减速机应该遵循适用性和经济性相结合的原则，就是说行星减速机的各项技术指标，既能满足设备的要求又能节约成本。“过”与“不及”都会带来成本浪费。选型不当是减速机出现故障的主要原因，因此正确选用行星减速机非常重要。

选用减速机应考虑其结构类型、承载能力、减速比、输出转速、轴向力、径向力、扭转刚性、背隙等内在性能指标，也应充分考虑安装形式、工况条件、工作环境等外部因素。为方便起见，请参考以下步骤，实现准确快速选型。

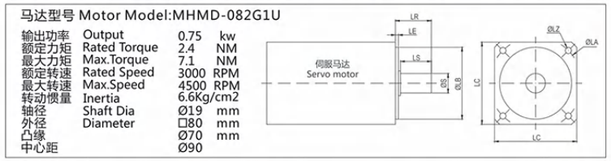
Step1：减速机规格的确定

步骤	说明	代号	参数计算						
			Loading classification 负载类型	Running per hour 每小时启动次数Z	Using fs 使用系数fs Running per day(h) 每日运行时间（h） h<4	4<h<8	8<h<12	12<h<16	16<h<24
1	设备使用系数	f_1	Uniform 均匀负载	Z<10	0.85	0.95	1.00	1.20	1.60
				10<Z<30	0.90	1.10	1.15	1.40	1.80
				30<Z<100	1.00	1.20	1.30	1.60	2.00
			Medium shock 中等冲击负载	Z<10	1.00	1.20	1.30	1.60	2.00
				10<Z<30	1.10	1.35	1.45	1.80	2.20
				30<Z<100	1.20	1.45	1.60	2.00	2.40
			Heavy shock 重冲击负载	Z<10	1.20	1.45	1.60	2.00	2.40
				10<Z<30	1.30	1.55	1.75	2.20	2.50
				30<Z<100	1.40	1.65	1.90	2.40	2.80
2	扭矩的确定	T_{2N}	$T_{2N}>T_{C2}$所选减速机的额定扭矩T_{2N}必须大于计算扭矩T_{C2}。$T_{C2}=T_{r2}\times f_s$（T_{C2}-计算扭矩 T_{r2}-实际所需扭矩f_s-使用系数）						
3	额定输入转速	n_1	允许最大输出转速请参照减速机性能资料						
4	确定减速比	i	$i=n_1/n_2$						
5	减速机效率	η	L1≥95%、L2≥92%						
6	以被驱动设备所需的扭矩或功率，计算减速机的输入功率	P_1	$P_1=（T_2\times n_1）/（9550\times i\times\eta）$ 或 $P_1=P_2\div\eta$						
7	根据计算传动力表确定减速机的规格	T_{2N}、P_{1N}	$T_{2N}\geq T_3\times f_1\times f_2$ $P_{1N}\geq P_1\times f_1\times f_2$						
8	输出轴径向力、轴向力校核	Fr、Fa	查《产品手册》性能资料表。对比应小于减速机最大径向力、轴向力。频繁起动-停止运转工况应选择加强型						
9	确认使用环境		防护等级、工作温度、化学环境等						
10	根据空间确认安装方式		同轴安装、90°直角安装						
11	确认减速机型号		根据性能资料表、输入、输出方式等确定具体系列、型号、规格及附件						

说明：n_2、P_2为被驱动设备的转速和功率；$P_1=P_2$为被驱动设备所需的功率和扭矩；P_{1N}、T_{2N}为实际减速机所需功率和扭矩。

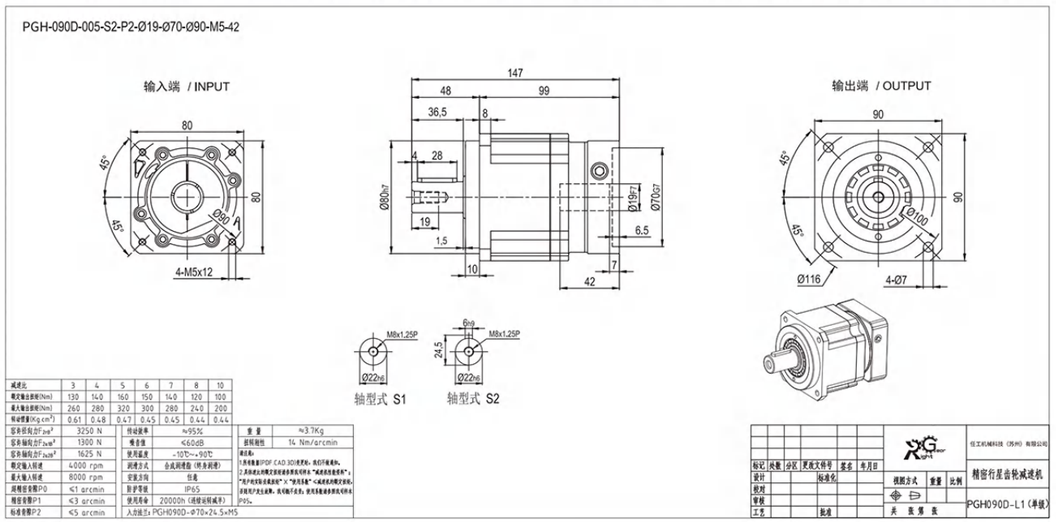
Step2：确定电机。电机生产厂商、规格型号、性能指标及外形尺寸确定

Notice for ordering 订货须知



Motor's type & measurement
配用电机品牌及端面尺寸
Planetary gearbox's type:
行星减速机系列及规格型号：
Torque:
扭 矩：
Ratio:
减速比：
Backlash:
实际等级：
Mounting position&others requir:
外形及安装方式方面特殊要求：

Step3:确定所订行星减速机规格型号及工厂给出的CAD或PDF图纸，正确书写型号 例如 :PGH090D-005-S2-P2/MHMD 082GIU



产品选型及注意事项 /PRODUCT SELECTION AND PRECAUTIONS

与选型有关的基本概念 /BASIC CONCEPTS RELATED TO TYPE SELECTION

Ratio减速比

Input speed/Output speed 输出转速比上输入转速

额定输入转速 n_1[rpm]

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。本书中的额定转入转速是在环境温度为20℃的条件下测得的。环境温度较高时请降低转速n_1

输出转速 n_2[rpm]

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

Poles 段/级数

The number of set of planetary gear. Oweing to one set planetary gear can’ t satisfy bigger transmission ratio,two or three sets can meet Users’ requirements of bigger transimission ratio. Since increasing the gear quantity,the length of two or three poles motor will increase accordingly,of course,the efficiency will reduce accordingly.
行星齿轮的套数。由于一套行星齿轮无法满足较大的传动比，有时需要两套或三套来满足用户对较大传动比的求，也就是说，减速比越大段/级数越多。由于增加了行星齿轮的数量，所以二级或三级减速机的长度会有所增加，效率会有所下降。

Efficiency 传动效率

If refers to the gearing efficiency of the gearboxes in the case of the largest load.
指在额定负载情况下，减速机的传输效率。减速比越大，级数越多，效率越低。

Average lifetime 平均寿命

Refers to the continuous working time of the gearboxes of the highestinputrev.
指减速机在额定负载下，额定输入转速是减速机的连续工作时间。

Precise positioning 定位精度

In high-speed reciprocating mechanical movement achieve precise positioning is the key to minimizing the movement through the angular deviation,positioning accuracy depends on the two values,with a load of the deflection angle,involving a return to space with torsion stiffness,and the other is control of the movement and rotation angle,involving partial synchronization the problem worse.
在高速机械往复运动中做到精确定位的关键在于尽量减小通过运动产生的角偏差。定位精度取决于两个值，一个是与加载有关的偏转角，涉及到回程间隙和扭转刚度；另一个是与运动控制有关的偏转角，涉及到同步偏差问题。

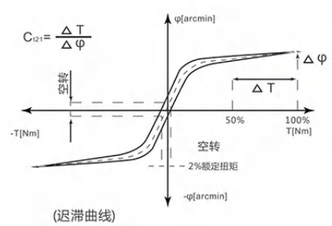
Backlash 回程间隙背隙

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_{2N}），以克服减速机内的摩擦力。

迟滞曲线



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



（迟滞曲线）

Inertia 转动惯性

Moment of the rotary inertiain this description refers to that at the input terminal.Said an object strive to maintain their rotational state(or a stationary of rotating)characteristics of a value.
本说明书中的该值均指输入端。表示一个物体尽力保持自己转动状态（或静止或转动）特征的一个值。

The proportion of inertia 惯量比

Refer to the ration of load inertia and inertia drive system(motor with gearbox).This ratio determines the controllable of the λ value,the greater is the moment of inertia greater margin,high-dynamic action on the more difficult process of precision control.The values can be control in 5,gearboxes can be used to reduce load $1/i^2$.
是指负载惯量与传动系统惯量（电机加上减速机）之间的比值。这个比值决定了系统的可控性。λ值越大，也就是各转动惯量差值越大，高动态的动作过程就越难精确控制，建议尽可能将λ值控制在＜5。齿轮箱可以将负载惯量降低$1/i^2$。

Noise 噪音

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

Operating conditions 工作条件

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

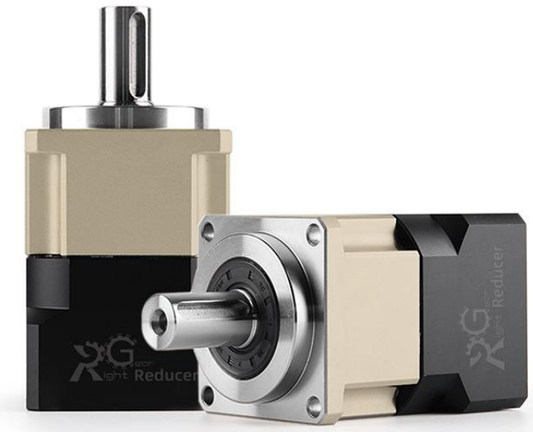
斜齿高精度型

斜齿系列产品选型及注意事项 /PRODUCT SELECTION AND PRECAUTIONS

与选型有关的基本概念 /BASIC CONCEPTS RELATED TO TYPE SELECTION

额定输出扭矩 T_{2N}[Nm]	T_{2N}[Nm]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,FG160/FAB142以下机型，理论寿命为20000小时：FAB180以上机型理论寿命为10000小时：T_N值遵守ISODP6336齿轮标准与ISO281轴承标准。
加速扭矩 [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，须考虑冲击因素。加速扭转是周期工作制选型时的一个最大值，实际使用中的加速力矩必须小于T_{2B}，否则会缩短减速机的寿命。
紧急制动扭矩 [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期内加载1000次，绝对不能超过1000次。（备注：FG160/FAB142以下机型为$T_{2HOT}=2•T_{2B}$ FAB180以上机型为$T_{2HOT}=1.5•T_{2B}$)
空载扭矩 T_{012}[Nm]	指加载到减速机上的以克服减速机内摩擦力的力矩。
最大输出扭矩 T_{2B}	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。
实际所需扭矩 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_{2N}必须大于这个扭矩。
计算用扭矩 T_{C2}[Nm]	会在选择减速机时被用到，可以由实际所需转矩T_2和系数f_s，按以下公式得出 $T_{C2}=T_2*f_s\leq T_N$
侧倾扭矩 [Nm]	指轴向力和径向力作用于输出端轴承上径向受力点的力矩。其计算公式为：$M_{2kmax}=[Fa*y_2+Fr*(X_2+Z_2)]/1000$
轴向力 Fa[N]	是指平行于轴心的一个力，它的作用点与输出轴端有一定的轴向偏差（Y_2）时，会形成一个额外的弯挠力矩。轴向力超过样本所示的额定值时，须用联轴节来抵消这种弯挠力。
径向力 Fr[N]	指垂直作用于轴向力的一个力，它平行于输出轴，它的作用点与轴端有一定的轴向距离（X_2）。这个点成一个杠杆点，横向力形成一个弯挠力矩。
轴伸径向载荷、轴向载荷	选择减速机的附加依据是输出轴伸出端上的径向载荷和轴向载荷。轴的强度和轴承的承载能力决定了许用轴伸的径向载荷。产品样本中给出的最大允许值是指在最不利的方向作用在 轴伸出端中点（即1/2L处）的力。当作用力不在中点时，越接近轴肩，允许的径向载荷就越大；相反，作用点离轴肩越远，允许的径向载荷就越小。
安全系数 s	安全系数等于减速机的额定输入功率与电机功率的比值。
使用系数 f_1	使用系数表现减速机的应用特征，它考虑到减速机的负载类型和每日工作时间。
扭转刚度C_{t21} [Nm/Arcmin]	由加载力矩和所产生的扭转角之间的比率来定义。$C_{t21}=\triangle T/\triangle$它说明需要用多大的力矩才能把输出轴转动一弧分。扭转刚度是从迟滞曲线得出的。在曲线图上只需要关注T_{2B}的50%到100%这个范围，在这个范围内，曲线可看成是一条直线。
安装力矩 [Nm]	减速机的组装以及电机与减速机连接安装（输入轴采用弹性联轴器要求），都是有力矩要求。建议使用力矩扳手来完成安装步骤。
Special Notice 特别注意	You can only refer to the input terminal dimension given in this book,special dimension is depend on the shaft extension terminal of chosen motor,practical object's dimension will be difference with these in book,the practical is depend on the finished product,the output terminal dimension is according to these given in this book if not sign. The weight of reduce motor given in this book is approximation,the practical is depend on the finished product. 本书给出的所有减速机输入端尺寸仅供参考，具体尺寸由适配电机的轴伸端尺寸决定，因此实物外形尺寸与本手册有所差异，应以订购货品的标准图纸为准，在没有特殊制定状态下减速机的输出端尺寸以本书为准。 本书给出的所有减速机重量为近似值，实际重量以实物为准。书中错误之处还请见谅。

PGH
SERIES



斜齿高精度型 PGH SERIES

减速机性能资料 /GEAR BOX PERFORMANCE INFORMATION

规 格		级 数	减速比[1]	PGH042	PGH060	PGH090	PGH115	PGH142	PGH180	PGH220
额定输出力矩T_{2N}	Nm	1	3	20	55	130	208	342	588	1,140
			4	19	50	140	290	542	1,050	1,700
			5	22	60	160	330	650	1,200	2,000
			6	20	55	150	310	600	1,100	1,900
			7	19	50	140	300	550	1,100	1,800
			8	17	45	120	260	500	1,000	1,600
			10	14	40	100	230	450	520	1,220
		2	12	20	55	130	208	342	588	1,140
			15	20	55	130	208	342	588	1,140
			20	19	50	140	290	542	1,050	1,700
			25	22	60	160	330	650	1,200	2,000
			30	22	55	130	208	342	1,200	2,000
			35	22	60	160	330	650	1,200	2,000
			40	22	50	140	290	542	1,200	2,000
			50	22	60	160	330	650	1,200	2,000
			60	20	55	150	310	600	1,100	1,900
			70	19	50	140	300	550	1,100	1,800
			80	17	45	120	260	500	1,000	1,600
			100	14	40	100	230	450	520	1,220
最大输出力矩T_{2B}	Nm	1,2	3~100	3倍额定输出力矩						
额定输入转速n_1	rpm	1,2	3~100	5,000	5,000	4,000	4,000	3,000	3,000	2,000
最大输入转速n_{1B}	rpm	1,2	3~100	10,000	10,000	8,000	8,000	6,000	6,000	4,000
超精密背隙 P0	arcmin	1	3~10	—	—	≤1	≤1	≤1	≤1	≤1
		2	3~100	—	—	—	≤3	≤3	≤3	≤3
精密背隙 P1	arcmin	1	3~10	≤3	≤3	≤3	≤3	≤3	≤3	≤3
		2	12~100	≤5	≤5	≤5	≤5	≤5	≤5	≤5
标准背隙 P2	arcmin	1	3~10	≤5	≤5	≤5	≤5	≤5	≤5	≤5
		2	12~100	≤7	≤7	≤7	≤7	≤7	≤7	≤7
扭转刚性	Nm/arcmin	1,2	3~100	3	7	14	25	50	145	225
容许径向力F_{2rB}[2]	N	1,2	3~100	780	1,530	3,250	6,700	9,400	14,500	50,000
容许轴向力F_{2a1B}[2]	N	1,2	3~100	350	630	1,300	3,000	4,000	6,200	35,000
容许轴向力F_{2a2B}[2]	N	1,2	3~100	390	765	1,625	3,350	4,700	7,250	25,000
使用寿命	hr	1,2	3~100	20,000*						
效率 η	%	1	3~10	≥97%						
		2	12~100	≥94%						
重量	kg	1	3~10	0.5	1.3	3.7	7.8	14.5	29	48
		2	12~100	0.8	1.9	4.1	9	17.5	33	60
使用温度	℃	1,2	3~100	-10℃~+90℃						
润滑		1,2	3~100	合成润滑油脂						
防护等级		1,2	3~100	IP65						
安装方向		1,2	3~100	任意方向						
噪音值（n_1=3000rpm）	dB	1,2	3~100	≤56	≤58	≤60	≤63	≤65	≤67	≤70

减速机转动惯量

规 格		级 数	减速比[1]	PGH042	PGH060	PGH090	PGH115	PGH142	PGH180	PGH220
转动惯量J_1	kg·cm²	1	3	0.03	0.16	0.61	3.25	9.21	28.98	69.61
			4	0.03	0.14	0.48	2.74	7.54	23.67	54.37
			5	0.03	0.13	0.47	2.71	7.42	23.29	53.27
			6	0.03	0.13	0.45	2.65	7.25	22.75	51.72
			7	0.03	0.13	0.45	2.62	7.14	22.48	50.97
			8	0.03	0.13	0.44	2.58	7.07	22.59	50.84
			10	0.03	0.13	0.44	2.57	7.03	22.51	50.56
		2	12	0.03	0.03	0.13	0.47	2.71	7.42	23.29
			15	0.03	0.03	0.13	0.47	2.71	7.42	23.29
			20	0.03	0.03	0.13	0.47	2.71	7.42	23.29
			25	0.03	0.03	0.13	0.47	2.71	7.42	23.29
			30	0.03	0.03	0.13	0.47	2.71	7.42	23.29
			35	0.03	0.03	0.13	0.47	2.71	7.42	23.29
			40	0.03	0.03	0.13	0.47	2.71	7.42	23.29
			50	0.03	0.03	0.13	0.44	2.57	7.03	22.51
			60	0.03	0.03	0.13	0.44	2.57	7.03	22.51
			70	0.03	0.03	0.13	0.44	2.57	7.03	22.51
			80	0.03	0.03	0.13	0.44	2.57	7.03	22.51
			100	0.03	0.03	0.13	0.44	2.57	7.03	22.51

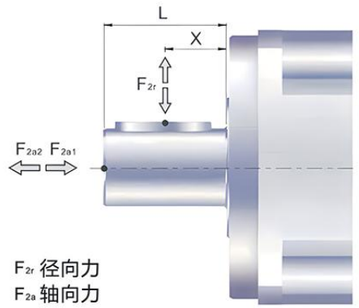
1.减速比（$i=N_{in}/N_{out}$）
* 连续运转降低使用寿命二分之一。

2.输出转数 **100rpm** 时，作用于输出轴中心位置。

任工机械科技 RIGHT GEAR MECHANICAL TECHNOLOGY | 行星减速机专业非标制造与服务厂商 PLANETARY REDUCER PROFESSIONAL NON-STANDARD MANUFACTURING AND SERVICE MANUFACTURERS
高精密行星齿轮减速机系列 Planetary Gear Reducer series 任重致远 工匠精神 www.rengongkeji.com

斜齿高精度型 PGH SERIES

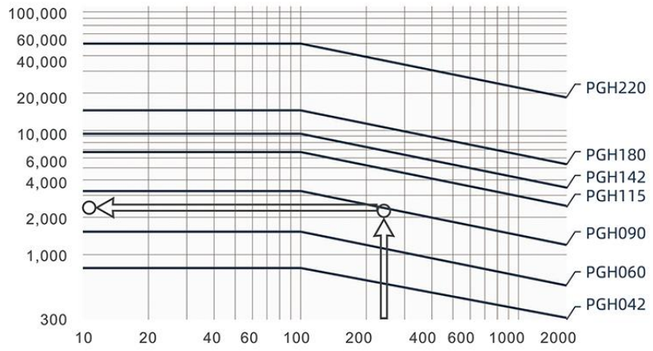
减速机输出轴之容许径向力及轴向力
REDUCER OUTPUT SHAFT OF THE PERMISSIBLE RADIAL FORCE AND SHAFT AND FORCE



F_{2r} 径向力
F_{2a} 轴向力

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

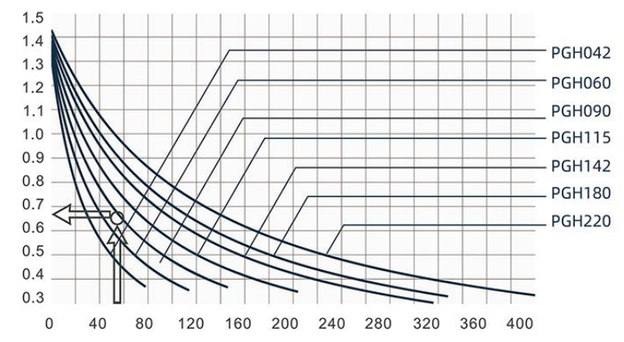
容许径向力 F_{2rB}[N] 施力于轴中心位置



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

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

位置负荷系数k_b



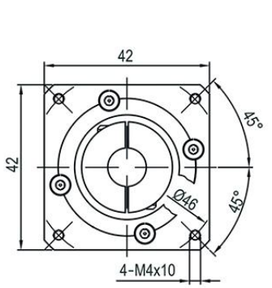
当径向力F_{2r}施力不在轴中心位置时，越靠近减速机即X < 1/2xL，所能承受之容许径向力变大，越远离减速机即X > 1/2xL时，所能承受之容许径向力则变小，藉由左图，依减速机规格及径向力施力位置X，查出位置负荷洗漱K_b，在代入下列公式，求出容许
径向力：
$F'_{2rB}=KbxF_{2rB}$
轴向力:
$F'_{2a1B}=0.2xF'_{2rB}$
$F'_{2a2B}=0.1xF'_{2rB}$

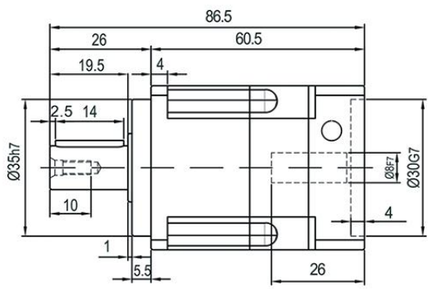
＊连续运转降低使用寿命二分之一。

外形尺寸图表 /OUTLINE DIMENSION SHEET

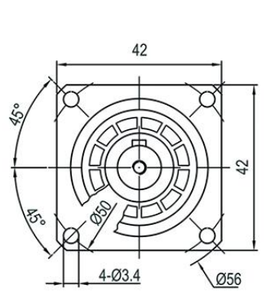
PGH042-L1(8-30-46-M4)

输入端/INPUT



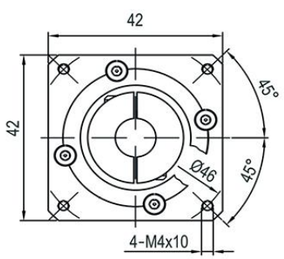


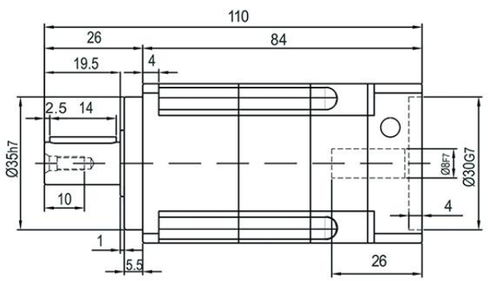
输出端/OUTPUT



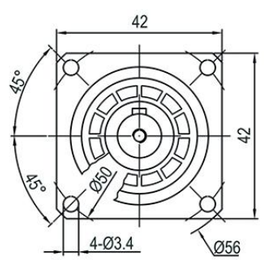
PGH042-L2(8-30-46-M4)

输入端/INPUT

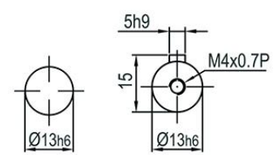




输出端/OUTPUT



*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

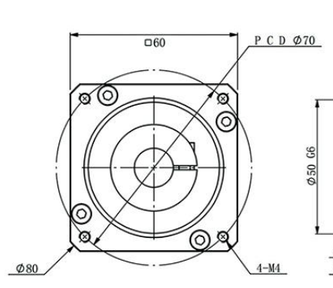


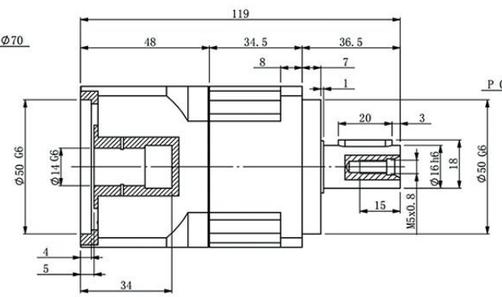
轴型式 S1 轴型式 S2

外形尺寸图表 /OUTLINE DIMENSION SHEET

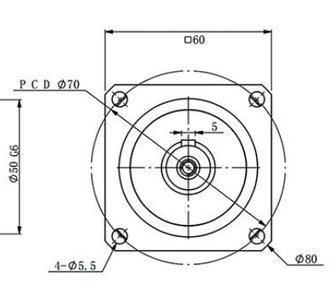
PGH060-L1(14-50-70-M4)

输入端/INPUT



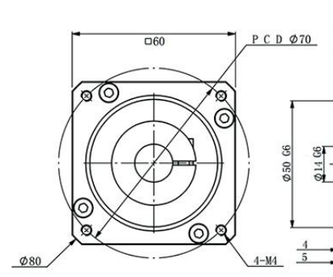


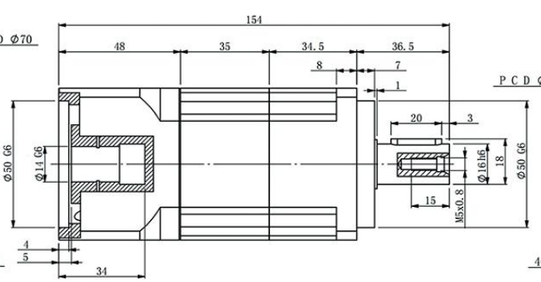
输出端/OUTPUT



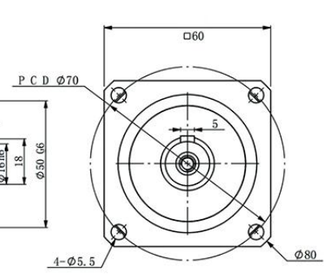
PGH060-L2(14-50-70-M4)

输入端/INPUT





输出端/OUTPUT

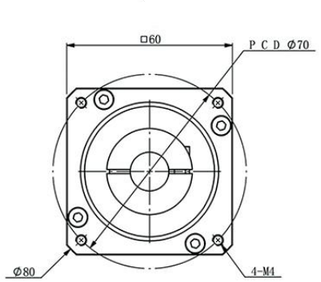


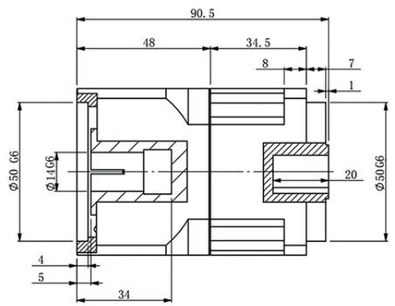
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

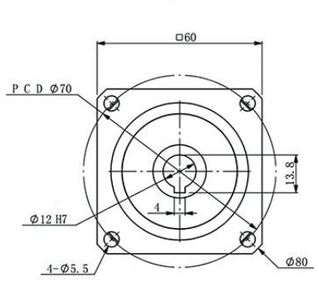
孔输出 PGH060-L1(14-50-70-M4)

输入端/INPUT



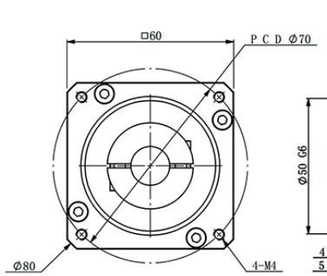


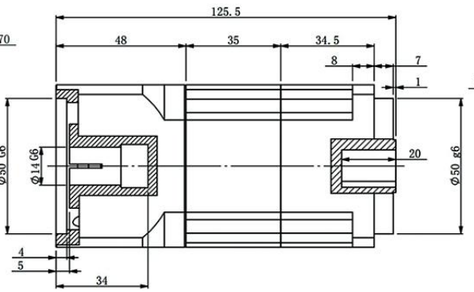
输出端/OUTPUT



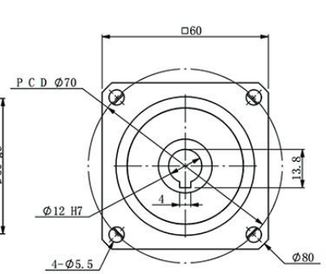
孔输出 PGH060-L2(14-50-70-M4)

输入端/INPUT





输出端/OUTPUT

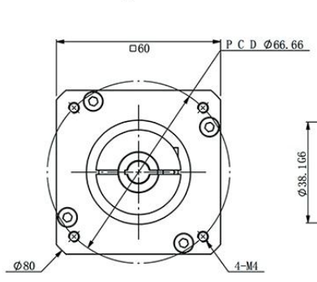


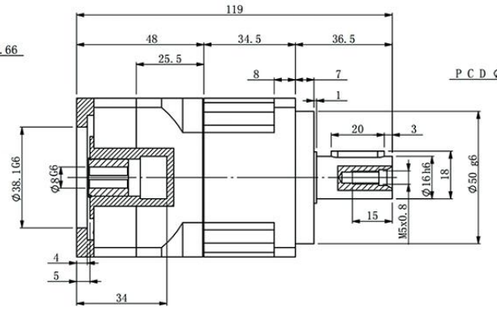
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

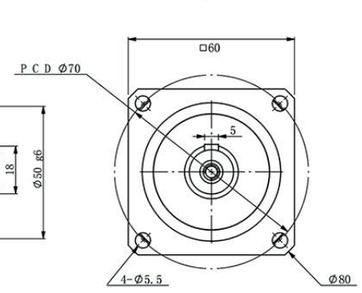
57步进 PGH060-L1(8-38.1-66.66-M4)

输入端/INPUT



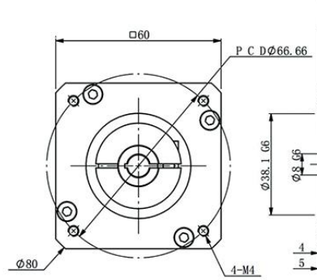


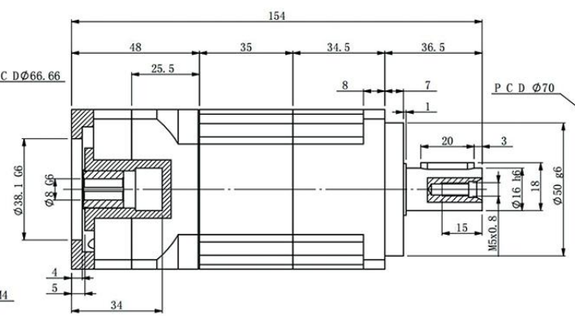
输出端/OUTPUT



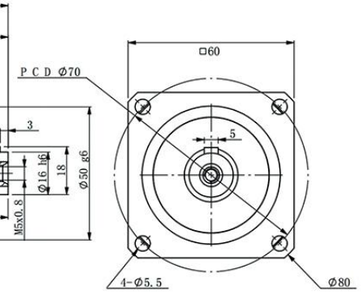
57步进 PGH060-L2(8-38.1-66.66-M4)

输入端/INPUT





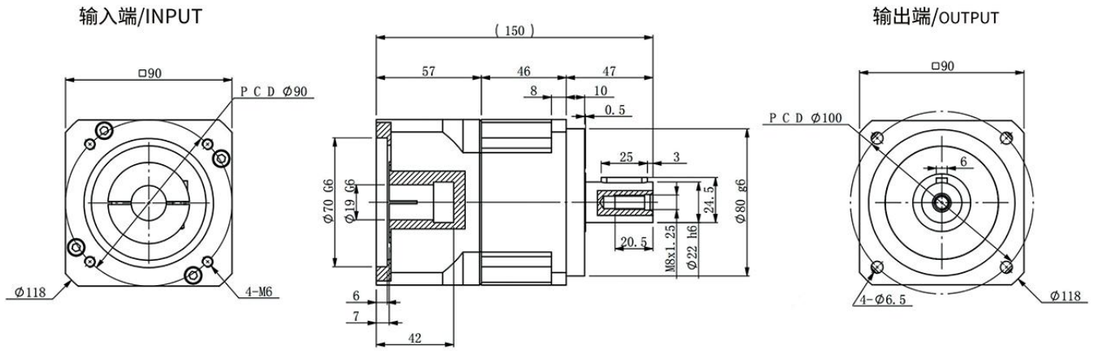
输出端/OUTPUT



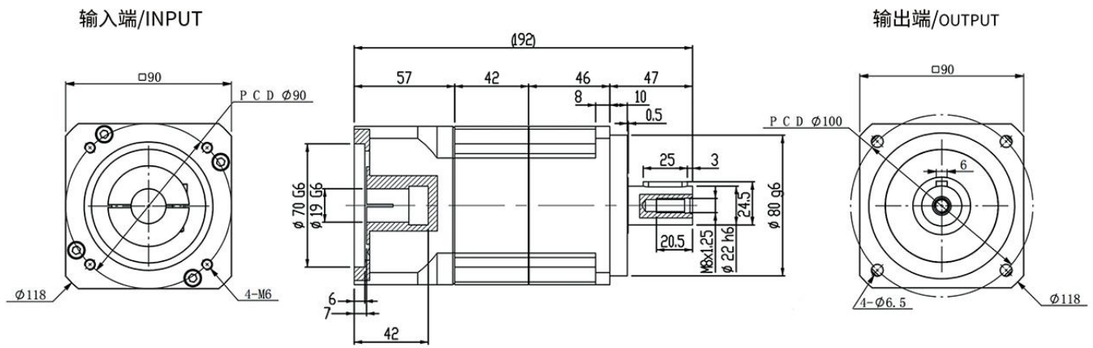
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

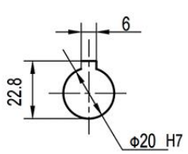
PGH090-L1(19-70-90-M6)



PGH090-L2(19-70-90-M6)



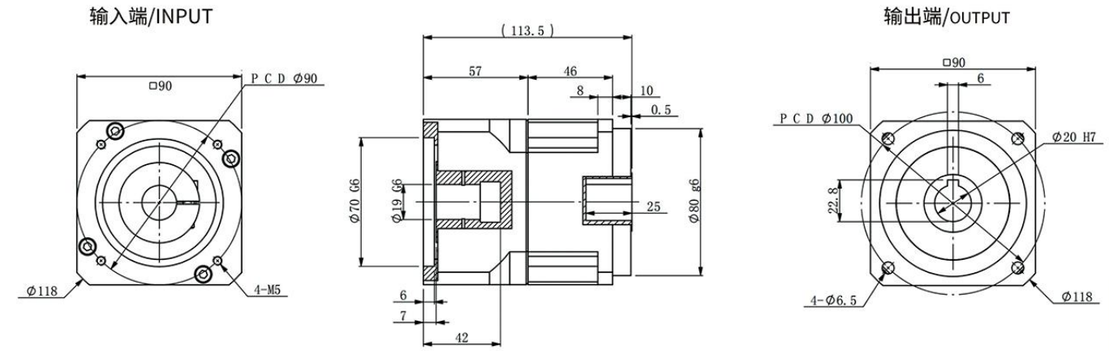
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.



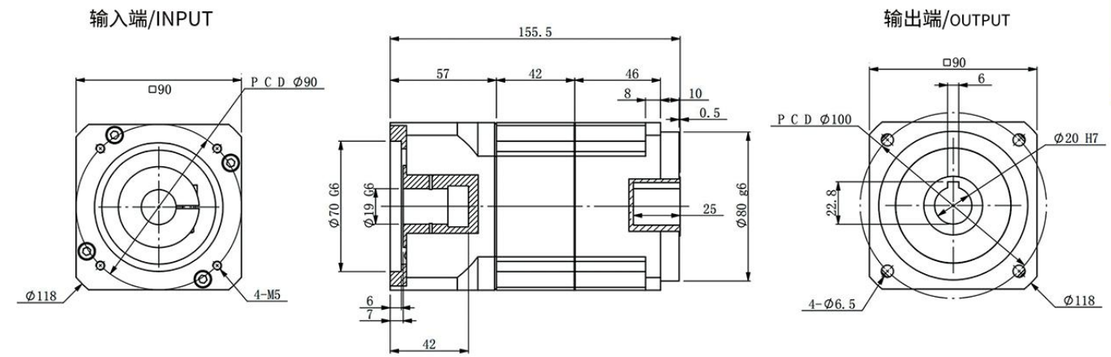
中空输出

外形尺寸图表 /OUTLINE DIMENSION SHEET

孔输出 PGH090-L1(19-70-90-M5)



孔输出 PGH090-L2(19-70-90-M5)

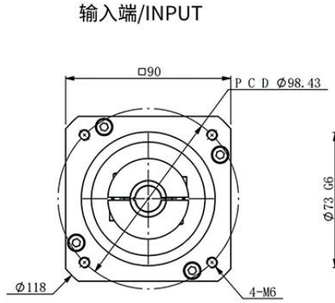


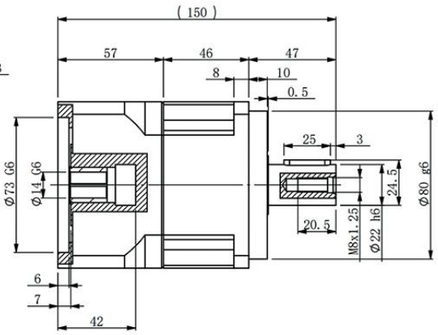
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

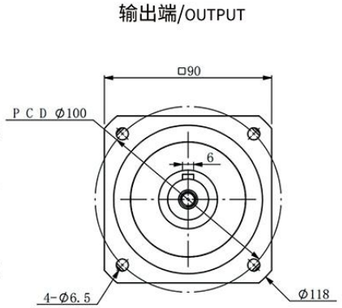
86步进 PGH090-L1(14-73-98.43-M6)

输入端/INPUT



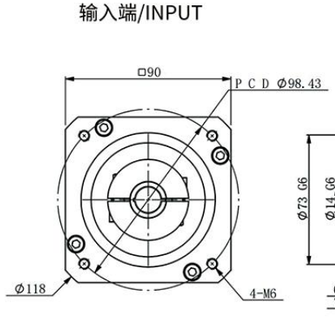


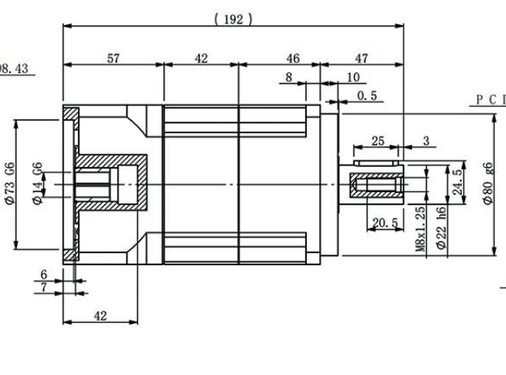
输出端/OUTPUT



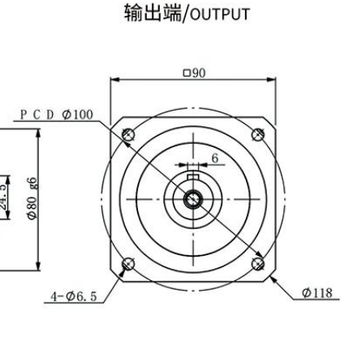
86步进 PGH090-L2(14-73-98.43-M6)

输入端/INPUT





输出端/OUTPUT



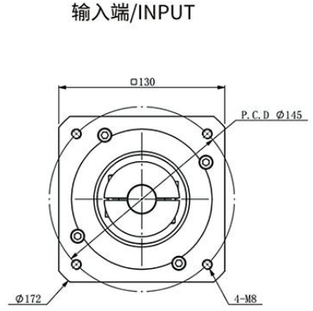
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

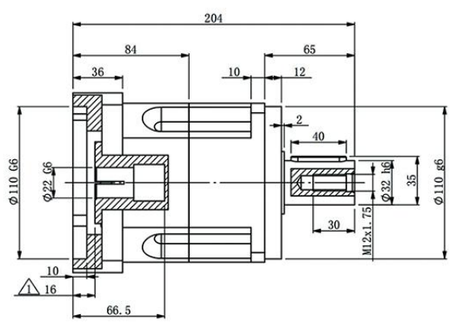
任工机械科技 RIGHT GEAR MECHANICAL TECHNOLOGY | 行星减速机专业非标制造与服务厂商 PLANETARY REDUCER PROFESSIONAL NON-STANDARD MANUFACTURING AND SERVICE MANUFACTURERS
高精密行星齿轮减速机系列 Planetary Gear Reducer series 任重致远 工匠精神 www.rengongkeji.com

外形尺寸图表 /OUTLINE DIMENSION SHEET

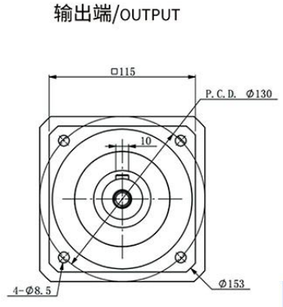
PGH115-L1(22-110-145-M8)

输入端/INPUT



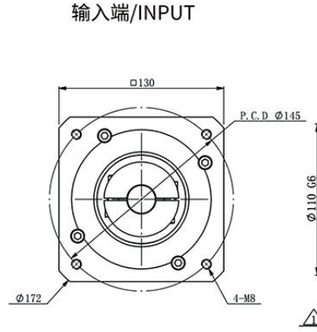


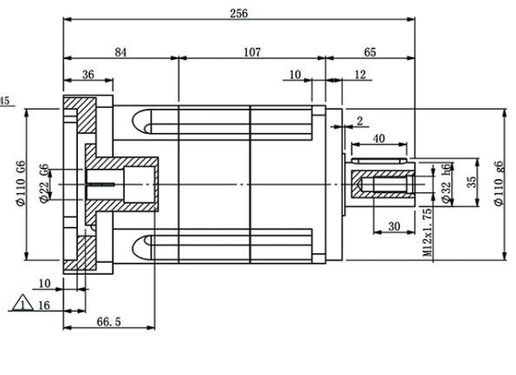
输出端/OUTPUT



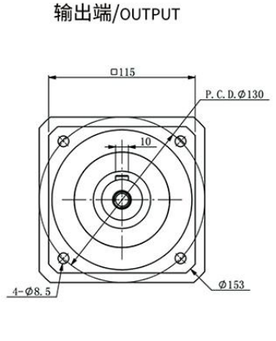
PGH115-L2(22-110-145-M8)

输入端/INPUT





输出端/OUTPUT

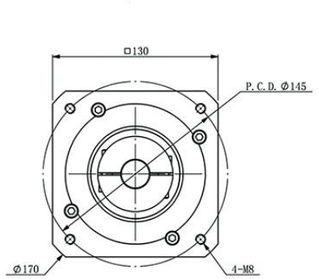


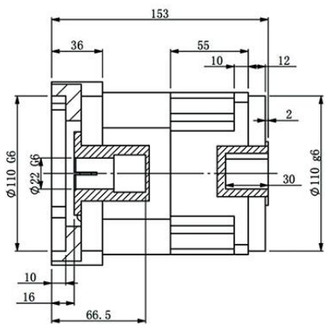
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

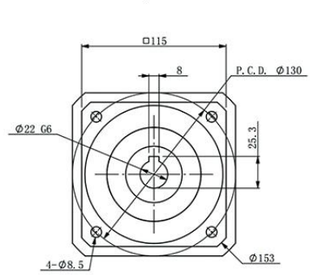
孔输出 PGH115-L1(22-110-145-M8)

输入端/INPUT



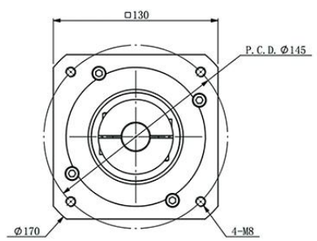


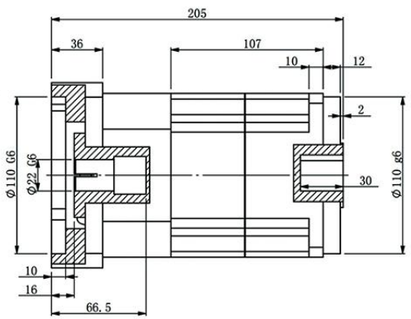
输出端/OUTPUT



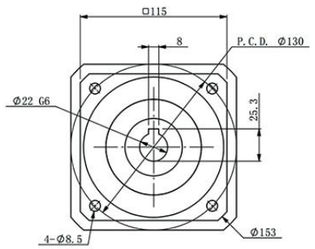
孔输出 PGH115-L2(22-110-145-M8)

输入端/INPUT





输出端/OUTPUT

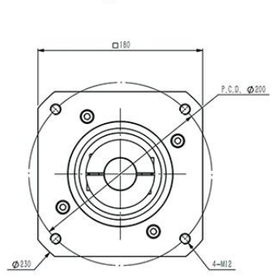


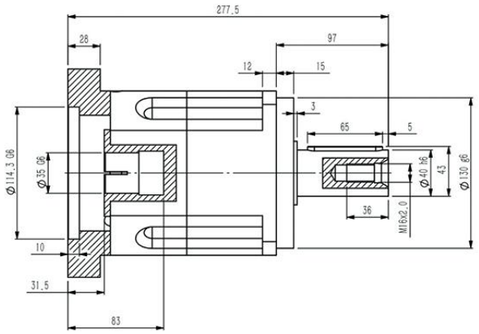
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

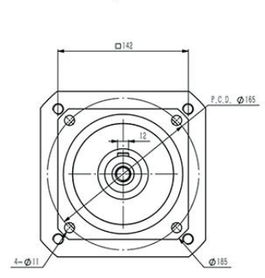
PGH142-L1(35-114.3-200-M12)

输入端/INPUT



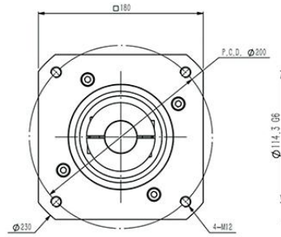


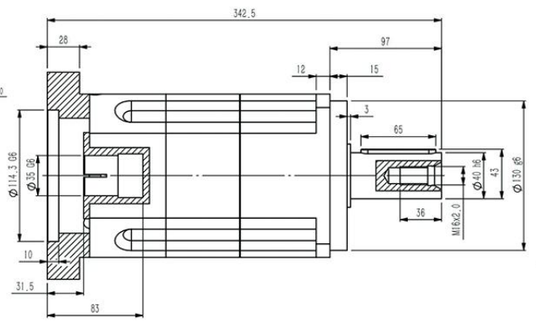
输出端/OUTPUT



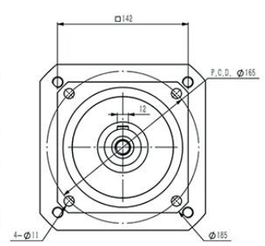
PGH142-L2(35-114.3-200-M12)

输入端/INPUT





输出端/OUTPUT

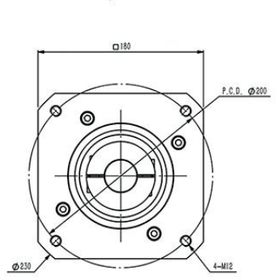


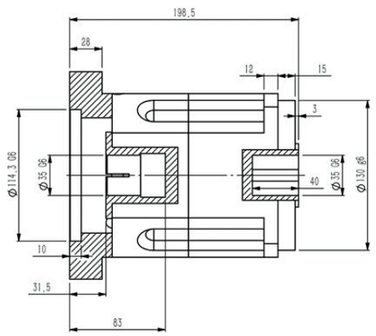
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

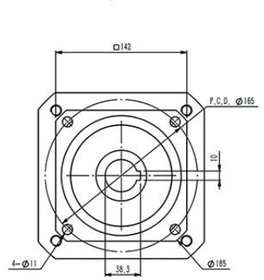
孔输出 PGH142-L1(35-114.3-200-M12)

输入端/INPUT



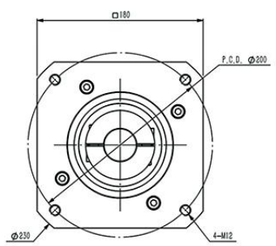


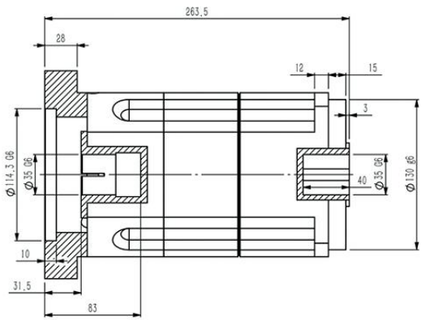
输出端/OUTPUT



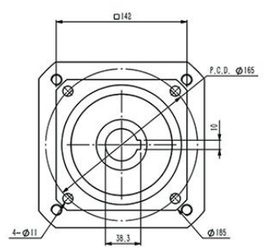
孔输出 PGH142-L2(35-114.3-200-M12)

输入端/INPUT





输出端/OUTPUT

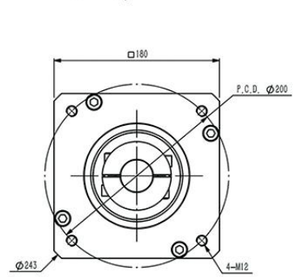


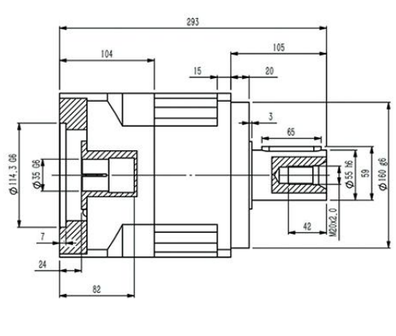
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

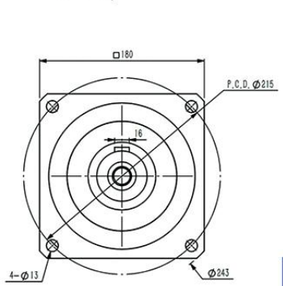
PGH180-L1(35-114.3-200-M12)

输入端/INPUT



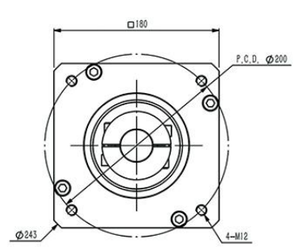


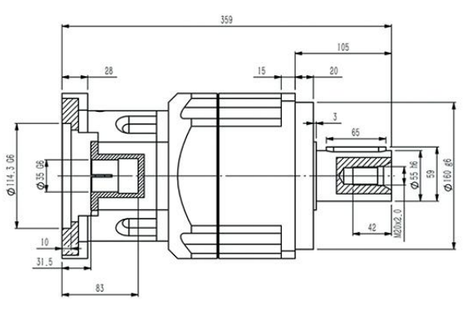
输出端/OUTPUT



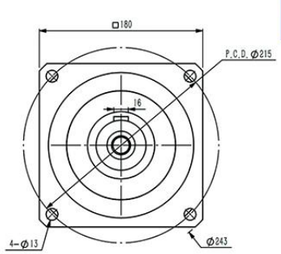
PGH180-L2(35-114.3-200-M12)

输入端/INPUT





输出端/OUTPUT

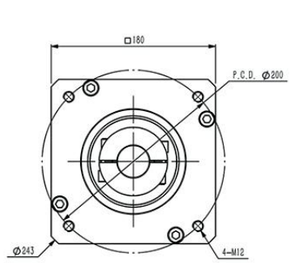


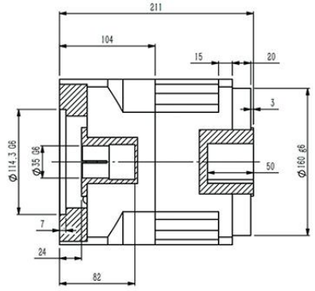
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

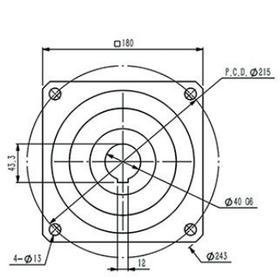
孔输出 PGH180-L1(35-114.3-200-M12)

输入端/INPUT



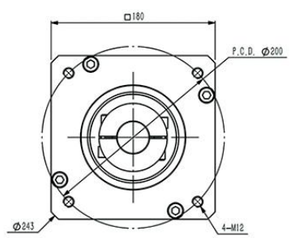


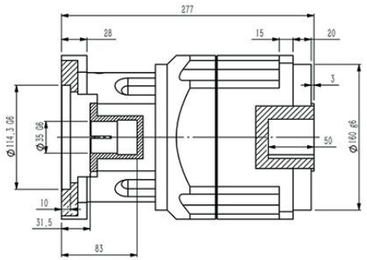
输出端/OUTPUT



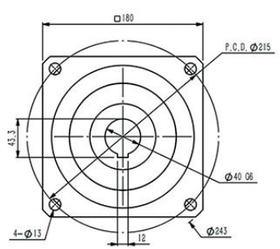
孔输出 PGH180-L2(35-114.3-200-M12)

输入端/INPUT





输出端/OUTPUT



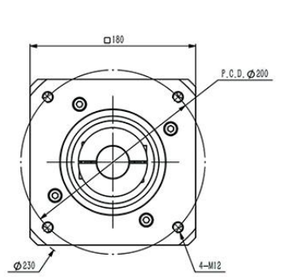
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

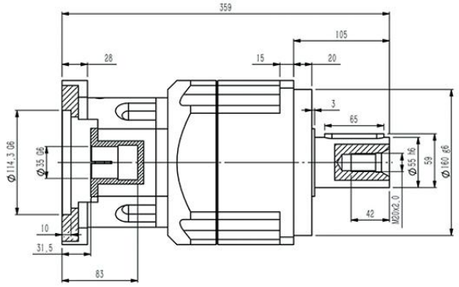
任工机械科技 RIGHT GEAR MECHANICAL TECHNOLOGY
行星减速机专业非标制造与服务厂商 PLANETARY REDUCER PROFESSIONAL NON-STANDARD MANUFACTURING AND SERVICE MANUFACTURERS
高精密行星齿轮减速机系列 Planetary Gear Reducer series
任重致远 工匠精神 www.rengongkeji.com

外形尺寸图表 /OUTLINE DIMENSION SHEET

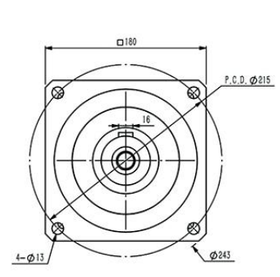
PGH180T-L2(35-114.3-200-M12)

输入端/INPUT



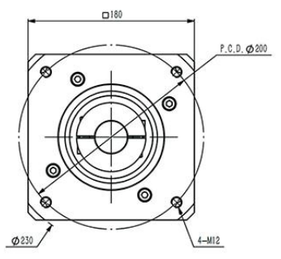


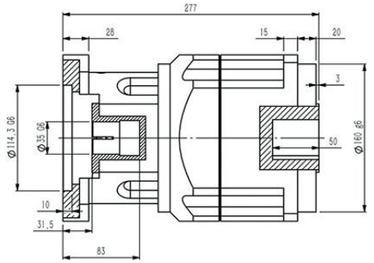
输出端/OUTPUT



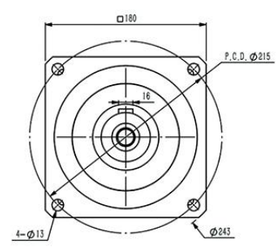
孔输出 PGH180T-L2(35-114.3-200-M12)

输入端/INPUT





输出端/OUTPUT

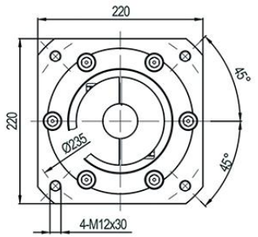


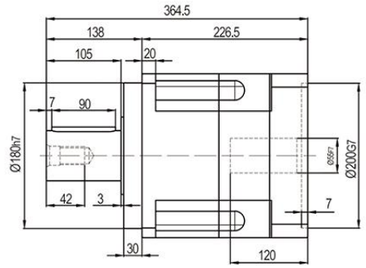
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

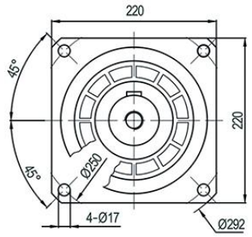
PGH220-L1(55-200-235-M12)

输入端/INPUT



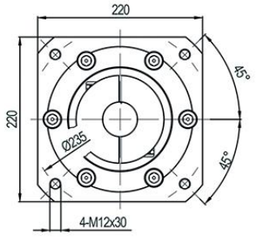


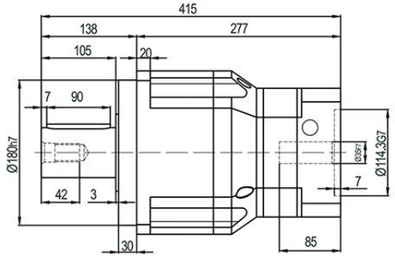
输出端/OUTPUT



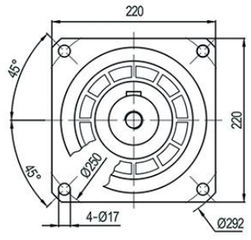
PGH220T-L2(35-114.3-200-M12)

输入端/INPUT

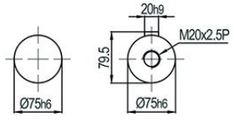




输出端/OUTPUT

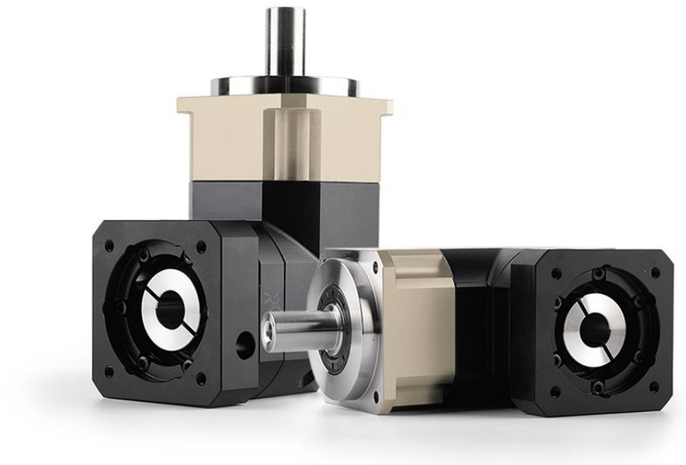


*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.



轴型式 S1　　轴型式 S2

PGRH SERIES



减速机性能资料 /GEAR BOX PERFORMANCE INFORMATION

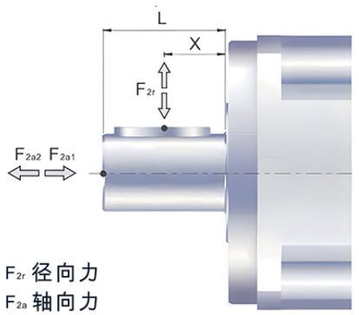
规 格		级 数	减速比[1]	PGRH042	PGRH060	PGRH090	PGRH115	PGRH142	PGRH180	PGRH220
额定输出力矩T_{2N}	Nm	1	3	20	55	130	208	342	588	1,140
			4	19	50	140	290	542	1,050	1,700
			5	22	60	160	330	650	1,200	2,000
			6	20	55	150	310	600	1,100	1,900
			7	19	50	140	300	550	1,100	1,800
			8	17	50	140	290	542	1,000	1,600
			10	14	60	160	330	650	520	1,220
			14	–	50	140	300	550	1,100	1,800
			20	–	40	100	230	450	520	1,220
		2	12	–	55	130	208	342	588	1,140
			15	20	55	130	208	342	588	1,140
			20	19	50	140	290	542	1,050	1,700
			25	22	60	160	330	650	1,200	2,000
			30	22	55	130	208	342	1,200	2,000
			35	22	60	160	330	650	1,200	2,000
			40	22	50	140	290	542	1,200	2,000
			50	22	60	160	330	650	1,200	2,000
			60	22	55	150	310	600	1,200	2,000
			70	22	60	160	330	650	1,200	2,000
			80	22	50	140	290	542	1,200	2,000
			100	22	60	160	330	650	1,200	2,000
			120	–	–	150	310	600	1,100	1,900
			140	–	–	140	300	550	1,100	1,800
			160	–	–	120	260	500	1,000	1,600
			200	–	–	100	230	450	520	1,220
最大输出力矩T_{2B}	Nm	1,2	3~200	3倍额定输出力矩						
额定输入转速n_1	rpm	1,2	3~200	5,000	5,000	4,000	4,000	3,000	3,000	2,000
最大输入转速n_{1B}	rpm	1,2	3~200	10,000	10,000	8,000	8,000	6,000	6,000	4,000
超精密背隙 P0	arcmin	1	3~20	–	–	≤2	≤2	≤2	≤2	≤2
		2	12~200	–	–	≤4	≤4	≤4	≤4	≤4
精密背隙 P1	arcmin	1	3~20	≤4	≤4	≤4	≤4	≤4	≤4	≤4
		2	12~200	≤7	≤7	≤7	≤7	≤7	≤7	≤7
标准背隙 P2	arcmin	1	3~20	≤6	≤6	≤6	≤6	≤6	≤6	≤4
		2	12~200	≤9	≤9	≤9	≤9	≤9	≤9	≤7
扭转刚性	Nm/arcmin	1,2	3~200	3	7	14	25	50	145	225
容许径向力F_{2B}[2]	N	1,2	3~200	780	1,530	3,250	6,700	9,400	14,500	50,000
容许轴向力F_{2a1B}[2]	N	1,2	3~200	350	630	1,300	3,000	4,000	6,200	35,000
容许轴向力F_{2a2B}[2]	N	1,2	3~200	390	765	1,625	3,350	4,700	7,250	25,000
使用寿命	hr	1,2	3~200	20,000*						
效率 η	%	1	3~20	≤95%						
		2	12~200	≤92%						
重量	kg	1	3~20	0.9	2.1	6.4	13	24.5	51	83
		2	12~200	1.2	2.5	7.8	14.2	27.5	54	95
使用温度	℃	1,2	3~200	-10℃~+90℃						
润滑		1,2	3~200	合成润滑油脂						
防护等级		1,2	3~200	IP65						
安装方向		1,2	3~200	任意方向						
噪音值（n_1=3000rpm）	dB	1,2	3~200	≤61	≤63	≤65	≤68	≤70	≤72	≤74

减速机转动惯量

规 格		级 数	减速比[1]	PGRH042	PGRH060	PGRH090	PGRH115	PGRH142	PGRH180	PGRH220
转动惯量J_1	kg · cm²	1	3~7	0.09	0.35	2.25	6.84	23.4	68.9	135.4
			8~10	0.09	0.07	1.87	6.25	21.8	65.6	119.8
			14~20	–	0.07	1.87	6.25	21.8	65.6	119.8
		2	12~40	0.09	0.09	0.35	2.25	6.84	23.4	68.9
			50	0.09	0.09	0.31	1.87	6.25	21.8	65.6
			60	0.09	0.09	0.35	2.25	6.84	23.4	68.9
			70~100	0.09	0.09	0.31	1.87	6.25	21.8	65.6
			120~200	–	–	0.31	1.87	6.25	21.8	65.6

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

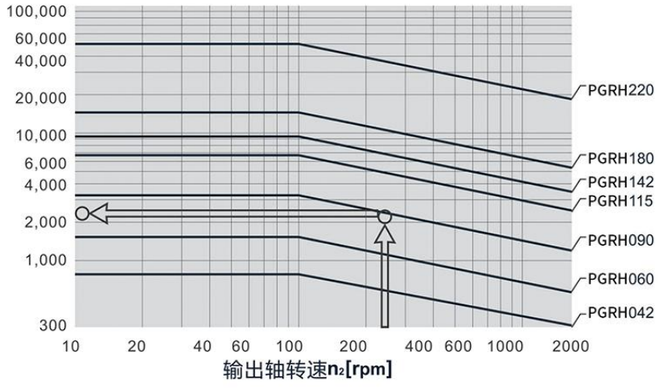
减速机输出轴之容许径向力及轴向力
REDUCER OUTPUT SHAFT OF THE PERMISSIBLE RADIAL FORCE AND SHAFT AND FORCE



F_{2r} 径向力
F_{2a} 轴向力

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

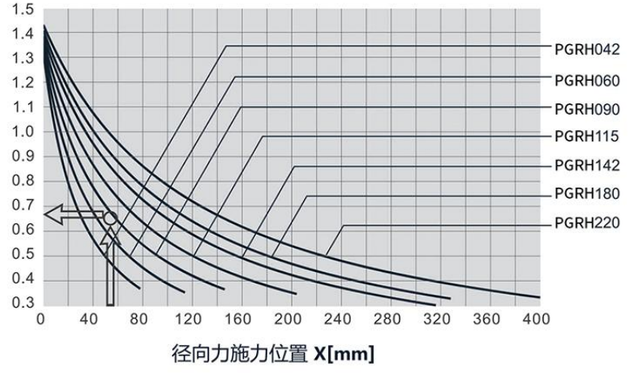
容许径向力F_{2rB}[N]施力于轴中心位置



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

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

位置负荷系数k_b



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

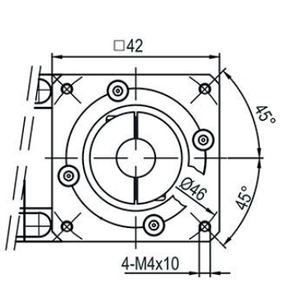
$F'_{2rB}=KbxF_{2rB}$
轴向力:
$F'_{2a1B}=0.2xF'_{2rB}$
$F'_{2a2B}=0.1xF'_{2rB}$

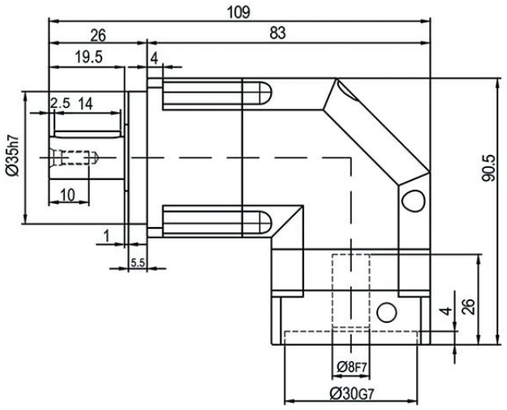
*连续运转降低使用寿命二分之一。

外形尺寸图表 /OUTLINE DIMENSION SHEET

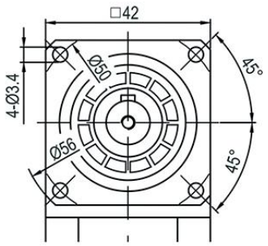
PGRH042-L1(8-30-46-M4)

输入端/INPUT



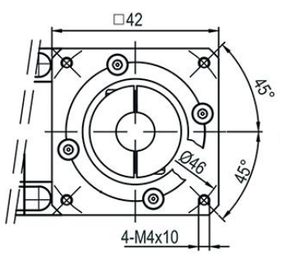


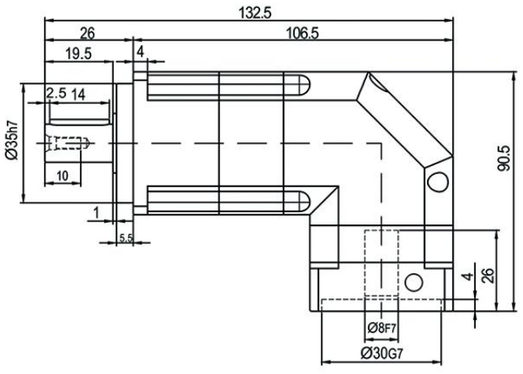
输出端/OUTPUT



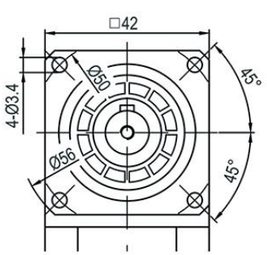
PGRH042-L2(8-30-46-M4)

输入端/INPUT

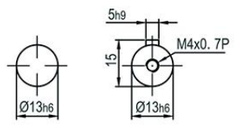




输出端/OUTPUT



*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

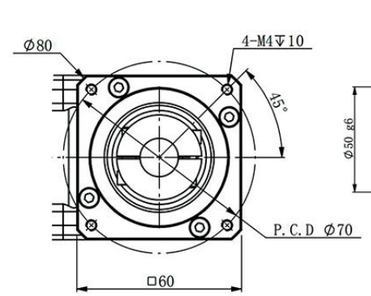


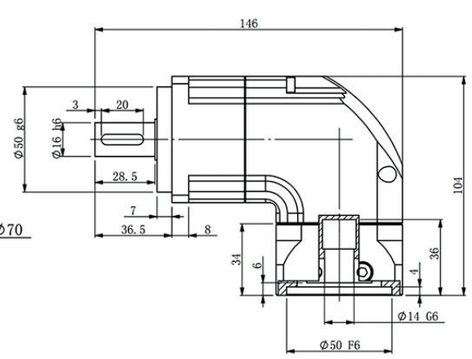
轴型式 S1　　轴型式 S2

外形尺寸图表 /OUTLINE DIMENSION SHEET

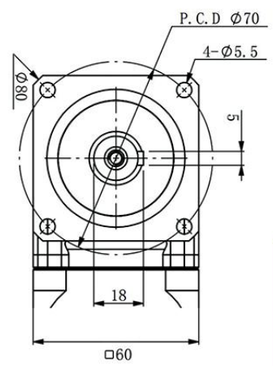
PGRH060-L1(14-50-70-M4)

输入端/INPUT



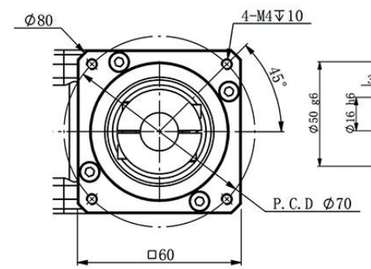


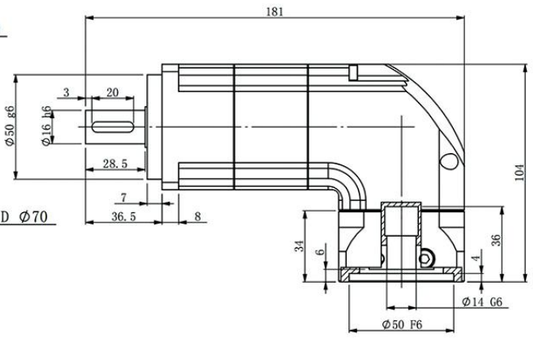
输出端/OUTPUT



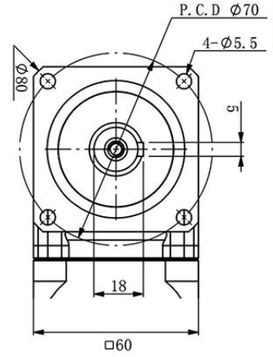
PGRH060-L2(14-50-70-M4)

输入端/INPUT

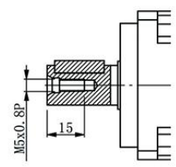




输出端/OUTPUT



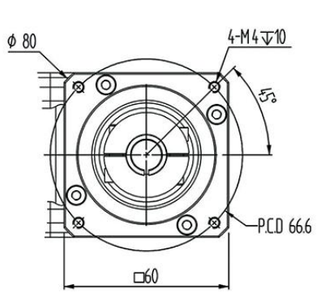
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

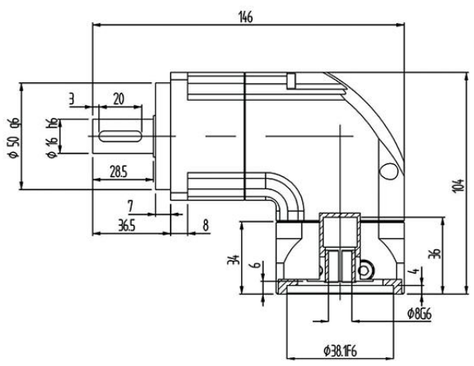


外形尺寸图表 /OUTLINE DIMENSION SHEET

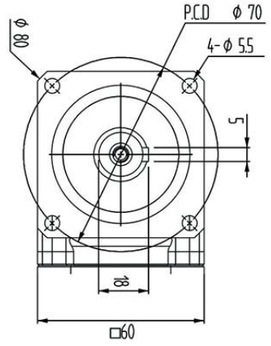
57步进 PGRH060-L1(8-38.1-66.6-M4)

输入端/INPUT



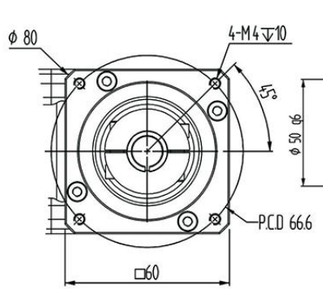


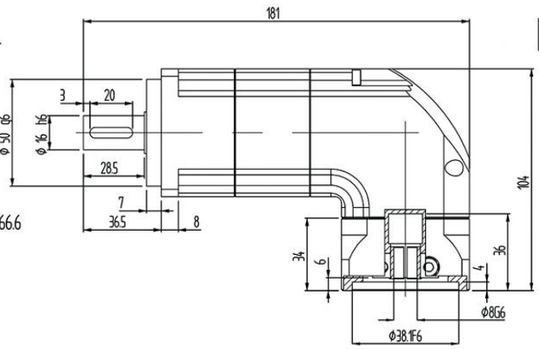
输出端/OUTPUT



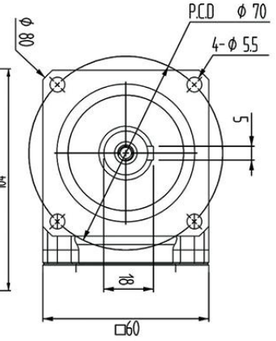
57步进 PGRH060-L2(8-38.1-66.6-M4)

输入端/INPUT

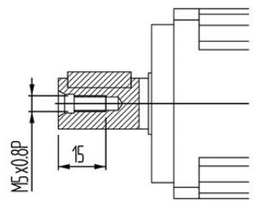




输出端/OUTPUT



*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

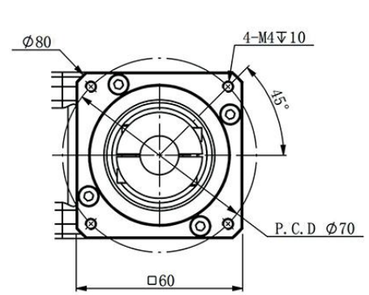


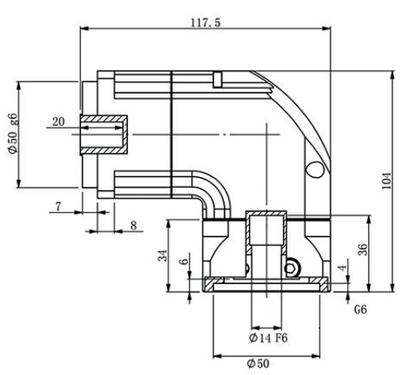
任工机械科技 | 行星减速机专业非标制造与服务厂商
RIGHT GEAR MECHANICAL TECHNOLOGY
PLANETARY REDUCER PROFESSIONAL NON-STANDARD MANUFACTURING AND SERVICE MANUFACTURERS
高精密行星齿轮减速机系列 Planetary Gear Reducer series
任重致远 工匠精神 www.rengongkeji.com

外形尺寸图表 /OUTLINE DIMENSION SHEET

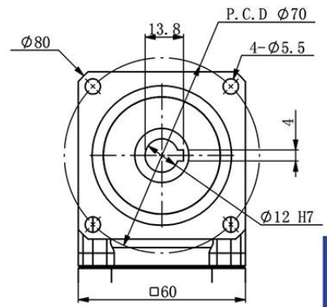
孔输出 PGRH060-L1(14-50-70-M4)

输入端/INPUT



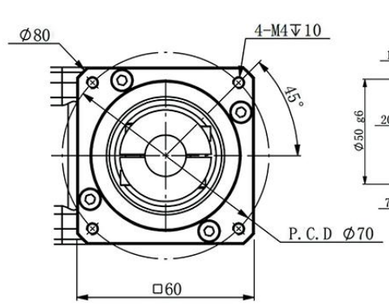


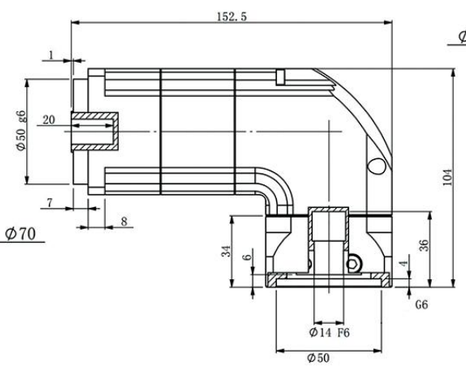
输出端/OUTPUT



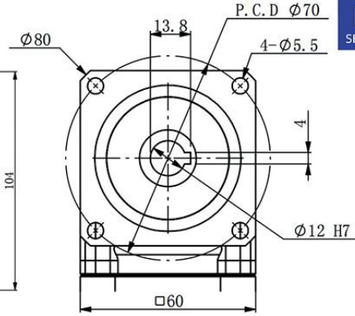
孔输出 PGRH060-L2(14-50-70-M4)

输入端/INPUT





输出端/OUTPUT

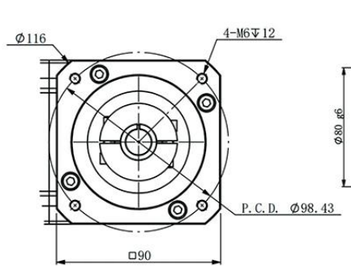


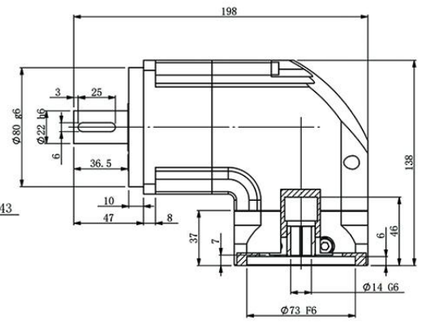
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

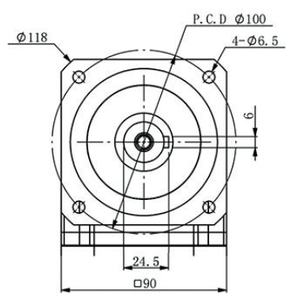
86步进 PGRH090-L1(14-73-98.43-M6)

输入端/INPUT



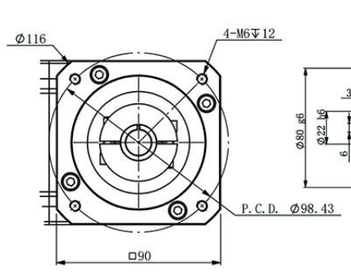


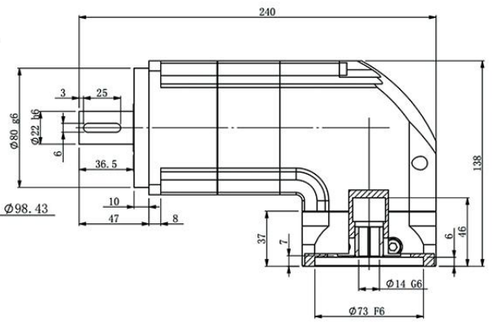
输出端/OUTPUT



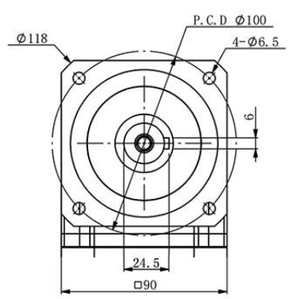
86步进 PGRH090-L2(14-73-98.43-M6)

输入端/INPUT

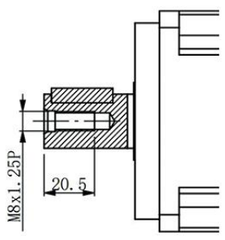




输出端/OUTPUT



*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

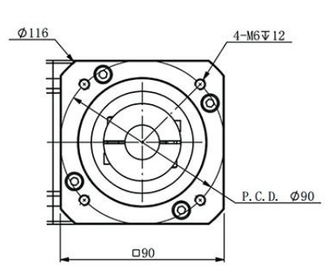


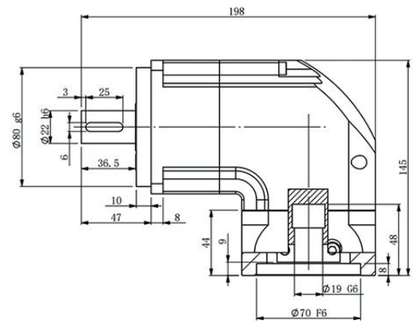
任工机械科技 | 行星减速机专业非标制造与服务厂商
RIGHT GEAR MECHANICAL TECHNOLOGY
PLANETARY REDUCER PROFESSIONAL NON-STANDARD MANUFACTURING AND SERVICE MANUFACTURERS
高精密行星齿轮减速机系列 Planetary Gear Reducer series
任重致远 工匠精神 www.rengongkeji.com

外形尺寸图表 /OUTLINE DIMENSION SHEET

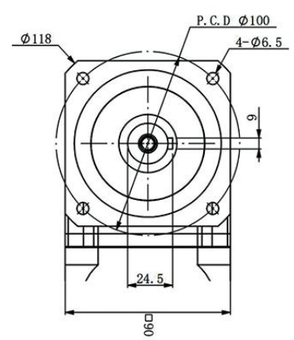
PGRH090-L1(19-70-90-M6)

输入端/INPUT



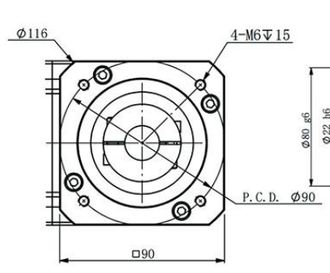


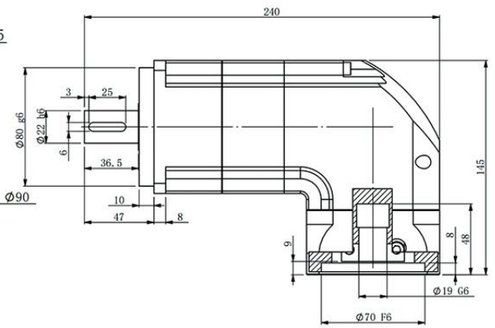
输出端/OUTPUT



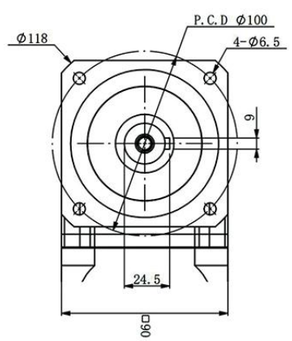
PGRH090-L2(19-70-90-M6)

输入端/INPUT

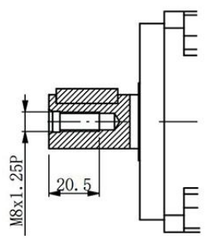




输出端/OUTPUT



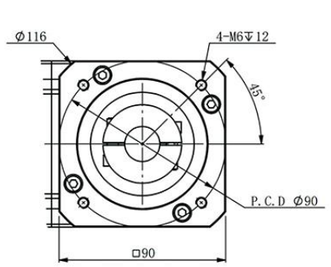
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

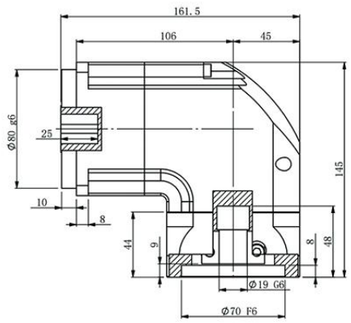


外形尺寸图表 /OUTLINE DIMENSION SHEET

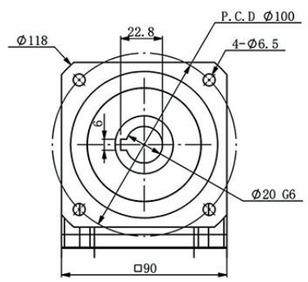
孔输出 PGRH090-L1(19-70-90-M6)

输入端/INPUT



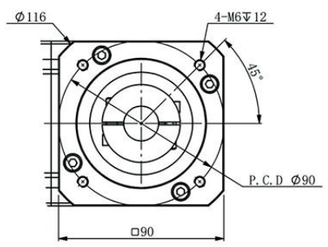


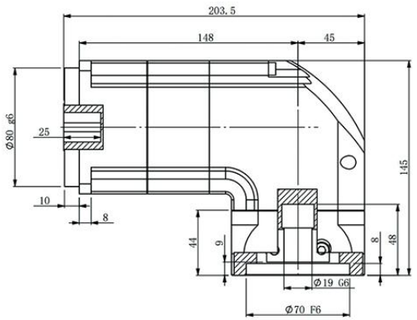
输出端/OUTPUT



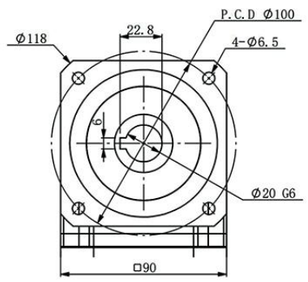
孔输出 PGRH090-L2(19-70-90-M6)

输入端/INPUT





输出端/OUTPUT

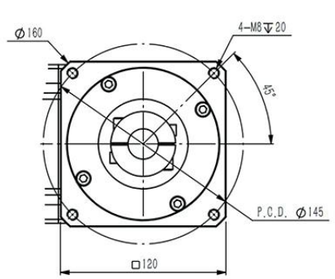


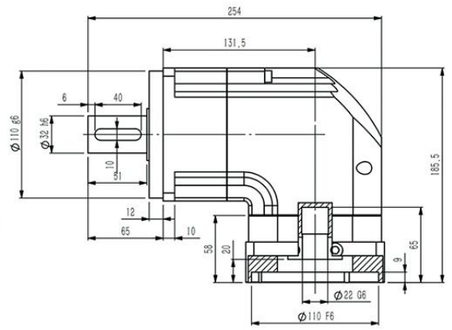
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

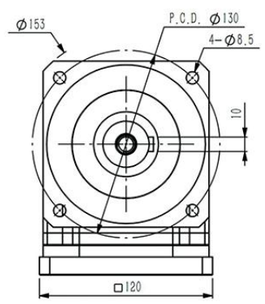
PGRH115-L1(22-110-145-M8)

输入端/INPUT



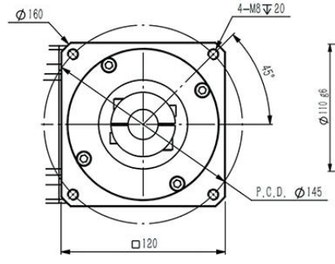


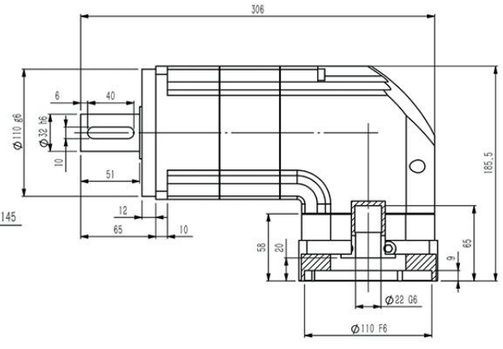
输出端/OUTPUT



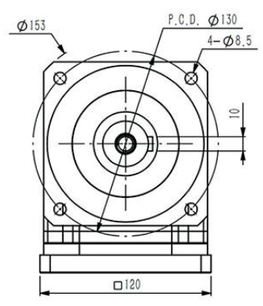
PGRH115-L2(22-110-145-M8)

输入端/INPUT

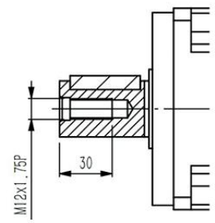




输出端/OUTPUT



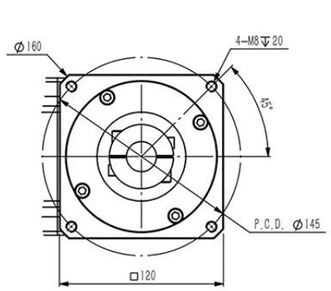
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

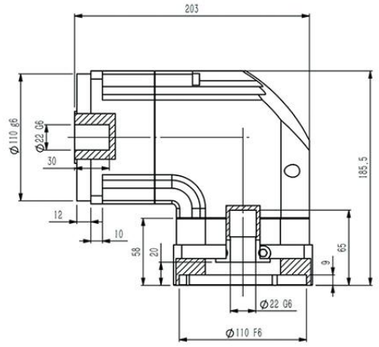


外形尺寸图表 /OUTLINE DIMENSION SHEET

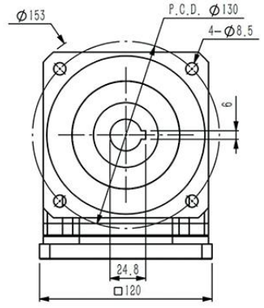
孔输出 PGRH115-L1(22-110-145-M8)

输入端/INPUT



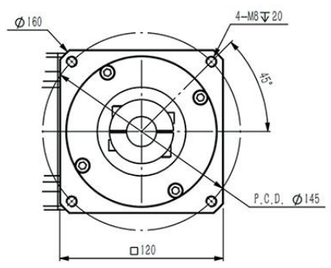


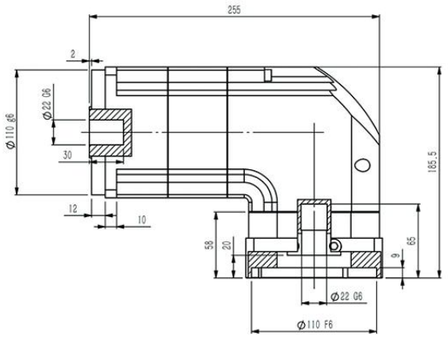
输出端/OUTPUT



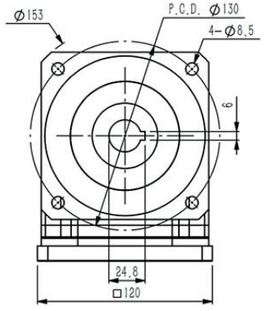
孔输出 PGRH115-L2(22-110-145-M8)

输入端/INPUT





输出端/OUTPUT



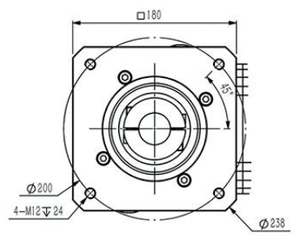
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

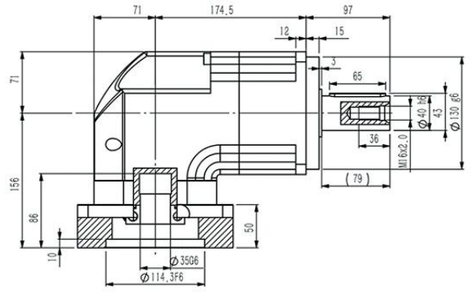
任工机械科技 RIGHT GEAR MECHANICAL TECHNOLOGY | 行星减速机专业非标制造与服务厂商 PLANETARY REDUCER PROFESSIONAL NON-STANDARD MANUFACTURING AND SERVICE MANUFACTURERS
高精密行星齿轮减速机系列 Planetary Gear Reducer series 任重致远 工匠精神 www.rengongkeji.com

外形尺寸图表 /OUTLINE DIMENSION SHEET

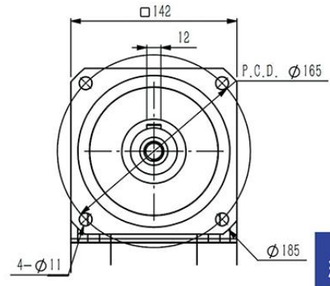
PGRH142-L1(35-114.3-200-M12)

输入端/INPUT



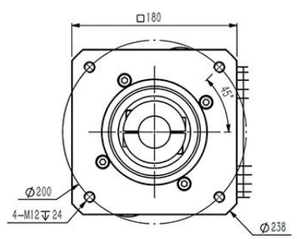


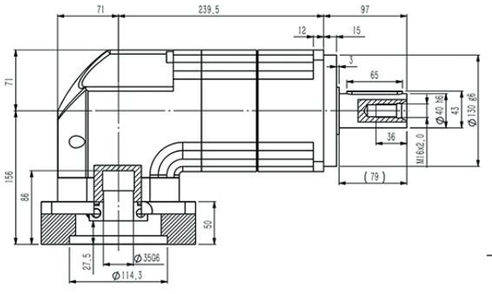
输出端/OUTPUT



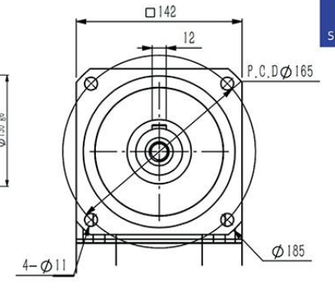
PGRH142-L2(35-114.3-200-M12)

输入端/INPUT





输出端/OUTPUT

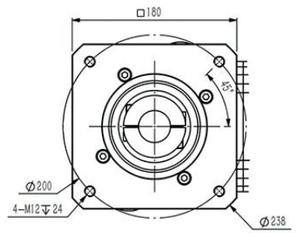


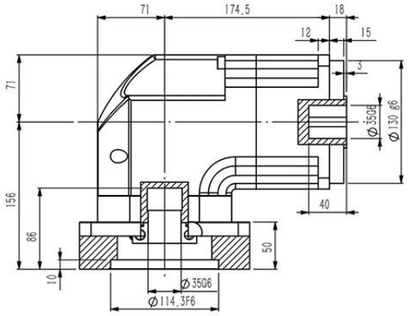
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

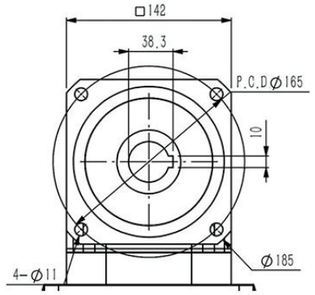
孔输出 PGRH142-L1(35-114.3-200-M12)

输入端/INPUT



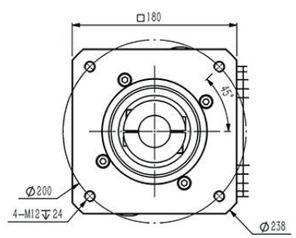


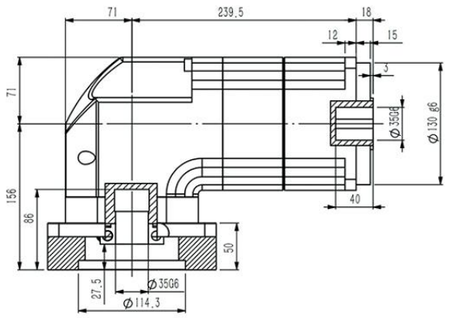
输出端/OUTPUT



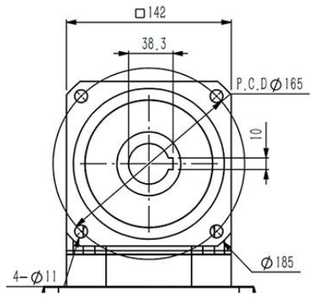
孔输出 PGRH142-L2(35-114.3-200-M12)

输入端/INPUT





输出端/OUTPUT



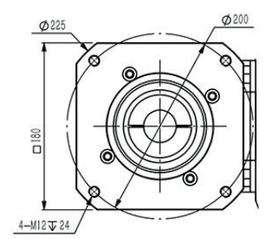
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

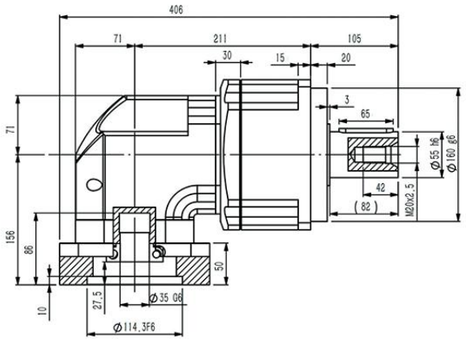
任工机械科技 | 行星减速机专业非标制造与服务厂商
RIGHT GEAR MECHANICAL TECHNOLOGY
PLANETARY REDUCER PROFESSIONAL NON-STANDARD MANUFACTURING AND SERVICE MANUFACTURERS
高精密行星齿轮减速机系列 Planetary Gear Reducer series
任重致远 工匠精神 www.rengongkeji.com

外形尺寸图表 /OUTLINE DIMENSION SHEET

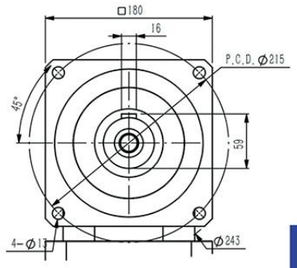
PGRH180-L1(35-114.3-200-M12)

输入端/INPUT



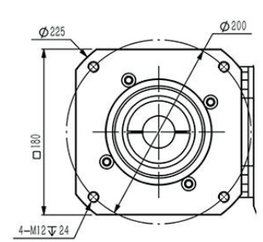


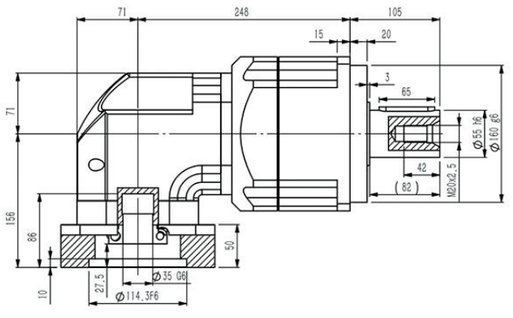
输出端/OUTPUT



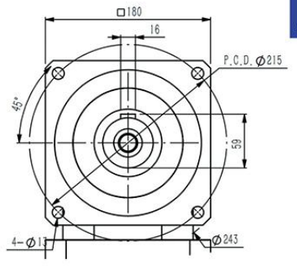
PGRH180T-L2(35-114.3-200-M12)

输入端/INPUT





输出端/OUTPUT

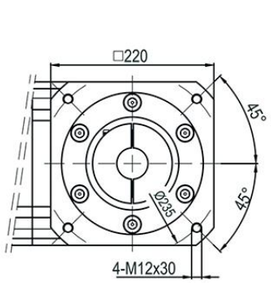


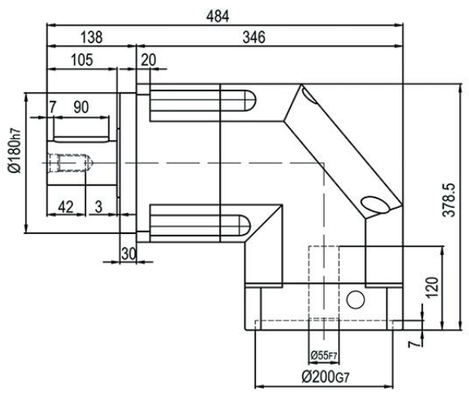
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

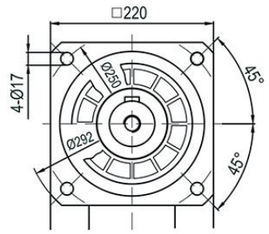
PGRH220-L1(55-200-235-M12)

输入端/INPUT



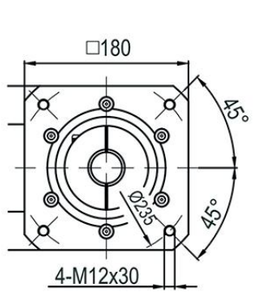


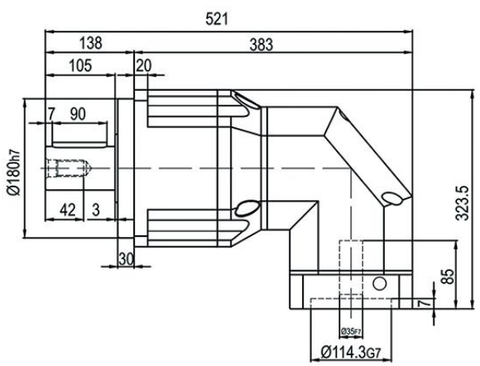
输出端/OUTPUT



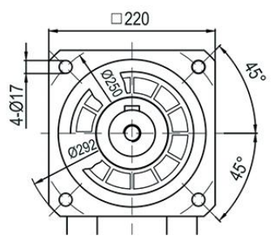
PGRH220-L2(55-200-235-M12)

输入端/INPUT

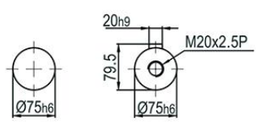




输出端/OUTPUT



*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.



轴型式 S1　轴型式 S2

PGF SERIES



外形尺寸图表 /OUTLINE DIMENSION SHEET

规 格		级 数	减速比[1]	PGF047	PGF060	PGF090	PGF110	PGF140	PGF200
额定输出力矩T_{2N}	Nm	1	4	19	48	130	270	560	1,100
			5	22	60	160	330	650	1,200
			6	-	55	150	310	600	-
			7	19	50	140	300	550	1,100
			8	17	45	120	260	500	1,000
			10	14	40	100	230	450	520
		2	20	19	48	130	270	560	1,100
			25	22	60	160	330	650	1,200
			35	22	60	160	330	650	1,200
			40	22	48	130	270	560	1,200
			50	22	60	160	330	650	1,200
			60	-	55	150	310	600	-
			70	19	50	140	300	550	1,100
			80	-	45	120	260	500	-
			100	14	40	100	230	450	520
最大输出力矩T_{2B}	Nm	1,2	4~100	3倍额定输出力矩					
额定输入转速n_1	rpm	1,2	4~100	5,000	5,000	4,000	4,000	3,000	3,000
最大输入转速n_{1B}	rpm	1,2	4~100	10,000	10,000	8,000	8,000	6,000	6,000
超精密背隙 P0	arcmin	1	4~100	-	-	≤1	≤1	≤1	≤1
		2	4~10	-	-	-	≤3	≤3	≤3
精密背隙 P1	arcmin	1	20~100	≤3	≤3	≤3	≤3	≤3	≤3
		2	4~10	≤5	≤5	≤5	≤5	≤5	≤5
标准背隙 P2	arcmin	1	20~100	≤5	≤5	≤5	≤5	≤5	≤5
		2	4~10	≤7	≤7	≤7	≤7	≤7	≤7
扭转刚性	Nm/arcmin	1,2	20~100	7	13	31	82	151	440
最大弯曲力矩M_{2KB}[2]	Nm	1,2	4~100	42.5	125	235	430	1,300	3,064
容许径向力F_{2B}[2]	N	1,2	4~100	1,080	2,110	2,310	4,800	6,200	5,450
使用寿命	hr	1,2	4~100	20,000＊					
效率 η	%	1	4~10	≥97%					
		2	20~100	≥94%					
重量	kg	1	4~10	0.7	1.2	3.0	5.6	11.9	31.6
		2	20~100	1.0	1.6	3.7	7.3	15.9	36.9
使用温度	℃	1,2	4~100	-10℃~+90℃					
润滑		1,2	4~100	合成润滑油脂					
防护等级		1,2	4~100	IP65					
安装方向		1,2	4~100	任意方向					
噪音值（n_1=3000rpm）	dB	1,2	4~100	≤56	≤58	≤60	≤63	≤65	≤67

减速机转动惯量

规 格		级 数	减速比[1]	PGF047	PGF060	PGF090	PGF110	PGF140	PGF200
转动惯量J_1	kg·cm²	1	4	0.03	0.14	0.51	2.87	7.54	25.03
			5	0.03	0.13	0.47	2.71	7.42	23.29
			6	-	0.13	0.45	2.65	7.25	-
			7	0.03	0.13	0.45	2.62	7.14	22.48
			8	0.03	0.13	0.45	2.58	7.07	22.48
			10	0.03	0.13	0.44	2.57	7.03	22.51
		2	20	0.03	0.03	0.13	0.47	2.71	7.42
			25	0.03	0.03	0.13	0.47	2.71	7.42
			35	0.03	0.03	0.13	0.47	2.71	7.42
			40	0.03	0.03	0.13	0.44	2.57	7.03
			50	0.03	0.03	0.13	0.44	2.57	7.03
			60	-	0.03	0.13	0.44	2.57	-
			70	0.03	0.03	0.13	0.44	2.57	7.03
			80	-	0.03	0.13	0.44	2.57	-
			100	0.03	0.03	0.13	0.44	2.57	7.03

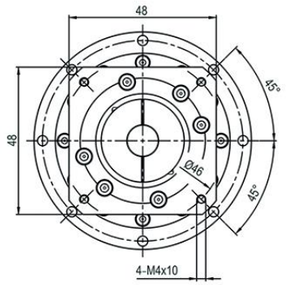
1.减速比（$i=N_{in}/N_{out}$）
2.输出转数 **100rpm** 时，作用于输出轴中心位置。
* 连续运转降低使用寿命二分之一。

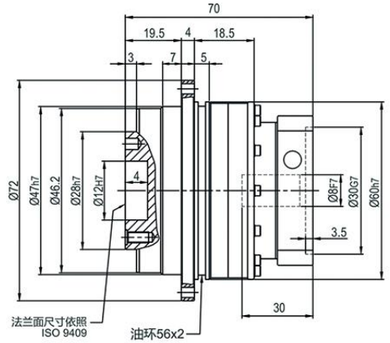
任工机械科技 | 行星减速机专业非标制造与服务厂商
RIGHT GEAR MECHANICAL TECHNOLOGY
PLANETARY REDUCER PROFESSIONAL NON-STANDARD MANUFACTURING AND SERVICE MANUFACTURERS
高精密行星齿轮减速机系列 Planetary Gear Reducer series
任重致远 工匠精神 www.rengongkeji.com

外形尺寸图表 /OUTLINE DIMENSION SHEET

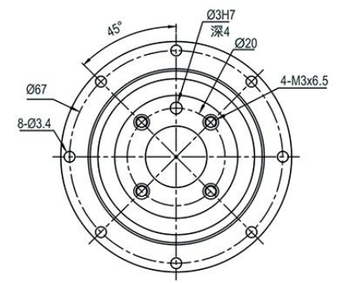
PGF047-L1(8-30-46-M4)

输入端/INPUT



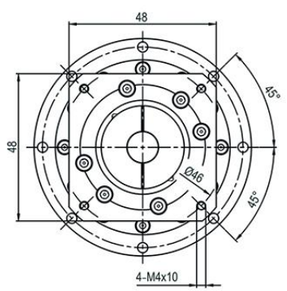


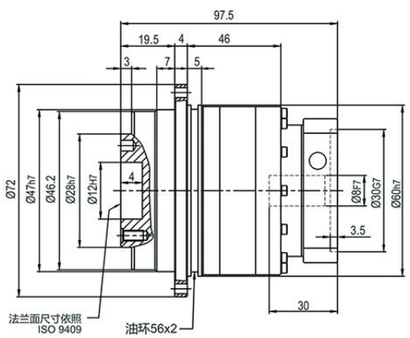
输出端/OUTPUT



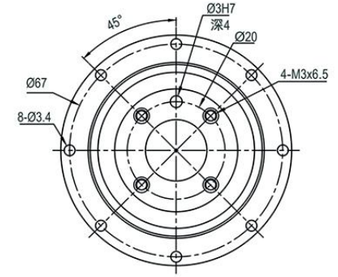
PGF047-L2(8-30-46-M4)

输入端/INPUT





输出端/OUTPUT



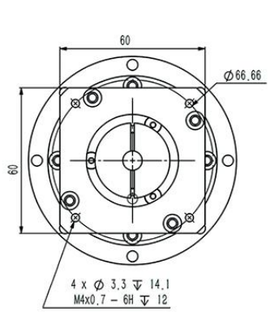
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

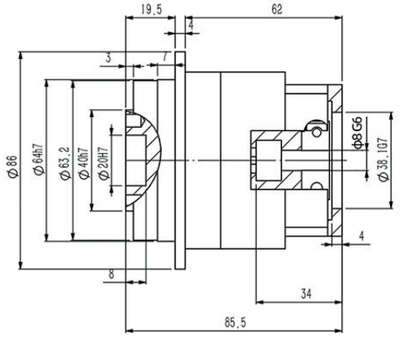
斜齿高精度型
PGF SERIES

外形尺寸图表 /OUTLINE DIMENSION SHEET

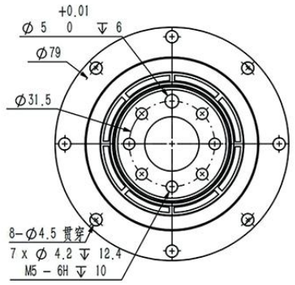
57步进 PGF060-L1(8-38.1-66.66-M4)

输入端/INPUT



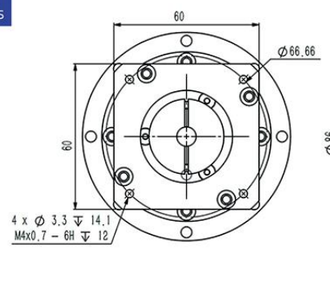


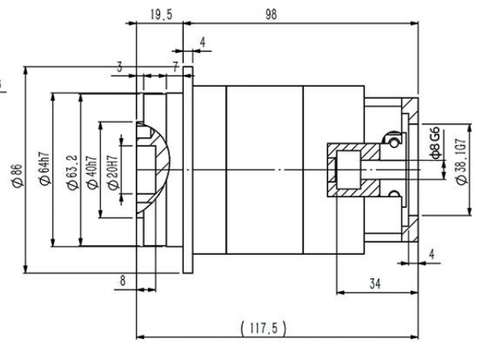
输出端/OUTPUT



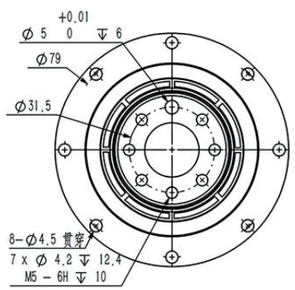
57步进 PGF060-L2(8-38.1-66.66-M4)

输入端/INPUT





输出端/OUTPUT

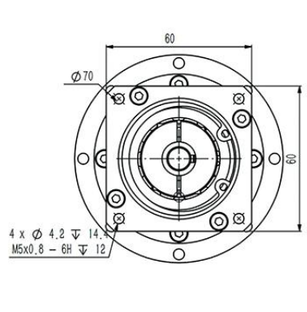


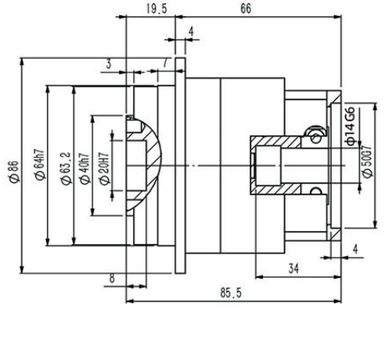
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

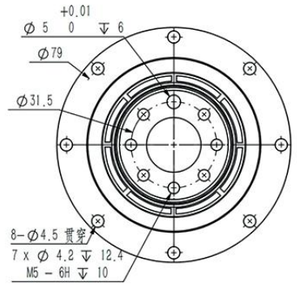
PGF060-L1(14-50-70-M5)

输入端/INPUT



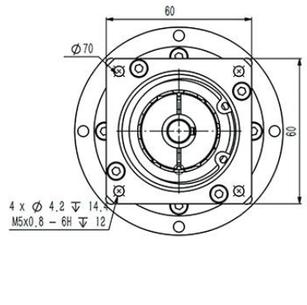


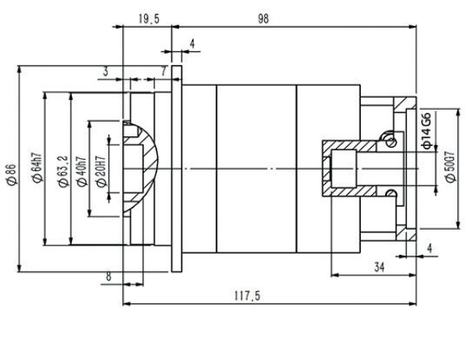
输出端/OUTPUT



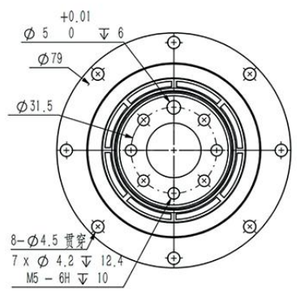
PGF060-L2(14-50-70-M5)

输入端/INPUT





输出端/OUTPUT

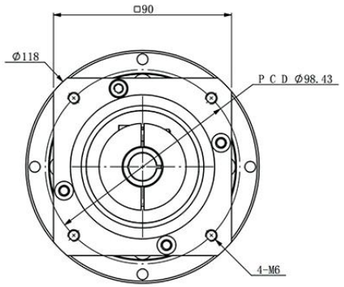


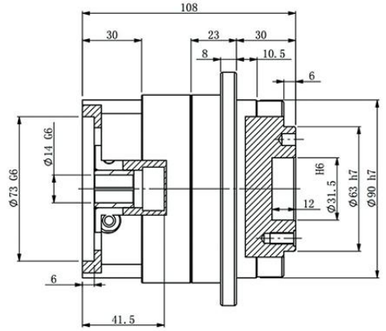
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

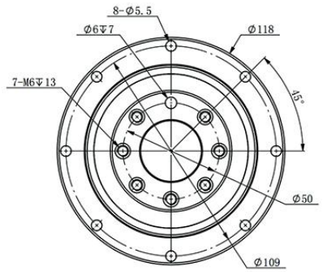
86步进 PGF090-L1(14-73-98.43-M6)

输入端/INPUT



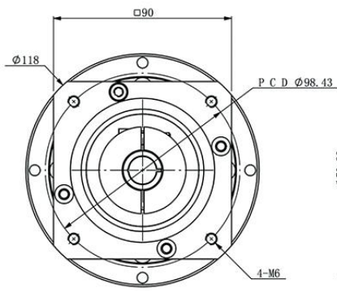


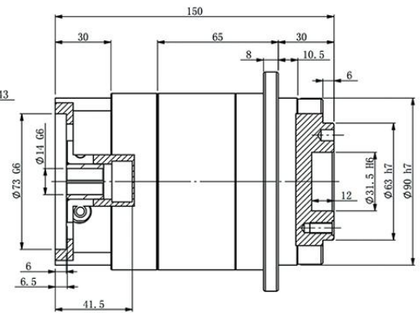
输出端/OUTPUT



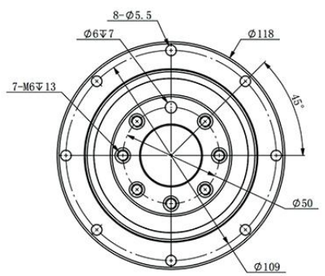
86步进 PGF090-L1(14-73-98.43-M6)

输入端/INPUT





输出端/OUTPUT

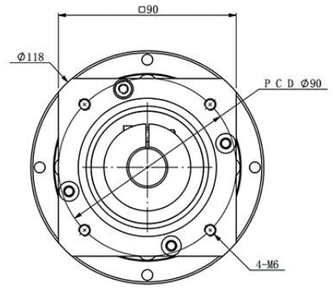


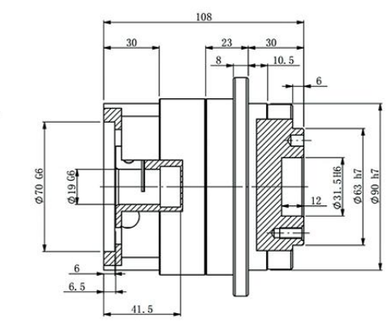
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

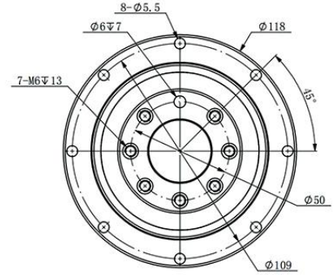
PGF090-L1(19-70-90-M6)

输入端/INPUT



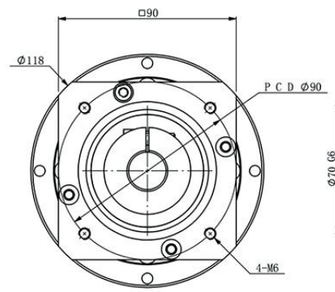


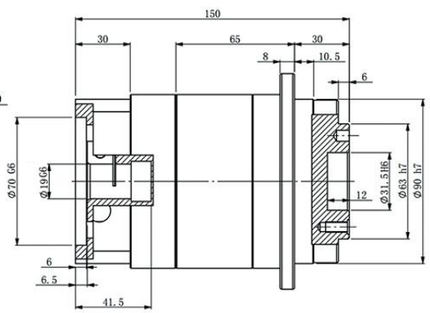
输出端/OUTPUT



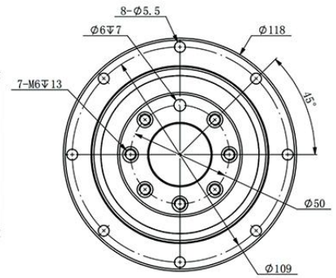
PGF090-L2(19-70-90-M6)

输入端/INPUT





输出端/OUTPUT

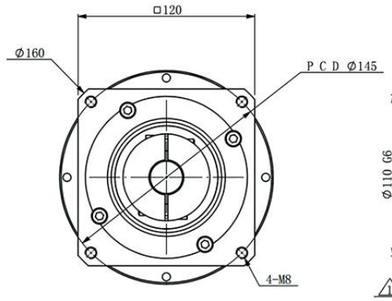


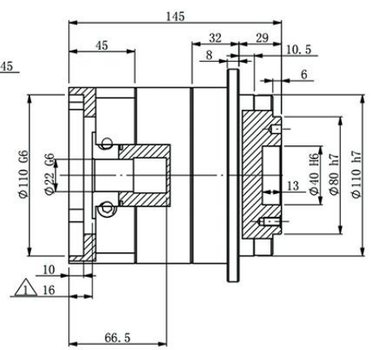
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

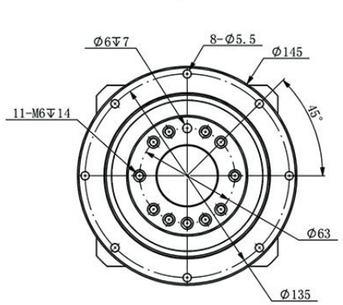
PGF110-L1(22-110-145-M8)

输入端/INPUT



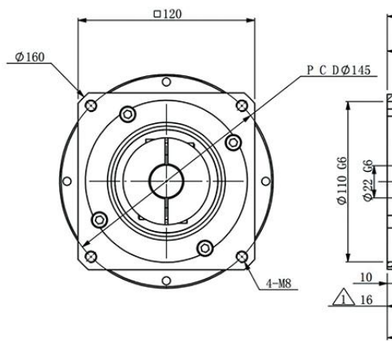


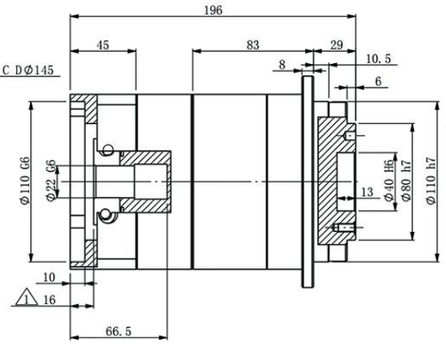
输出端/OUTPUT



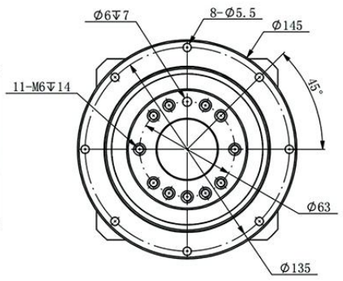
PGF110-L2(22-110-145-M8)

输入端/INPUT





输出端/OUTPUT

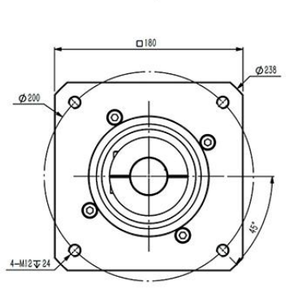


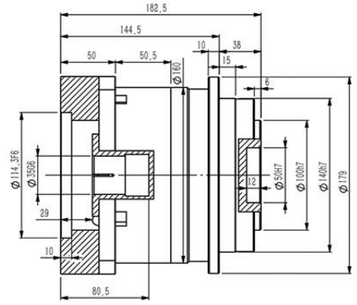
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

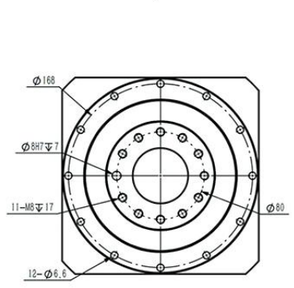
PGF140-L1(35-114.3-200-M12)

输入端/INPUT



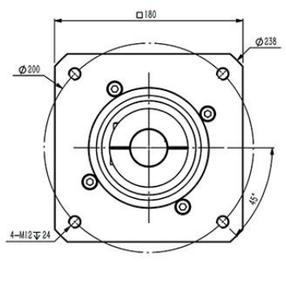


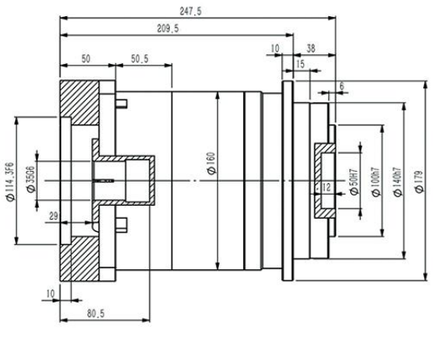
输出端/OUTPUT



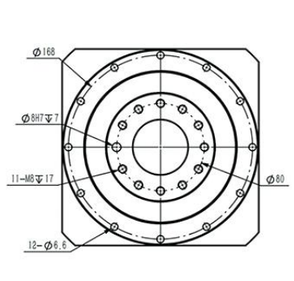
PGF140-L2(35-114.3-200-M12)

输入端/INPUT





输出端/OUTPUT

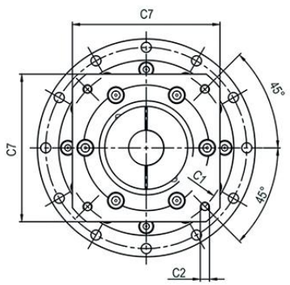


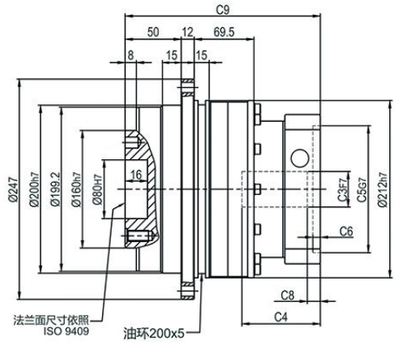
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

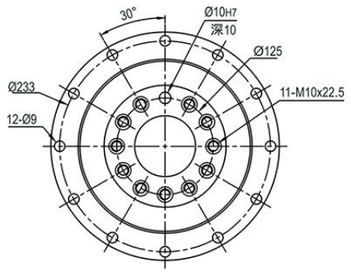
PGF200-L1

输入端/INPUT



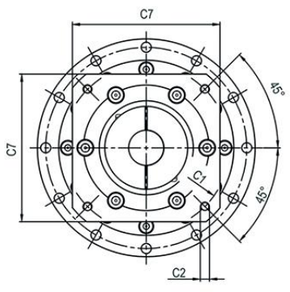


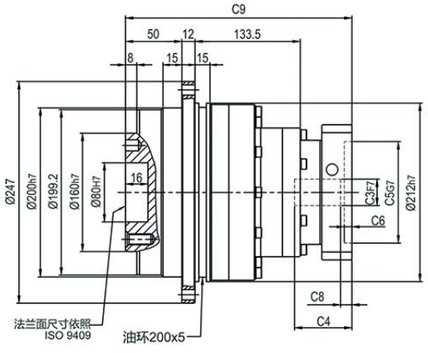
输出端/OUTPUT



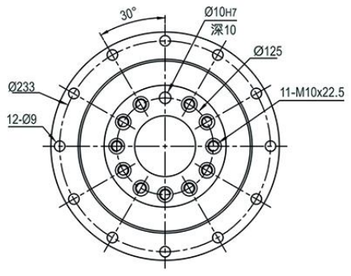
PGF200-L2

输入端/INPUT





输出端/OUTPUT



尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9
PGF-200-L1	Ø165	4-M10x25	Ø32	86	Ø130	6	168	8.5	199.5
	Ø200	4-M12x28	Ø35	86	Ø114.3	6	180	8.5	199.5
PGF-200-L2	Ø145	4-M8x25	Ø22,Ø24	75	Ø110	11	130	19	249.5
	Ø200	4-M12x30	Ø35	83	Ø114.3	8	180	28	257.5

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

PGFR
SERIES



斜齿高精度型

减速机性能资料 /GEAR BOX PERFORMANCE INFORMATION

规 格		级 数	减速比[1]	PGFR047	PGFR060	PGFR090	PGFR110	PGFR140	PGFR200
额定输出力矩T_{2N}	Nm	1	4	19	48	130	270	560	1,100
			5	22	60	160	330	650	1,200
			6	-	55	150	310	600	-
			7	19	50	140	300	550	1,100
			8	17	48	130	270	560	1,000
			10	14	60	160	330	650	520
			14	-	50	140	300	550	1,100
			20	-	40	100	230	450	520
		2	20	19	48	130	270	560	1,100
			25	22	60	160	330	650	1,200
			35	22	60	160	330	650	1,200
			40	22	48	130	270	560	1,200
			50	22	60	160	330	650	1,200
			60	-	55	150	310	600	-
			70	22	60	160	330	650	1,200
			80	-	48	130	270	560	-
			100	22	60	160	330	650	1,200
			120	-	-	150	310	600	-
			140	-	-	140	300	550	1,100
			160	-	-	120	260	500	-
			200	-	-	100	230	450	520
最大输出力矩T_{2B}	Nm	1,2	4~200	3倍额定输出力矩					
额定输入转速n_1	rpm	1,2	4~200	5,000	5,000	4,000	4,000	3,000	3,000
最大输入转速n_{1B}	rpm	1,2	4~200	10,000	10,000	8,000	8,000	6,000	6,000
超精密背隙 P0	arcmin	1	4~20	-	-	≤2	≤2	≤2	≤2
		2	20~200	-	-	≤4	≤4	≤4	≤4
精密背隙 P1	arcmin	1	4~20	≤4	≤4	≤4	≤4	≤4	≤4
		2	20~200	≤7	≤7	≤7	≤7	≤7	≤7
标准背隙 P2	arcmin	1	4~20	≤6	≤6	≤6	≤6	≤6	≤6
		2	20~200	≤9	≤9	≤9	≤9	≤9	≤9
扭转刚性		1,2	4~200	7	13	31	82	151	440
最大弯曲力矩M_{2KB}[2]	Nm	1,2	4~200	42.5	125	235	430	1,300	3,064
容许径向力F_{2B}[2]	N	1,2	4~200	1,080	2,110	2,310	4,800	6,200	5,450
使用寿命	hr	1,2	4~200	20,000＊					
效率 η	%	1	4~20	≥95%					
		2	20~200	≥92%					
重量	kg	1	4~20	1.1	2.1	5.9	10.5	21.9	50.9
		2	20~200	1.4	1.9	4.5	9.8	20.1	45.4
使用温度	℃	1,2	4~200	-10℃~+90℃					
润滑		1,2	4~200	合成润滑油脂					
防护等级		1,2	4~200	IP65					
安装方向		1,2	4~200	任意方向					
噪音值（n_1=3000rpm）	dB	1,2	4~200	≤61	≤63	≤65	≤68	≤70	≤72

减速机转动惯量

规 格		级 数	减速比[1]	PGFR047	PGFR060	PGFR090	PGFR110	PGFR140	PGFR200
转动惯量J_1	kg·cm²	1	4~7	0.09	0.35	2.25	6.84	23.4	68.9
			8~10	0.09	0.07	1.87	6.25	21.8	65.6
			14~20	–	0.07	1.87	6.25	21.8	65.6
		2	20~40	0.09	0.09	0.35	2.25	6.84	23.4
			50	–	0.09	0.31	1.87	6.25	21. 8
			60	–	0.09	0.35	2.25	6.84	–
			70~100	–	0.09	0.31	1.87	6.25	21. 8
			120~200	–	–	0.31	1.87	6.25	21. 8

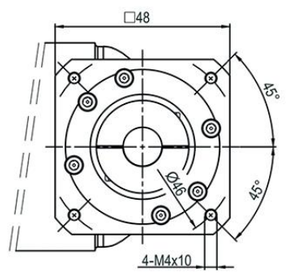
1.减速比（$i=N_{in}/N_{out}$）
＊连续运转降低使用寿命二分之一。

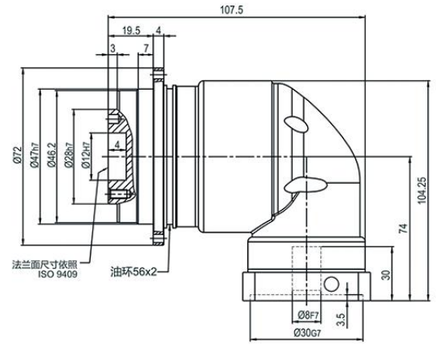
2.输出转数 100rpm 时，作用于输出轴中心位置。

外形尺寸图表 /OUTLINE DIMENSION SHEET

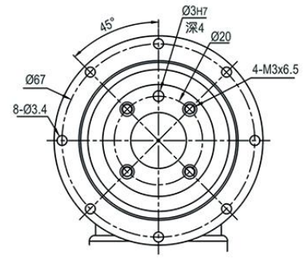
PGFR047-L1(8-30-46-M4)

输入端/INPUT



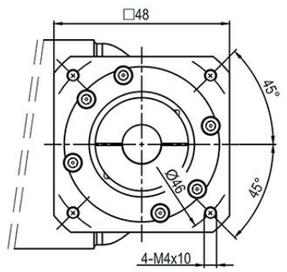


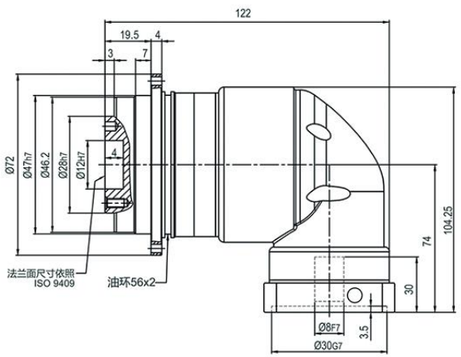
输出端/OUTPUT



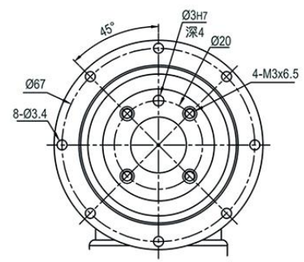
PGFR047-L2(8-30-46-M4)

输入端/INPUT





输出端/OUTPUT

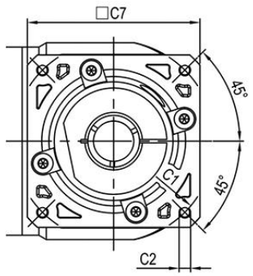


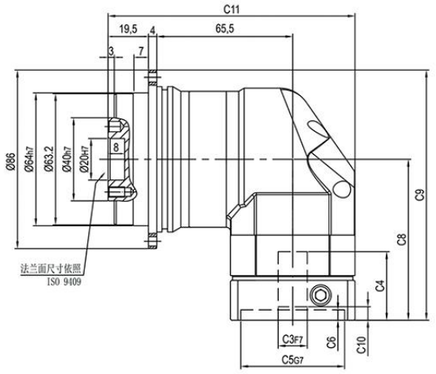
＊输入马达连接板之尺寸，可根据客户要求单独定做。
＊The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

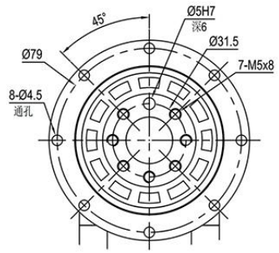
PGFR060D(M1)-L1

输入端/INPUT



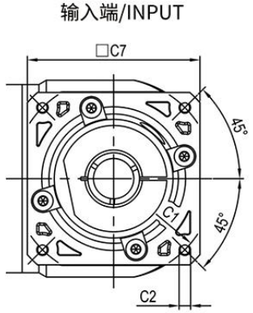


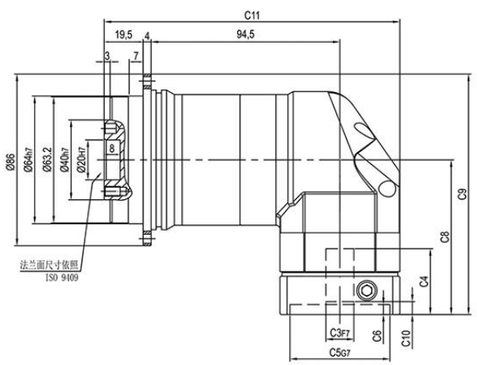
输出端/OUTPUT



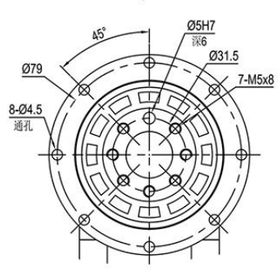
PGFR060D(M1)-L2

输入端/INPUT





输出端/OUTPUT



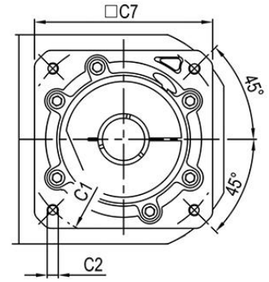
尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11
PGFR-064D-L1	Ø66.7	4-M4x10	Ø8	33	Ø38.1	5	60	77.5	120.5	5.5	119
PGFR-064D-L2											148
PGFR-064D-L1	Ø70	4-M4x10,4-M5x12	Ø11,Ø14	33	Ø50	5	60	77.5	120.5	5.5	119
PGFR-064D-L2											148
PGFR-064M1-L1	Ø90	4-M5x12,4-M6x14	Ø19	42.5	Ø70	6.5	80	87	130	12	129
PGFR-064M1-L2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

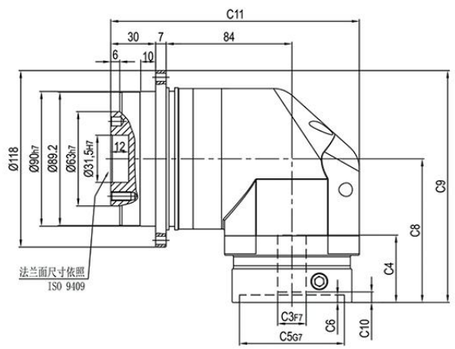
* C1~C7是公制标准马达连接板之尺寸,可根据客户要求单独定做。
* C1~C7are motor(metric standard) specific dimensions, which could be customised。
* D:常规孔,M1:极限孔
* D: Conventional Hole, M1: Limit Hole

外形尺寸图表 /OUTLINE DIMENSION SHEET

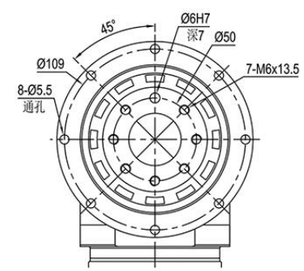
PGFR090D(M1)-L1

输入端/INPUT



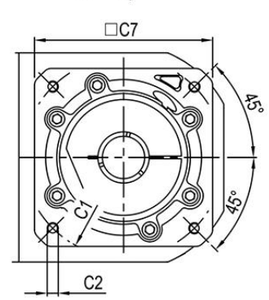


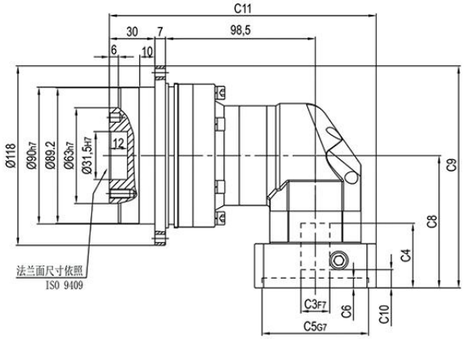
输出端/OUTPUT



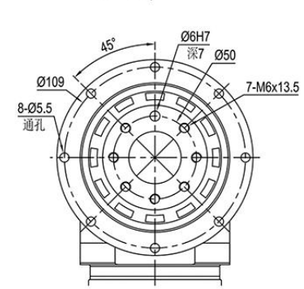
PGFR090D(M1)-L2

输入端/INPUT





输出端/OUTPUT



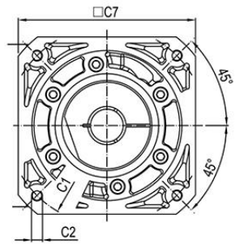
尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11
PGFR-090D-L1	Ø90	4-M5x12,4-M6x14	Ø19	45	Ø70	6.5	80	96	155	7	166
	Ø100	4-M6x14	Ø16	45	Ø80	6.5	86	96	155	6	166
PGFR-090M1-L1	Ø115	4-M8x20	Ø19,Ø22	56.5	Ø95	8	100	117.5	176.5	16.5	171
	Ø145	4-M8x20	Ø19,Ø22,Ø24	59	Ø110	11	130	120	179	19	186
PGFR-090D-L2	Ø66.7	4-M4x10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

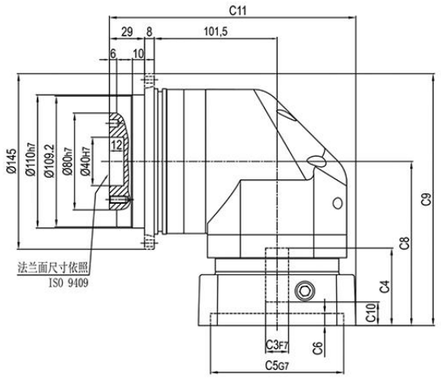
* C1~C7是公制标准马达连接板之尺寸,可根据客户要求单独定做。
* C1~C7are motor(metric standard) specific dimensions, which could be customised。
* D:常规孔,M1:极限孔
* D: Conventional Hole, M1: Limit Hole

外形尺寸图表 /OUTLINE DIMENSION SHEET

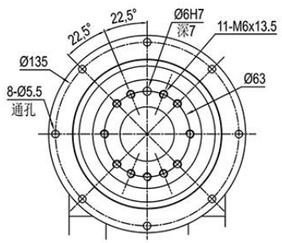
PGFR110D(M1)-L1

输入端/INPUT



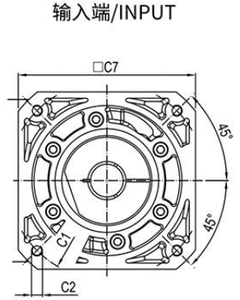


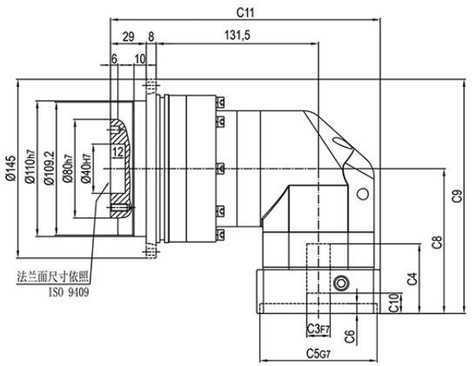
输出端/OUTPUT



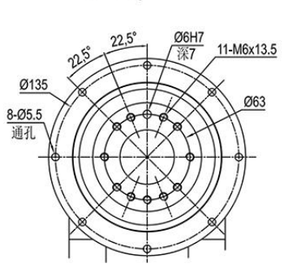
PGFR110D(M1)-L2

输入端/INPUT





输出端/OUTPUT



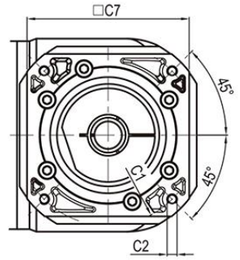
尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11
PGFR-110D-L1	Ø145	4-M8x20	Ø19,Ø22,Ø24	64	Ø110	10	130	135.5	208	19.5	203.5
PGFR-110M1-L1	Ø200	4-M12x28	Ø35	81	Ø114.3	10	180	152.5	225	28	228.5
PGFR-110D-L2	Ø90	4-M5x12,4-M6x14	Ø19	45	Ø70	6.5	80	96	168.5	7	213.5
	Ø100	4-M6x14	Ø16	45	Ø80	6.5	86	96	168.5	6	213.5
PGFR-110M1-L2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

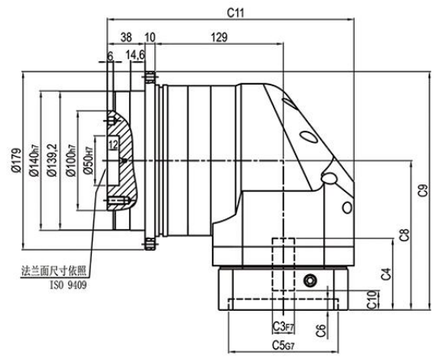
* C1~C7是公制标准马达连接板之尺寸,可根据客户要求单独定做。
* C1~C7are motor(metric standard) specific dimensions, which could be customised。
* D:常规孔,M1:极限孔
* D: Conventional Hole, M1: Limit Hole

外形尺寸图表 /OUTLINE DIMENSION SHEET

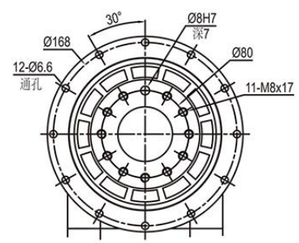
PGFR140D(M1)-L1

输入端/INPUT



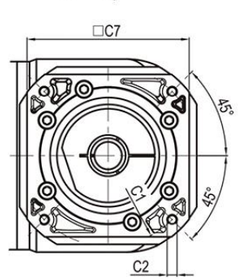


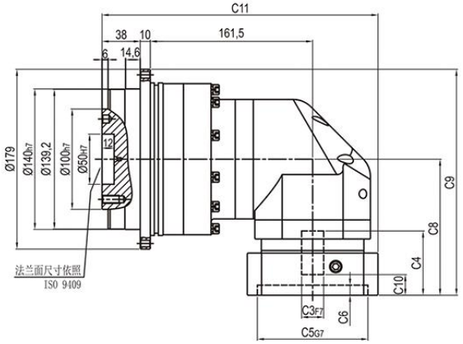
输出端/OUTPUT



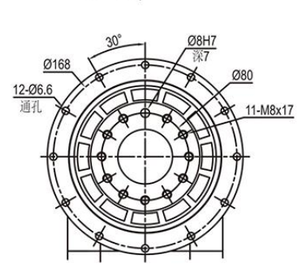
PGFR140D(M1)-L2

输入端/INPUT





输出端/OUTPUT



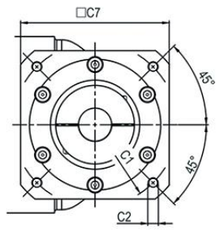
尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11
PGFR-140D-L1	Ø145	4-M8x20	Ø22,Ø24	72	Ø110	11	130	150	239.5	19.5	248
	Ø200	4-M12x28	Ø35	82	Ø114.3	8	180	160	249.5	25	267
PGFR-140D-L2	Ø145	4-M8x20	Ø19,Ø22,Ø24	64	Ø110	10	130	135.5	225	19.5	274.5
PGFR-140M1-L2	Ø200	4-M12x28	Ø35	81	Ø114.3	10	180	152.5	242	28	299.5

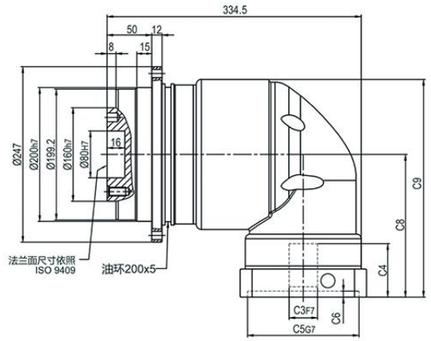
* C1~C7是公制标准马达连接板之尺寸,可根据客户要求单独定做。
* C1~C7are motor(metric standard) specific dimensions, which could be customised。
* D:常规孔,M1:极限孔
* D: Conventional Hole, M1: Limit Hole

外形尺寸图表 /OUTLINE DIMENSION SHEET

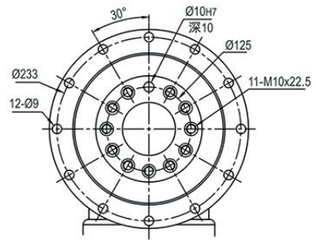
PGFR200D(M1)-L1

输入端/INPUT



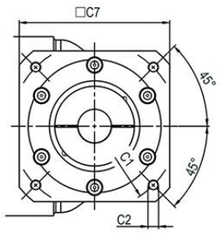


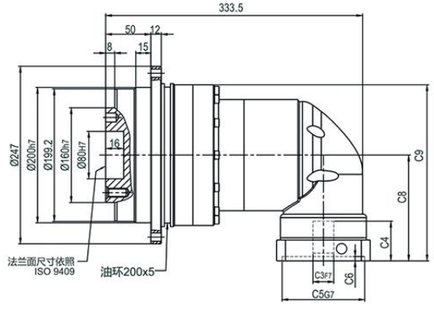
输出端/OUTPUT



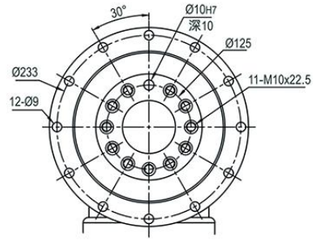
PGFR200D(M1)-L2

输入端/INPUT





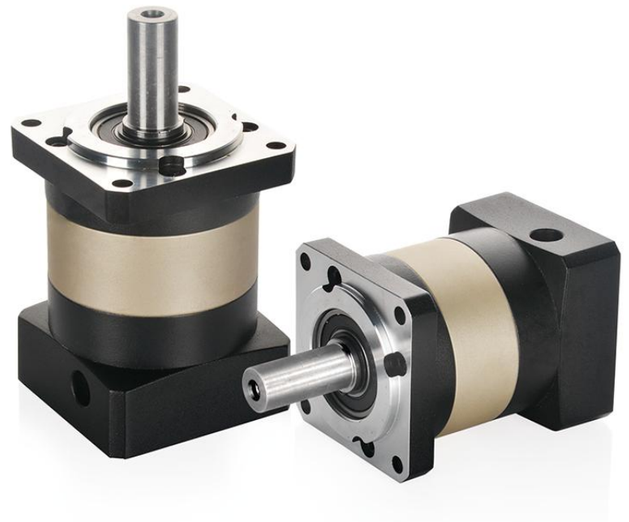
输出端/OUTPUT



尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9
PGFR-200-L1	Ø200	4-M12x28	Ø35	85	Ø114.3	6	180	213.5	316
	Ø215	4-M12x28	Ø38	85	Ø180	6	190	213.5	316
PGFR-200-L2	Ø165	4-M10x25	Ø28	60	Ø130	6	142	164.5	269.5
	Ø200	4-M12x28	Ø35	85	Ø114.3	6	180	189.5	294.5

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

PLF SERIES



减速机性能资料 /GEAR BOX PERFORMANCE INFORMATION

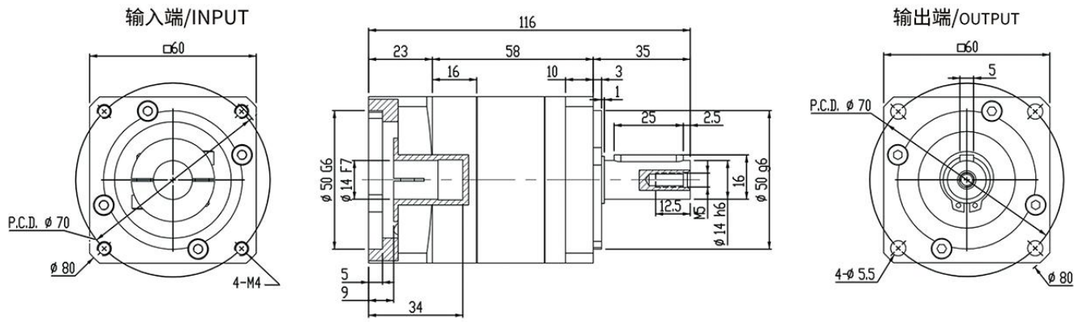
产品型号	单位	速比	级数	PLF060	PLF080	PLF090	PLF120	PLF160
额定输出扭矩	Nm	4	1级	42	142	142	280	585
		5		42	142	142	280	585
		7		33	92	92	198	378
		10		15	54	54	95	310
		16	2级	42	142	142	280	585
		20		42	142	142	280	585
		25		42	142	142	280	585
		35		42	142	142	280	585
		40		42	142	142	280	585
		50		42	142	142	280	585
		70		33	92	92	198	378
		100		15	54	54	95	310
		64	3级	42	142	142	280	585
		80		42	142	142	280	585
		100		42	142	142	280	585
		125		42	142	142	280	585
		140		42	142	142	280	585
		175		42	142	142	280	585
		245		42	142	142	280	585
		350		42	142	142	280	585
		400		42	142	142	280	585
		500		42	142	142	280	585
		700		33	92	92	198	378
		1000		15	54	54	95	310
最大额定扭矩	Nm	2倍额定输出扭矩						
最大径向力	N			680	1750	1750	3100	6550
最大轴向力	N			340	875	875	1550	3275
满载效率	%		1	98				
			2	96				
			3	94				
重量	kg		1	1.4	3.5	3.5	6.8	24.4
			2	2.0	4.5	4.5	8.8	26
			3	2.6	5.5	5.5	10.8	31

任工机械科技 | 行星减速机专业非标制造与服务厂商
RIGHT GEAR MECHANICAL TECHNOLOGY
PLANETARY REDUCER PROFESSIONAL NON-STANDARD MANUFACTURING AND SERVICE MANUFACTURERS
高精密行星齿轮减速机系列 Planetary Gear Reducer series
任重致远 工匠精神 www.rengongkeji.com

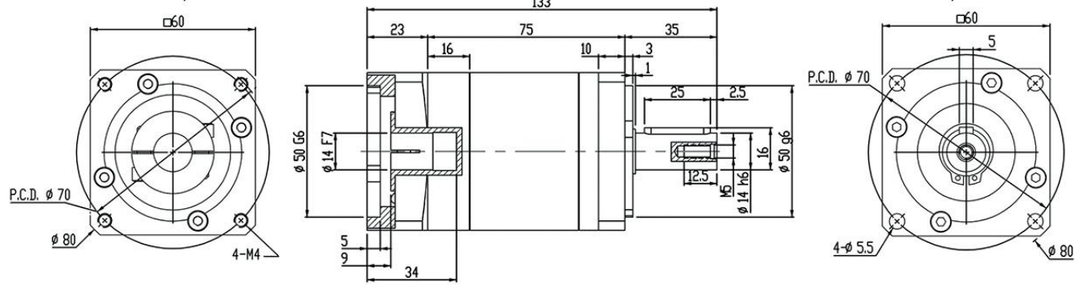
直齿高精密型
PLF SERIES

外形尺寸图表 /OUTLINE DIMENSION SHEET

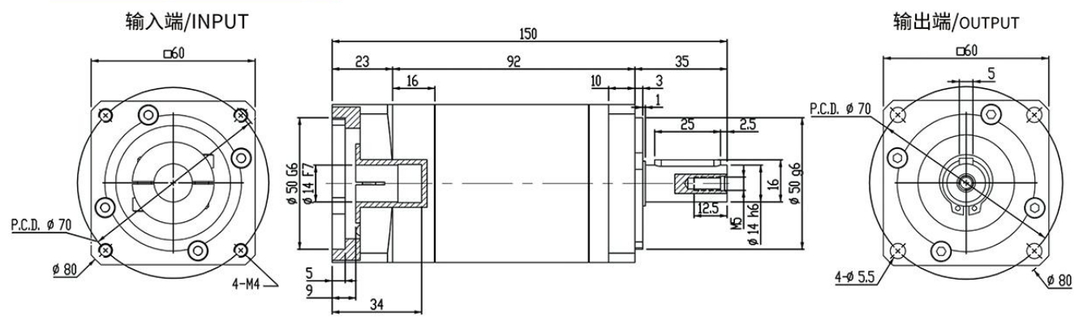
PLF060-L1(14-50-70-M4)



PLF060-L2(14-50-70-M4)



PLF060-L3(14-50-70-M4)

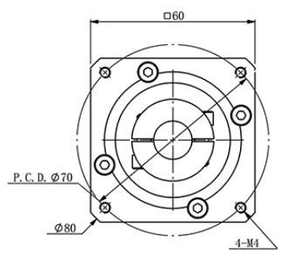


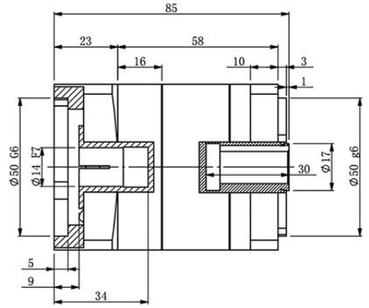
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

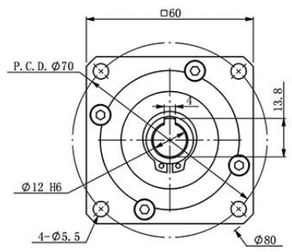
孔输出 PLF060-L1(14-50-70-M4)

输入端/INPUT



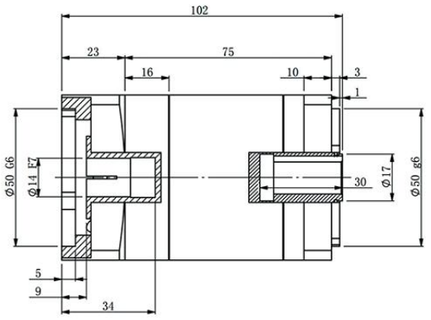


输出端/OUTPUT



孔输出 PLF060-L2(14-50-70-M4)

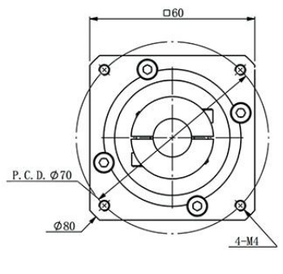
输入端/INPUT

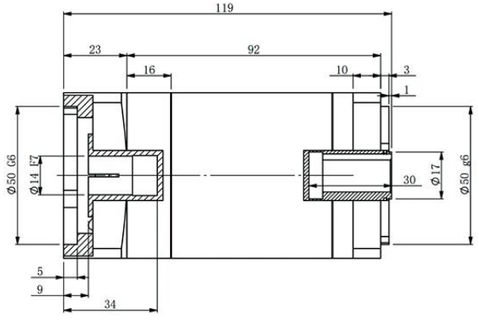


输出端/OUTPUT

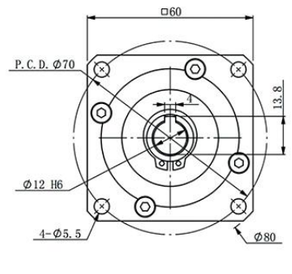
孔输出 PLF060-L3(14-50-70-M4)

输入端/INPUT





输出端/OUTPUT

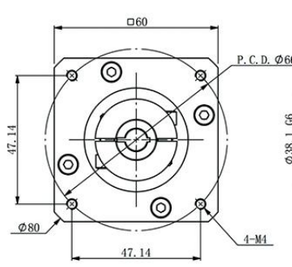


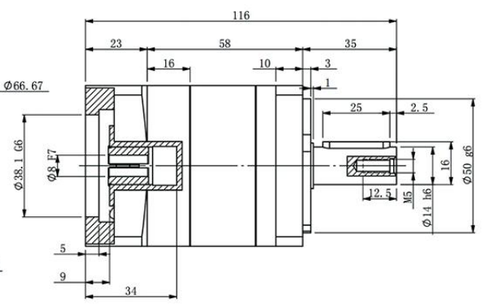
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

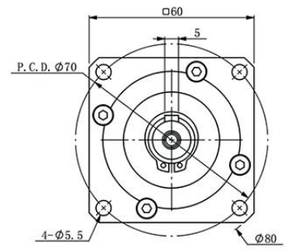
57步进 PLF060-L1(8-38.1-66.67-M4)

输入端/INPUT



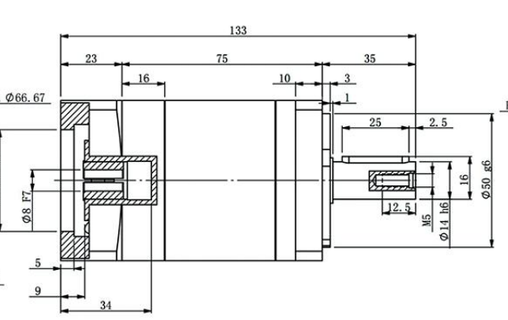


输出端/OUTPUT



57步进 PLF060-L2(8-38.1-66.67-M4)

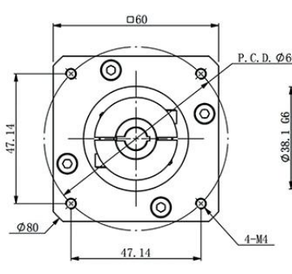
输入端/INPUT

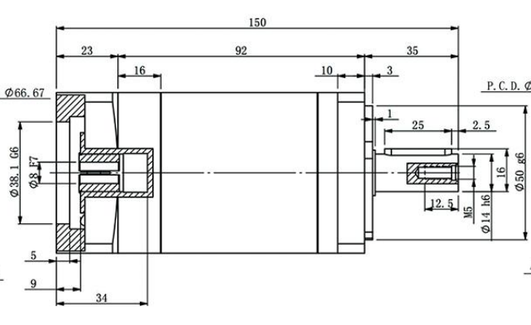


输出端/OUTPUT

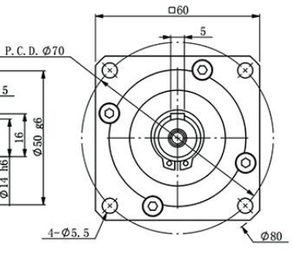
57步进 PLF060-L3(8-38.1-66.67-M4)

输入端/INPUT





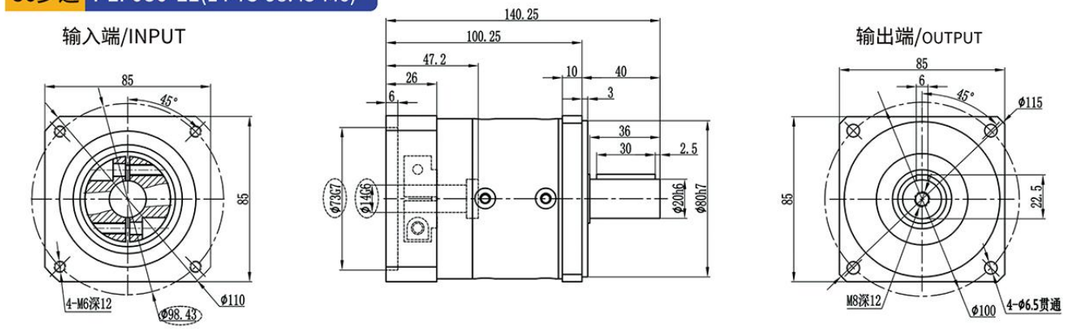
输出端/OUTPUT



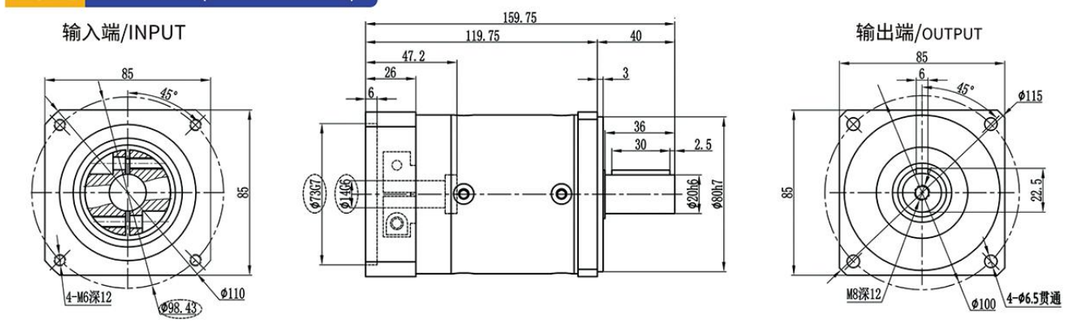
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

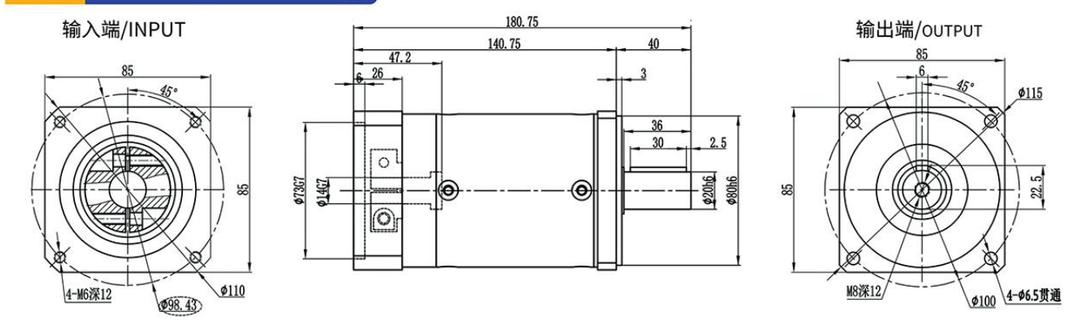
86步进 PLF080-L1(14-73-98.43-M6)



86步进 PLF080-L2(14-73-98.43-M6)



86步进 PLF080-L3(14-73-98.43-M6)

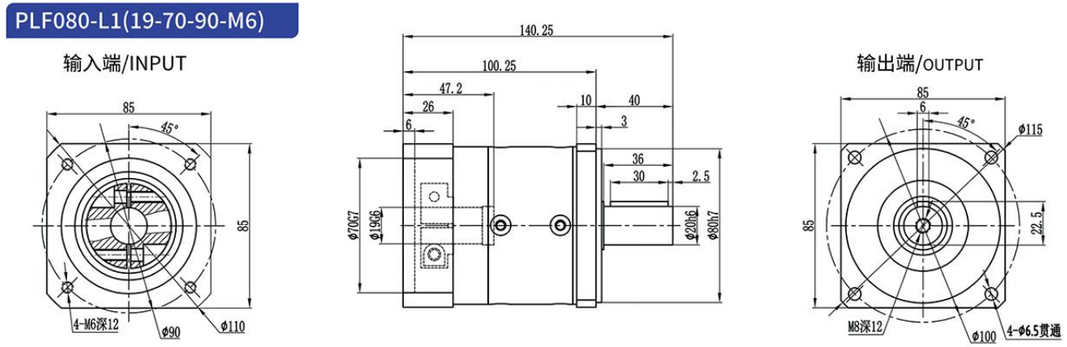


*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

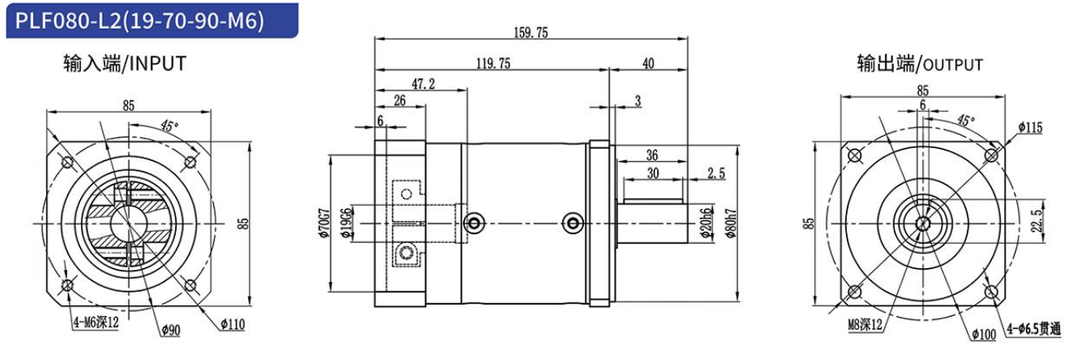
任工机械科技 | 行星减速机专业非标制造与服务厂商
RIGHT GEAR MECHANICAL TECHNOLOGY | PLANETARY REDUCER PROFESSIONAL NON-STANDARD MANUFACTURING AND SERVICE MANUFACTURERS
高精密行星齿轮减速机系列 Planetary Gear Reducer series
任重致远 工匠精神 www.rengongkeji.com

外形尺寸图表 /OUTLINE DIMENSION SHEET

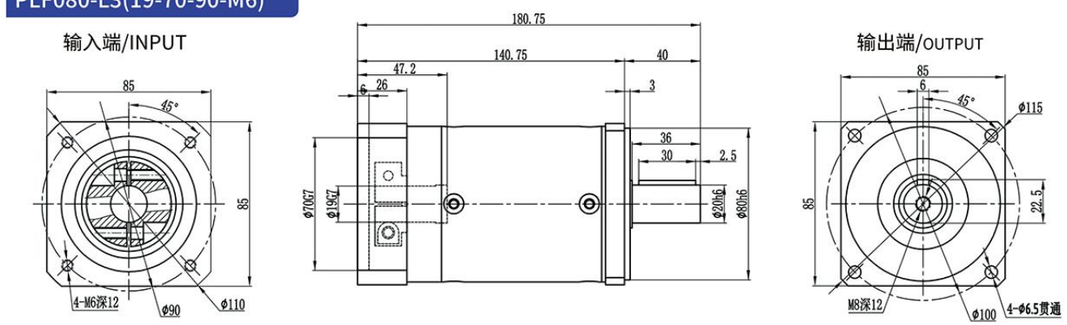
PLF080-L1(19-70-90-M6)



PLF080-L2(19-70-90-M6)



PLF080-L3(19-70-90-M6)



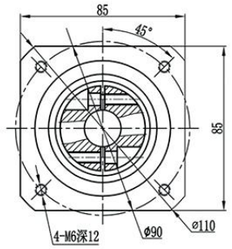
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

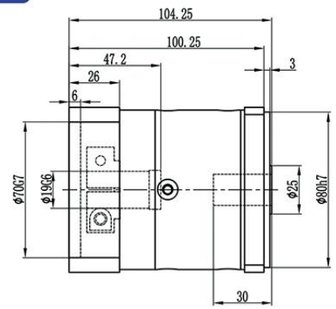
直齿高精密型
PLF SERIES

外形尺寸图表 /OUTLINE DIMENSION SHEET

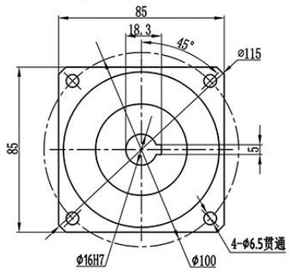
孔输出 PLF080-L1(19-70-90-M6)

输入端/INPUT



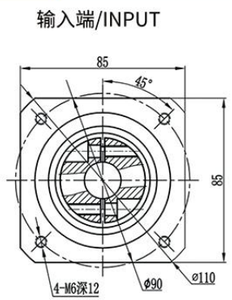


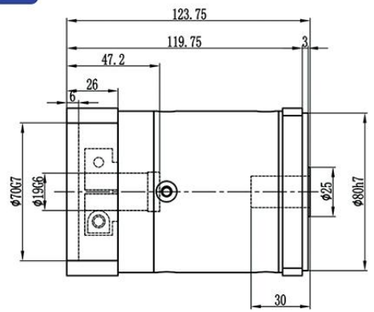
输出端/OUTPUT



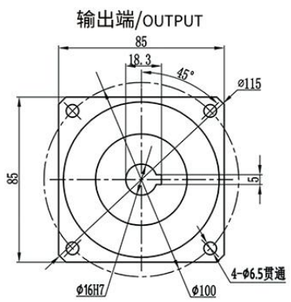
孔输出 PLF080-L2(19-70-90-M6)

输入端/INPUT



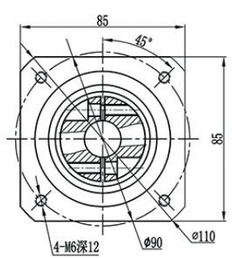


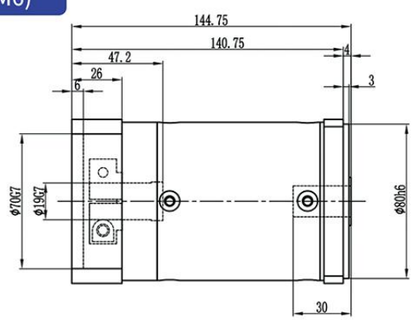
输出端/OUTPUT



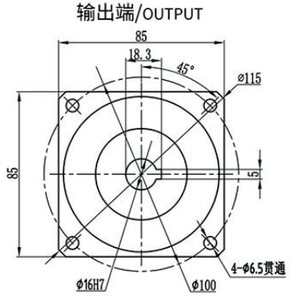
孔输出 PLF080-L3(19-70-90-M6)

输入端/INPUT





输出端/OUTPUT



*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

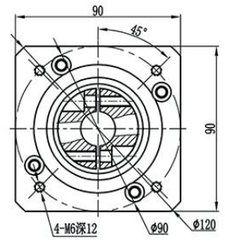
任工机械科技 RIGHT GEAR MECHANICAL TECHNOLOGY | 行星减速机专业非标制造与服务厂商 PLANETARY REDUCER PROFESSIONAL NON-STANDARD MANUFACTURING AND SERVICE MANUFACTURERS
高精密行星齿轮减速机系列 Planetary Gear Reducer series 任重致远 工匠精神 www.rengongkeji.com

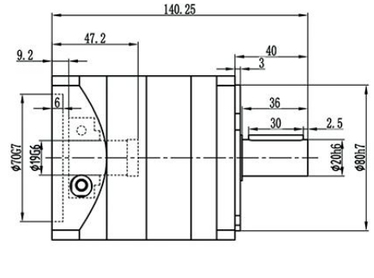
外形尺寸图表 /OUTLINE DIMENSION SHEET

直齿高精密型 PLF SERIES

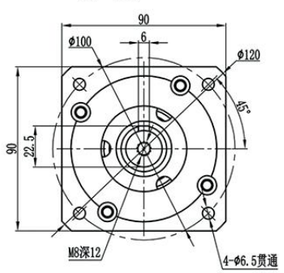
PLF090-L1(19-70-90-M6)

输入端/INPUT



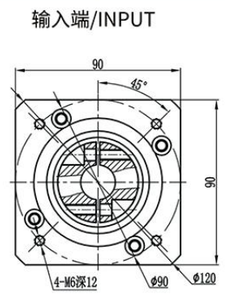


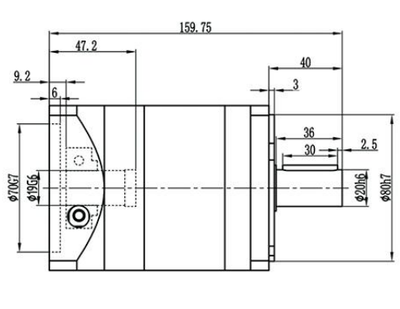
输出端/OUTPUT



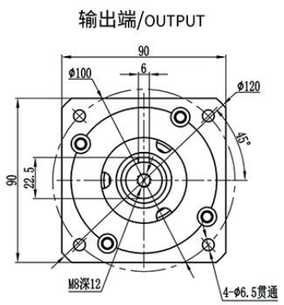
PLF090-L2(19-70-90-M6)

输入端/INPUT



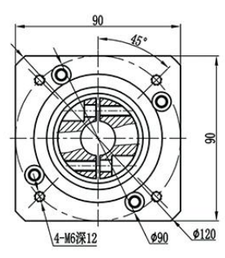


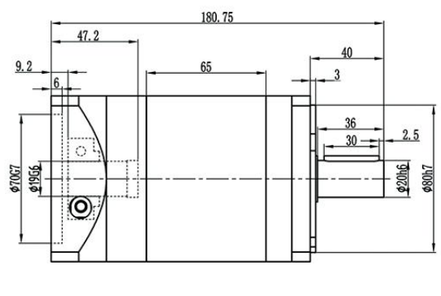
输出端/OUTPUT



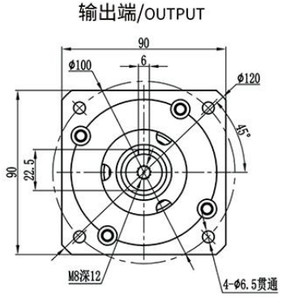
PLF090-L3(19-70-90-M6)

输入端/INPUT





输出端/OUTPUT

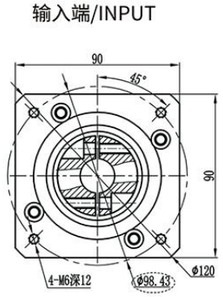


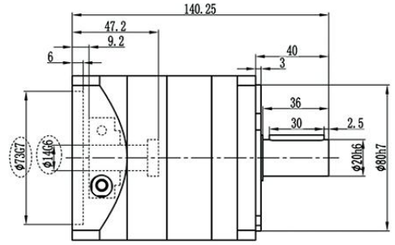
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

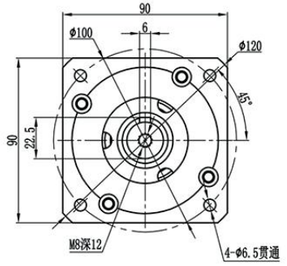
86步进 PLF090-L1(14-73-98.43-M6)

输入端/INPUT



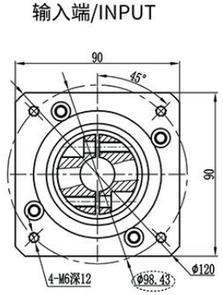


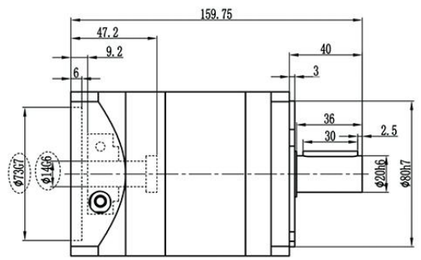
输出端/OUTPUT



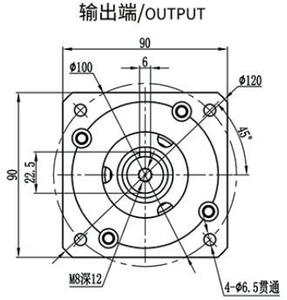
86步进 PLF090-L2(14-73-98.43-M6)

输入端/INPUT



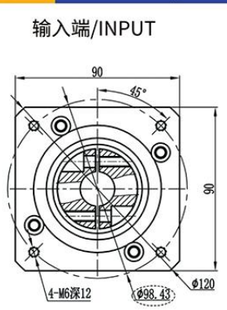


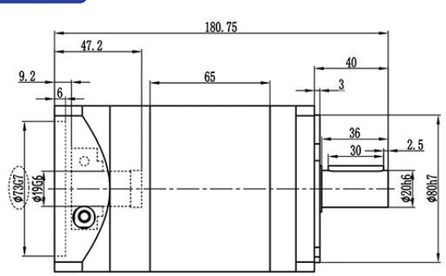
输出端/OUTPUT



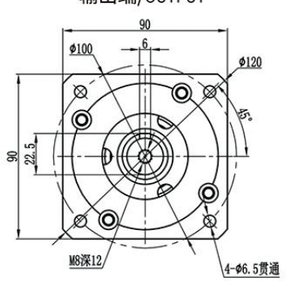
86步进 PLF090-L3(14-73-98.43-M6)

输入端/INPUT





输出端/OUTPUT

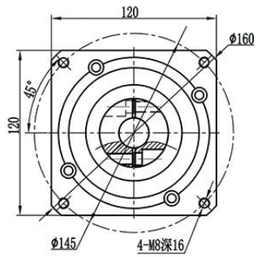


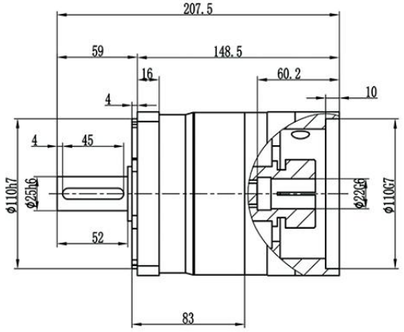
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

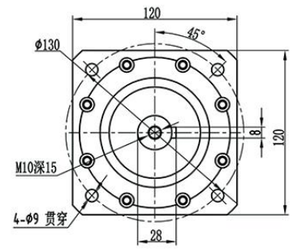
PLF120-L1(22-110-145-M8)

输入端/INPUT



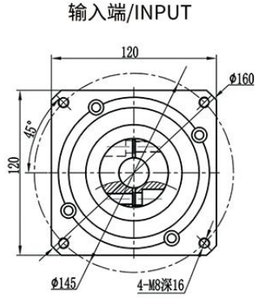


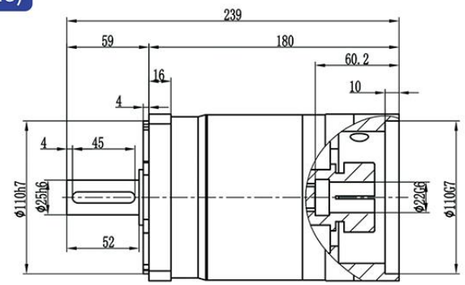
输出端/OUTPUT



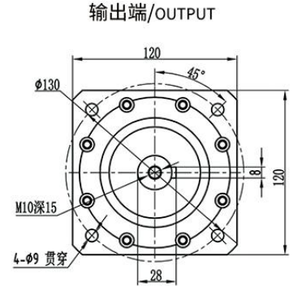
PLF120-L2(22-110-145-M8)

输入端/INPUT



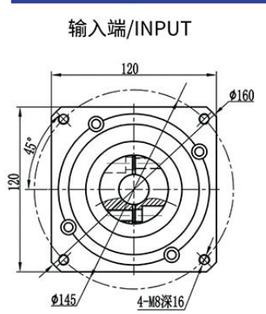


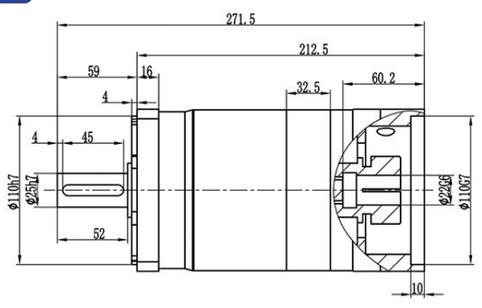
输出端/OUTPUT



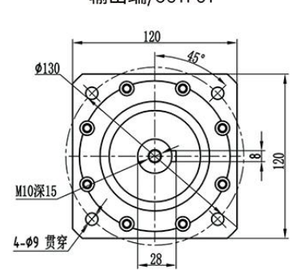
PLF120-L3(22-110-145-M8)

输入端/INPUT





输出端/OUTPUT



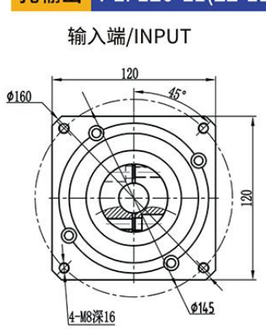
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

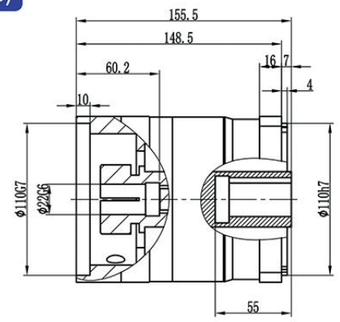
直齿高精密型 PLF SERIES

外形尺寸图表 /OUTLINE DIMENSION SHEET

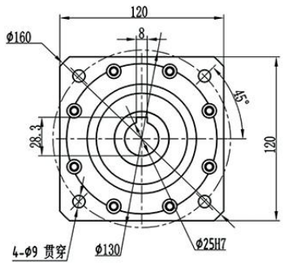
孔输出 PLF120-L1(22-110-145-M8)

输入端/INPUT



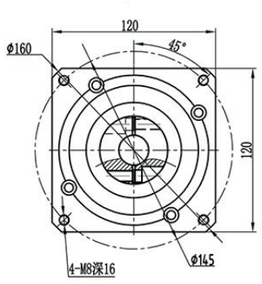


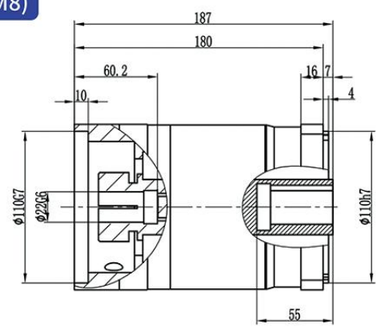
输出端/OUTPUT



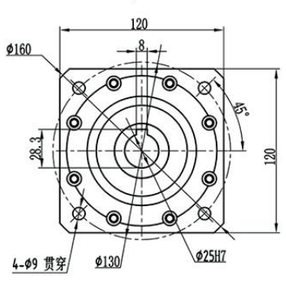
孔输出 PLF120-L2(22-110-145-M8)

输入端/INPUT



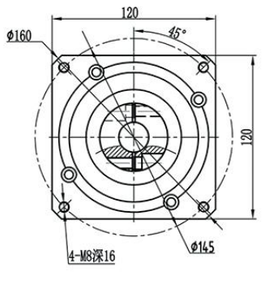


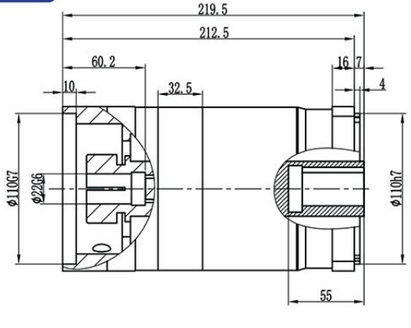
输出端/OUTPUT



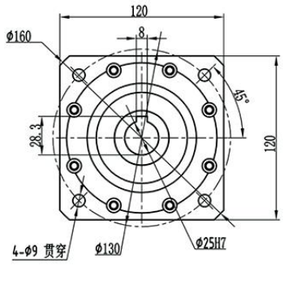
孔输出 PLF120-L3(22-110-145-M8)

输入端/INPUT





输出端/OUTPUT



*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

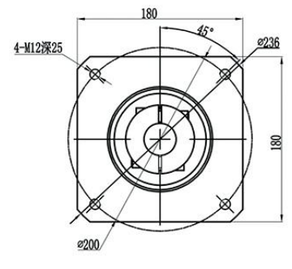
任工机械科技 RIGHT GEAR MECHANICAL TECHNOLOGY | 行星减速机专业非标制造与服务厂商 PLANETARY REDUCER PROFESSIONAL NON-STANDARD MANUFACTURING AND SERVICE MANUFACTURERS
高精密行星齿轮减速机系列 Planetary Gear Reducer series 任重致远 工匠精神 www.rengongkeji.com

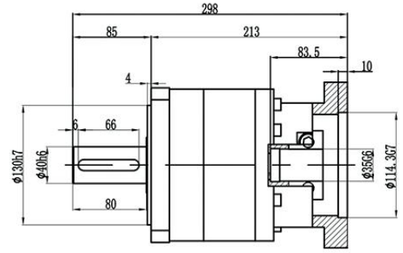
外形尺寸图表 /OUTLINE DIMENSION SHEET

直齿高精密型 PLF SERIES

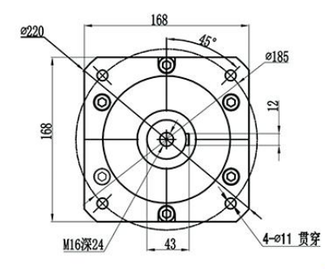
PLF160-L1(35-114.3-200-M12)

输入端/INPUT



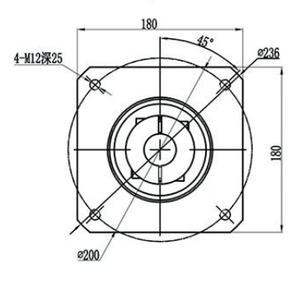


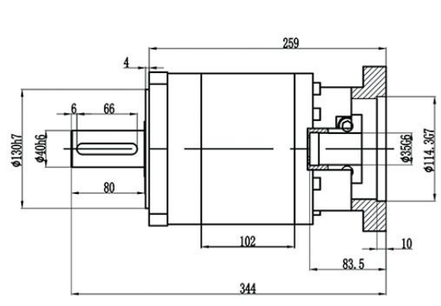
输出端/OUTPUT



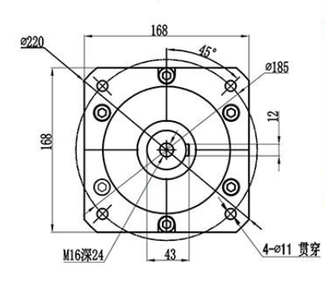
PLF160-L2(35-114.3-200-M12)

输入端/INPUT



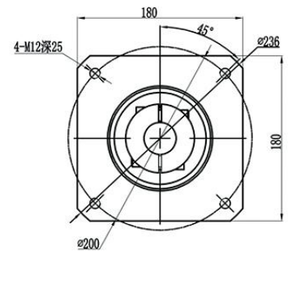


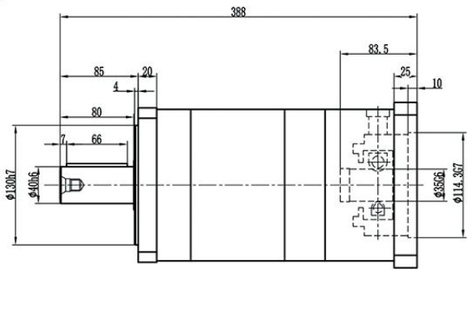
输出端/OUTPUT



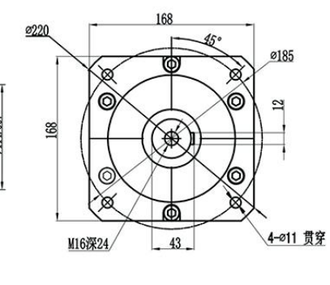
PLF160-L3(35-114.3-200-M12)

输入端/INPUT





输出端/OUTPUT

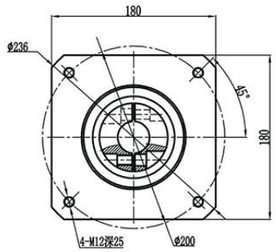


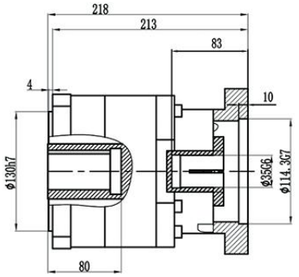
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

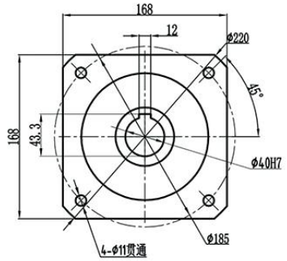
孔输出 PLF160-L1(35-114.3-200-M12)

输入端/INPUT



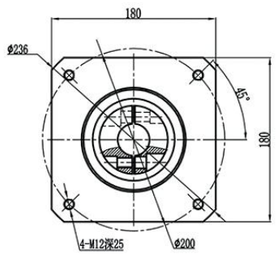


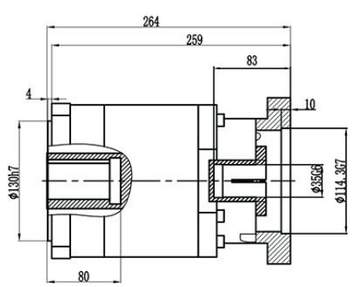
输出端/OUTPUT



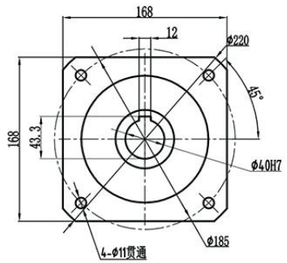
孔输出 PLF160-L2(35-114.3-200-M12)

输入端/INPUT



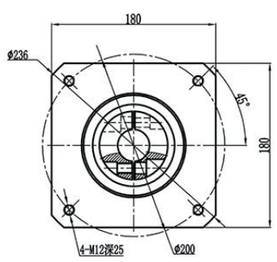


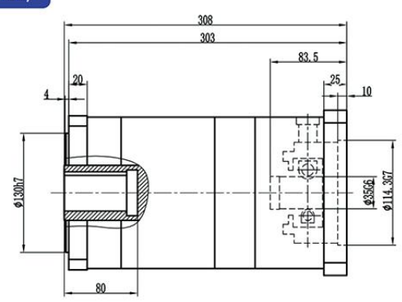
输出端/OUTPUT



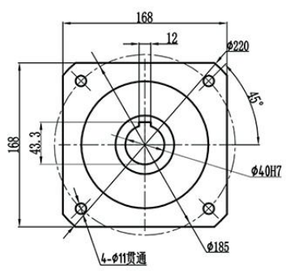
孔输出 PLF160-L3(35-114.3-200-M12)

输入端/INPUT





输出端/OUTPUT



*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

PLE SERIES



减速机性能资料 /GEAR BOX PERFORMANCE INFORMATION

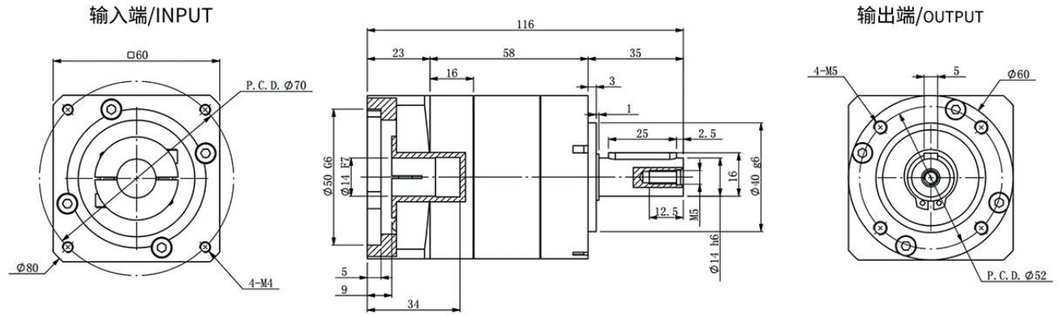
产品型号	单位	速比	级数	PLE060	PLE080	PLE090	PLE120	PLE160
额定输出扭矩	Nm	4	1级	42	142	142	280	585
		5		42	142	142	280	585
		7		33	92	92	198	378
		10		15	54	54	95	310
		16	2级	42	142	142	280	585
		20		42	142	142	280	585
		25		42	142	142	280	585
		35		42	142	142	280	585
		40		42	142	142	280	585
		50		42	142	142	280	585
		70		33	92	92	198	378
		100		15	54	54	95	310
		64	3级	42	142	142	280	585
		80		42	142	142	280	585
		100		42	142	142	280	585
		125		42	142	142	280	585
		140		42	142	142	280	585
		175		42	142	142	280	585
		245		42	142	142	280	585
		350		42	142	142	280	585
		400		42	142	142	280	585
		500		42	142	142	280	585
		700		33	92	92	198	378
		1000		15	54	54	95	310
最大额定扭矩	Nm	2倍额定输出扭矩						
最大径向力	N			680	1750	1750	3100	6550
最大轴向力	N			340	875	875	1550	3275
满载效率	%		1	98				
			2	96				
			3	94				
重量	kg		1	1.0	3.1	3.1	7.4	22
			2	1.5	3.8	3.8	9.2	27.7
			3	2.0	5.0	5.0	9.8	29

任工机械科技 | 行星减速机专业非标制造与服务厂商
RIGHT GEAR MECHANICAL TECHNOLOGY
PLANETARY REDUCER PROFESSIONAL NON-STANDARD MANUFACTURING AND SERVICE MANUFACTURERS
高精密行星齿轮减速机系列 Planetary Gear Reducer series
任重致远 工匠精神 www.rengongkeji.com

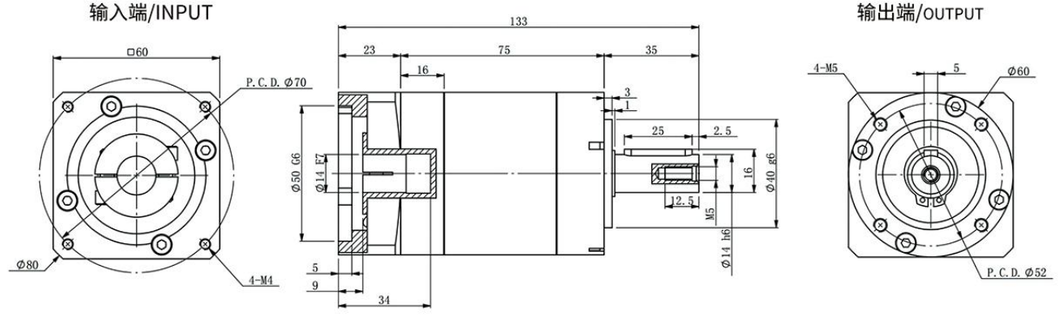
直齿高精密型
PLE SERIES

外形尺寸图表 /OUTLINE DIMENSION SHEET

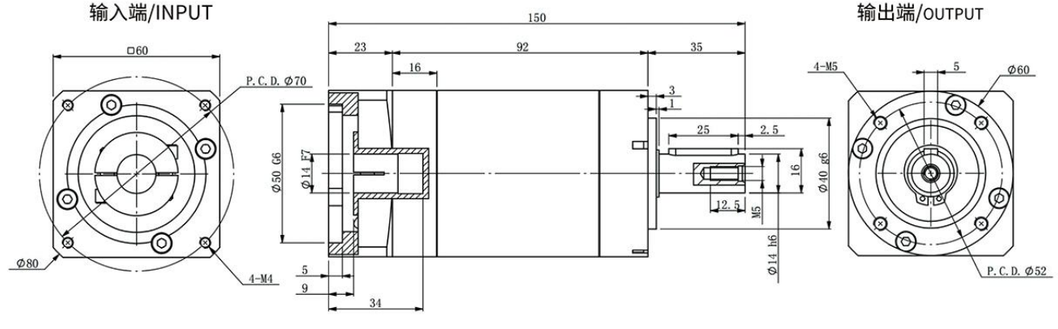
PLE060-L1(14-50-70-M4)



PLE060-L2(14-50-70-M4)



PLE060-L3(14-50-70-M4)

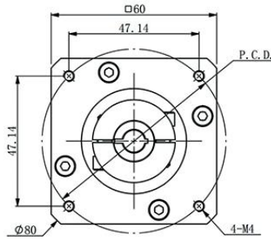


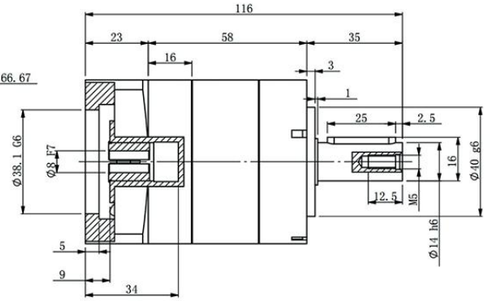
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

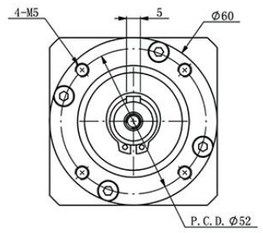
57步进 PLE060-L1(8-38.1-66.67-M4)

输入端/INPUT



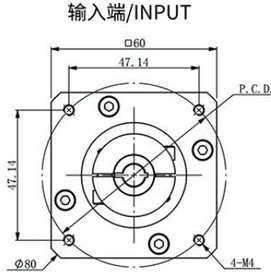


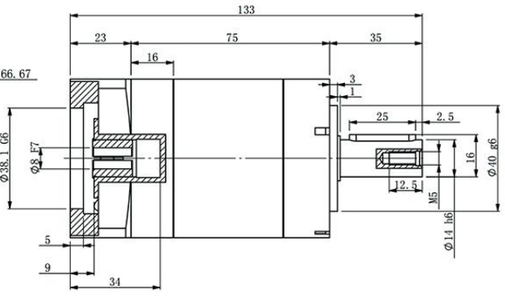
输出端/OUTPUT



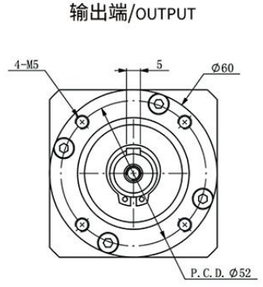
57步进 PLE060-L2(8-38.1-66.67-M4)

输入端/INPUT





输出端/OUTPUT



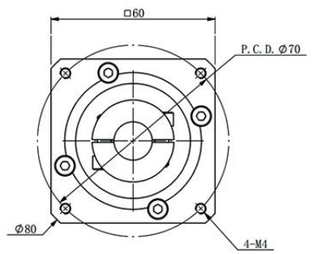
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

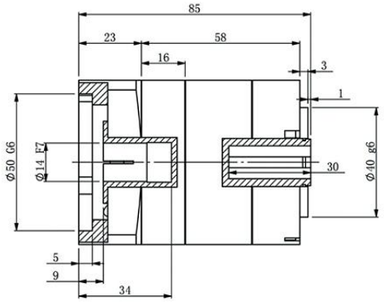
任工机械科技 | 行星减速机专业非标制造与服务厂商
RIGHT GEAR MECHANICAL TECHNOLOGY | PLANETARY REDUCER PROFESSIONAL NON-STANDARD MANUFACTURING AND SERVICE MANUFACTURERS
高精密行星齿轮减速机系列 Planetary Gear Reducer series
任重致远 工匠精神 www.rengongkeji.com

外形尺寸图表 /OUTLINE DIMENSION SHEET

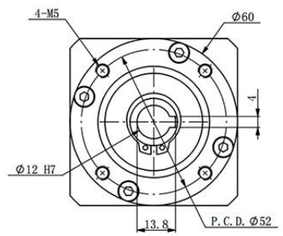
孔输出 PLE060-L1(14-50-70-M4)

输入端/INPUT



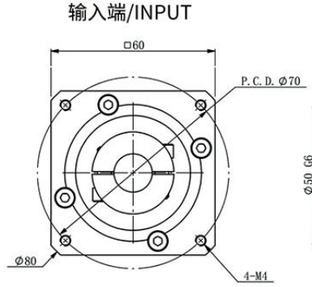


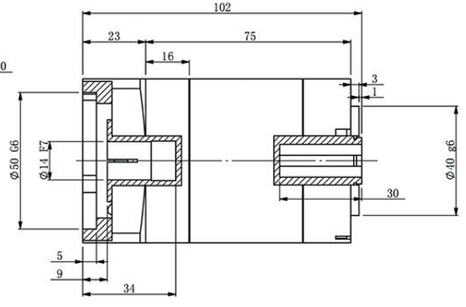
输出端/OUTPUT



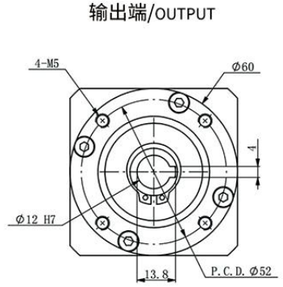
孔输出 PLE060-L2(14-50-70-M4)

输入端/INPUT



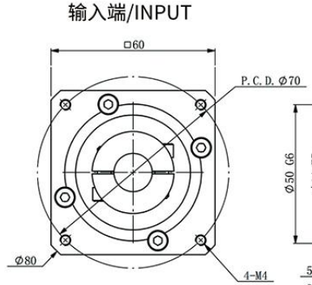


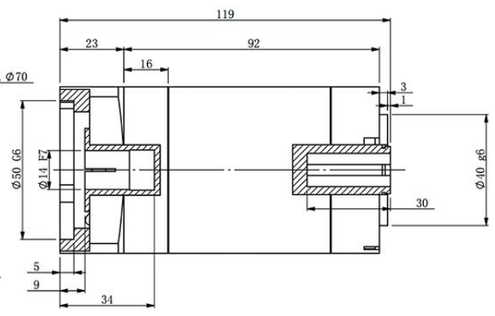
输出端/OUTPUT



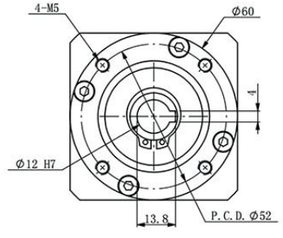
孔输出 PLE060-L3(14-50-70-M4)

输入端/INPUT





输出端/OUTPUT

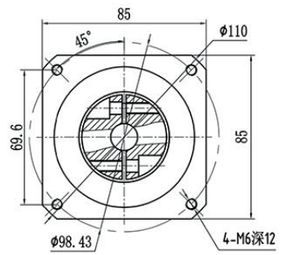


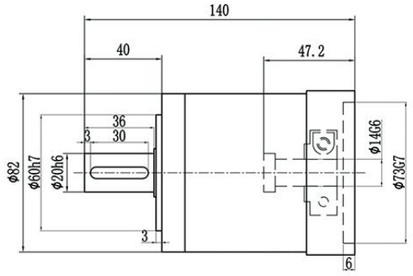
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

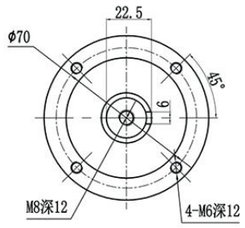
86步进 PLE080-L1(14-73-98.43-M6)

输入端/INPUT



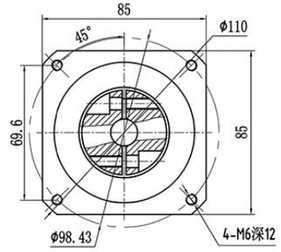


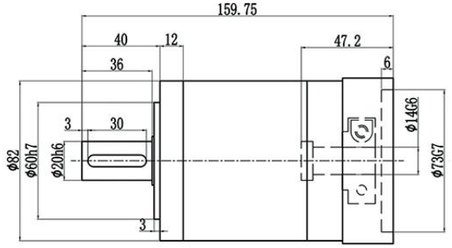
输出端/OUTPUT



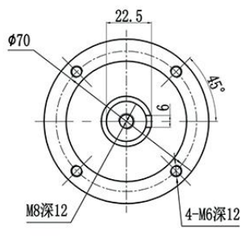
86步进 PLE080-L2(14-73-98.43-M6)

输入端/INPUT



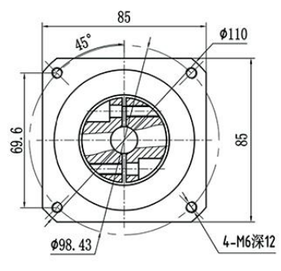


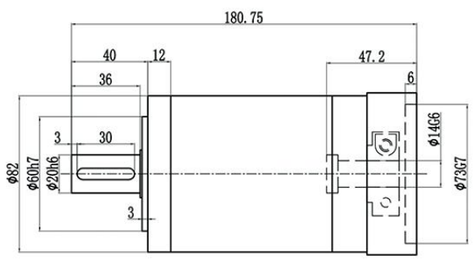
输出端/OUTPUT



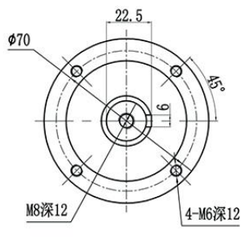
86步进 PLE080-L3(14-73-98.43-M6)

输入端/INPUT





输出端/OUTPUT



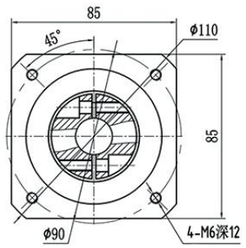
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

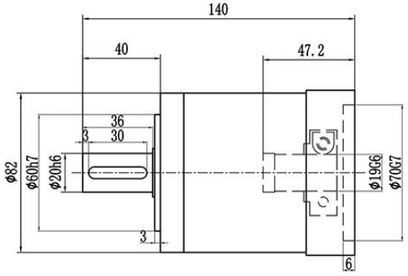
任工机械科技 | 行星减速机专业非标制造与服务厂商
RIGHT GEAR MECHANICAL TECHNOLOGY
PLANETARY REDUCER PROFESSIONAL NON-STANDARD MANUFACTURING AND SERVICE MANUFACTURERS
高精密行星齿轮减速机系列 Planetary Gear Reducer series
任重致远 工匠精神 www.rengongkeji.com

外形尺寸图表 /OUTLINE DIMENSION SHEET

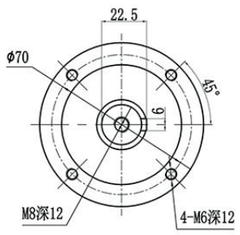
PLE080-L1(19-70-90-M6)

输入端/INPUT



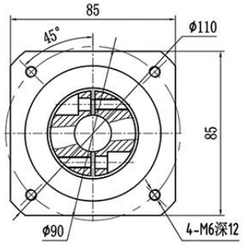


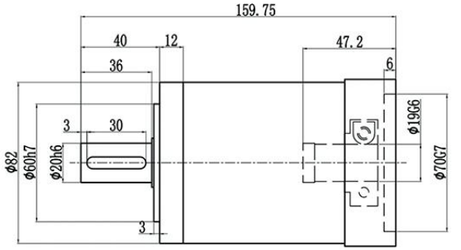
输出端/OUTPUT



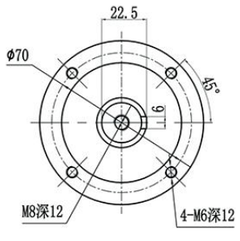
PLE080-L2(19-70-90-M6)

输入端/INPUT



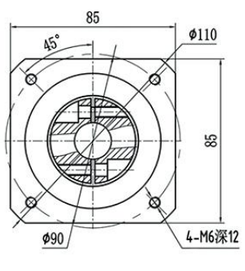


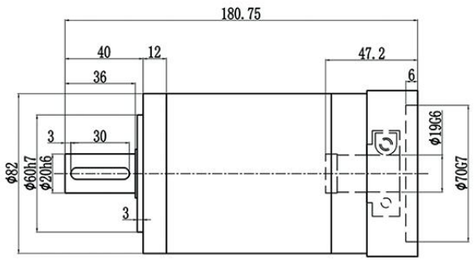
输出端/OUTPUT



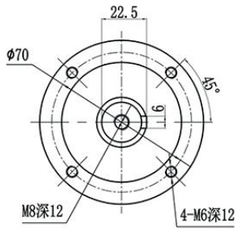
PLE080-L3(19-70-90-M6)

输入端/INPUT





输出端/OUTPUT



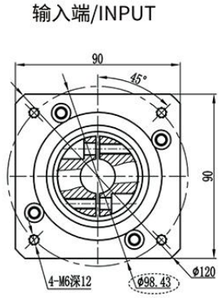
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

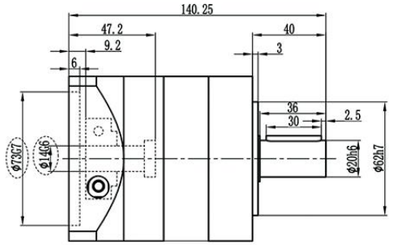
直齿高精密型
PLE SERIES

外形尺寸图表 /OUTLINE DIMENSION SHEET

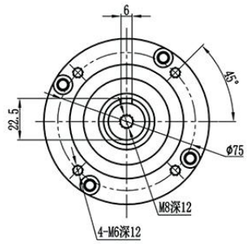
86步进 PLE090-L1(14-73-98.43-M6)

输入端/INPUT



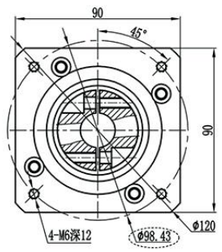


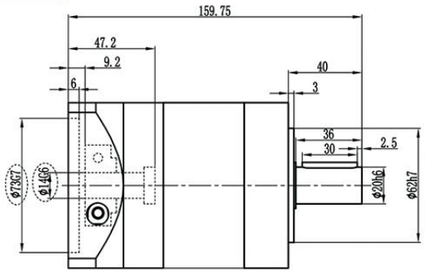
输出端/OUTPUT



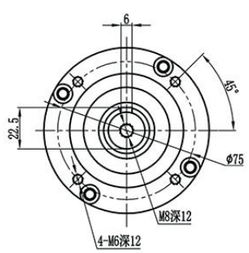
86步进 PLE090-L2(14-73-98.43-M6)

输入端/INPUT



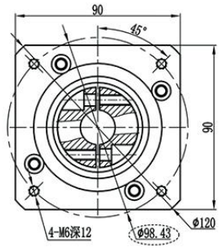


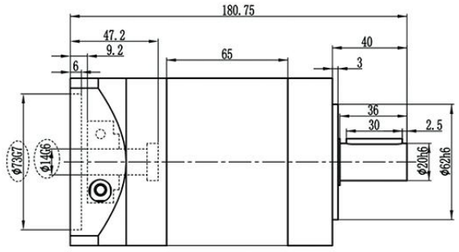
输出端/OUTPUT



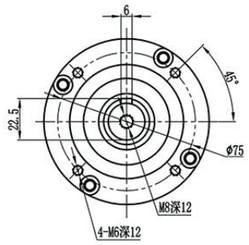
86步进 PLE090-L3(14-73-98.43-M6)

输入端/INPUT





输出端/OUTPUT

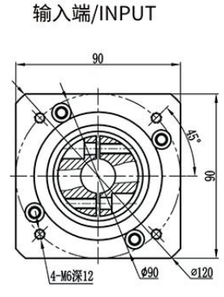


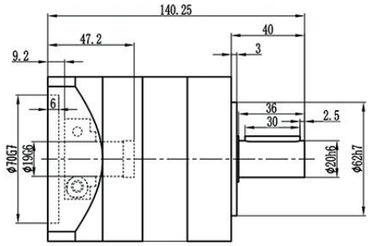
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

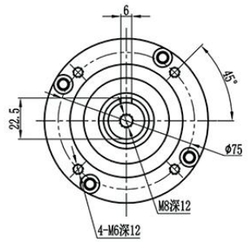
PLE090-L1(19-70-90-M6)

输入端/INPUT



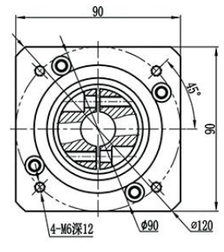


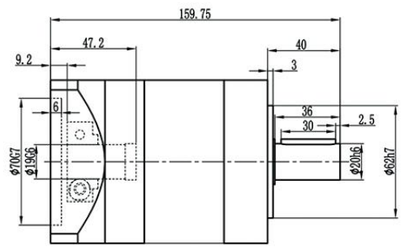
输出端/OUTPUT



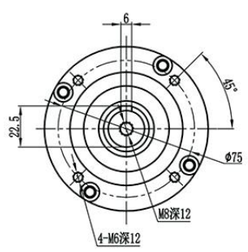
PLE090-L2(19-70-90-M6)

输入端/INPUT



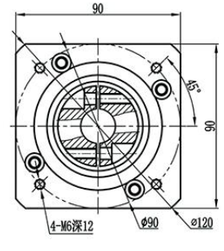


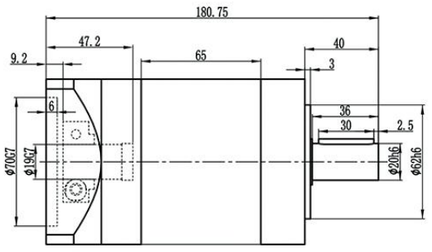
输出端/OUTPUT



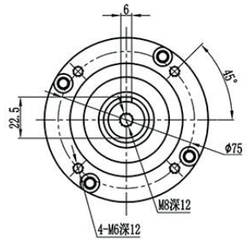
PLE090-L3(19-70-90-M6)

输入端/INPUT





输出端/OUTPUT

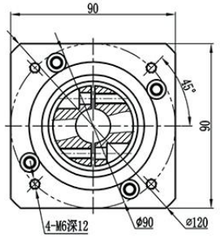


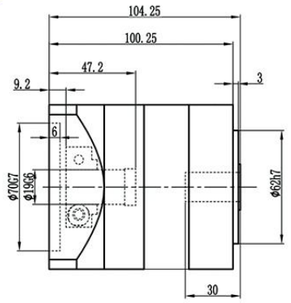
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

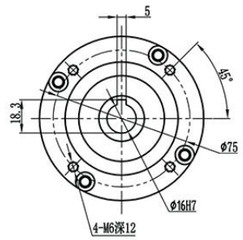
孔输出 PLE090-L1(19-70-90-M6)

输入端/INPUT



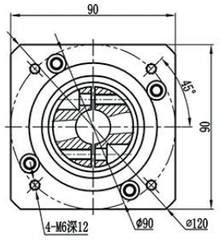


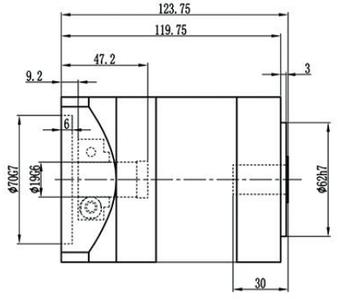
输出端/OUTPUT



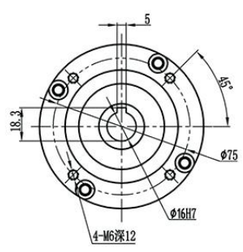
孔输出 PLE090-L2(19-70-90-M6)

输入端/INPUT



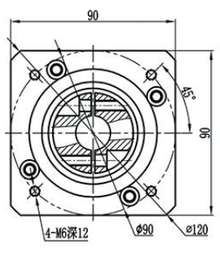


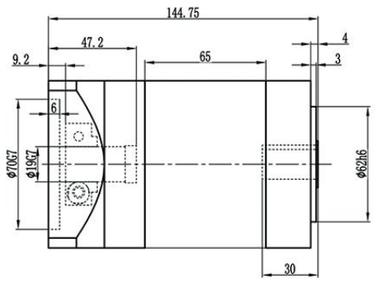
输出端/OUTPUT



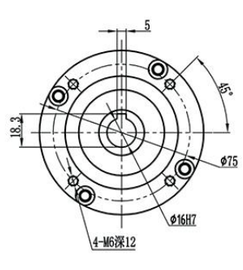
孔输出 PLE090-L3(19-70-90-M6)

输入端/INPUT





输出端/OUTPUT



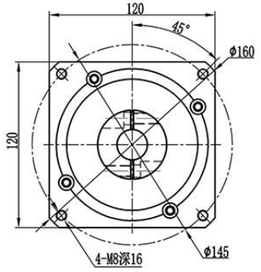
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

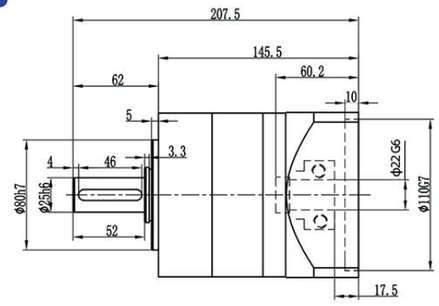
任工机械科技 RIGHT GEAR MECHANICAL TECHNOLOGY | 行星减速机专业非标制造与服务厂商 PLANETARY REDUCER PROFESSIONAL NON-STANDARD MANUFACTURING AND SERVICE MANUFACTURERS
高精密行星齿轮减速机系列 Planetary Gear Reducer series 任重致远 工匠精神 www.rengongkeji.com

外形尺寸图表 /OUTLINE DIMENSION SHEET

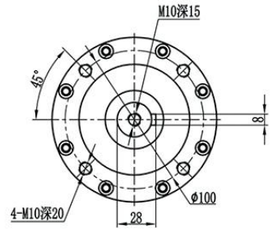
PLE120-L1(22-110-145-M8)

输入端/INPUT



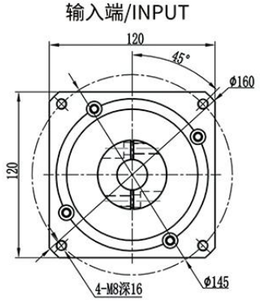


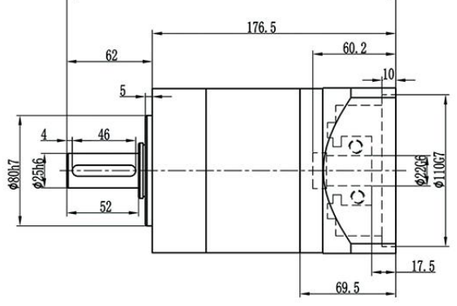
输出端/OUTPUT



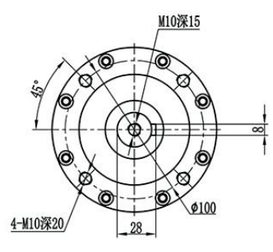
PLE120-L2(22-110-145-M8)

输入端/INPUT



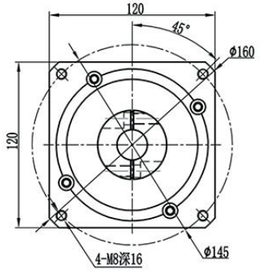


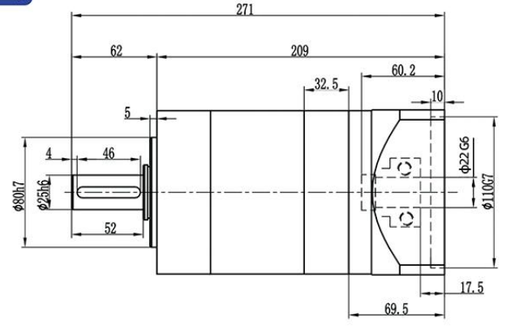
输出端/OUTPUT



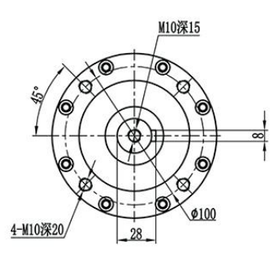
PLE120-L3(22-110-145-M8)

输入端/INPUT





输出端/OUTPUT



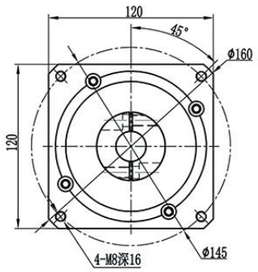
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

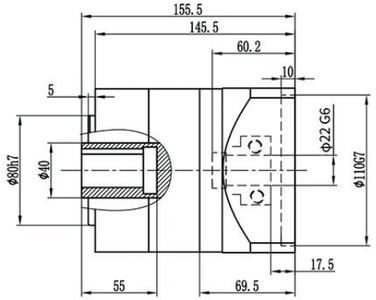
直齿高精密型 PLF SERIES

外形尺寸图表 /OUTLINE DIMENSION SHEET

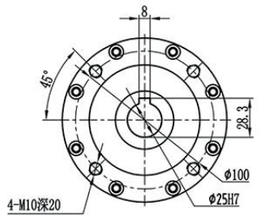
孔输出 PLE120-L1(22-110-145-M8)

输入端/INPUT



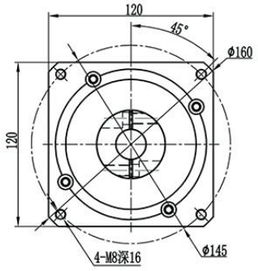


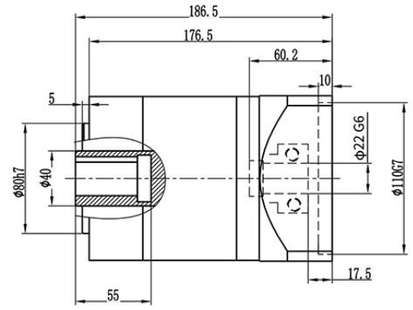
输出端/OUTPUT



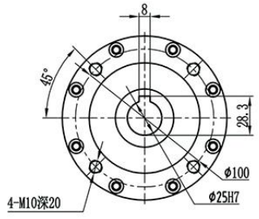
孔输出 PLE120-L2(22-110-145-M8)

输入端/INPUT



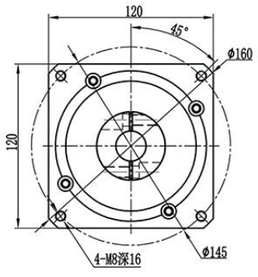


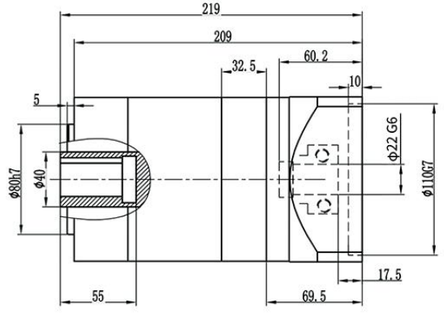
输出端/OUTPUT



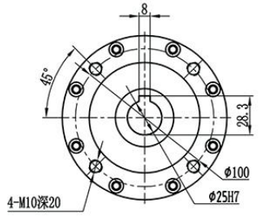
孔输出 PLE120-L3(22-110-145-M8)

输入端/INPUT





输出端/OUTPUT

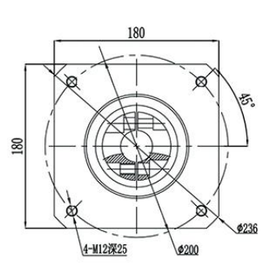


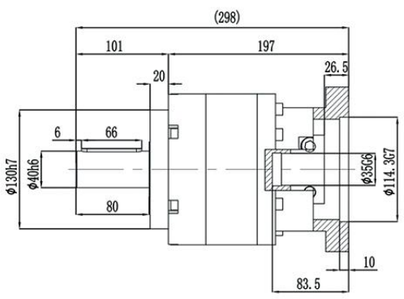
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

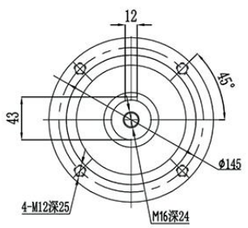
PLE160-L1(35-114.3-200-M12)

输入端/INPUT



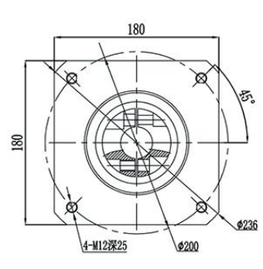


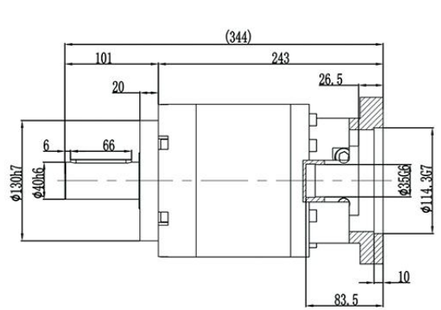
输出端/OUTPUT



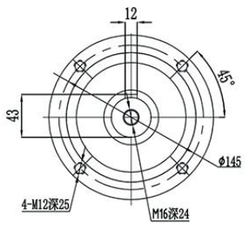
PLE160-L2(35-114.3-200-M12)

输入端/INPUT



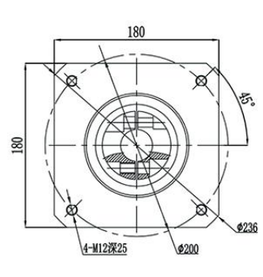


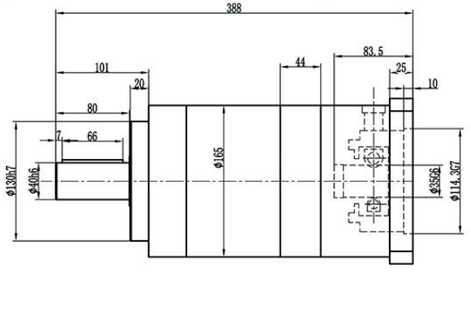
输出端/OUTPUT



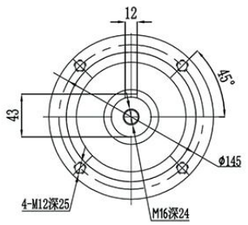
PLE160-L3(35-114.3-200-M12)

输入端/INPUT





输出端/OUTPUT

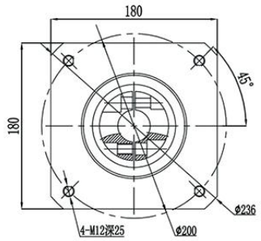


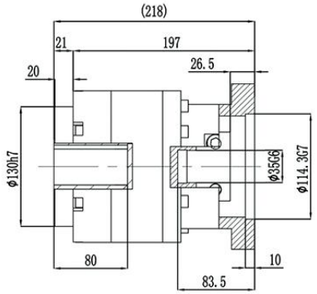
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

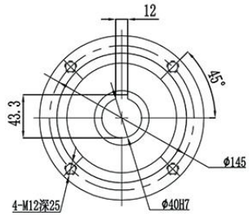
孔输出 PLE160-L1(35-114.3-200-M12)

输入端/INPUT



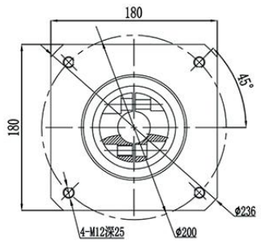


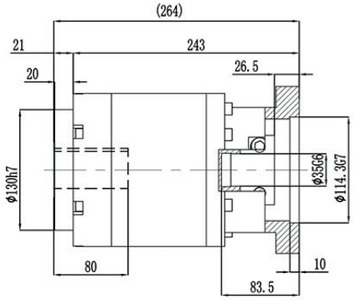
输出端/OUTPUT



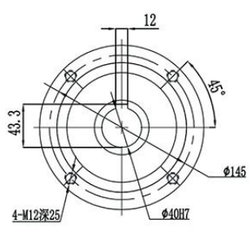
孔输出 PLE160-L2(35-114.3-200-M12)

输入端/INPUT



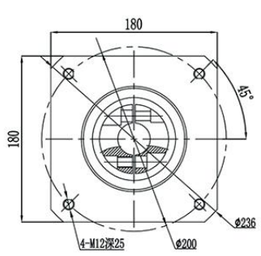


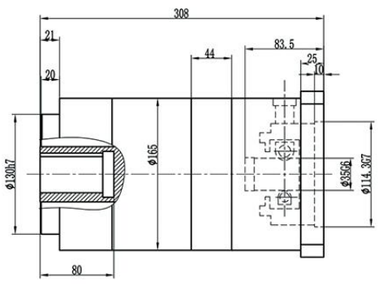
输出端/OUTPUT



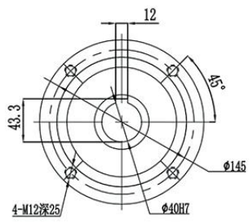
孔输出 PLE160-L3(35-114.3-200-M12)

输入端/INPUT





输出端/OUTPUT



*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

PLFR SERIES



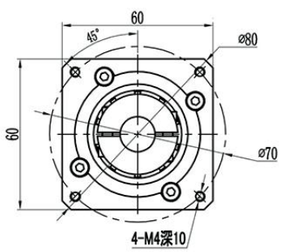
减速机性能资料 /GEAR BOX PERFORMANCE INFORMATION

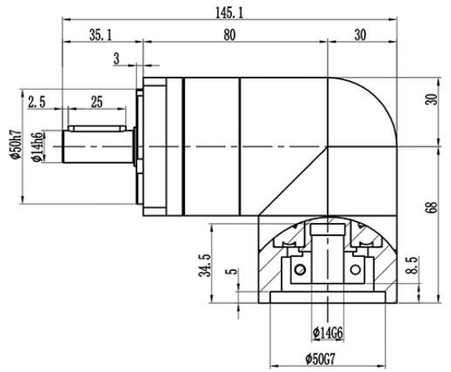
产品型号	单位	速比	级数	PLFR060	PLFR080	PLFR120	PLFR160
额定输出扭矩	Nm	3	1级	42	142	280	585
		4		42	142	280	585
		5		42	142	280	585
		7		33	92	198	378
		8			92	198	378
		10		16	54	95	310
		15	2级	42	142	280	585
		20		42	142	280	585
		25		42	142	280	585
		30		42	142	280	585
		35		42	142	280	585
		40		42	142	280	585
		50		42	142	280	585
		70		33	92	198	378
		100		15	54	95	310
		64	3级	42	142	280	585
		80			142	280	586
		100		42	142	280	585
		125		42	142	280	585
		140		42	142	280	585
		175		42	142	280	585
		245		42	142	280	585
		350		42	142	280	585
		400		42	142	280	585
		500		42	142	280	585
		700		33	92	198	378
		1000		15	54	95	310
最大额定扭矩	Nm	2倍额定输出扭矩					
最大径向力	N			680	1750	3100	6550
最大轴向力	N			340	875	1550	3275
满截效率	%		1	98			
			2	96			
			3	94			
重量	kg		1	2.1	5.0	8.8	26.4
			2	2.7	6.0	10.8	28
			3	3.3	7.0	12.8	33

外形尺寸图表 /OUTLINE DIMENSION SHEET

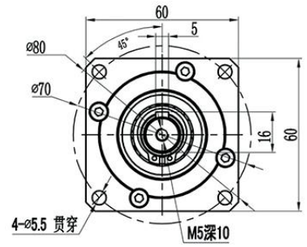
PLFR060-L1(14-50-70-M4)

输入端/INPUT



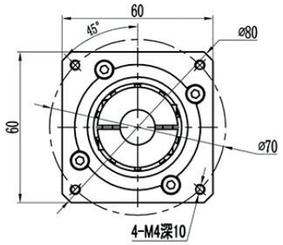


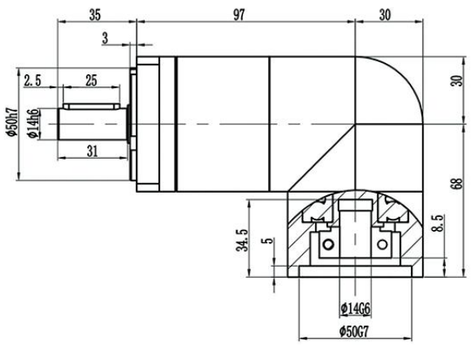
输出端/OUTPUT



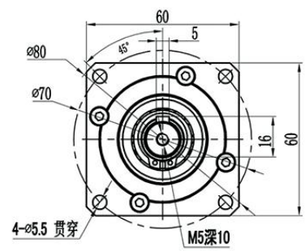
PLFR060-L2(14-50-70-M4)

输入端/INPUT



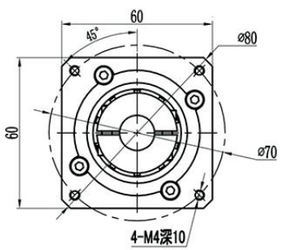


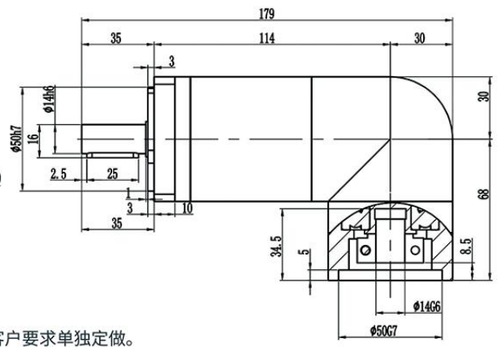
输出端/OUTPUT



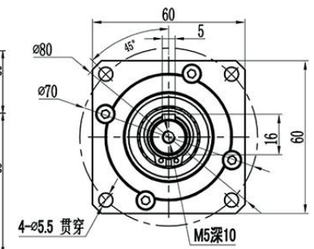
PLFR060-L3(14-50-70-M4)

输入端/INPUT





输出端/OUTPUT

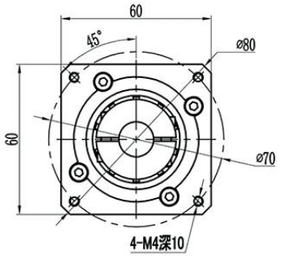


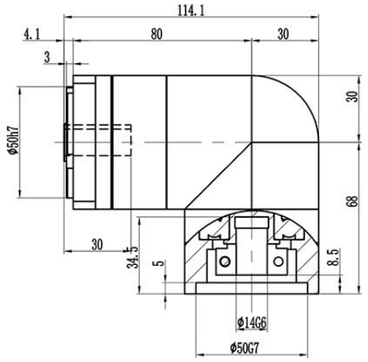
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

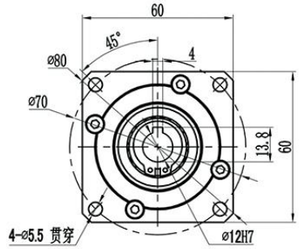
孔输出 PLFR060-L1(14-50-70-M4)

输入端/INPUT



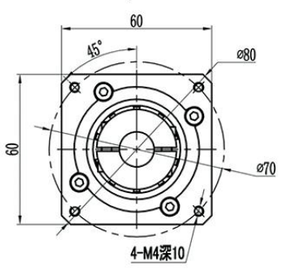


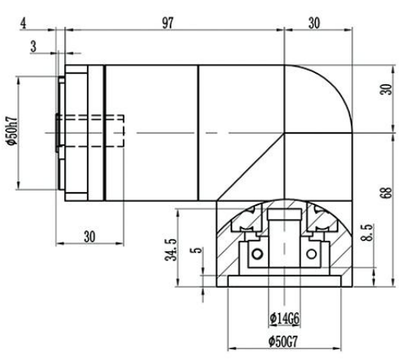
输出端/OUTPUT



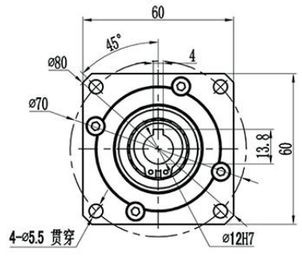
孔输出 PLFR060-L2(14-50-70-M4)

输入端/INPUT



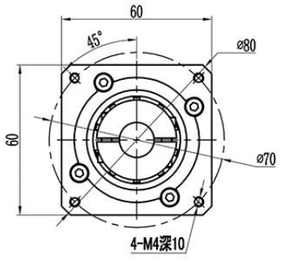


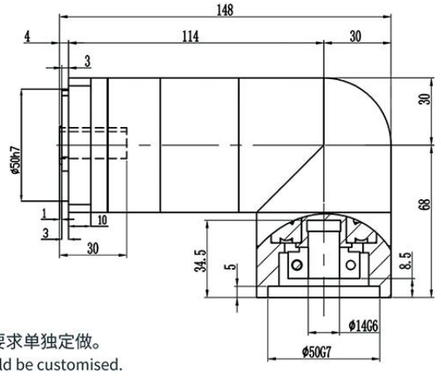
输出端/OUTPUT



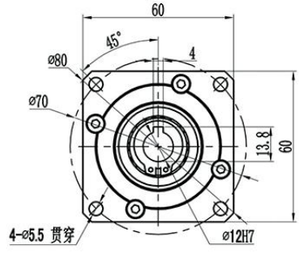
孔输出 PLFR060-L3(14-50-70-M4)

输入端/INPUT





输出端/OUTPUT



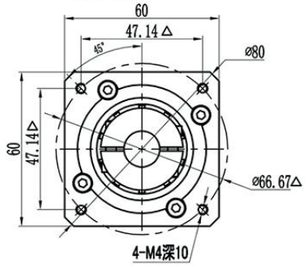
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

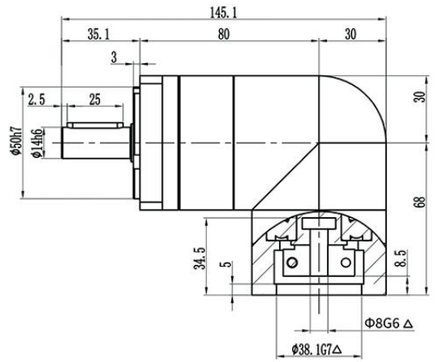
任工机械科技 RIGHT GEAR MECHANICAL TECHNOLOGY
行星减速机专业非标制造与服务厂商
PLANETARY REDUCER PROFESSIONAL NON-STANDARD MANUFACTURING AND SERVICE MANUFACTURERS
高精密行星齿轮减速机系列 Planetary Gear Reducer series
任重致远 工匠精神 www.rengongkeji.com

外形尺寸图表 /OUTLINE DIMENSION SHEET

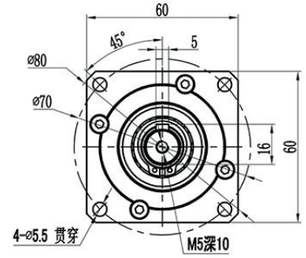
57步进 PLFR060-L1(8-38.1-66.67-M4)

输入端/INPUT



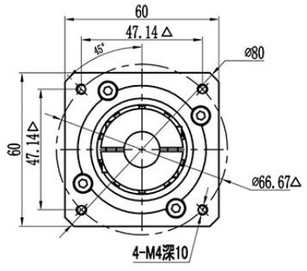


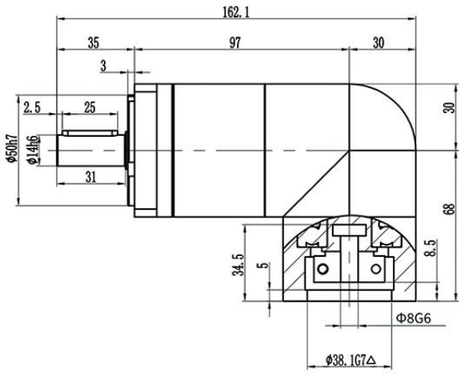
输出端/OUTPUT



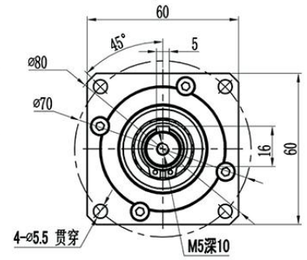
57步进 PLFR060-L2(8-38.1-66.67-M4)

输入端/INPUT



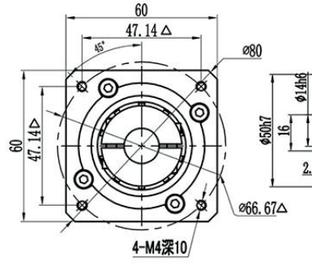


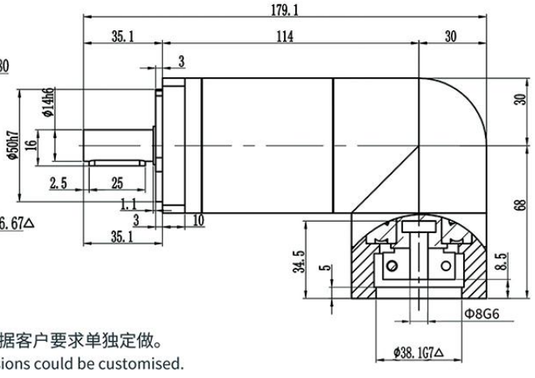
输出端/OUTPUT



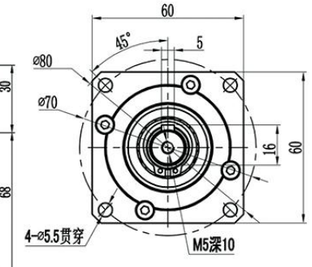
57步进 PLFR060-L3(8-38.1-66.67-M4)

输入端/INPUT





输出端/OUTPUT

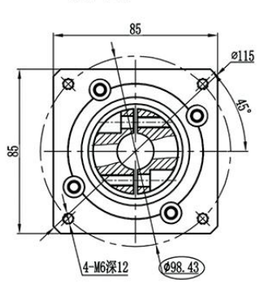


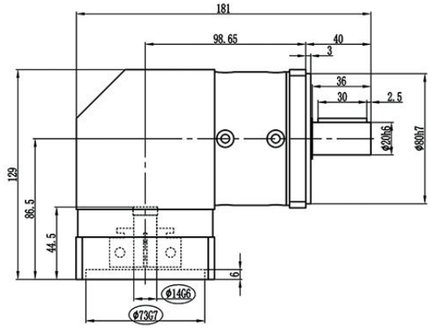
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

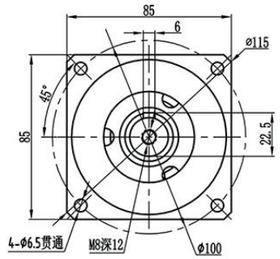
86步进 PLFR080-L1(14-73-98.43-M6)

输入端/INPUT



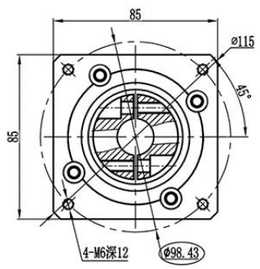


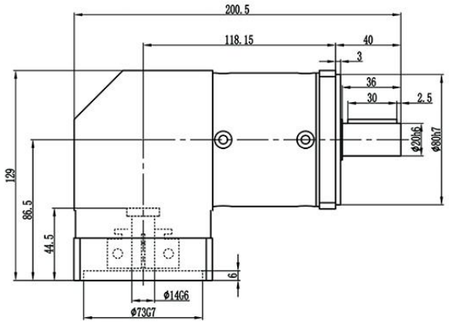
输出端/OUTPUT



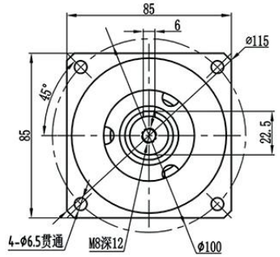
86步进 PLFR080-L2(14-73-98.43-M6)

输入端/INPUT



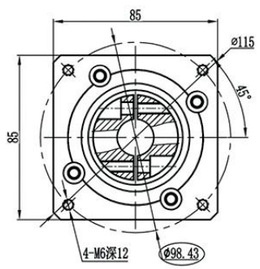


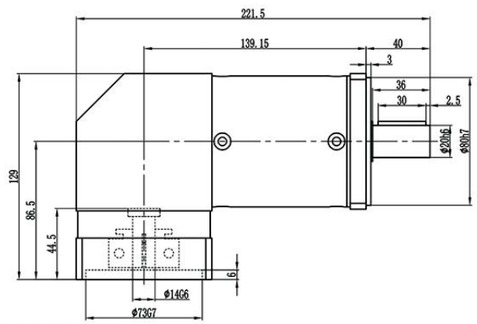
输出端/OUTPUT



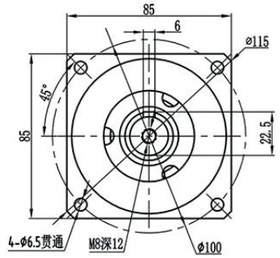
86步进 PLFR080-L3(14-73-98.43-M6)

输入端/INPUT





输出端/OUTPUT



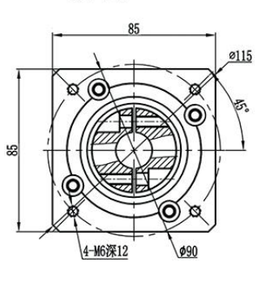
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

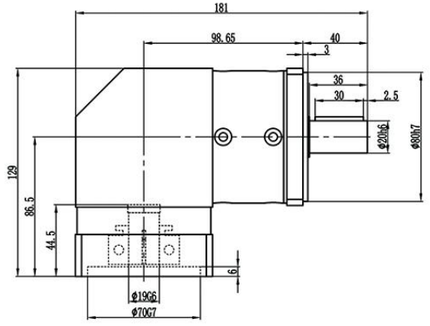
任工机械科技 RIGHT GEAR MECHANICAL TECHNOLOGY | 行星减速机专业非标制造与服务厂商 PLANETARY REDUCER PROFESSIONAL NON-STANDARD MANUFACTURING AND SERVICE MANUFACTURERS
高精密行星齿轮减速机系列 Planetary Gear Reducer series 任重致远 工匠精神 www.rengongkeji.com

外形尺寸图表 /OUTLINE DIMENSION SHEET

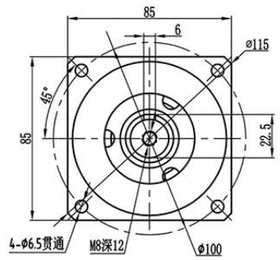
PLFR080-L1(19-70-90-M6)

输入端/INPUT



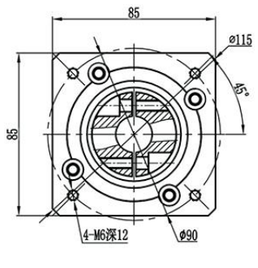


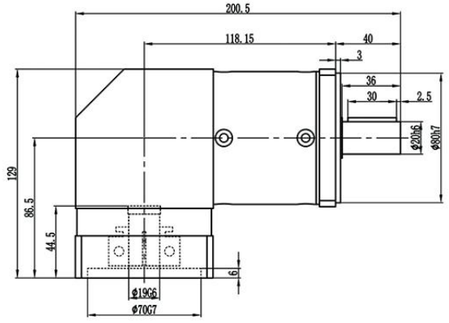
输出端/OUTPUT



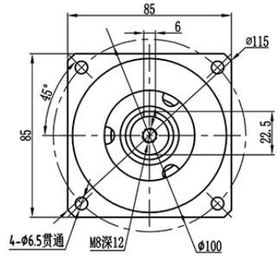
PLFR080-L2(19-70-90-M6)

输入端/INPUT



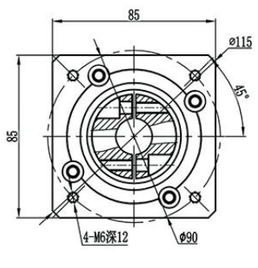


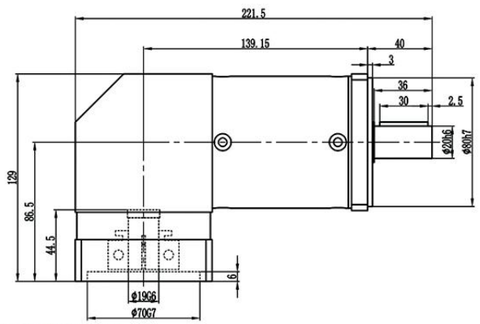
输出端/OUTPUT



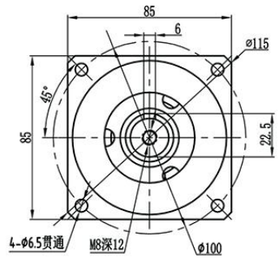
PLFR080-L3(19-70-90-M6)

输入端/INPUT





输出端/OUTPUT

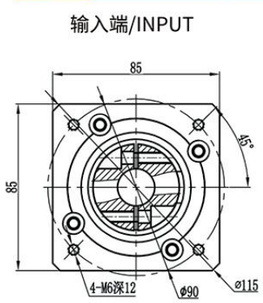


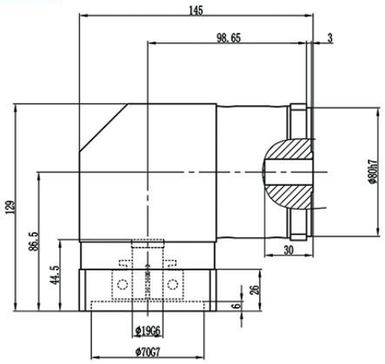
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

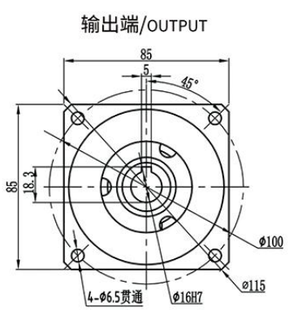
孔输出 PLFR080-L1(19-70-90-M6)

输入端/INPUT



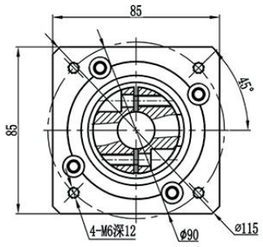


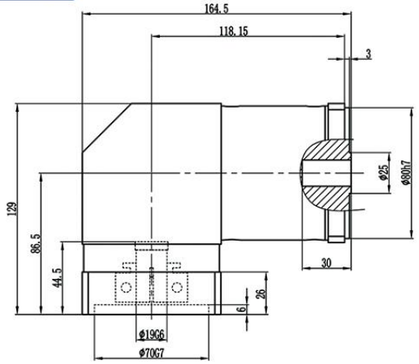
输出端/OUTPUT



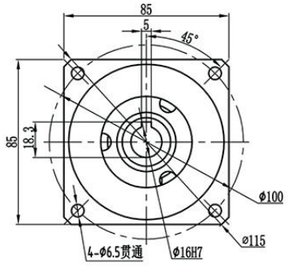
孔输出 PLFR080-L2(19-70-90-M6)

输入端/INPUT



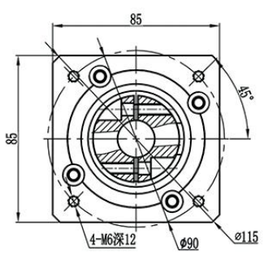


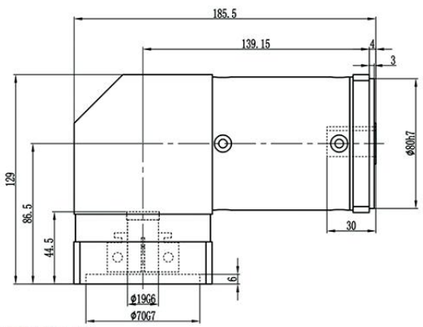
输出端/OUTPUT



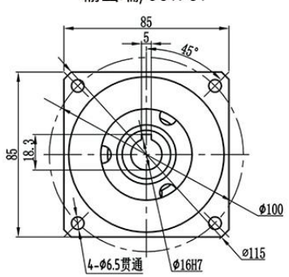
孔输出 PLFR080-L3(19-70-90-M6)

输入端/INPUT





输出端/OUTPUT



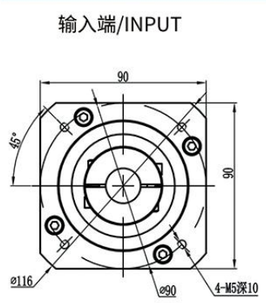
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

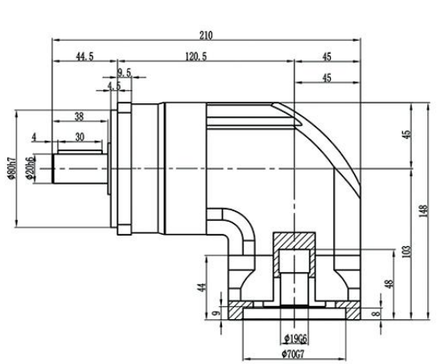
任工机械科技 RIGHT GEAR MECHANICAL TECHNOLOGY | 行星减速机专业非标制造与服务厂商 PLANETARY REDUCER PROFESSIONAL NON-STANDARD MANUFACTURING AND SERVICE MANUFACTURERS
高精密行星齿轮减速机系列 Planetary Gear Reducer series 任重致远 工匠精神 www.rengongkeji.com

外形尺寸图表 /OUTLINE DIMENSION SHEET

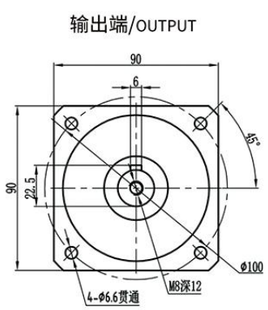
PLFR090-L1(19-70-90-M5)

输入端/INPUT



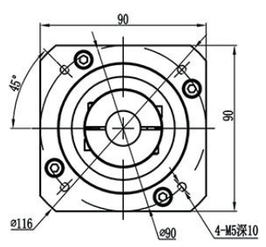


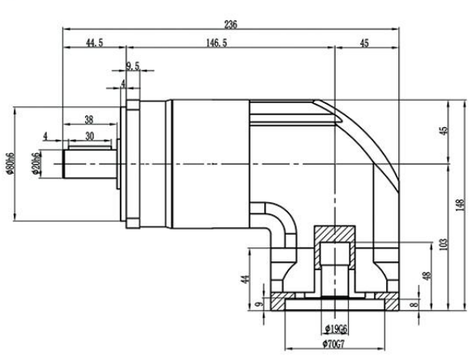
输出端/OUTPUT



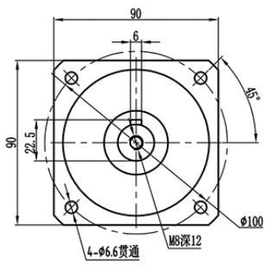
PLFR090-L2(19-70-90-M5)

输入端/INPUT



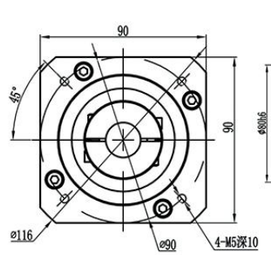


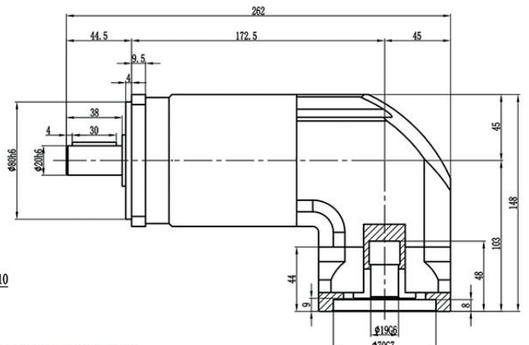
输出端/OUTPUT



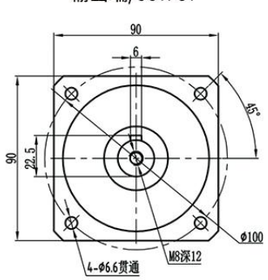
PLFR090-L3(19-70-90-M5)

输入端/INPUT





输出端/OUTPUT

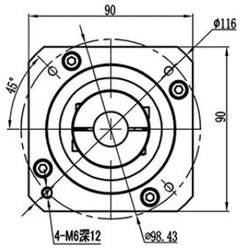


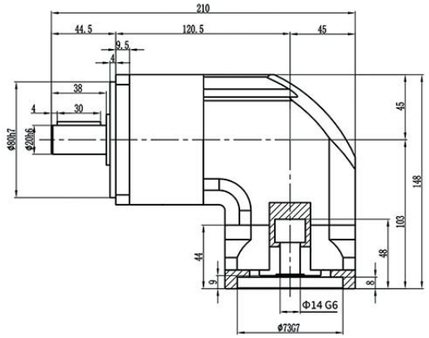
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

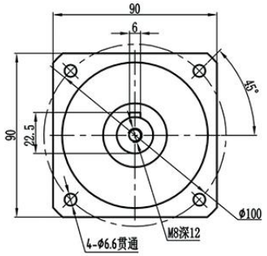
86步进 PLFR090-L1(14-73-98.43-M6)

输入端/INPUT



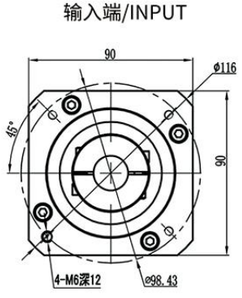


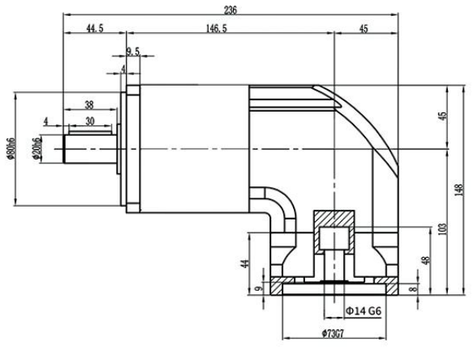
输出端/OUTPUT



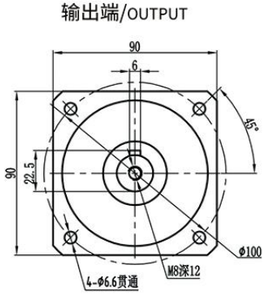
86步进 PLFR090-L2(14-73-98.43-M6)

输入端/INPUT



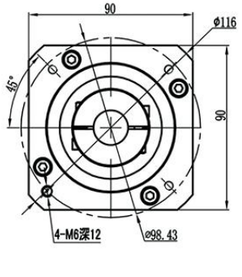


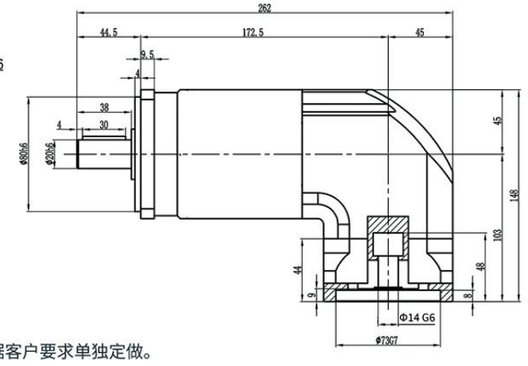
输出端/OUTPUT



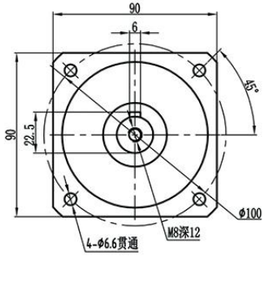
86步进 PLFR090-L3(14-73-98.43-M6)

输入端/INPUT





输出端/OUTPUT

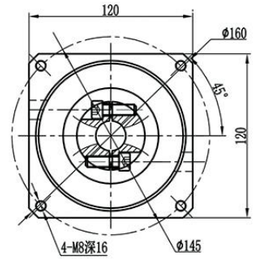


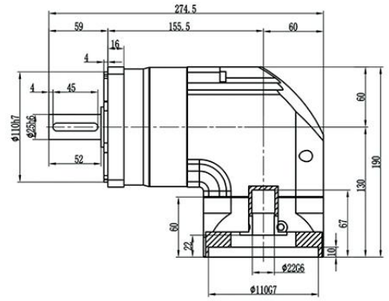
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

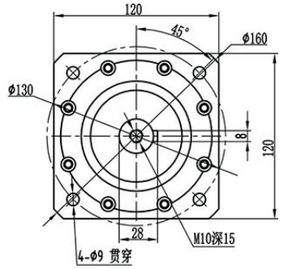
PLFR120-L1(22-110-145-M8)

输入端/INPUT



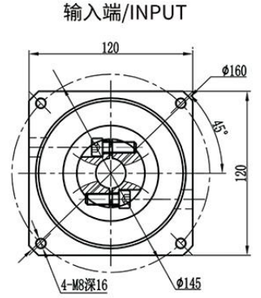


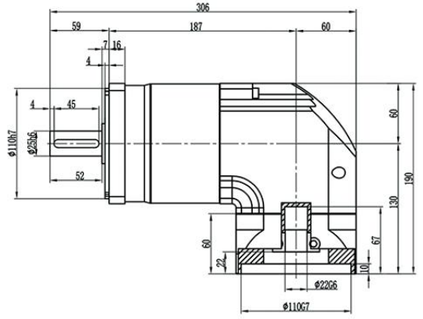
输出端/OUTPUT



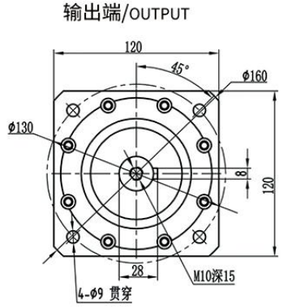
PLFR120-L2(22-110-145-M8)

输入端/INPUT



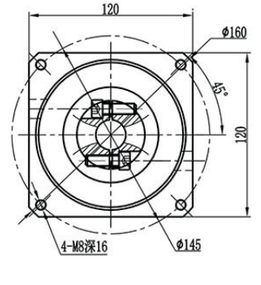


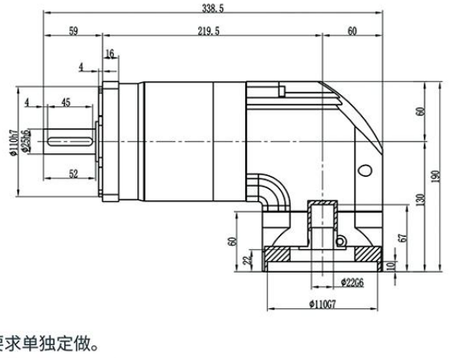
输出端/OUTPUT



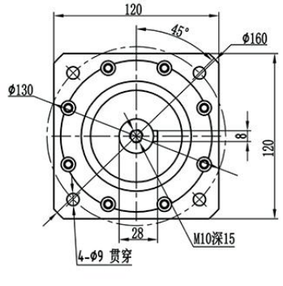
PLFR120-L3(22-110-145-M8)

输入端/INPUT





输出端/OUTPUT

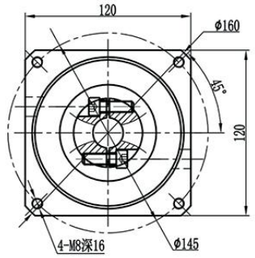


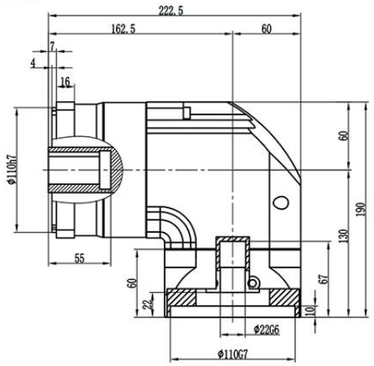
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

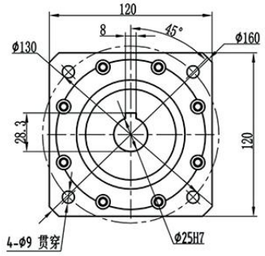
孔输出 PLFR120-L1(22-110-145-M8)

输入端/INPUT



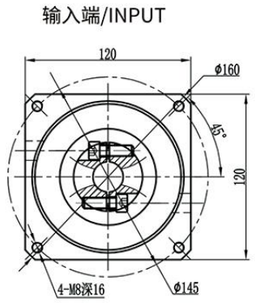


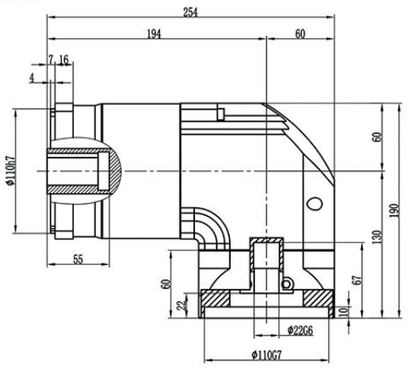
输出端/OUTPUT



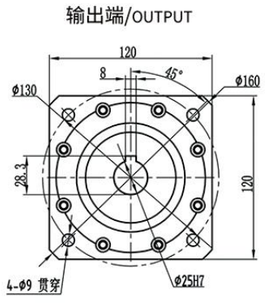
孔输出 PLFR120-L2(22-110-145-M8)

输入端/INPUT



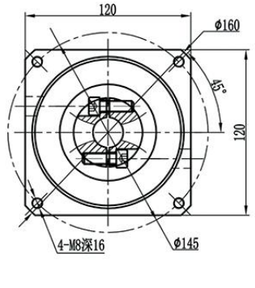


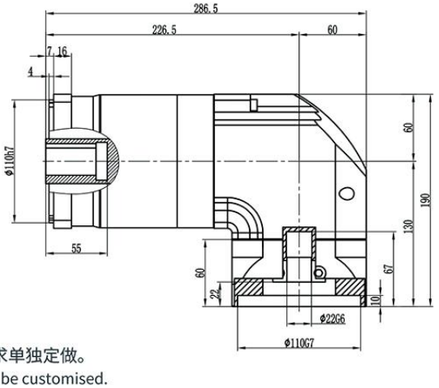
输出端/OUTPUT



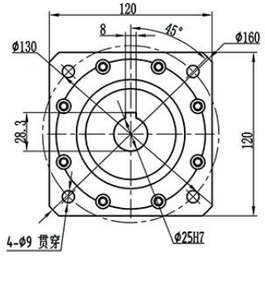
孔输出 PLFR120-L3(22-110-145-M8)

输入端/INPUT





输出端/OUTPUT

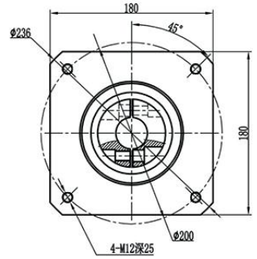


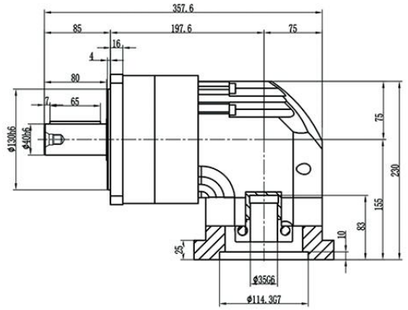
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

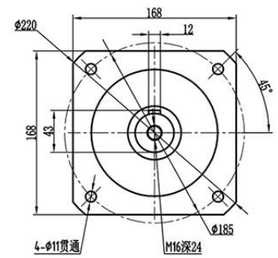
PLFR160-L1(35-114.3-200-M12)

输入端/INPUT



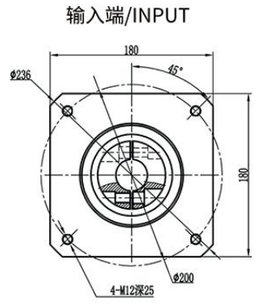


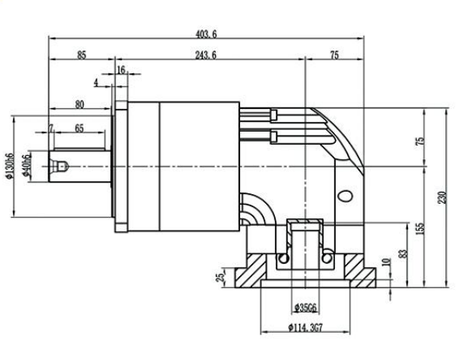
输出端/OUTPUT



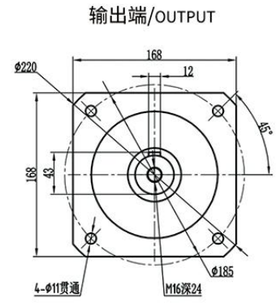
PLFR160-L2(35-114.3-200-M12)

输入端/INPUT



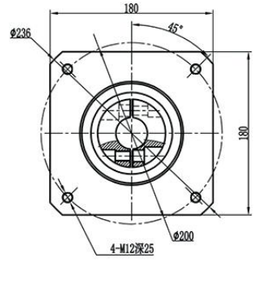


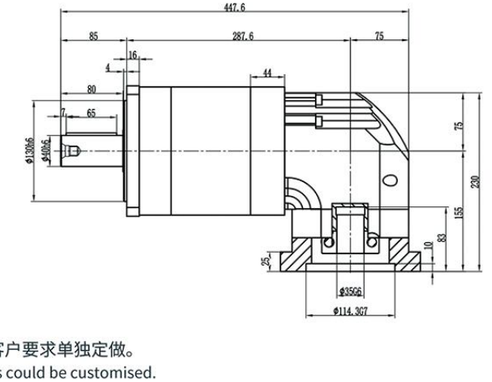
输出端/OUTPUT



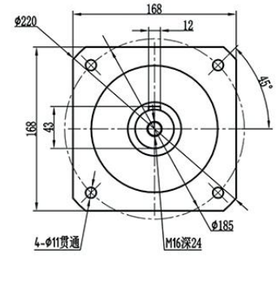
PLFR160-L3(35-114.3-200-M12)

输入端/INPUT





输出端/OUTPUT

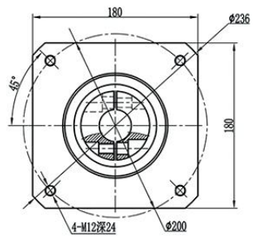


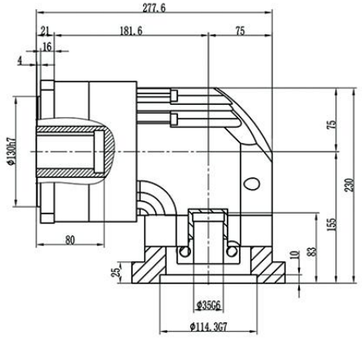
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

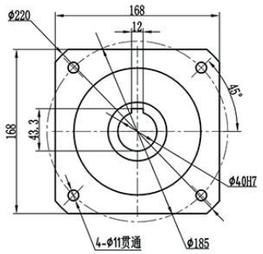
孔输出 PLFR160-L1(35-114.3-200-M12)

输入端/INPUT



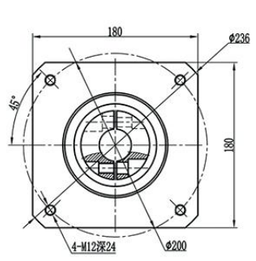


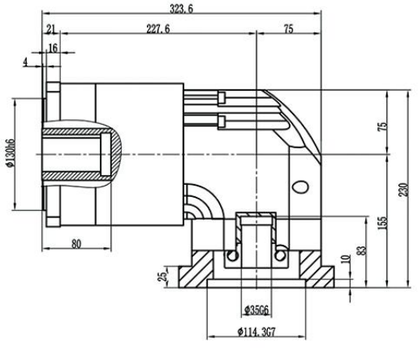
输出端/OUTPUT



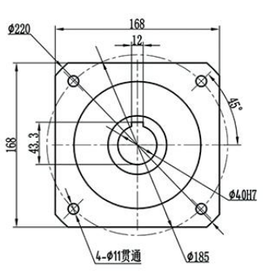
孔输出 PLFR160-L2(35-114.3-200-M12)

输入端/INPUT



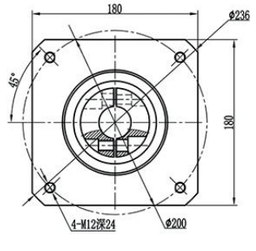


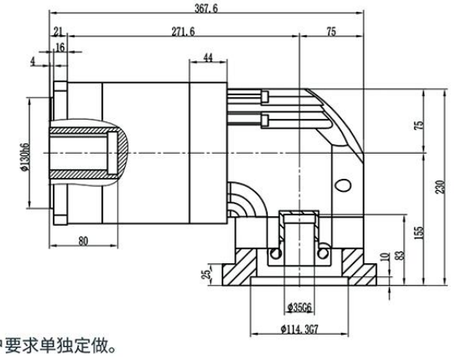
输出端/OUTPUT



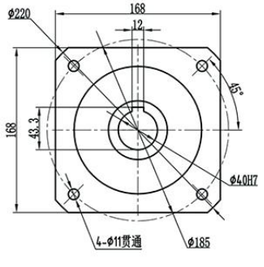
孔输出 PLFR160-L3(35-114.3-200-M12)

输入端/INPUT





输出端/OUTPUT



*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

PLER SERIES



减速机性能资料 /GEAR BOX PERFORMANCE INFORMATION

产品型号	单位	速比	级数	PLER060	PLER080	PLER120	PLER160
额定输出扭矩	Nm	3	1级	42	142	280	585
		4		42	142	280	585
		5		42	142	280	585
		7		33	92	198	378
		8			92	198	378
		10		16	54	95	310
		15	2级	42	142	280	585
		20		42	142	280	585
		25		42	142	280	585
		30		42	142	280	585
		35		42	142	280	585
		40		42	142	280	585
		50		42	142	280	585
		70		33	92	198	378
		100		15	54	95	310
		64	3级	42	142	280	585
		80			142	280	586
		100		42	142	280	585
		125		42	142	280	585
		140		42	142	280	585
		175		42	142	280	585
		245		42	142	280	585
		350		42	142	280	585
		400		42	142	280	585
		500		42	142	280	585
		700		33	92	198	378
		1000		15	54	95	310
最大额定扭矩	Nm	2倍额定输出扭矩					
最大径向力	N			680	1750	3100	6550
最大轴向力	N			340	875	1550	3275
满截效率	%		1	98			
			2	96			
			3	94			
重量	kg		1	2.1	5.0	8.8	26.4
			2	2.7	6.0	10.8	28
			3	3.3	7.0	12.8	33

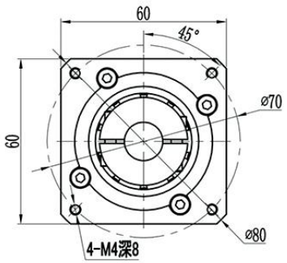
任工机械科技 RIGHT GEAR MECHANICAL TECHNOLOGY | 行星减速机专业非标制造与服务厂商 PLANETARY REDUCER PROFESSIONAL NON-STANDARD MANUFACTURING AND SERVICE MANUFACTURERS
高精密行星齿轮减速机系列 Planetary Gear Reducer series 任重致远 工匠精神 www.rengongkeji.com

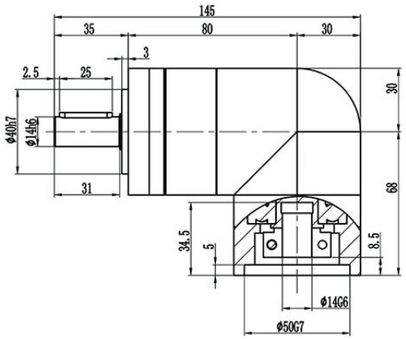
直齿高精密型 PLER SERIES

外形尺寸图表 /OUTLINE DIMENSION SHEET

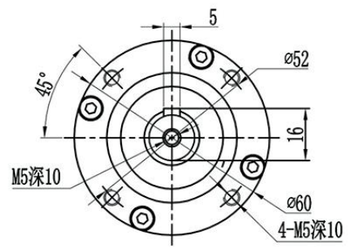
PLER060-L1(14-50-70-M4)

输入端/INPUT



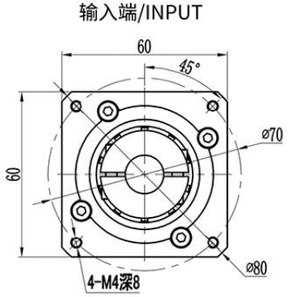


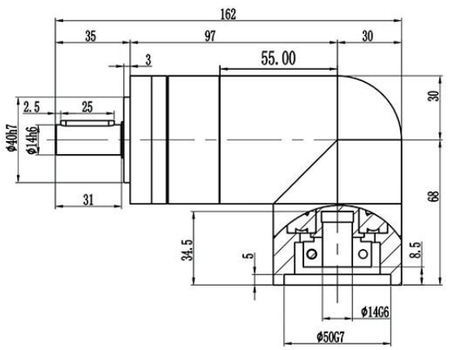
输出端/OUTPUT



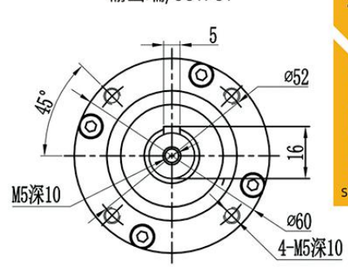
PLER060-L2(14-50-70-M4)

输入端/INPUT



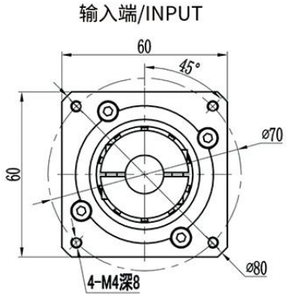


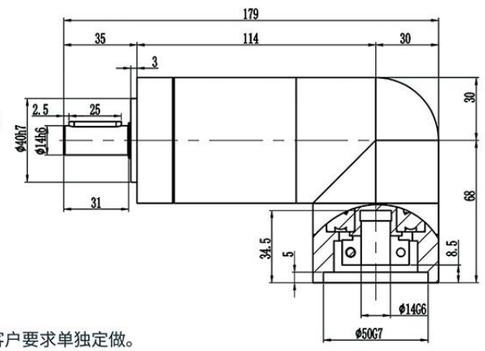
输出端/OUTPUT



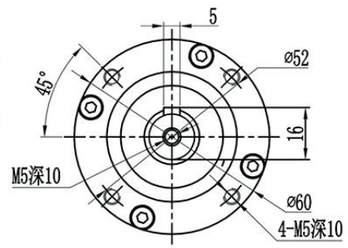
PLER060-L3(14-50-70-M4)

输入端/INPUT





输出端/OUTPUT

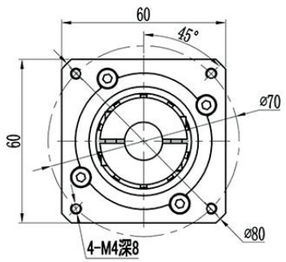


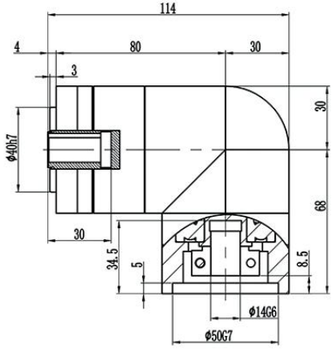
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

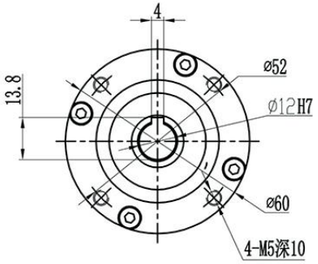
孔输出 PLER060-L1(14-50-70-M4)

输入端/INPUT



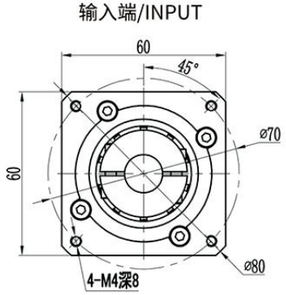


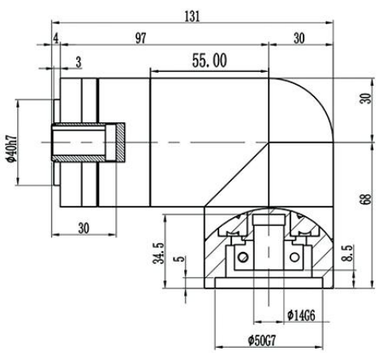
输出端/OUTPUT



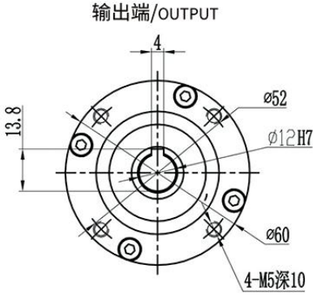
孔输出 PLER060-L2(14-50-70-M4)

输入端/INPUT



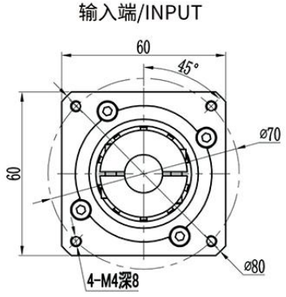


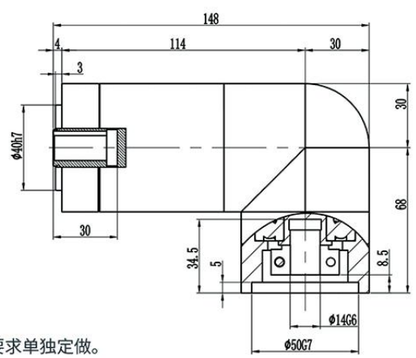
输出端/OUTPUT



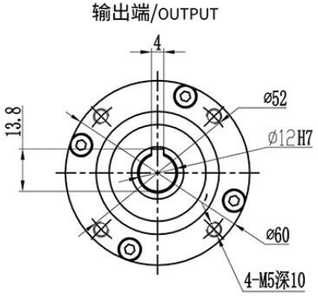
孔输出 PLER060-L3(14-50-70-M4)

输入端/INPUT





输出端/OUTPUT

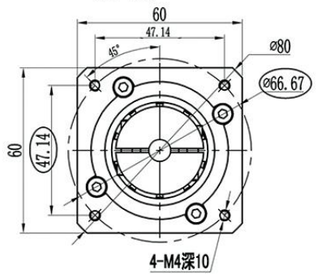


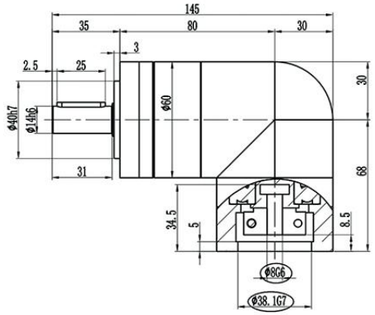
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

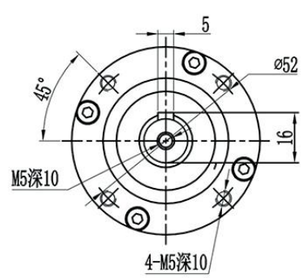
57步进 PLER060-L1(8-38.1-66.67-M4)

输入端/INPUT



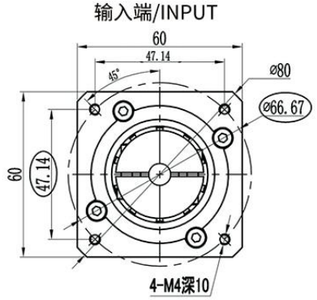


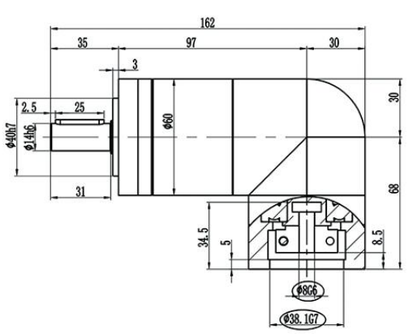
输出端/OUTPUT



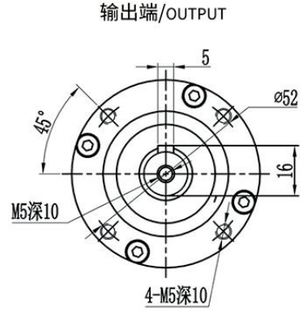
57步进 PLER060-L2(8-38.1-66.67-M4)

输入端/INPUT



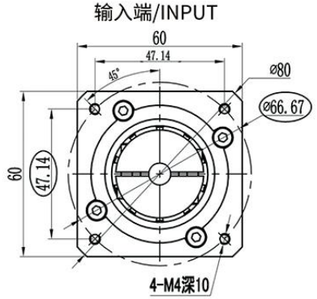


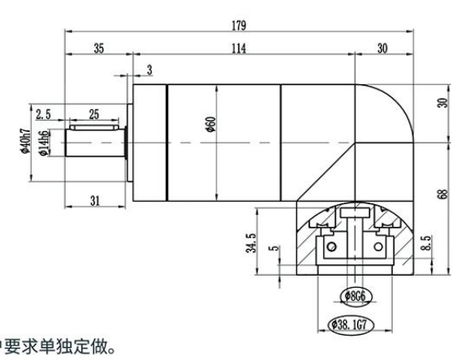
输出端/OUTPUT



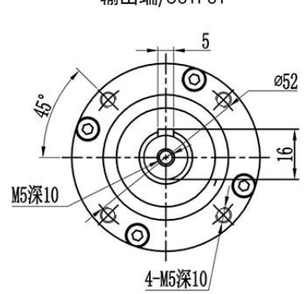
57步进 PLER060-L3(8-38.1-66.67-M4)

输入端/INPUT





输出端/OUTPUT

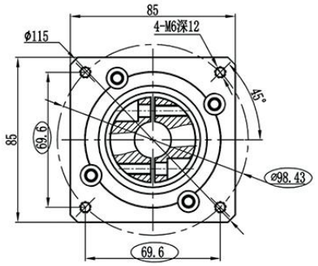


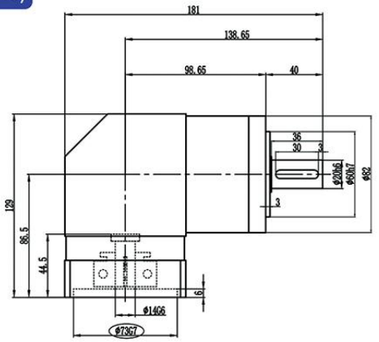
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

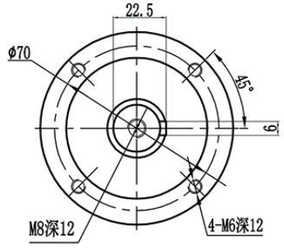
86步进 PLER080-L1(14-73-98.43-M6)

输入端/INPUT



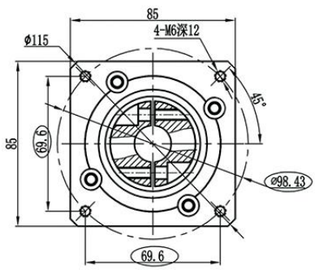


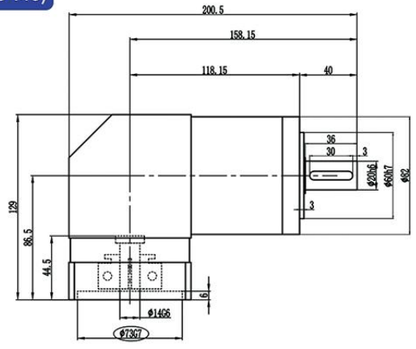
输出端/OUTPUT



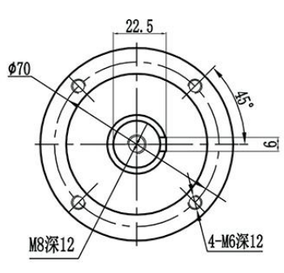
86步进 PLER080-L2(14-73-98.43-M6)

输入端/INPUT



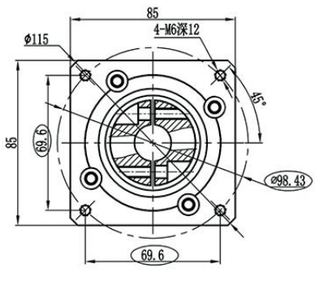


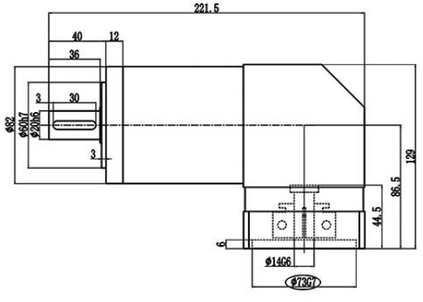
输出端/OUTPUT



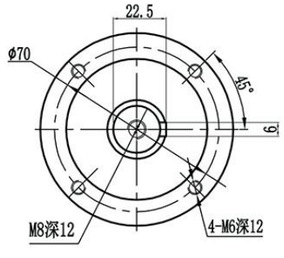
86步进 PLER080-L3(14-73-98.43-M6)

输入端/INPUT





输出端/OUTPUT



*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

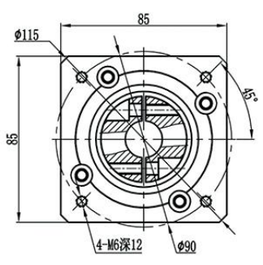
任工机械科技 RIGHT GEAR MECHANICAL TECHNOLOGY | 行星减速机专业非标制造与服务厂商 PLANETARY REDUCER PROFESSIONAL NON-STANDARD MANUFACTURING AND SERVICE MANUFACTURERS
高精密行星齿轮减速机系列 Planetary Gear Reducer series 任重致远 工匠精神 www.rengongkeji.com

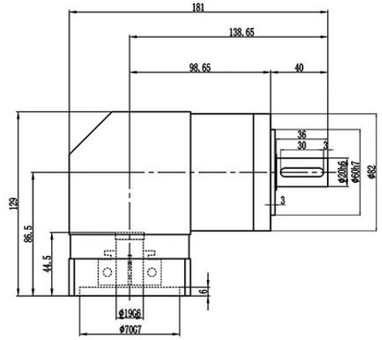
外形尺寸图表 /OUTLINE DIMENSION SHEET

直齿高精密型 PLER SERIES

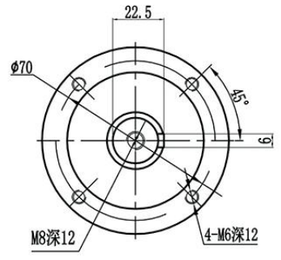
PLER080-L1(19-70-90-M6)

输入端/INPUT



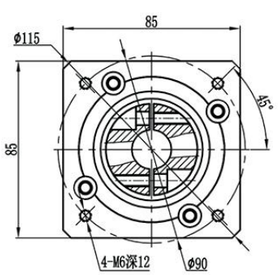


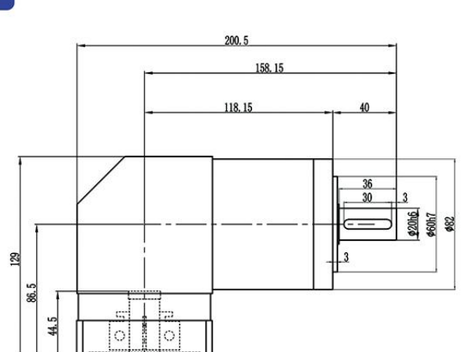
输出端/OUTPUT



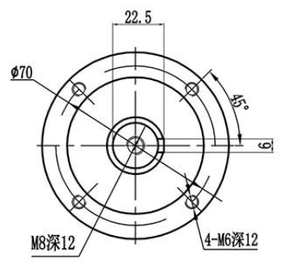
PLER080-L2(19-70-90-M6)

输入端/INPUT



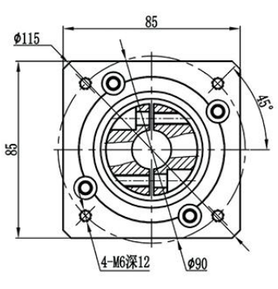


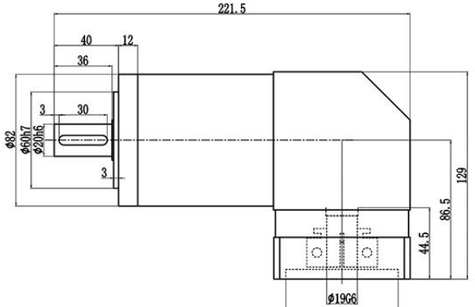
输出端/OUTPUT



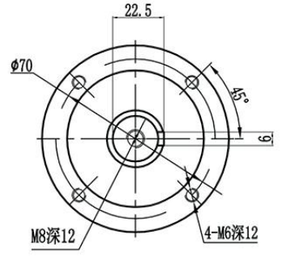
PLER080-L3(19-70-90-M6)

输入端/INPUT





输出端/OUTPUT

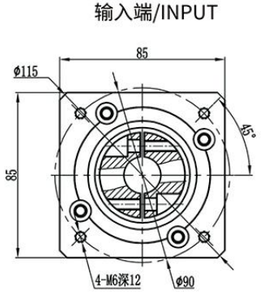


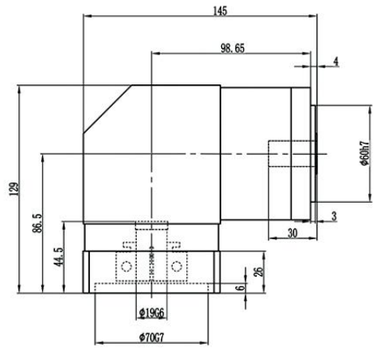
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

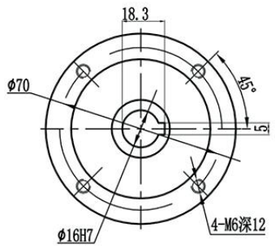
孔输出 PLER080-L1(19-70-90-M6)

输入端/INPUT



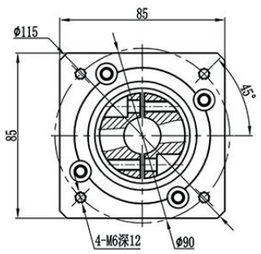


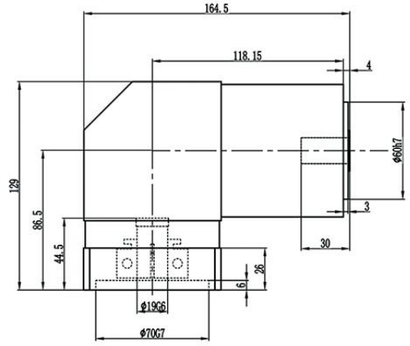
输出端/OUTPUT



孔输出 PLER080-L2(19-70-90-M6)

输入端/INPUT

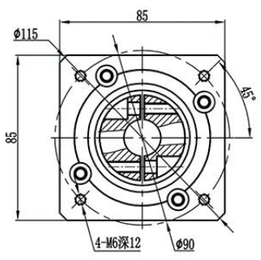


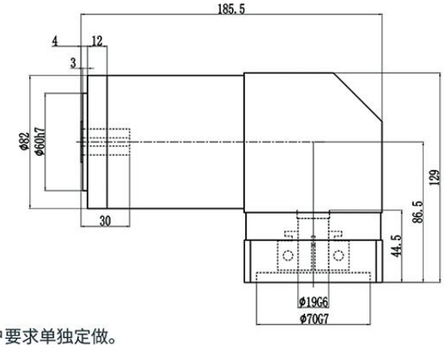


输出端/OUTPUT

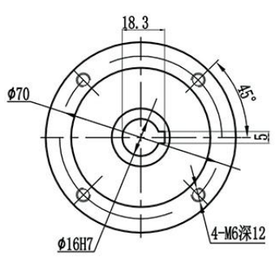
孔输出 PLER080-L3(19-70-90-M6)

输入端/INPUT





输出端/OUTPUT

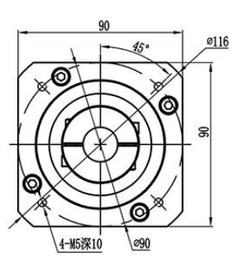


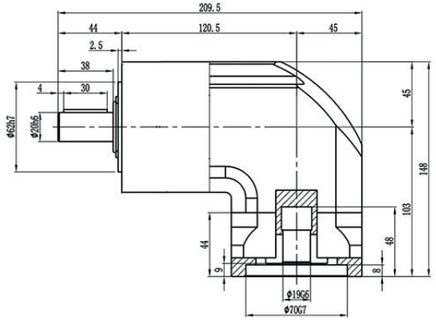
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

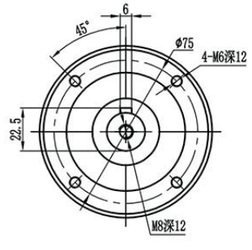
PLER090-L1(19-70-90-M5)

输入端/INPUT



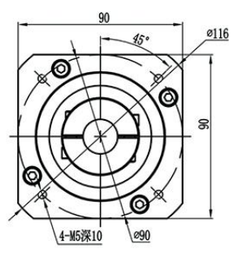


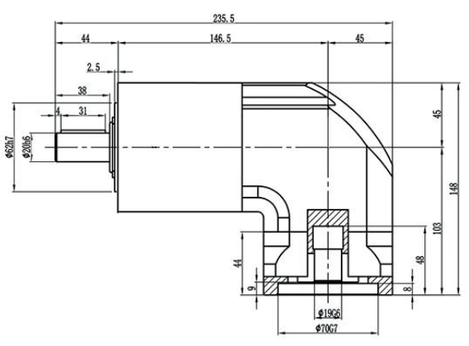
输出端/OUTPUT



PLER090-L2(19-70-90-M5)

输入端/INPUT

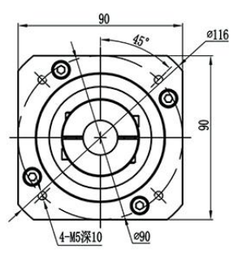


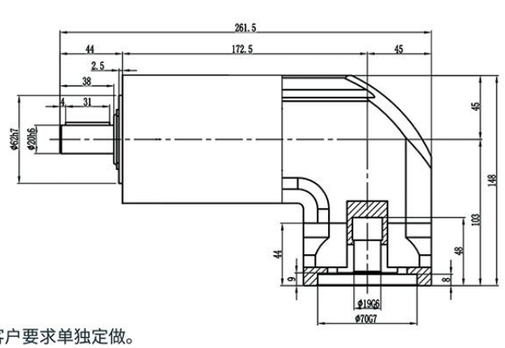


输出端/OUTPUT

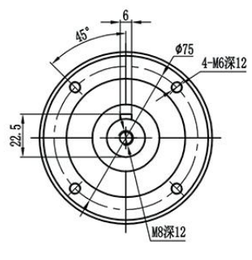
PLER090-L3(19-70-90-M5)

输入端/INPUT





输出端/OUTPUT



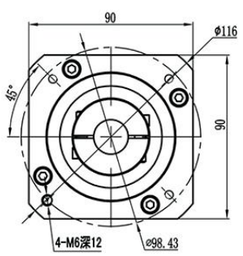
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

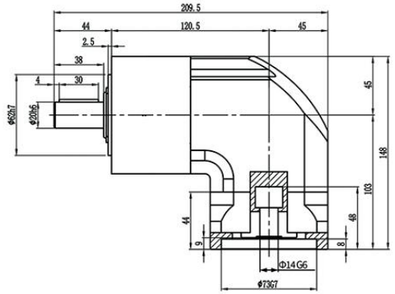
直齿高精密型 PLER SERIES

外形尺寸图表 /OUTLINE DIMENSION SHEET

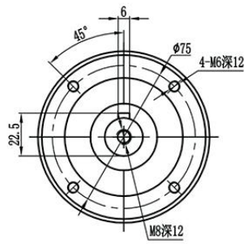
86步进 PLER090-L1(14-73-98.43-M6)

输入端/INPUT



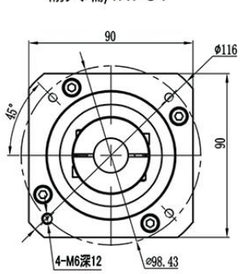


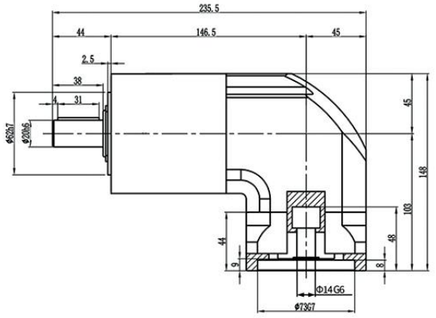
输出端/OUTPUT



86步进 PLER090-L2(14-73-98.43-M6)

输入端/INPUT

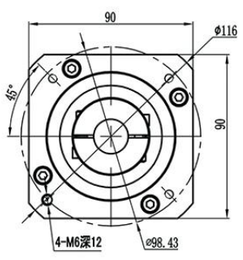


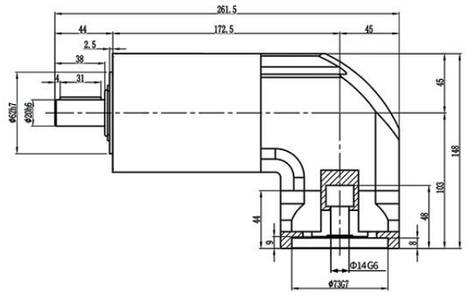


输出端/OUTPUT

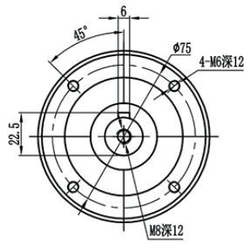
86步进 PLER090-L3(14-73-98.43-M6)

输入端/INPUT





输出端/OUTPUT

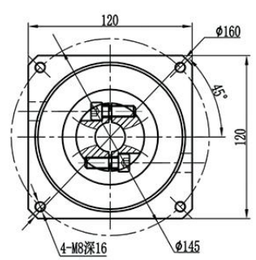


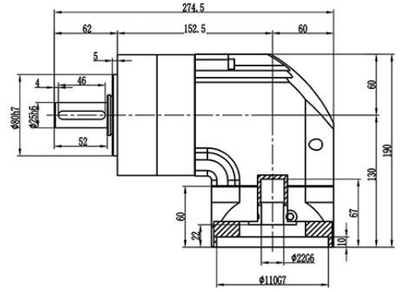
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

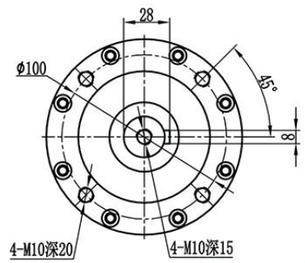
PLER120-L1(22-110-145-M8)

输入端/INPUT



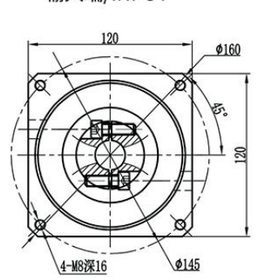


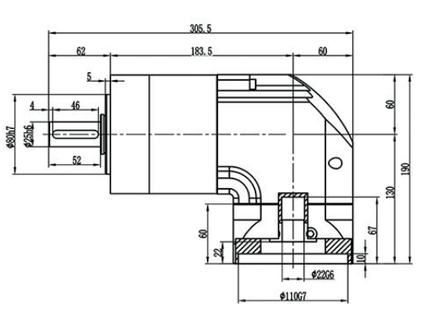
输出端/OUTPUT



PLER120-L2(22-110-145-M8)

输入端/INPUT

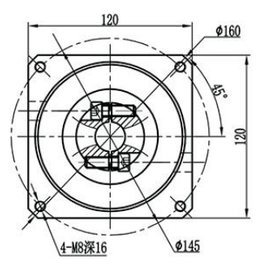


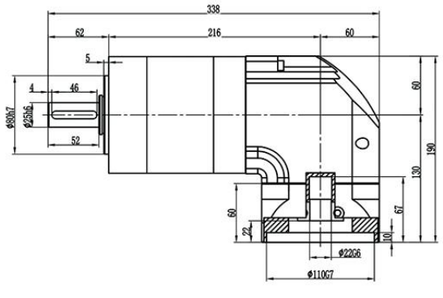


输出端/OUTPUT

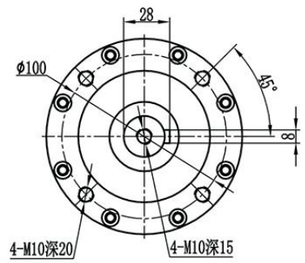
PLER120-L3(22-110-145-M8)

输入端/INPUT





输出端/OUTPUT

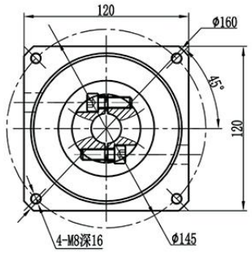


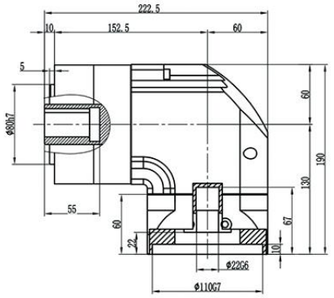
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

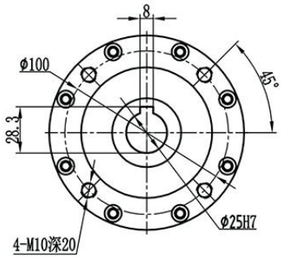
孔输出 PLER120-L1(22-110-145-M8)

输入端/INPUT



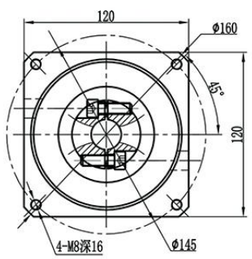


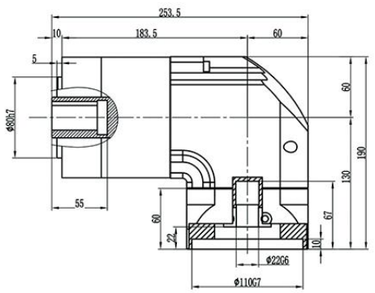
输出端/OUTPUT



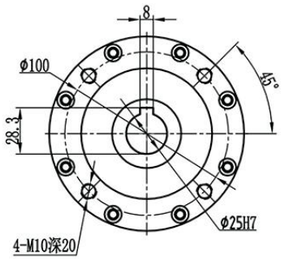
孔输出 PLER120-L2(22-110-145-M8)

输入端/INPUT



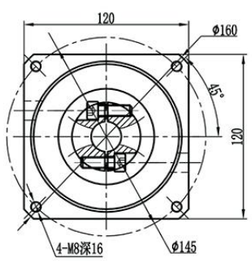


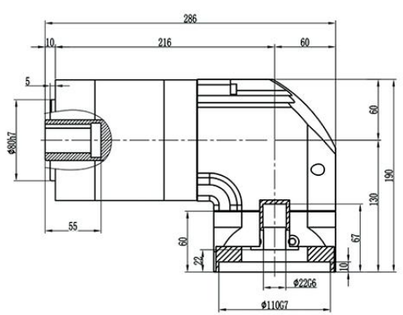
输出端/OUTPUT



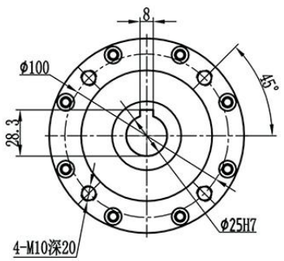
孔输出 PLER120-L3(22-110-145-M8)

输入端/INPUT





输出端/OUTPUT



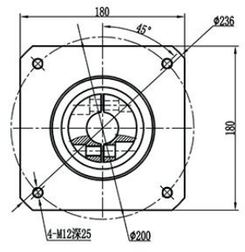
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

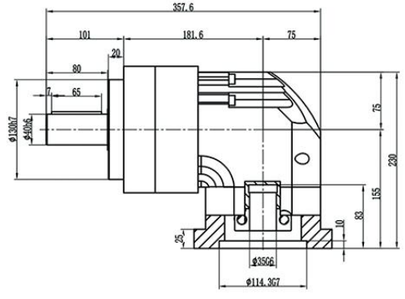
任工机械科技 RIGHT GEAR MECHANICAL TECHNOLOGY | 行星减速机专业非标制造与服务厂商 PLANETARY REDUCER PROFESSIONAL NON-STANDARD MANUFACTURING AND SERVICE MANUFACTURERS
高精密行星齿轮减速机系列 Planetary Gear Reducer series 任重致远 工匠精神 www.rengongkeji.com

外形尺寸图表 /OUTLINE DIMENSION SHEET

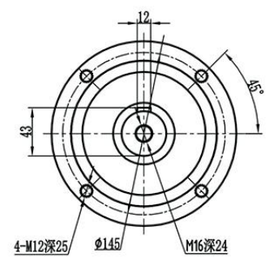
PLER160-L1(35-114.3-200-M12)

输入端/INPUT



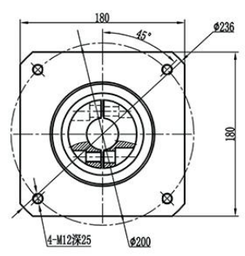


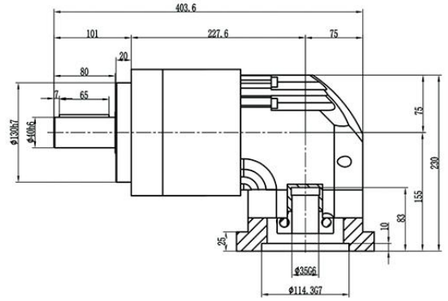
输出端/OUTPUT



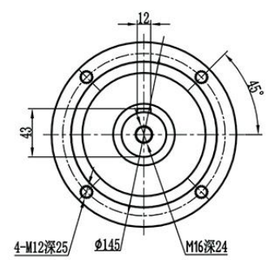
PLER160-L2(35-114.3-200-M12)

输入端/INPUT



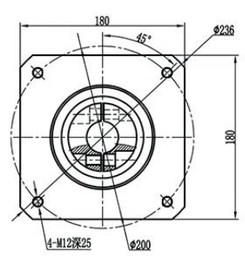


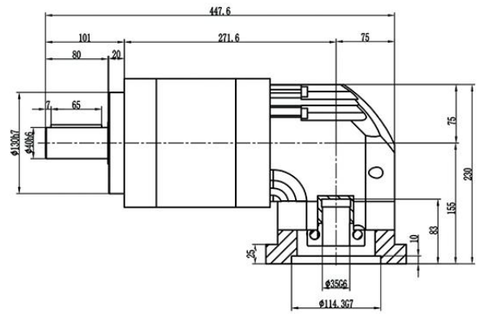
输出端/OUTPUT



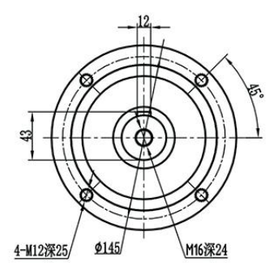
PLER160-L3(35-114.3-200-M12)

输入端/INPUT





输出端/OUTPUT

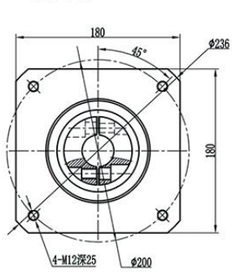


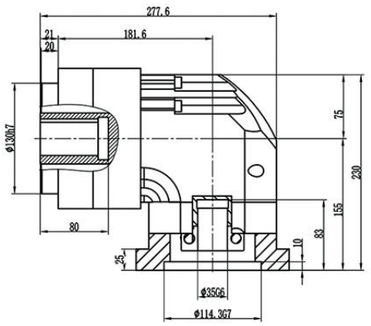
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

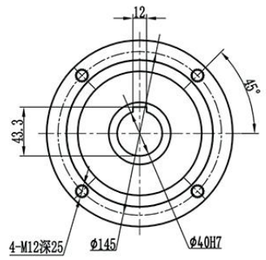
孔输出 PLER160-L1(35-114.3-200-M12)

输入端/INPUT



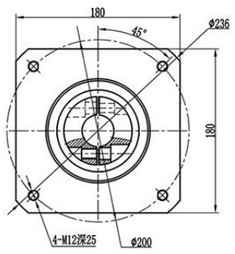


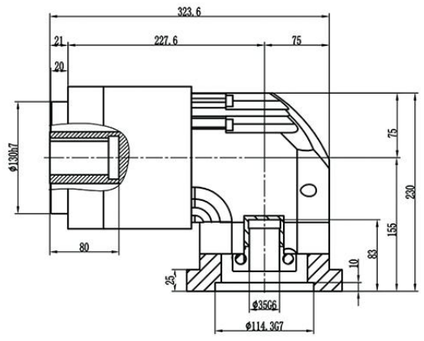
输出端/OUTPUT



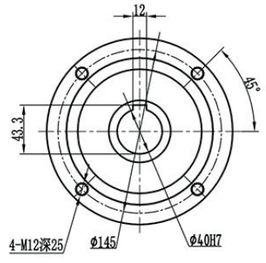
孔输出 PLER160-L2(35-114.3-200-M12)

输入端/INPUT



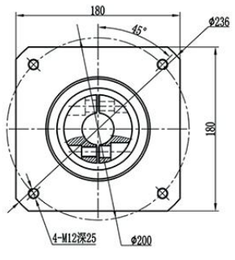


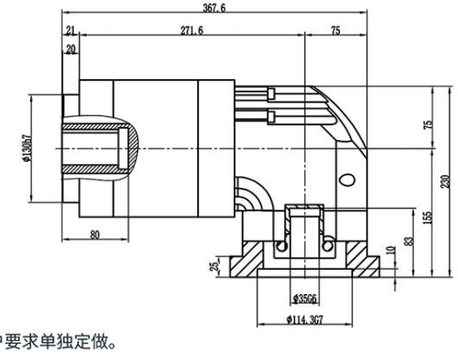
输出端/OUTPUT



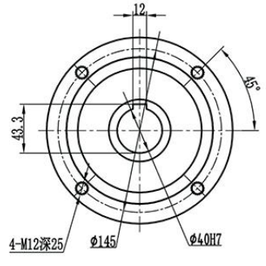
孔输出 PLER160-L3(35-114.3-200-M12)

输入端/INPUT





输出端/OUTPUT



*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

PG
SERIES



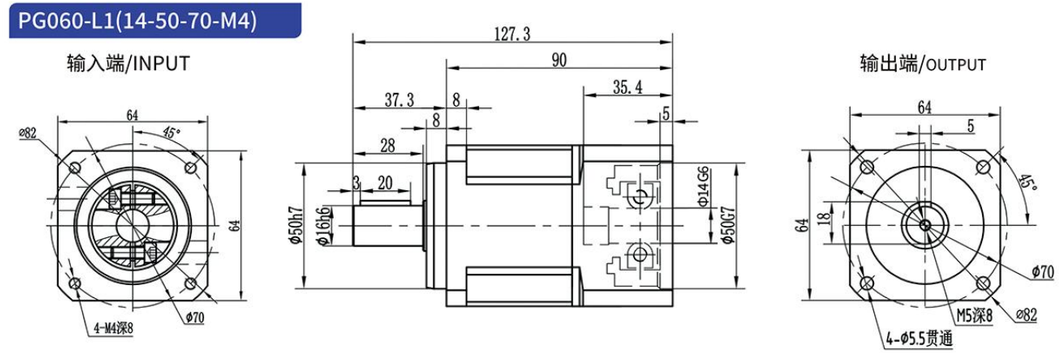
减速机性能资料 /GEAR BOX PERFORMANCE INFORMATION

产品型号	单位	速比	级数	PG060	PG090	PG120	PG142	PG180	PG240	PG280	PG330
额定输出扭矩	Nm	3	1级		135	245	490	1320	1820	4230	8200
		4		46.32	162	320	650	1650	2420	5620	9800
		5		46.32	162	320	650	1650	2420	5620	9800
		7		38.9	130	232	520	1250	1830	3520	9800
		10		18.5	72	165	320	820	1150	1820	5000
		9	2级		115	245	490	1320	1820	4230	3500
		12		27.8	162	245	490	1320	1820	4230	8200
		15		27.8	162	245	650	1650	2420	5620	8200
		16		27.8	162	245	650	1650	2420	5620	9800
		20		46.32	162	320	650	1650	2420	5620	9800
		25		46.32	162	320	650	1650	2420	5620	9800
		28		46.32	162	320	650	1650	2420	5620	9800
		30			135	245	490	1320	1820	4230	8200
		35		46.32	162	320	650	1650	2420	5620	9800
		40		46.32	162	320	650	1650	2420	5620	9800
		50		46.32	162	320	650	1650	2420	5620	9800
		70		38.9	130	232	520	1320	1830	3520	5000
		100		18.5	72	165	320	1650	1150	1820	2500
		64	3级	46.32	162	320	650	1650	2420	5620	9800
		80		46.32	162	320	650	1650	2420	5620	9800
		100		46.32	162	320	650	1650	2420	5620	9800
		150		46.32	162	320	650	1650	2420	5620	9800
		200		46.32	162	320	650	1650	2420	5620	9800
		250		46.32	162	320	650	1650	2420	5620	9800
		350		46.32	162	320	650	1650	2420	5620	9800
		400		46.32	162	320	650	1650	2420	5620	9800
		500		46.32	162	320	650	1650	2420	5620	9800
		700		38.9	130	232	520	1320	1830	3520	5000
		1000		18.5	72	165	320	820	1150	1820	3500
最大额定扭矩	Nm	2倍额定输出扭矩									
最大径向力	N			1550	3250	6700	9400	14500	50000	60000	70000
最大轴向力	N			775	1625	3350	4700	7250	25000	30000	95000
满载效率	%		1	98							
			2	96							
			3	94							
重量	kg		1	1.3	3.6	7.5	16	28	48	110	160
			2	1.5	4.2	9.5	20	32	60	135	190
			3	1.8	4.8	11.2	24	36	72	150	225

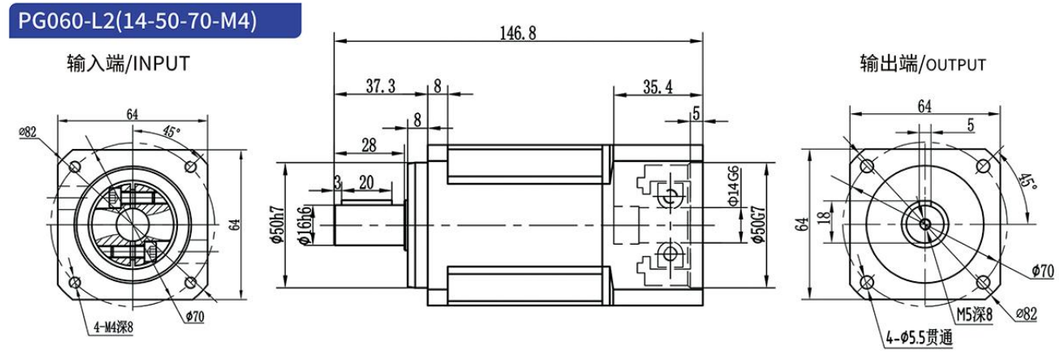
任工机械科技 | 行星减速机专业非标制造与服务厂商
RIGHT GEAR MECHANICAL TECHNOLOGY
PLANETARY REDUCER PROFESSIONAL NON-STANDARD MANUFACTURING AND SERVICE MANUFACTURERS
高精密行星齿轮减速机系列 Planetary Gear Reducer series
任重致远 工匠精神 www.rengongkeji.com

外形尺寸图表 /OUTLINE DIMENSION SHEET

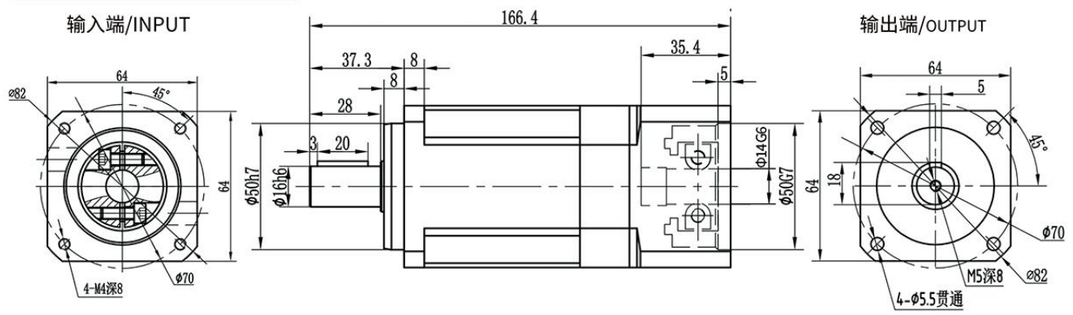
PG060-L1(14-50-70-M4)



PG060-L2(14-50-70-M4)



PG060-L3(14-50-70-M4)

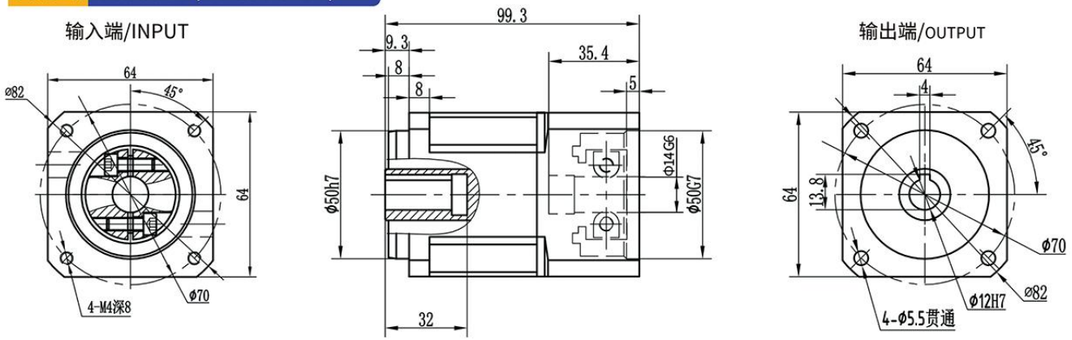


*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

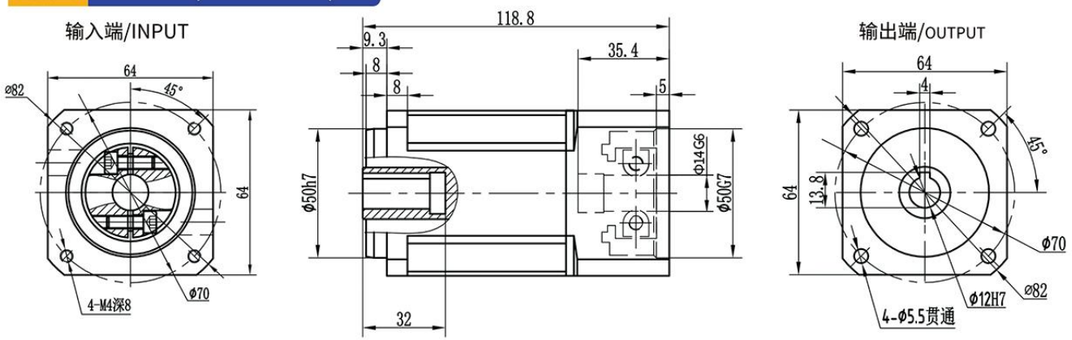
直齿高精密型
PG SERIES

外形尺寸图表 /OUTLINE DIMENSION SHEET

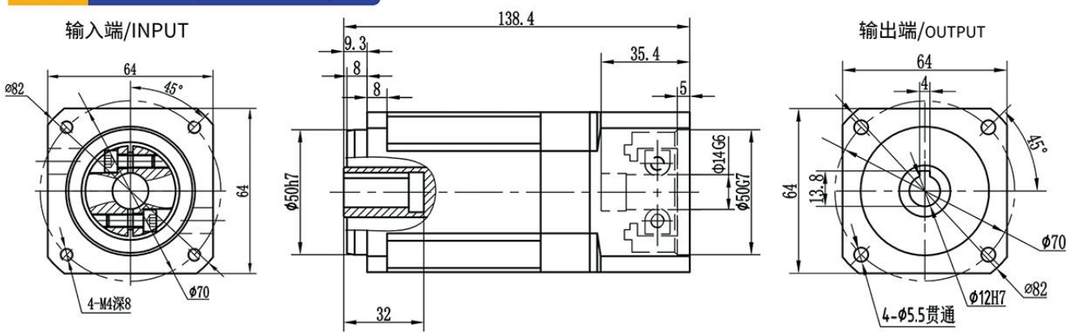
孔输出 PG060-L1(14-50-70-M4)



孔输出 PG060-L2(14-50-70-M4)



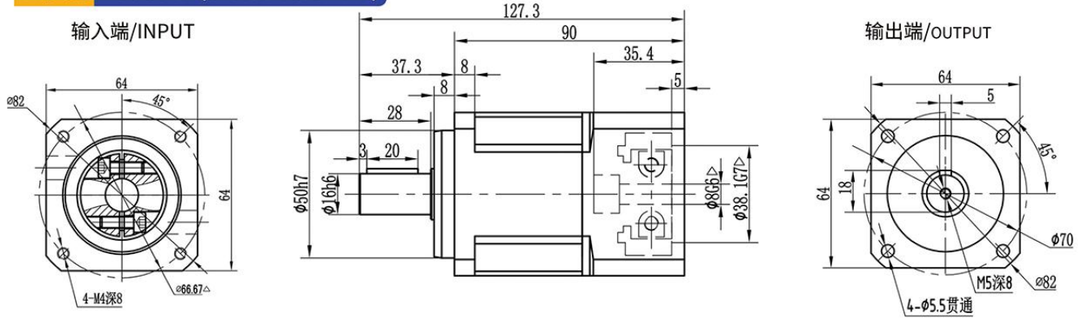
孔输出 PG060-L3(14-50-70-M4)



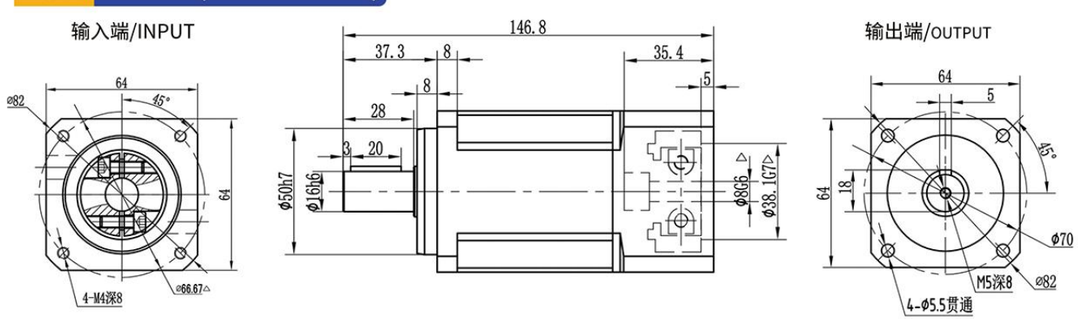
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

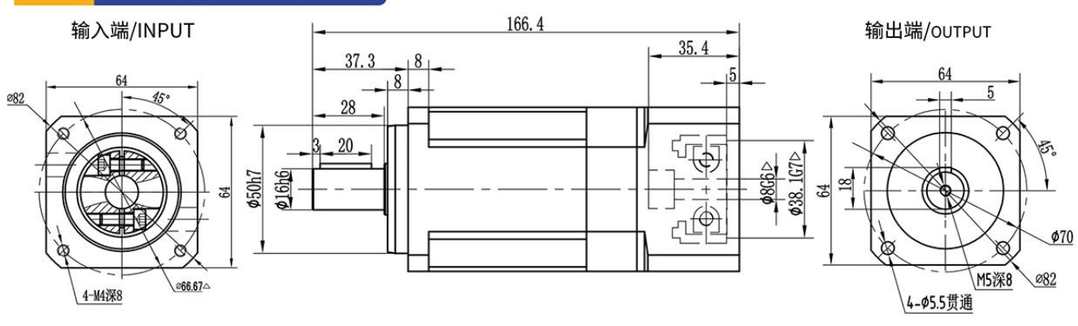
57步进 PG060-L1(8-38.1-66.67-M4)



57步进 PG060-L2(8-38.1-66.67-M4)



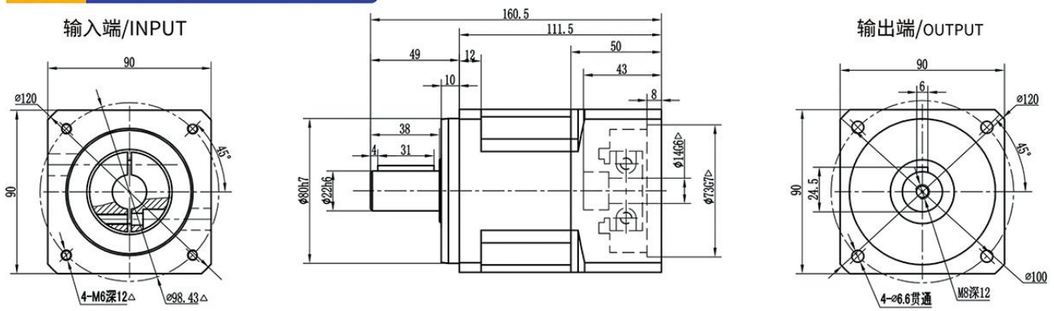
57步进 PG060-L3(8-38.1-66.67-M4)



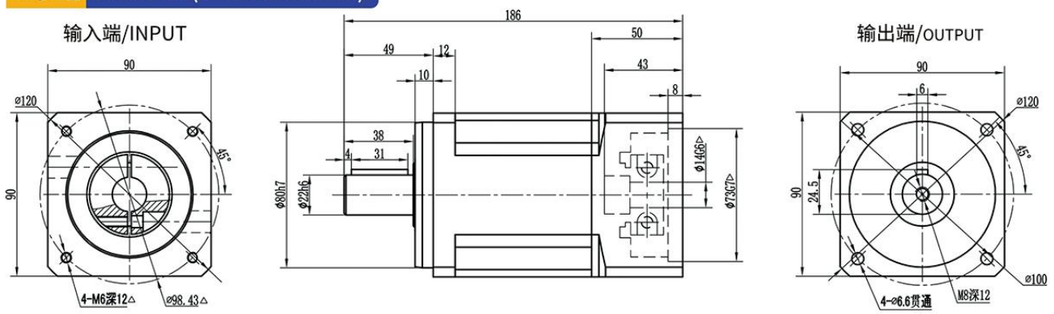
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

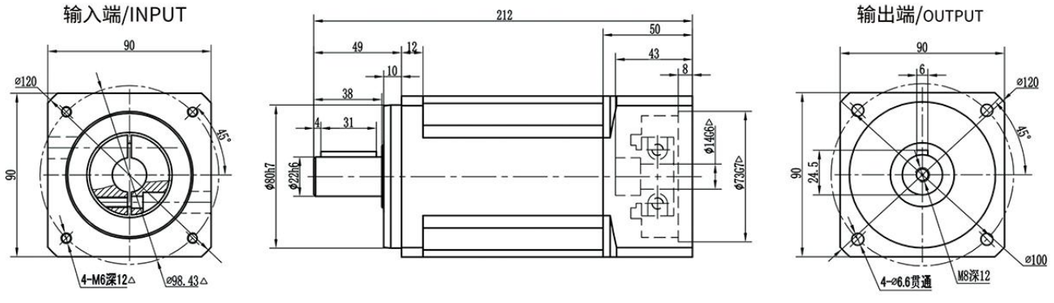
86步进 PG090-L1(14-73-98.43-M6)



86步进 PG090-L2(14-73-98.43-M6)



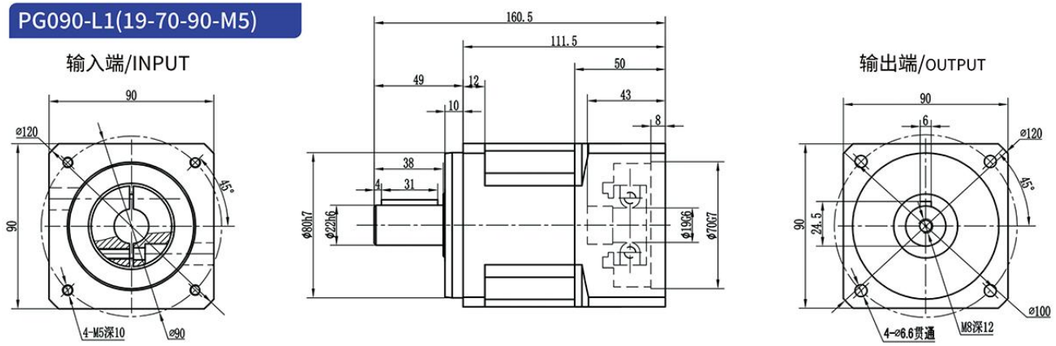
86步进 PG090-L3(14-73-98.43-M6)



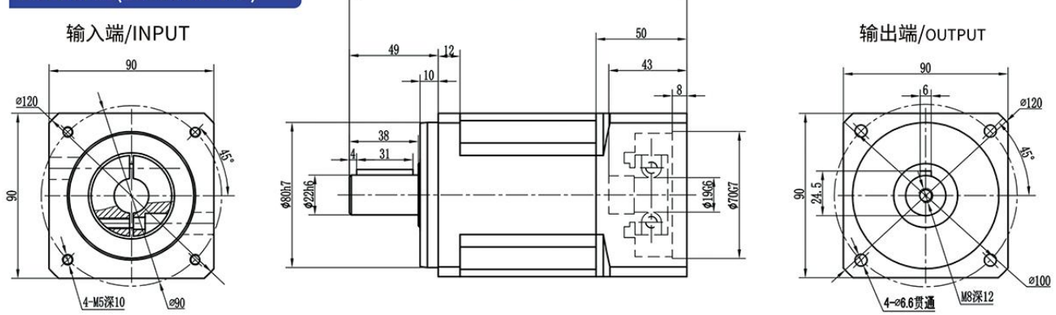
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

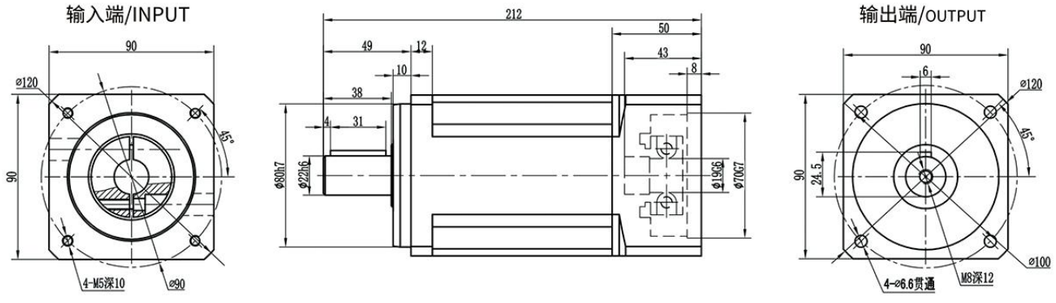
PG090-L1(19-70-90-M5)



PG090-L2(19-70-90-M5)



PG090-L3(19-70-90-M5)

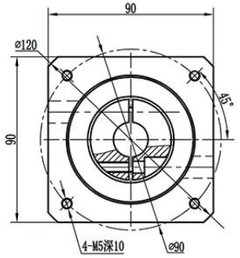


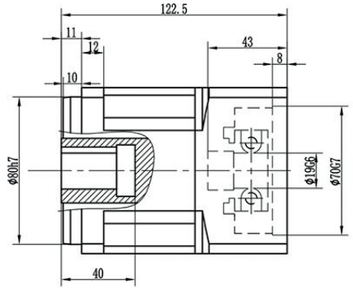
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

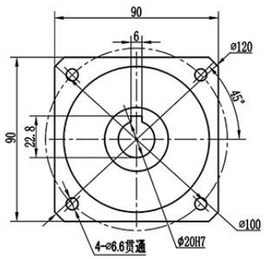
孔输出 PG090-L1(19-70-90-M5)

输入端/INPUT



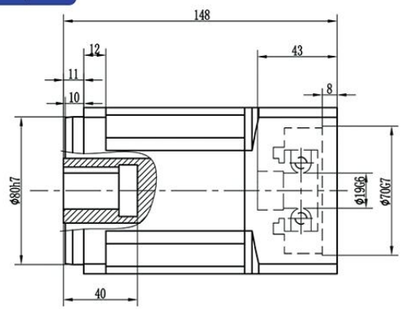


输出端/OUTPUT



孔输出 PG090-L2(19-70-90-M5)

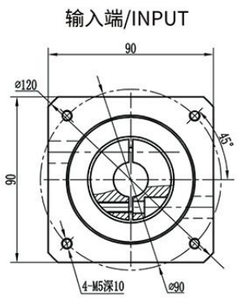
输入端/INPUT

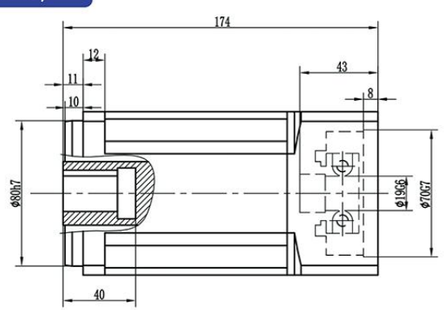


输出端/OUTPUT

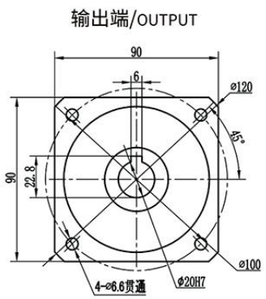
孔输出 PG090-L3(19-70-90-M5)

输入端/INPUT





输出端/OUTPUT



*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

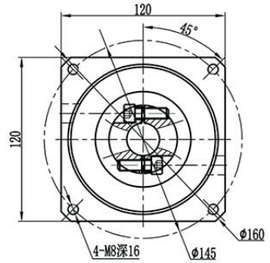
任工机械科技 RIGHT GEAR MECHANICAL TECHNOLOGY | 行星减速机专业非标制造与服务厂商 PLANETARY REDUCER PROFESSIONAL NON-STANDARD MANUFACTURING AND SERVICE MANUFACTURERS
高精密行星齿轮减速机系列 Planetary Gear Reducer series 任重致远 工匠精神 www.rengongkeji.com

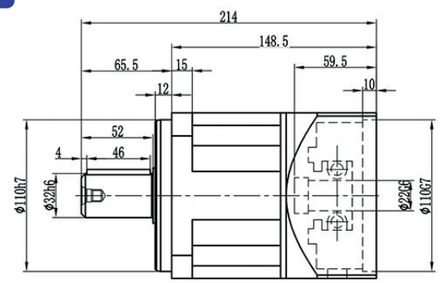
外形尺寸图表 /OUTLINE DIMENSION SHEET

直齿高精密型 PG SERIES

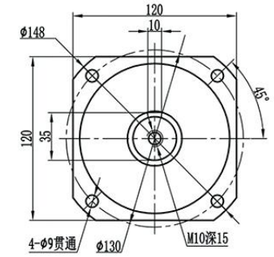
PG120-L1(22-110-145-M8)

输入端/INPUT



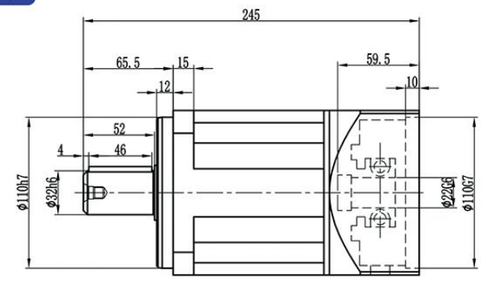


输出端/OUTPUT



PG120-L2(22-110-145-M8)

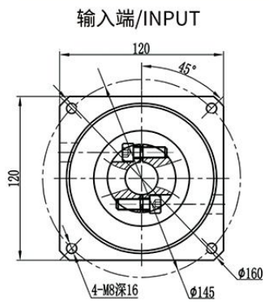
输入端/INPUT

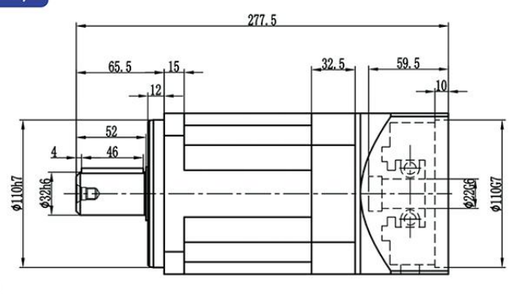


输出端/OUTPUT

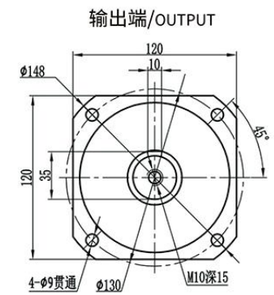
PG120-L3(22-110-145-M8)

输入端/INPUT





输出端/OUTPUT

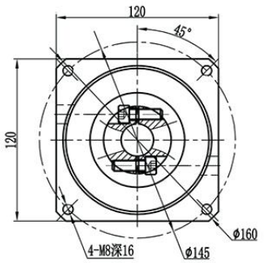


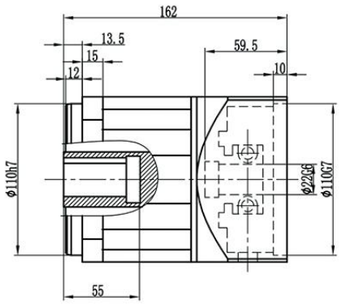
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

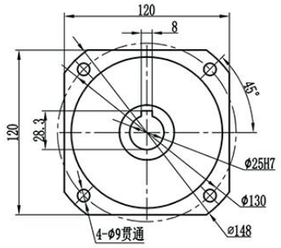
孔输出 PG120-L1(22-110-145-M8)

输入端/INPUT



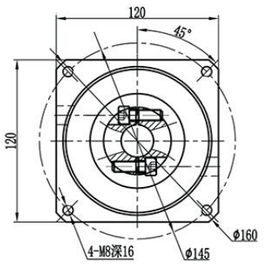


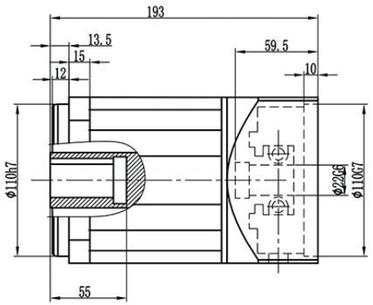
输出端/OUTPUT



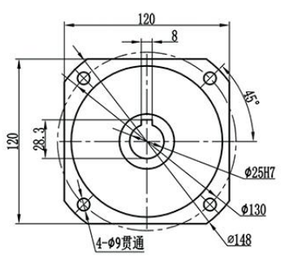
孔输出 PG120-L2(22-110-145-M8)

输入端/INPUT



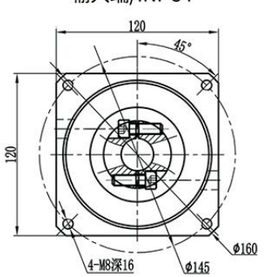


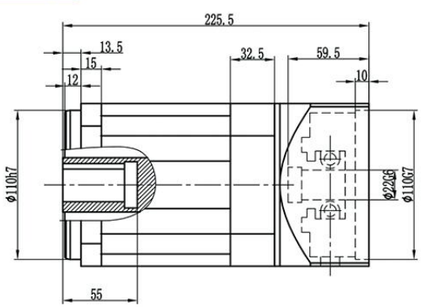
输出端/OUTPUT



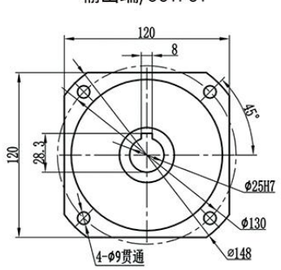
孔输出 PG120-L3(22-110-145-M8)

输入端/INPUT





输出端/OUTPUT



*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

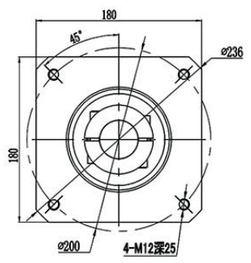
任工机械科技 RIGHT GEAR MECHANICAL TECHNOLOGY | 行星减速机专业非标制造与服务厂商 PLANETARY REDUCER PROFESSIONAL NON-STANDARD MANUFACTURING AND SERVICE MANUFACTURERS
高精密行星齿轮减速机系列 Planetary Gear Reducer series 任重致远 工匠精神 www.rengongkeji.com

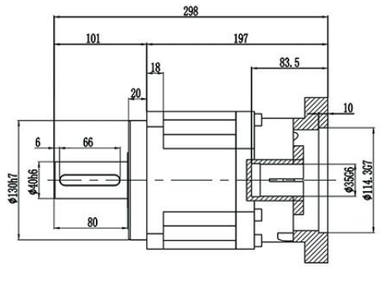
外形尺寸图表 /OUTLINE DIMENSION SHEET

直齿高精密型 PG SERIES

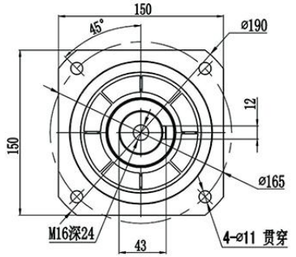
PG142-L1(35-114.3-200-M12)

输入端/INPUT



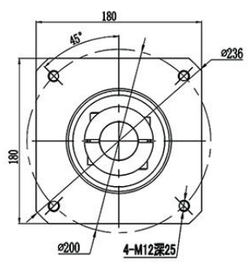


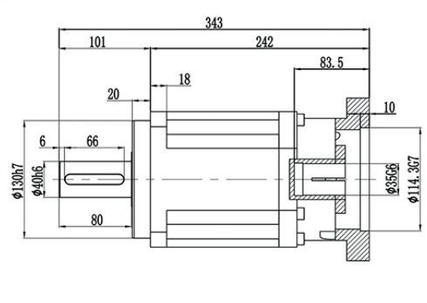
输出端/OUTPUT



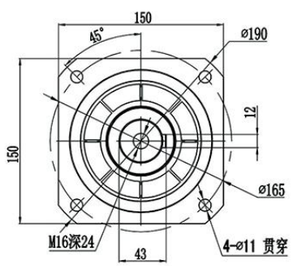
PG142-L2(35-114.3-200-M12)

输入端/INPUT





输出端/OUTPUT

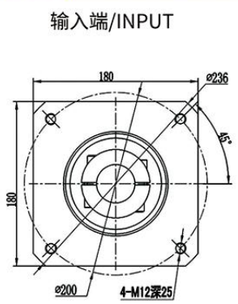


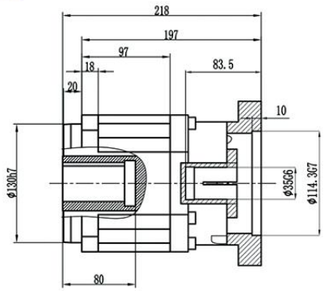
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

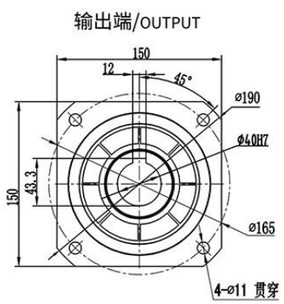
孔输出 PG142-L1(35-114.3-200-M12)

输入端/INPUT



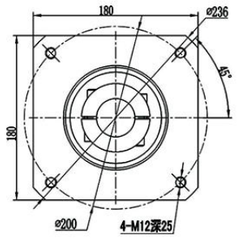


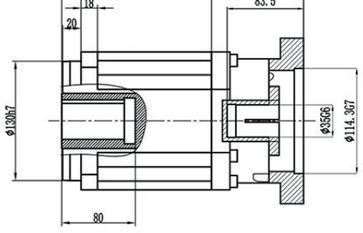
输出端/OUTPUT



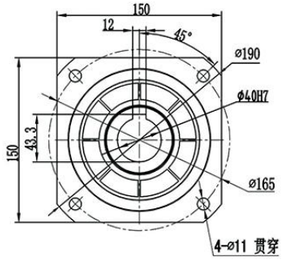
孔输出 PG142-L2(35-114.3-200-M12)

输入端/INPUT





输出端/OUTPUT

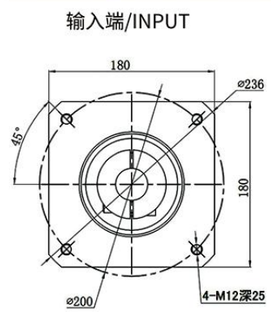


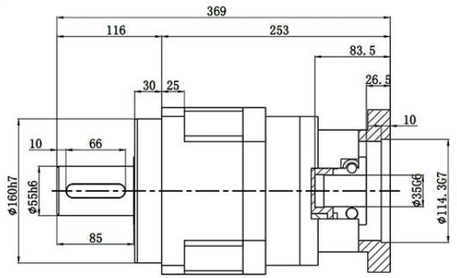
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

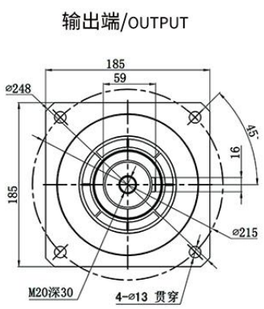
PG180-L2(35-114.3-200-M12)

输入端/INPUT



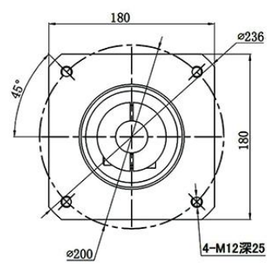


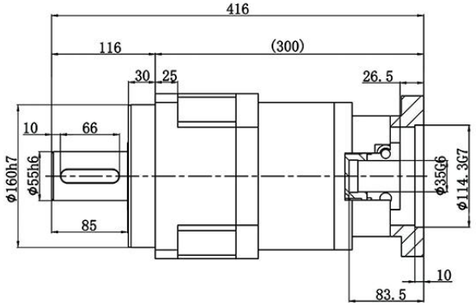
输出端/OUTPUT



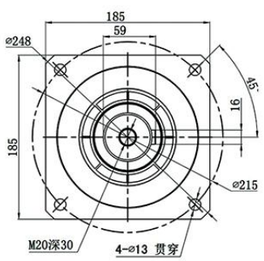
PG180-L3(35-114.3-200-M12)

输入端/INPUT





输出端/OUTPUT

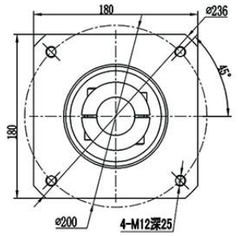


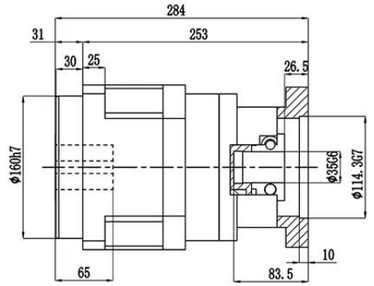
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

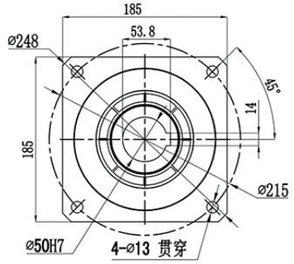
孔输出 PG180-L2(35-114.3-200-M12)

输入端/INPUT



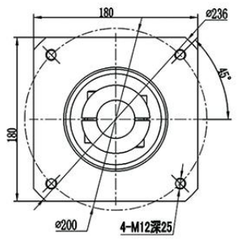


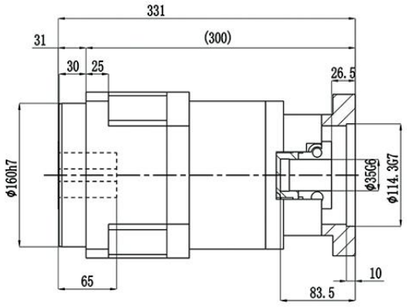
输出端/OUTPUT



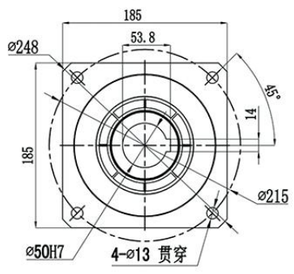
孔输出 PG180-L3(35-114.3-200-M12)

输入端/INPUT





输出端/OUTPUT

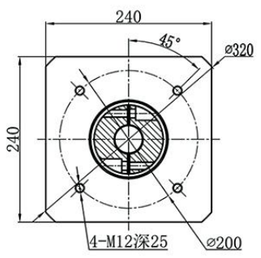


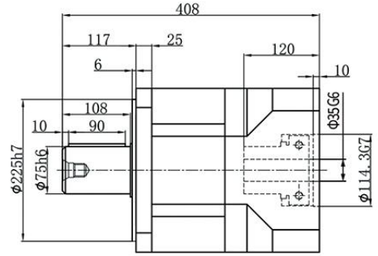
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

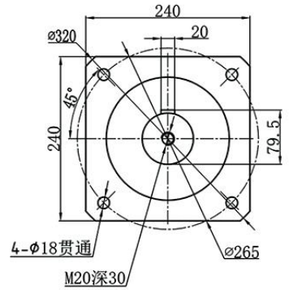
PG240-L1(35-114.3-200-M12)

输入端/INPUT



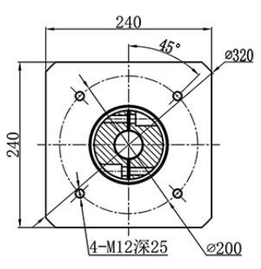


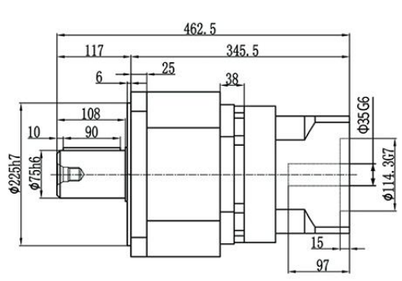
输出端/OUTPUT



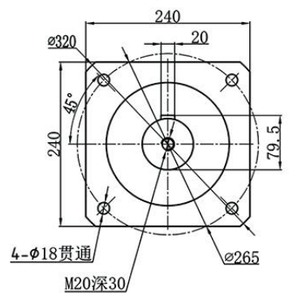
PG240-L2(35-114.3-200-M12)

输入端/INPUT



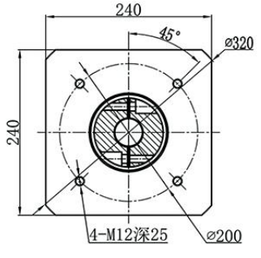


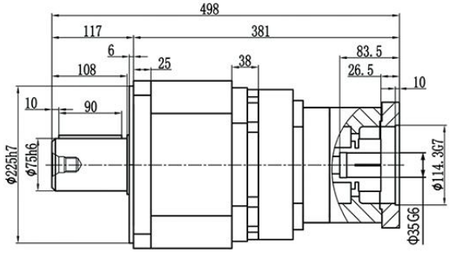
输出端/OUTPUT



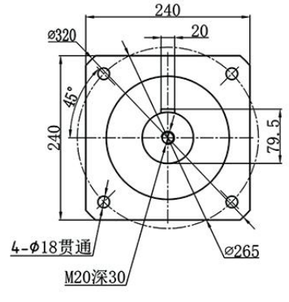
PG240-L3(35-114.3-200-M12)

输入端/INPUT





输出端/OUTPUT

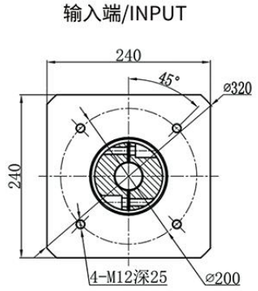


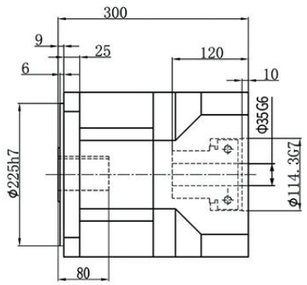
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

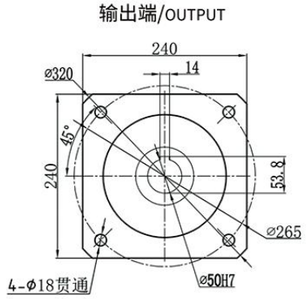
孔输出 PG240-L1(35-114.3-200-M12)

输入端/INPUT



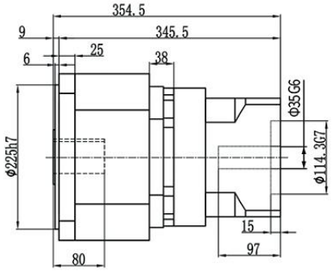


输出端/OUTPUT

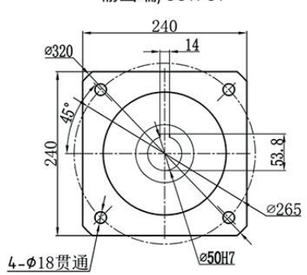


孔输出 PG240-L2(35-114.3-200-M12)

输入端/INPUT

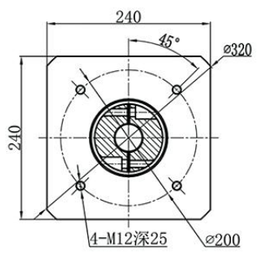


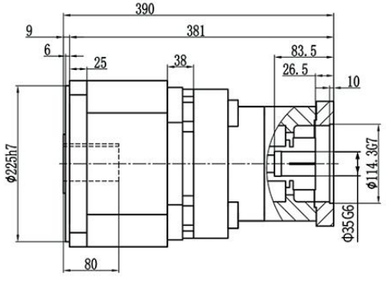
输出端/OUTPUT



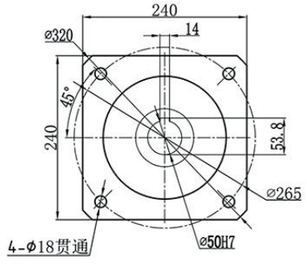
孔输出 PG240-L3(35-114.3-200-M12)

输入端/INPUT





输出端/OUTPUT

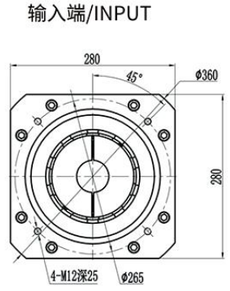


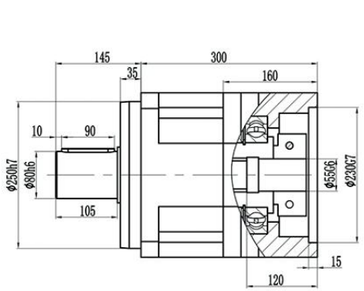
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

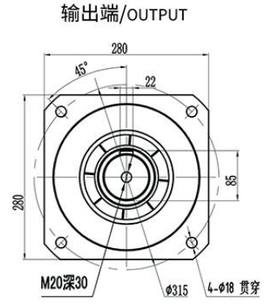
PG280-L1(55-230-265-M12)

输入端/INPUT



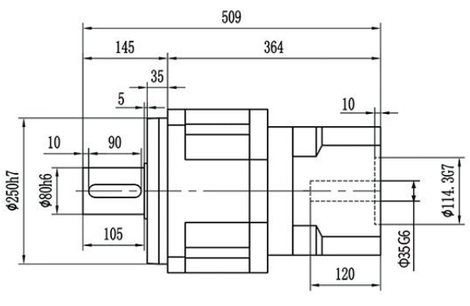


输出端/OUTPUT

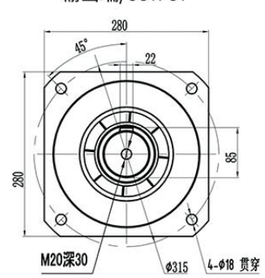


PG280-L2(35-114.3-200-M12)

输入端/INPUT

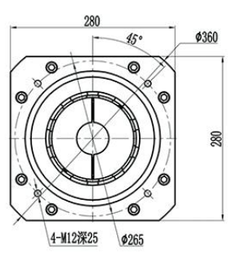


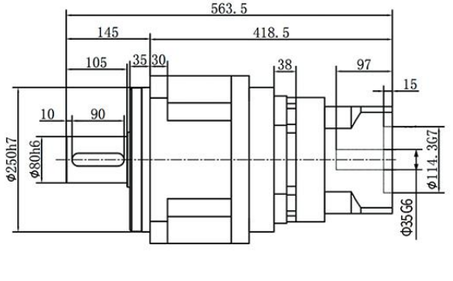
输出端/OUTPUT



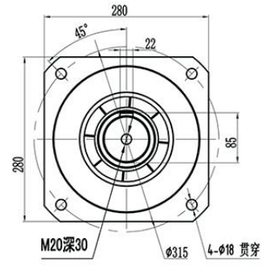
PG280-L3(35-114.3-200-M12)

输入端/INPUT





输出端/OUTPUT

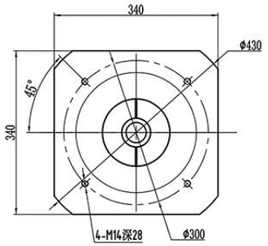


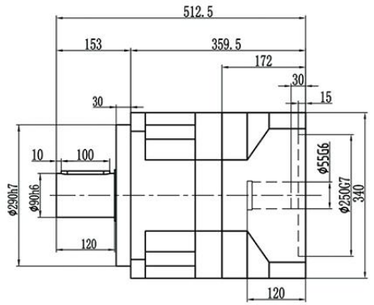
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

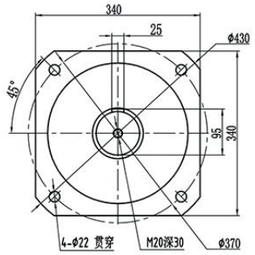
PG330-L1(55-250-300-M14)

输入端/INPUT



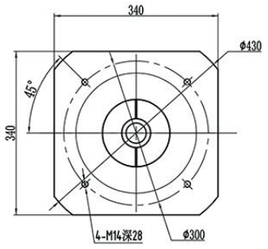


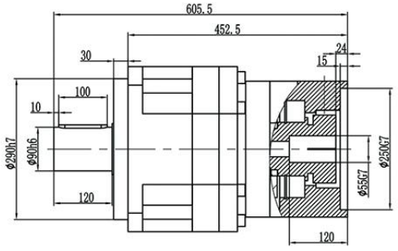
输出端/OUTPUT



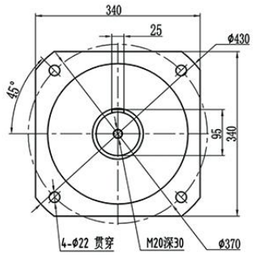
PG330-L2(55-250-300-M14)

输入端/INPUT





输出端/OUTPUT



*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

PGRL SERIES



减速机性能资料 /GEAR BOX PERFORMANCE INFORMATION

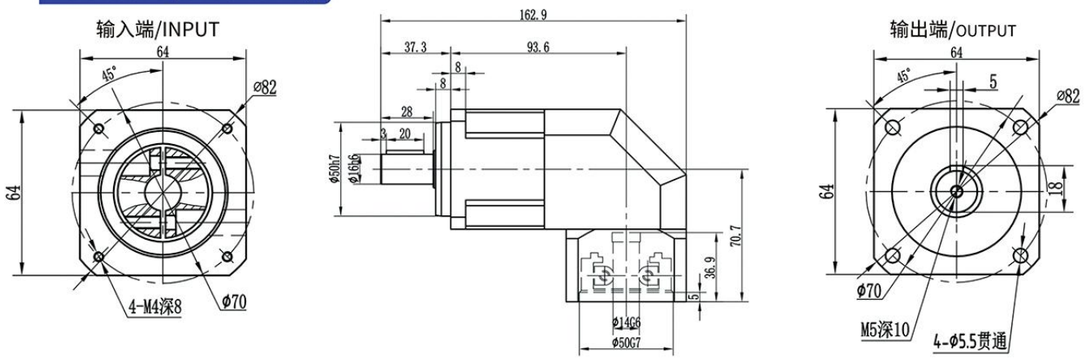
产品型号	单位	速比	级数	PGRL060	PGRL090	PGRL120	PGRL142
额定输出扭矩	Nm	3	1级		135	245	490
		4		46.32	162	320	650
		5		46.32	162	320	650
		7		38.9	130	232	520
		10		18.5	72	165	320
		9	2级	27.8	115	245	490
		12		27.8	162	245	490
		15		27.8	162	245	650
		16		27.8	162	245	650
		20		46.32	162	320	650
		25		46.32	162	320	650
		28		46.32	162	320	650
		30		27.8	135	245	490
		35		46.32	162	320	650
		40		46.32	162	320	650
		50		46.32	162	320	650
		70		38.9	130	232	520
		100		18.5	72	165	320
		64	3级	46.32	162	320	650
		80		46.32	162	320	650
		100		46.32	162	320	650
		150		46.32	162	320	650
		200		46.32	162	320	650
		250		46.32	162	320	650
		350		46.32	162	320	650
		400		46.32	162	320	650
		500		46.32	162	320	650
		700		38.9	130	232	520
		1000		18.5	72	165	320
最大额定扭矩	Nm	2倍额定输出扭矩					
最大径向力	N			1550	3250	6700	9400
最大轴向力	N			775	1625	3350	4700
满载效率	%		1	98			
			2	96			
			3	94			
重量	kg		1	2.1	5.9	12.3	29.6
			2	2.5	6.9	14.3	33.7
			3	32.9	7.9	16.3	37.8

任工机械科技 | 行星减速机专业非标制造与服务厂商
RIGHT GEAR MECHANICAL TECHNOLOGY
PLANETARY REDUCER PROFESSIONAL NON-STANDARD MANUFACTURING AND SERVICE MANUFACTURERS
高精密行星齿轮减速机系列 Planetary Gear Reducer series
任重致远 工匠精神 www.rengongkeji.com

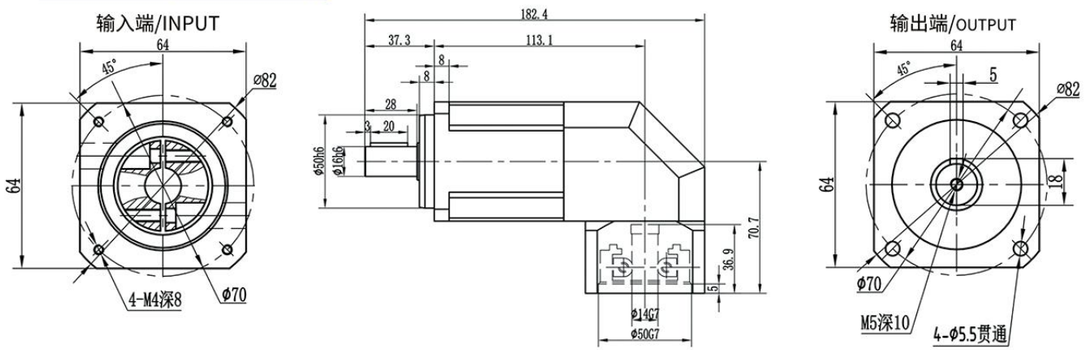
直齿高精密型
PGRL SERIES

外形尺寸图表 /OUTLINE DIMENSION SHEET

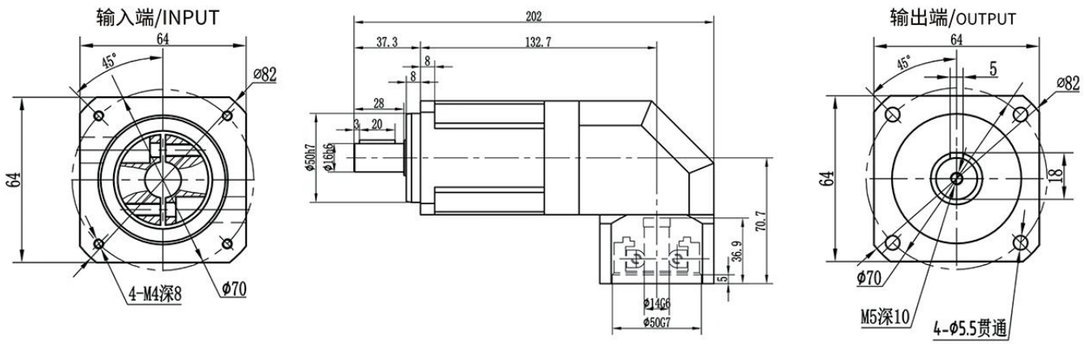
PGRL060-L1(14-50-70-M4)



PGRL060-L2(14-50-70-M4)



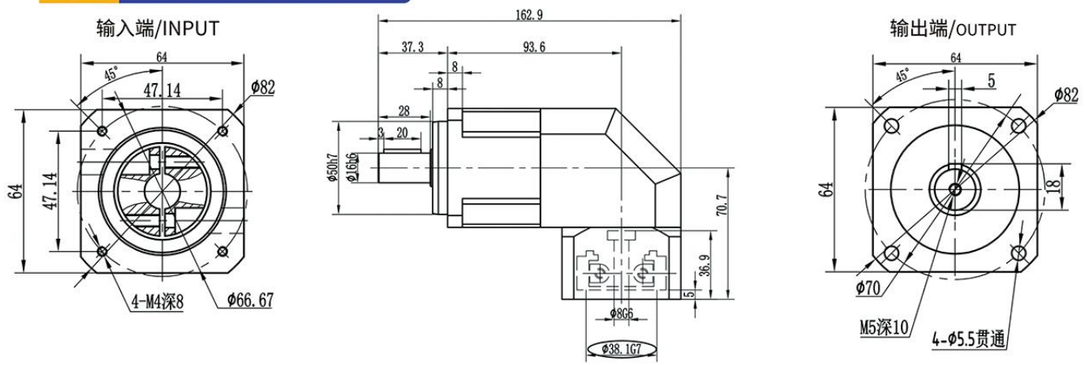
PGRL060-L3(14-50-70-M4)



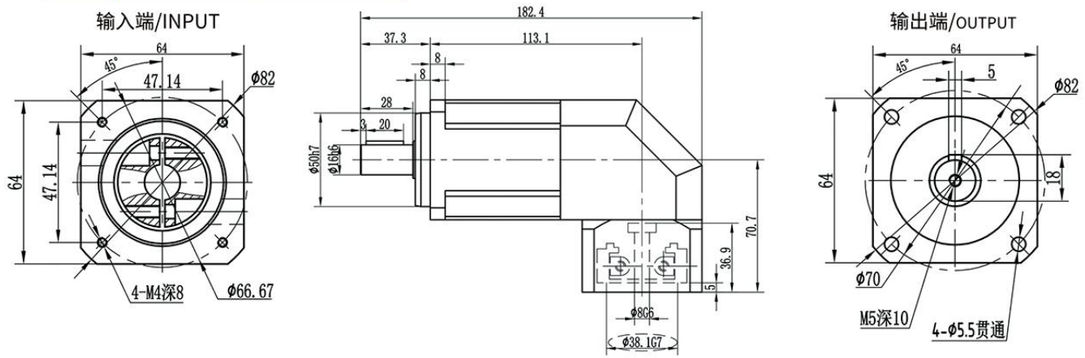
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

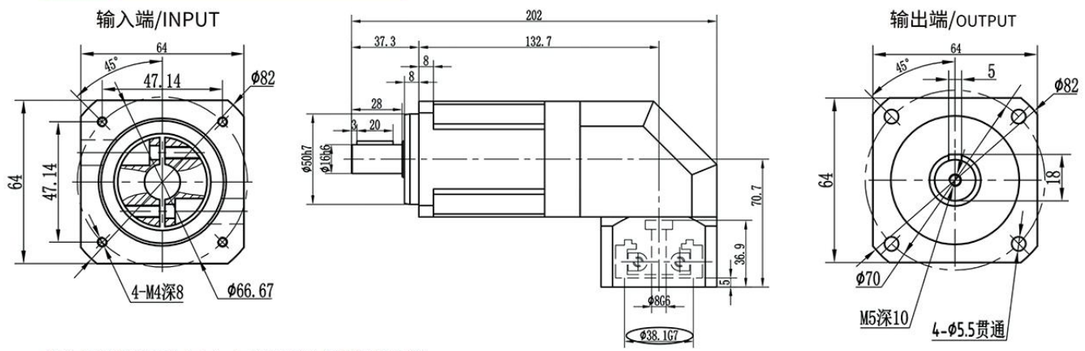
57步进 PGRL060-L1(8-38.1-66.67-M4)



57步进 PGRL060-L2(8-38.1-66.67-M4)



57步进 PGRL060-L3(8-38.1-66.67-M4)

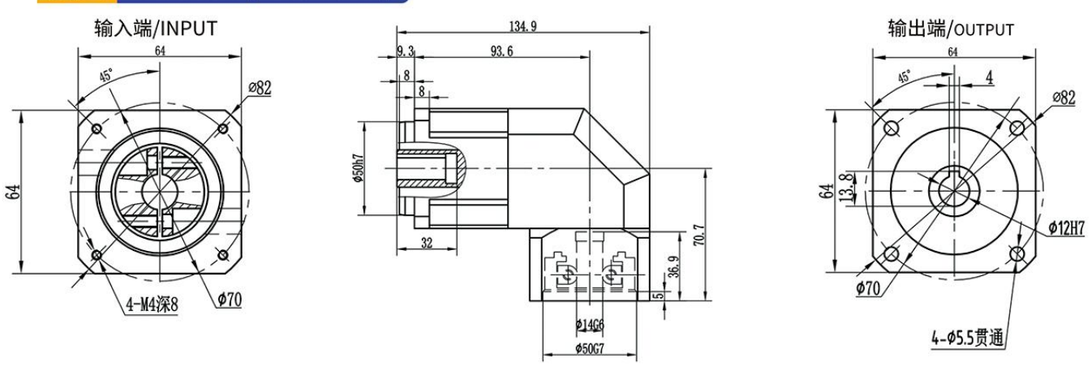


*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

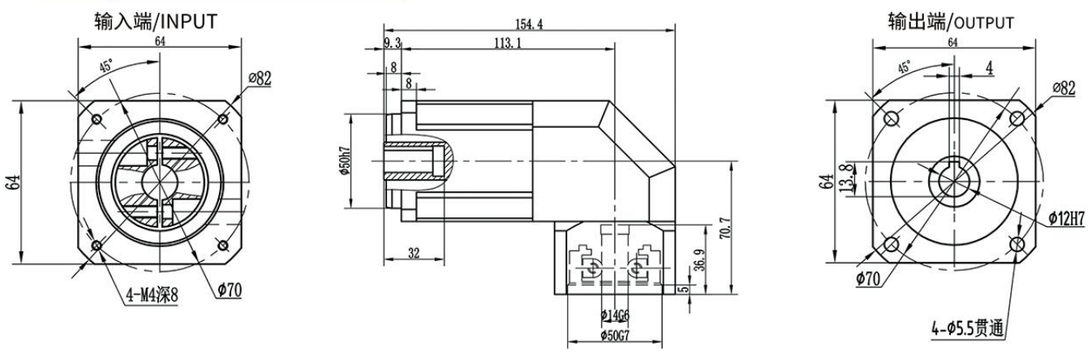
任工机械科技 RIGHT GEAR MECHANICAL TECHNOLOGY | 行星减速机专业非标制造与服务厂商 PLANETARY REDUCER PROFESSIONAL NON-STANDARD MANUFACTURING AND SERVICE MANUFACTURERS
高精密行星齿轮减速机系列 Planetary Gear Reducer series 任重致远 工匠精神 www.rengongkeji.com

外形尺寸图表 /OUTLINE DIMENSION SHEET

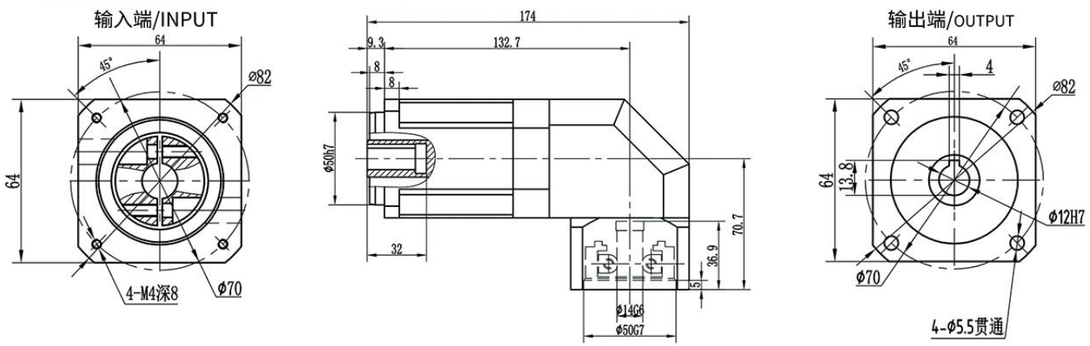
孔输出 PGRL060-L1(14-50-70-M4)



孔输出 PGRL060-L2(14-50-70-M4)



孔输出 PGRL060-L3(14-50-70-M4)



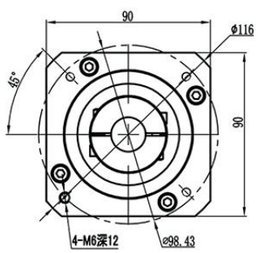
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

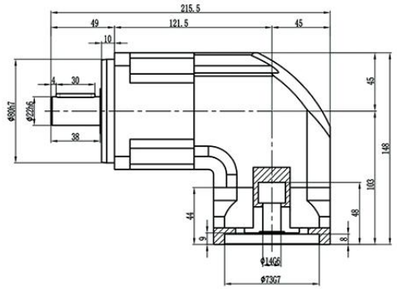
直齿高精密型 PGRL SERIES

外形尺寸图表 /OUTLINE DIMENSION SHEET

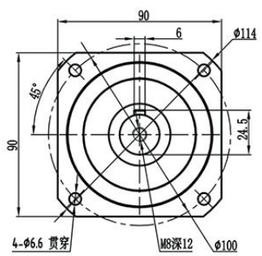
86步进 PGRL090-L1(14-73-98.43-M6)

输入端/INPUT



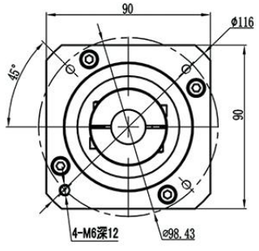


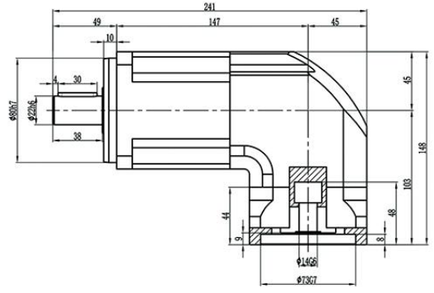
输出端/OUTPUT



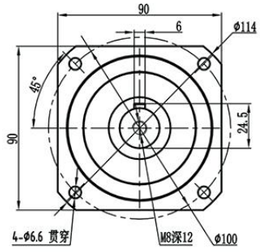
86步进 PGRL090-L2(14-73-98.43-M6)

输入端/INPUT



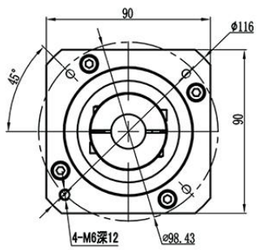


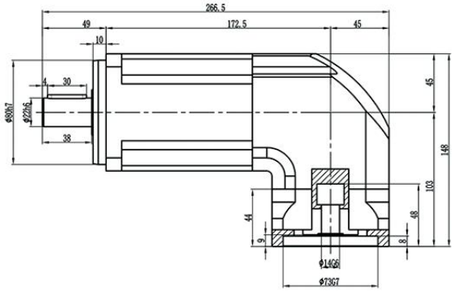
输出端/OUTPUT



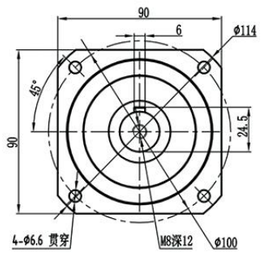
86步进 PGRL090-L3(14-73-98.43-M6)

输入端/INPUT





输出端/OUTPUT

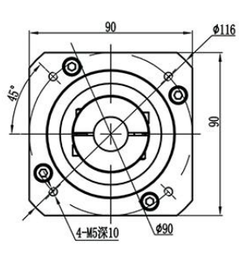


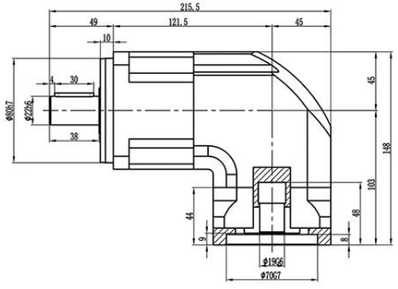
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

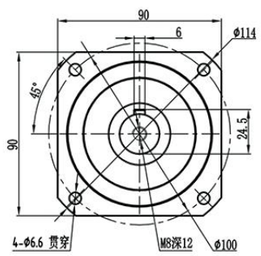
PGRL090-L1(19-70-90-M5)

输入端/INPUT



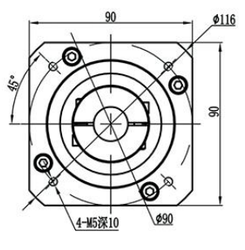


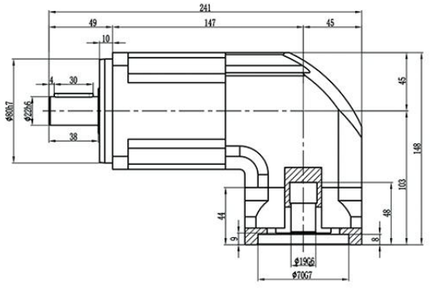
输出端/OUTPUT



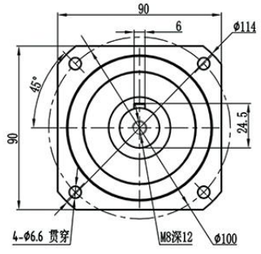
PGRL090-L2(19-70-90-M5)

输入端/INPUT



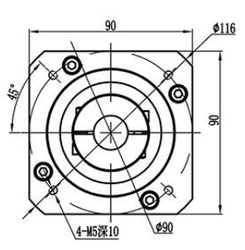


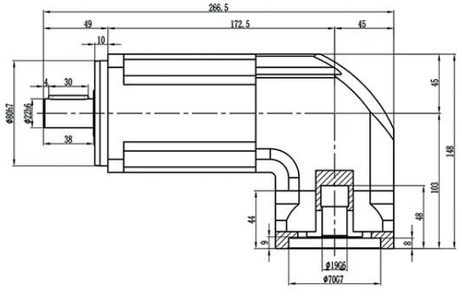
输出端/OUTPUT



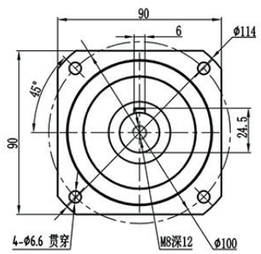
PGRL090-L3(19-70-90-M5)

输入端/INPUT





输出端/OUTPUT

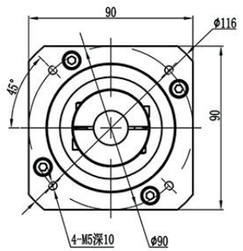


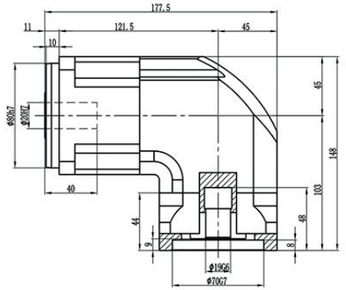
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

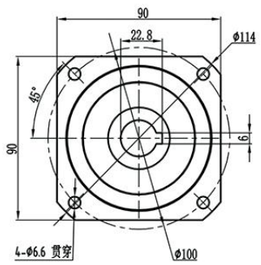
孔输出 PGRL090-L1(19-70-90-M5)

输入端/INPUT



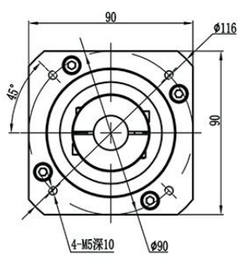


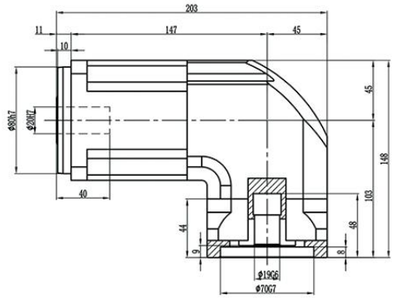
输出端/OUTPUT



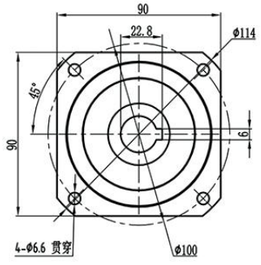
孔输出 PGRL090-L2(19-70-90-M5)

输入端/INPUT



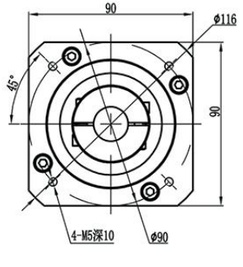


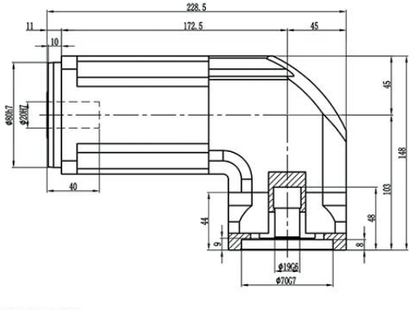
输出端/OUTPUT



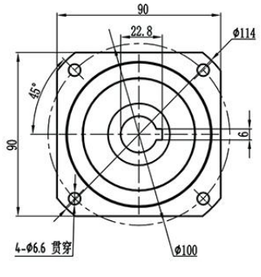
孔输出 PGRL090-L3(19-70-90-M5)

输入端/INPUT





输出端/OUTPUT

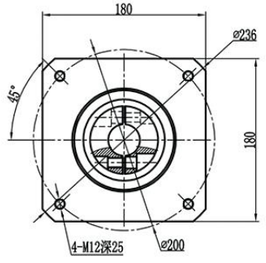


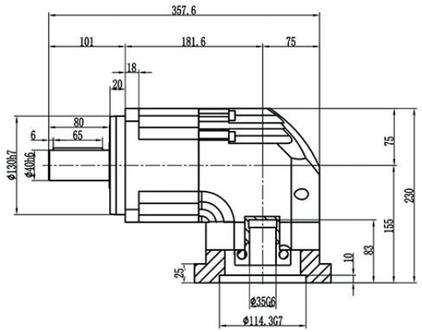
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

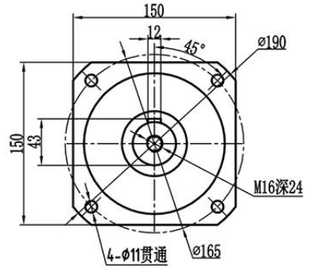
PGRL142-L1(35-114.3-200-M12)

输入端/INPUT



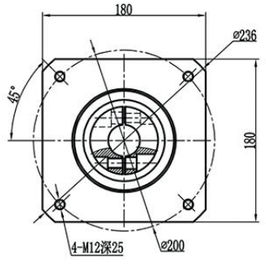


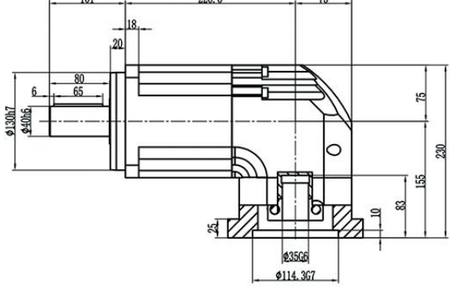
输出端/OUTPUT



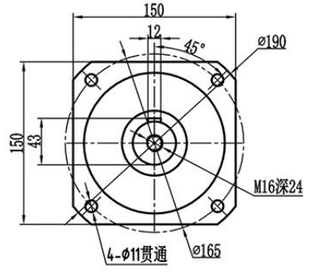
PGRL142-L2(35-114.3-200-M12)

输入端/INPUT



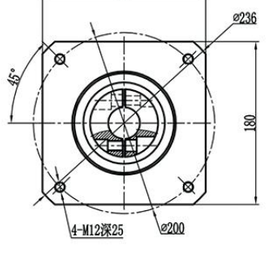


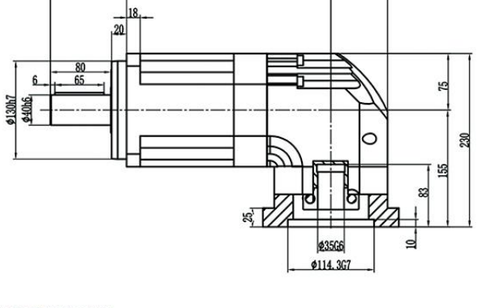
输出端/OUTPUT



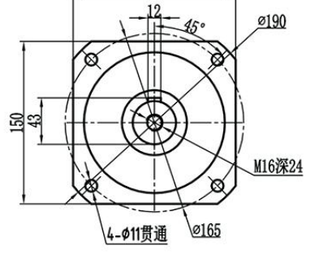
PGRL142-L3(35-114.3-200-M12)

输入端/INPUT





输出端/OUTPUT

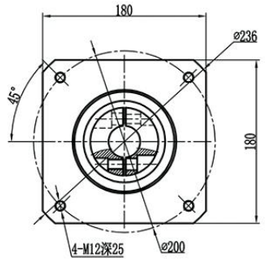


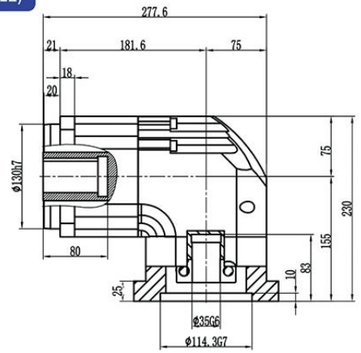
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

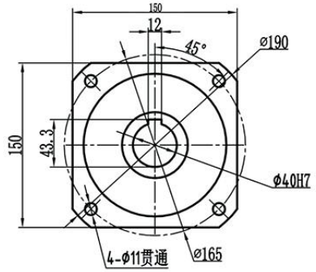
孔输出 PGRL142-L1(35-114.3-200-M12)

输入端/INPUT



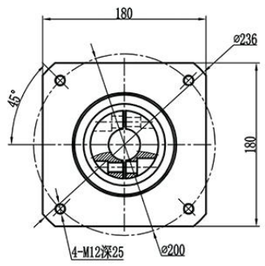


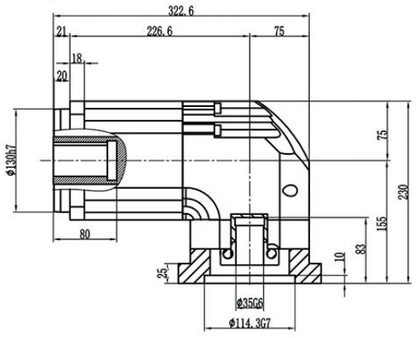
输出端/OUTPUT



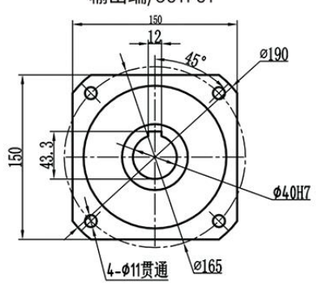
孔输出 PGRL142-L2(35-114.3-200-M12)

输入端/INPUT



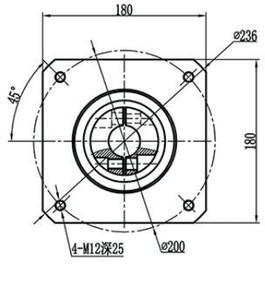


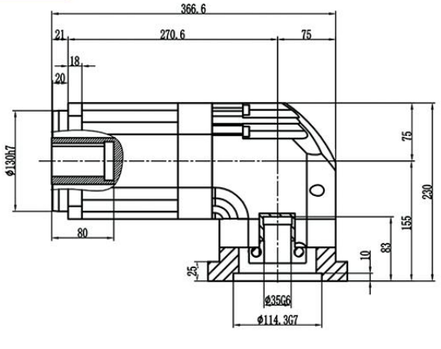
输出端/OUTPUT



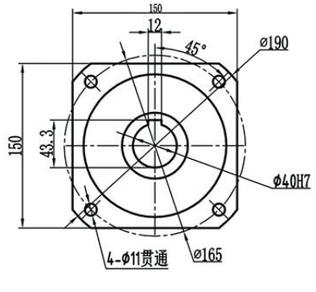
孔输出 PGRL142-L3(35-114.3-200-M12)

输入端/INPUT





输出端/OUTPUT

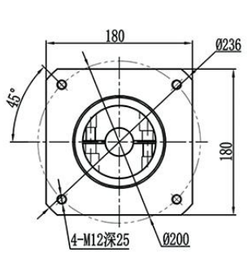


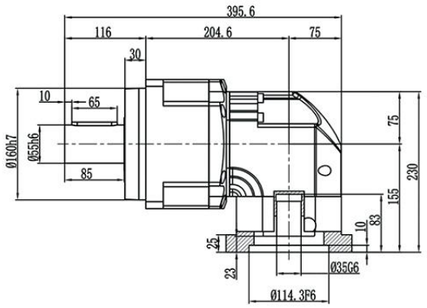
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

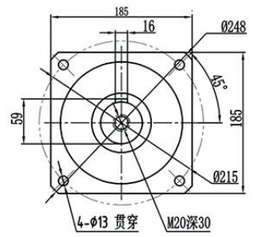
PGRL180-L1(35-114.3-200-M12)

输入端/INPUT



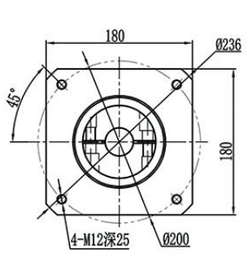


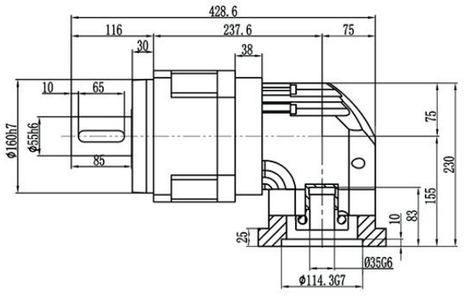
输出端/OUTPUT



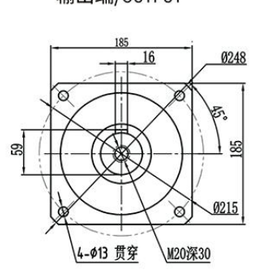
PGRL180-L2(35-114.3-200-M12)

输入端/INPUT



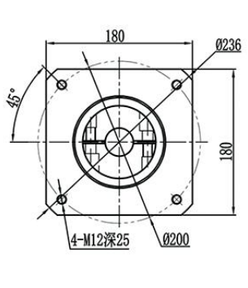


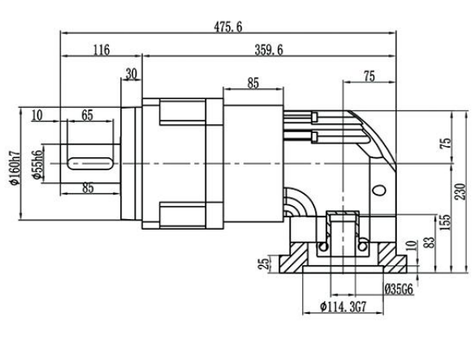
输出端/OUTPUT



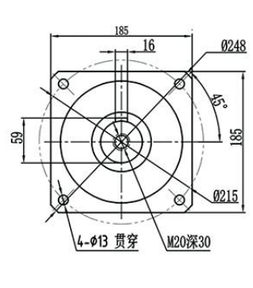
PGRL180-L3(35-114.3-200-M12)

输入端/INPUT





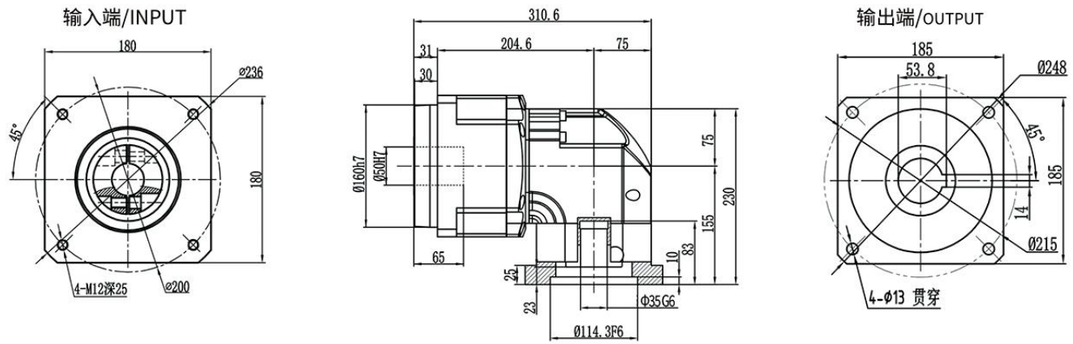
输出端/OUTPUT



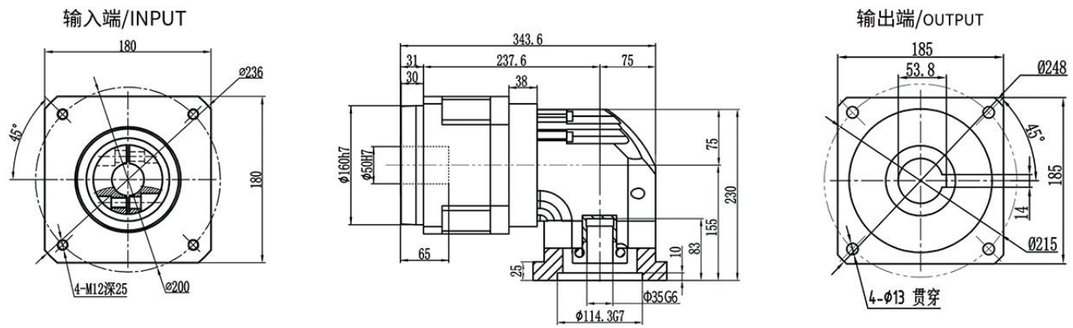
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

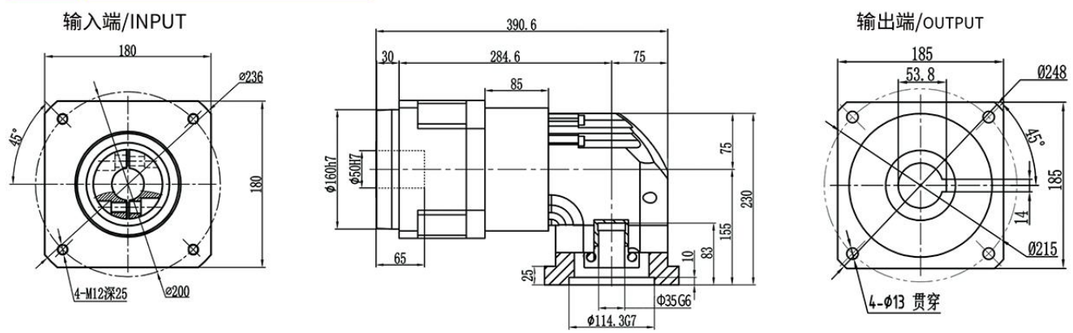
孔输出 PGRL180-L1(35-114.3-200-M12)



孔输出 PGRL180-L2(35-114.3-200-M12)



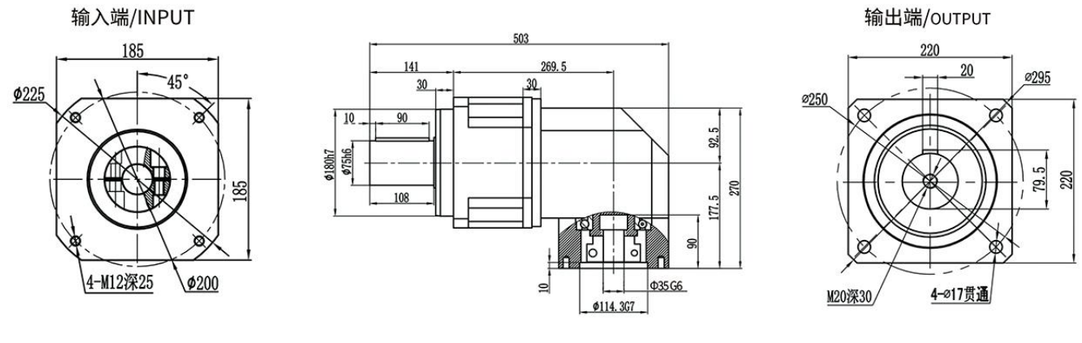
孔输出 PGRL180-L3(35-114.3-200-M12)



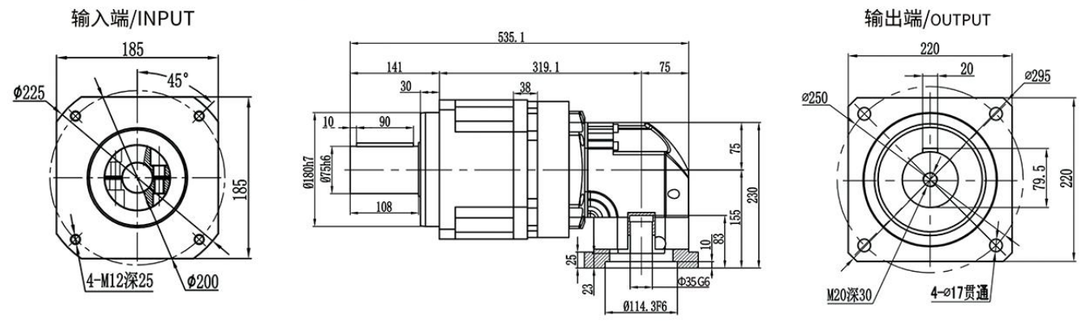
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

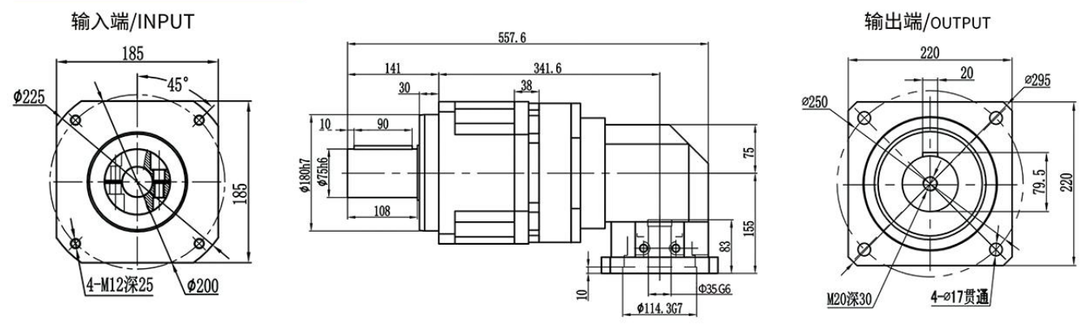
PGRL220-L1(35-114.3-200-M12)



PGRL220-L2(35-114.3-200-M12)



PGRL220-L3(35-114.3-200-M12)

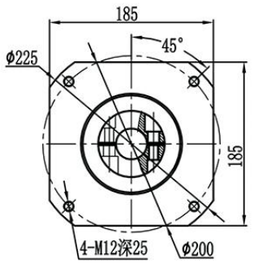


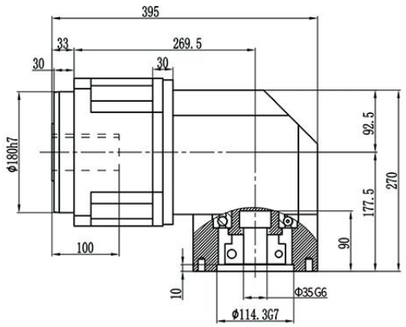
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

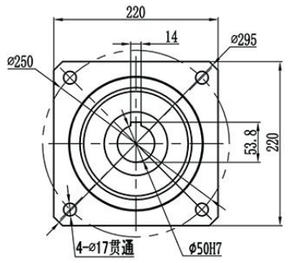
孔输出 PGRL220-L1(35-114.3-200-M12)

输入端/INPUT



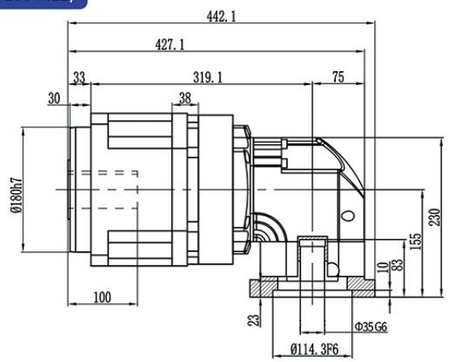


输出端/OUTPUT



孔输出 PGRL220-L2(35-114.3-200-M12)

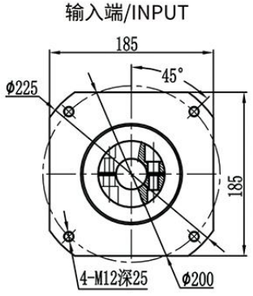
输入端/INPUT

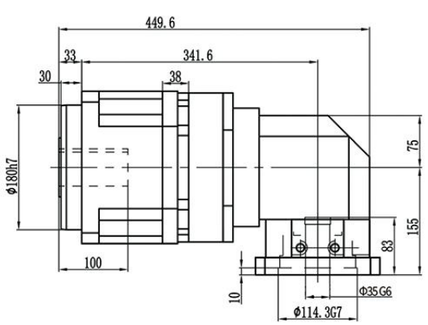


输出端/OUTPUT

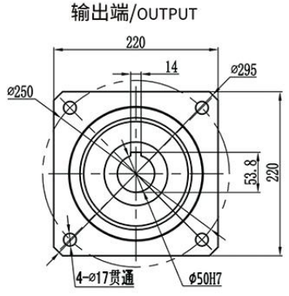
孔输出 PGRL220-L3(35-114.3-200-M12)

输入端/INPUT





输出端/OUTPUT



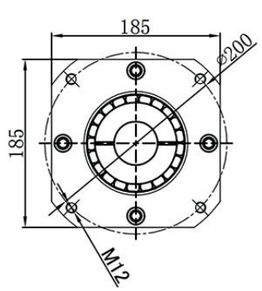
*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

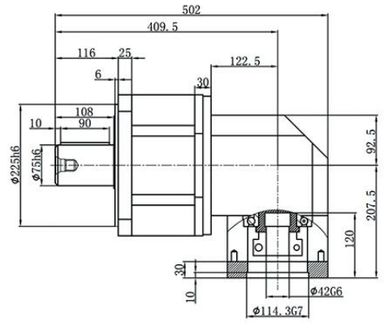
任工机械科技 RIGHT GEAR MECHANICAL TECHNOLOGY | 行星减速机专业非标制造与服务厂商 PLANETARY REDUCER PROFESSIONAL NON-STANDARD MANUFACTURING AND SERVICE MANUFACTURERS
高精密行星齿轮减速机系列 Planetary Gear Reducer series 任重致远 工匠精神 www.rengongkeji.com

外形尺寸图表 /OUTLINE DIMENSION SHEET

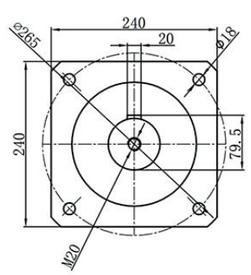
PGRL240-L1(42-114.3-200-M12)

输入端/INPUT



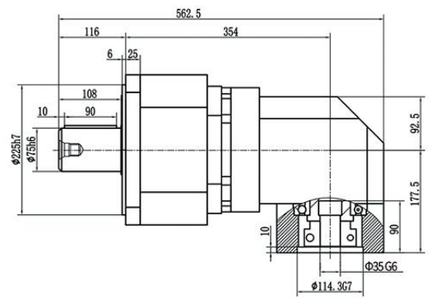


输出端/OUTPUT



PGRL240-L2(35-114.3-200-M12)

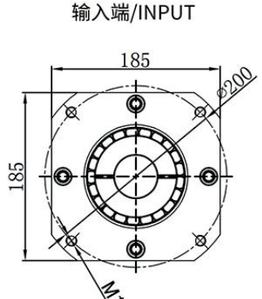
输入端/INPUT

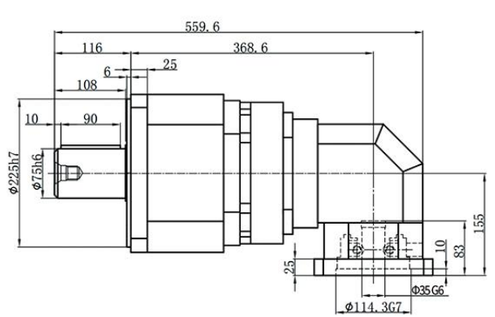


输出端/OUTPUT

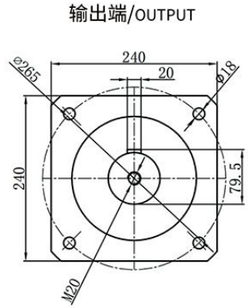
PGRL240-L3(35-114.3-200-M12)

输入端/INPUT





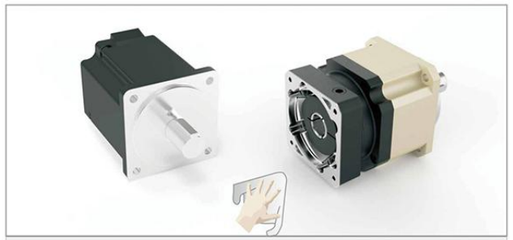
输出端/OUTPUT



*输入马达连接板之尺寸，可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 /OUTLINE DIMENSION SHEET

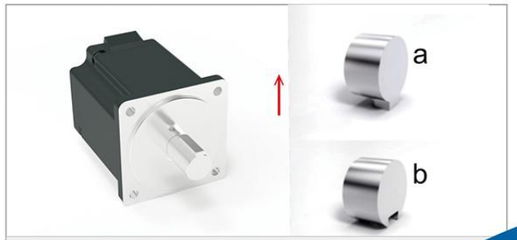
以斜齿款为例：



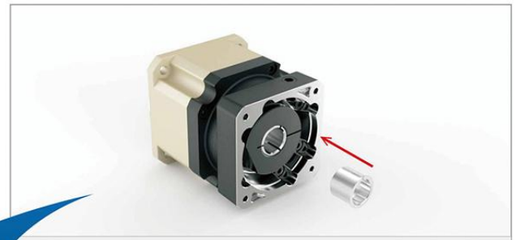
❶ 确认马达与减速机规格，并将马达及减速机之安装面擦拭干净。



❷ 将入力法兰侧孔堵头螺丝取出，转动马达锁紧毂，直到锁紧毂螺丝对准法兰侧孔。



❸ 取下马达上原先之平键；
如有必要，请安装平衡键。



❹ 确认马达轴心尺寸，若有必要，装上轴套。

正确的锁固方式

当马达为平轴状，对准入轴夹缝在平轴中心线，使锁紧毂螺丝与平轴呈垂直。



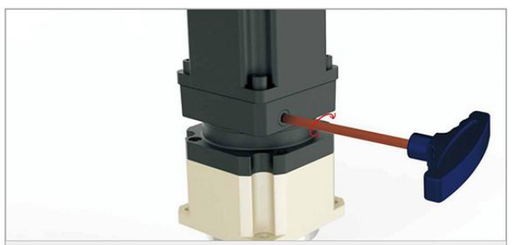
❺直立式的装入马达，以螺丝扭力表（表一）建议扭力值之5%，依1~4的顺序，用扳手将附垫片之螺丝轻轻锁上。



❻ 将马达与减速机直立摆设，以螺丝扭力表（表一）建议扭力值，依1~4的顺序，用扭力扳手将螺丝锁紧。



❼ 参照表二建议之扭力值，用扭力扳手将马达锁紧毂螺丝锁紧。



❽ 锁回法兰侧孔堵头螺丝。

外形尺寸图表 /OUTLINE DIMENSION SHEET

表一：马达锁紧螺丝扭力建议表

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

表二：马达锁紧螺丝扭力建议表

减速机型号		马达轴径	螺丝尺寸	六角头尺寸	锁紧扭力	
		[mm]	[mm]	[mm]	[Nm]	[In-lbs]
42/47	单级	≤12	M3x0.5Px10L	2.5	2.1	19
	双级	≤12	M3x0.5Px10L	2.5	2.1	19
60	单级	≤19	M5x0.8Px14L	4	9.8	87
	双级	≤19	M5x0.8Px14L	4	9.8	87
80/90	单级	≤24	M6x1Px20L	5	17	151
	双级	≤19	M5x0.8Px14L	4	9.8	87
110/115/120	单级	≤35	M8x1.25Px25L	6	41	364
	双级	≤24	M6x1Px20L	5	17	151
140/142/160	单级	≤38	M10x1.5Px30L	8	80	709
	双级	≤35	M8x1.25Px25L	6	41	364
180/200	单级	≤50	M12x1.75Px35L	10	139	1232
	双级	≤38	M10x1.5Px30L	8	80	709
220/255	单级	≤55	M16x2Px40L	14	343	3038
	双级	≤50	M12x1.75Px35L	10	139	1232

备注：螺丝锁紧扭力必须大于上述值。若有需要时，可将锁紧扭力多增加上述建议值之20%，以避免打滑。