



RECKON DRIVES S.A.S  
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Immeuble Horizon  
42000 Saint-Etienne  
www.reckondrives.com  
2022 · NO.3



Quality assurance  
Power peak

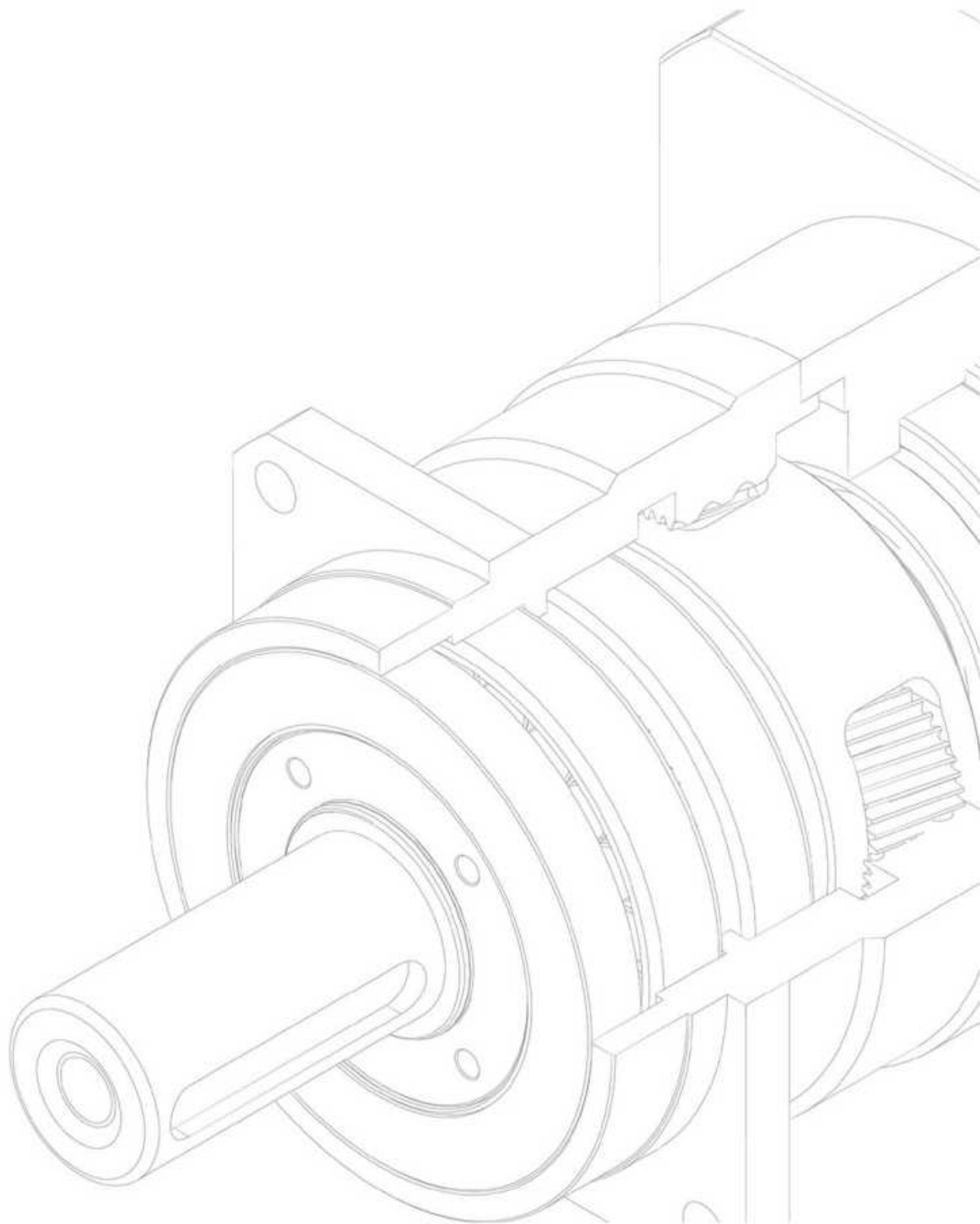


[www.moto-reducer.com](http://www.moto-reducer.com)

# MOTOREDUCTEUR

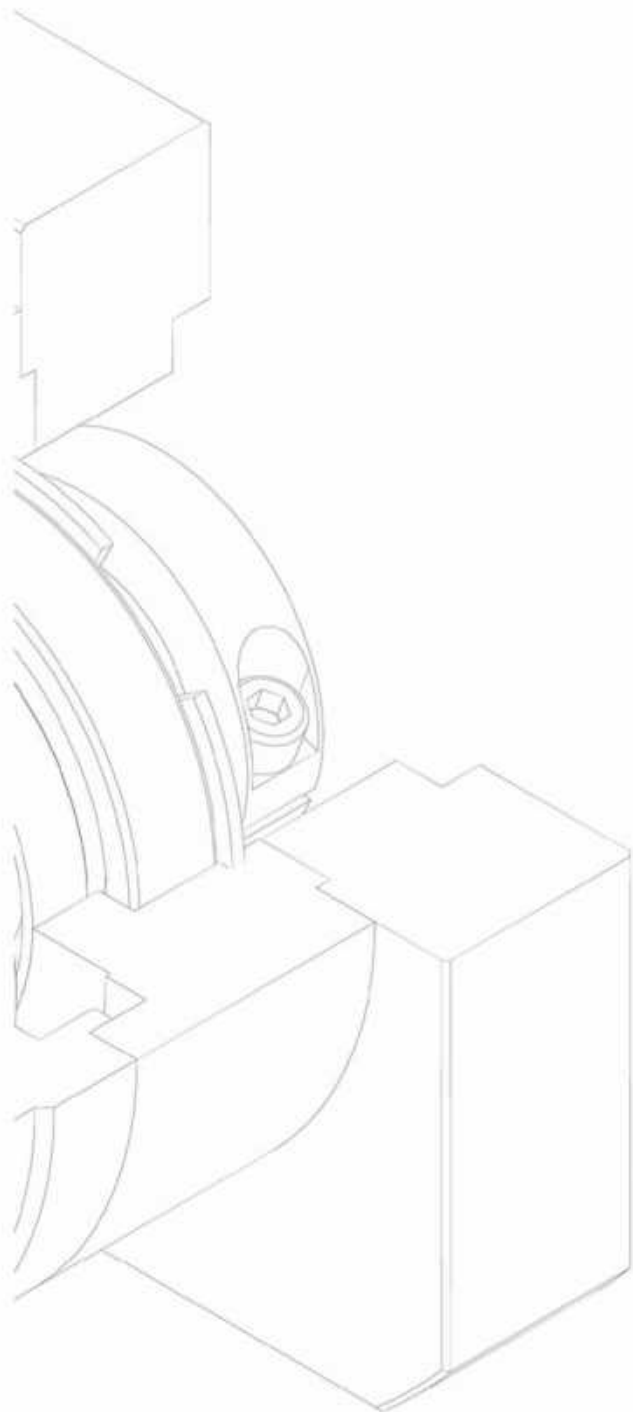
Low Backlash  
Planetary Gearboxes

**Assuring quality is our professional commitment,  
Performance and improvement are our principles,  
Customers' full satisfaction is our pride.**



The provided data are only on an indicative basis and are subject to modification.  
本样册所提供的相关信息仅供参考，可根据客户需求做出相应改动。

# MOTOREDUCER Planetary Gearboxes



17-32	MVB	
33-48	MVE	
49-64	MVD	
65-80	MAF	
81-94	MAFQ	
95-104	MPVB	
105-114	MPVE	
115-124	MAB	
125-132	MAE	
133-140	MVS	
141-154	MVBR	
155-168	MVER	
169-180	MVDR	
181-194	MAFR	



## About us

RECKON DRIVES is located in Saint-Etienne (France), one of the Traditional Military Industry Production Center in Europe. Specialized in power transmission equipment with higher requirements and higher standards, RECKON was born of the cooperation between MOTOREDUCTER and a French well-known military aerospace equipment manufacturing Company after years of technical exchange, so as to offer top quality products to the global market.

MOTOREDUCTER planetary gearboxes entered Chinese market in 2010 and since then have successfully supplied thousands of equipment manufacturers for various industrial applications. Today, in order to follow the booming industrial trend, we adhere more than ever to our philosophy "using world's leading technology, creating value for the world". From 2018 on, RECKON-MOTOREDUCTER full range of products is available with even higher performances and offers a larger choice of low backlash planetary gearboxes.

RECKON DRIVES公司位于欧洲传统军工生产基地-法国Saint-Etienne（圣埃蒂安城市），是由MOTOREDUCTER和法国知名军工航天设备制造企业经过多年技术交流以及对全球市场分析、战略规划而合作打造的更高要求、更高标准、更加全面的传动设备制造企业。

MOTOREDUCTER行星减速机从2010年开始在中国市场推广至今，成功为各领域上千家工业设备制造企业服务。如今，为了满足工业制造整体水平的提高，更好的秉承“用世界领先科技，为世界创造价值”的理念，2018年将会推出更高性能、更加全面的RECKON-MOTOREDUCTER精密行星减速机系列产品。





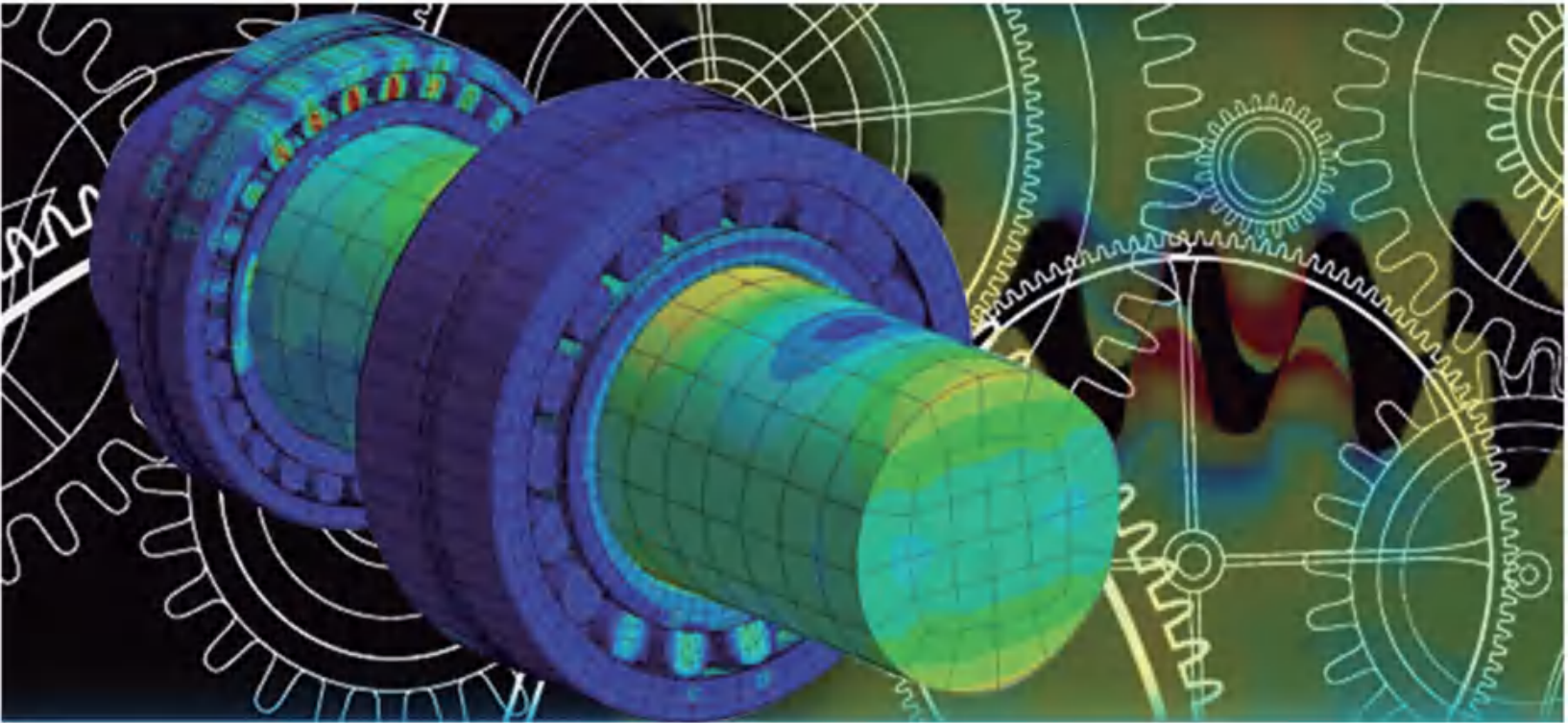
## About us



Performance, innovation and creation are the foundation of RECKON spirit; we are always referring to these principles so as to bring you entire satisfaction. Quality has always been our daily concern since we are aiming to reach perfection. Our quality and environmental policy remains our top priority and are at the center of our management system which integrates a tracking record for each phase of production and service. Using state-of-the-art high performance equipment for production and quality control of each component, we keep on developing extremely precise gear so as to bring you top notch low backlash planetary gearboxes according to your expectations. In the future we will keep on focusing on innovation to provide you with creative solutions.

RECKON一直以传承，创新，创造作为企业发展理念，我们始终坚信品质为企业生存的根本，且一直保持着对更高品质的追求，为客户的客户提供放心高质的产品。一个产品的生命，其价值的体现便是满意每一位使用他的客户。在此，我们真诚的感谢您在我司的成长过程中给予我们的信任以及陪伴，为了您的选择，我们会尽最大的努力给您提供满意的产品。在未来的日子里RECKON将继续开拓创新，为您提供终极解决方案。我们将一直秉承这些理念陪伴您走下去。

## Research & Development



Our research unit is constantly trying to bring new solutions and focus on an optimized use of machine-tools. Our production unit and its 90 machines are working under the total control of our quality department, for each manufactured mechanical piece so as to guarantee that there is no defect. This is why we are internally controlling the totality of the processing from machining to handling. Quality is the hardcore of our company spirit, and this enables us to look far in the future. Our internal quality standards often exceed those usually found in the industry. Because of this strict and challenging control process, we are able to offer you especially long working life planetary gearboxes. Our ISO 9001 certification allows us to get technical feedback from our clients and to continue improving on every aspect.



我们的研发部，负责给客户提供最新最快的方案。我们拥有90台大型减速机专业生产设备，并且拥有独立的质量检测部。我们的宗旨是每一个产品零瑕疵，这促使我们在生产和组装上更加严格的质量把控。追求质量是企业的精神核心，我们的质量检测标准已远超过同行业水平。由于产品经过质量严格把控，确保能够为客户提供使用寿命更长的行星减速机。通过ISO9001质量认证，获得了更多客户的认可和反馈，促使我们不断改进，不断超越。



## Customer Service



It is an honor for us to share our professional expertise gain through intense cooperation between our partners worldwide. We develop tailor-made concept products upon your special request at a very comprehensive price because we care about your final customers. Following this philosophy we analyze all most important parameters such as working conditions, duration of operation, speeds, or loads in order to bring you the corresponding solution. Our service culture leads us to be where you need us in the shortest delays, whether for supply of parts or technical support for your convenience.

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

## Quality & Production



- From raw material to bearings, gaskets or lubricants, each component comes from the best suppliers of their industry because we chose them through meticulous selection process and we keep on proceeding stringent quality control to secure your relation with your final client.
- Our helical gears (satellite, ring) are case hardened to 58-62 HRC and machined to class DIN6. This confers them high precision, great stability, high output torque, low noise level and low backlash.
- Our components are processed and corrected internally following our unique technical method.
- Precision is constant all along the rates working lifetime.
- 我们所用的原材料及轴承等配件均由优秀供应商所提供，经我公司严格的技术评估，质量筛选和流程把关。
- 我们提供的所有行星齿轮、太阳齿轮均为螺旋齿轮，经过渗碳淬火至58-62HRC，进行精密磨削而成，具有运转精度高、稳定性好、高输出扭矩、低背隙和低噪音的特性。
- 我们提供的所有齿轮都是经过我司独有的技术修正的。这样的修正可以降低摩擦，提高寿命并且降低噪音。
- 我们的产品精度在整个工作寿命期间都能保持稳定。



## Quality & Production





# Quality & Production

1 吹膜机  
Film blowing machine



2 机械手  
Industrial robots



3 印刷设备  
Printing machines



7 医疗设备  
Medical Equipment



8 检测设备  
Measuring equipment



9 汽车制造  
Automotive industry

We can offer you the all the modifications requested in your field of application. Our sales and service network provides quick availability and competent support. For special requirements we bring you individual solutions. Of course, our services are always cost optimized. Thanks to our professional expertise, our specialists provide technical and market consultation for a wide variety of industrial sectors.

纺织机械  
Textile machines 4



包装机械  
Packing machines 5



非标自动化  
Non-standard automation 6



卫星通讯  
Satellite communication 10



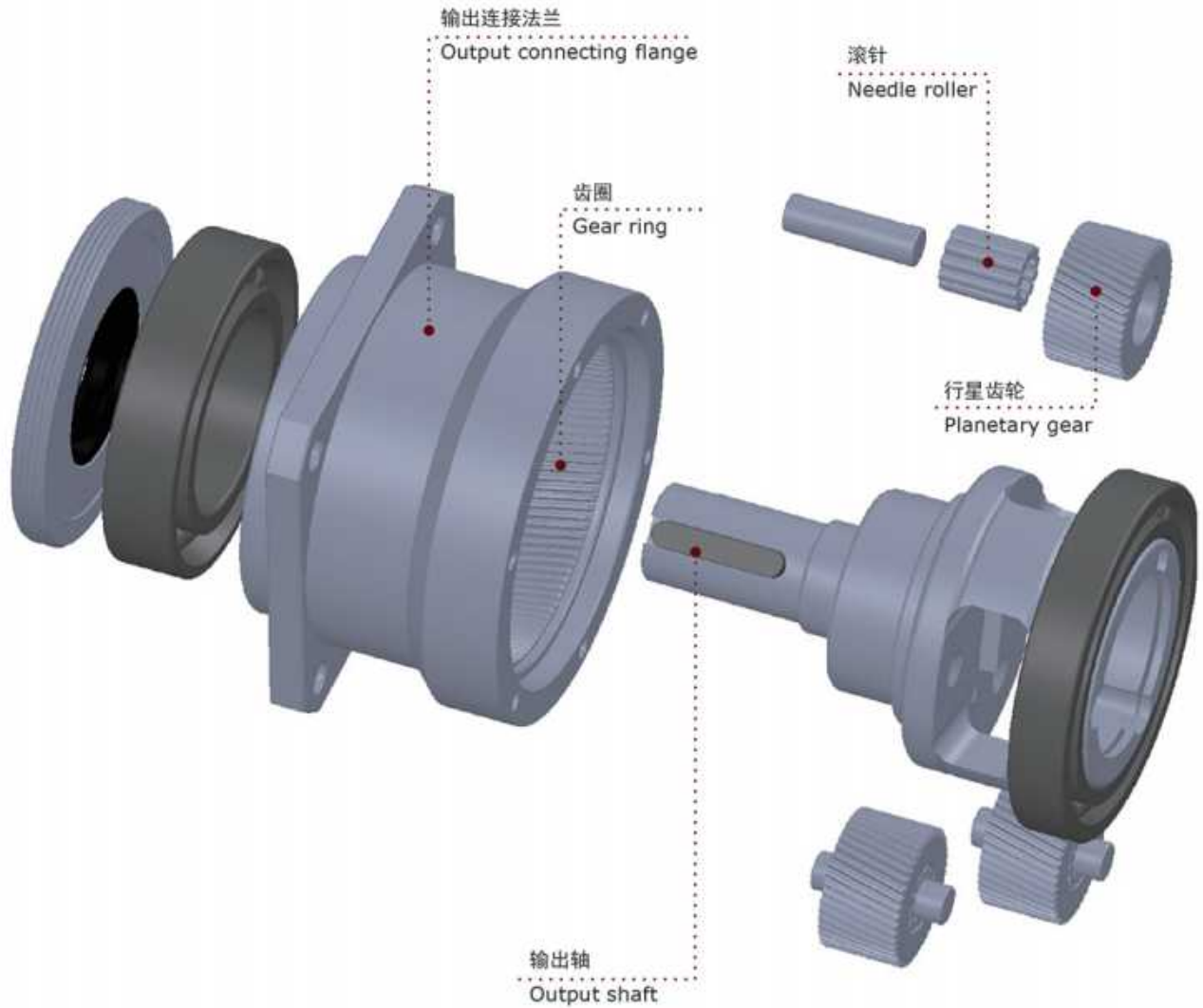
金属加工  
Metal processing 11



制药行业  
Pharmaceutical industry 12

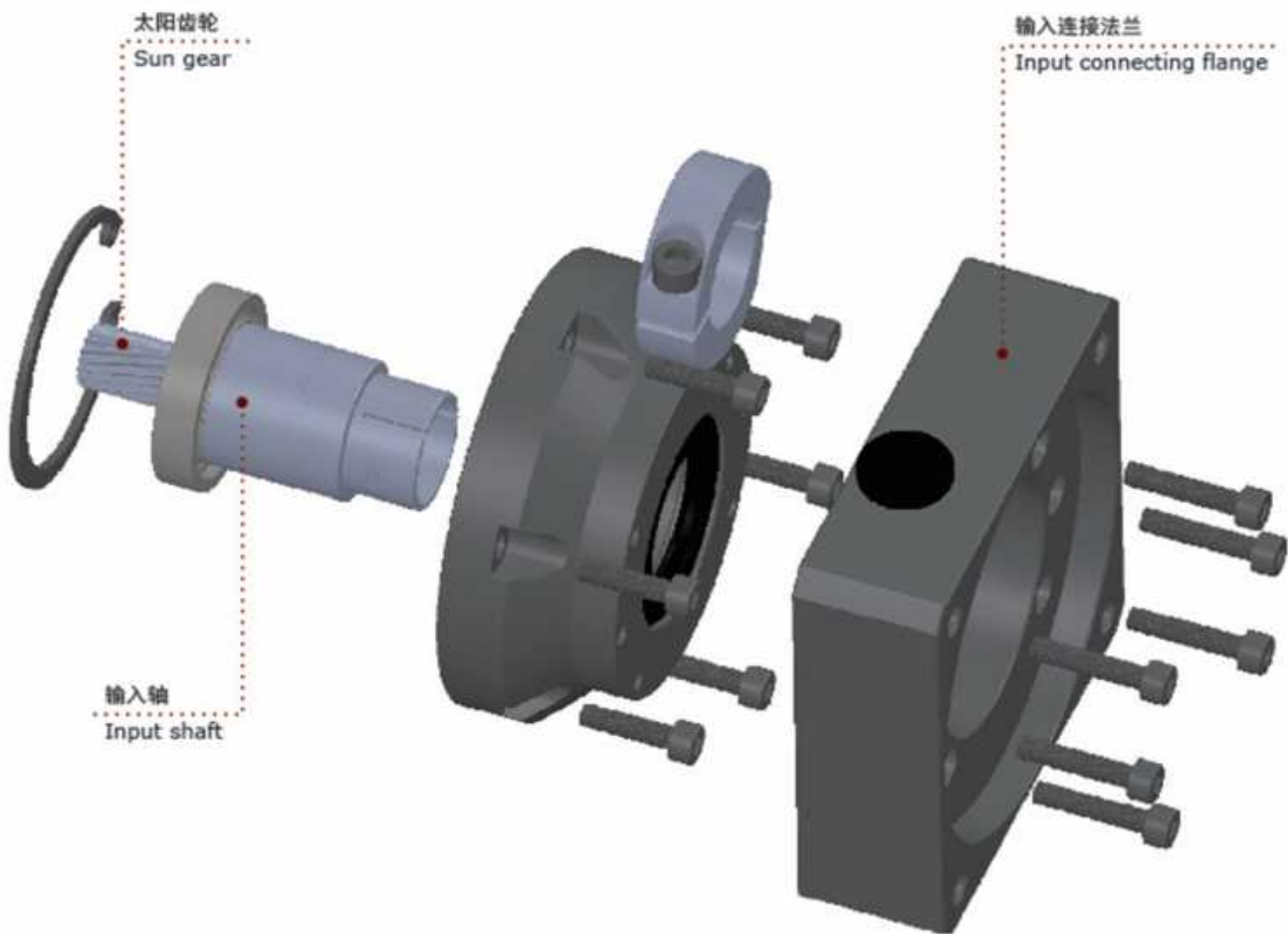
在您的应用领域，我们能够满足您的每一次需求。对于一些特殊要求，我们将会考虑给您提供相应的解决方案。我们的市场化网络能够确保快速有效的获取我们想要的信息。目前我们的产品已经应用于工业领域的各个行业，适用于机床，机械手，印刷设备，纺织机械，包装机械，非标自动化，医疗设备，检测设备，汽车制造，卫星通讯，金属加工，制药行业等工业领域。

## 3D Section Plan



Spare parts are strictly submitted to the quality control process required by RECKON. All our satellite and sun gears are helical-shaped and are case hardened to 58-62 HRC, granting superior transmission results. Satellite gears are double-supported with full-complement needle bearings that increase torsional stiffness. According to the International Protection Rating system, MOTOREDUCER gearboxes designation is IP65. This means protection against dust infiltration (dust-tight) and water jets which are emitted from a nozzle and sprayed against the housing from all directions (jet water).



















所有的零部件均按照RECKON严格的质量控制体系把关，行星齿轮和太阳齿轮均为斜齿轮，渗碳淬火至58-62HRC，进行精密磨削，经过技术修正，以达到完美的传动效果。行星齿轮由满滚针轴承两端支撑，增强了扭转刚度。MOTOREDUCER行星减速机防护等级达到国际标准IP65（完全防尘、防水）。

# Product line

Performance rating scale / 性能对照表

Model 系列	Positioning accuracy 定位精度	Radial force 径向力	Torsional stiffness 扭转刚性	Backlash 背隙	Wide range of size 规格多样性	Power density 功率密度	Wide range of ratio 传动多样性
 MVB	MMM	MM	MMM	MMM	MMM	MMM	MMM
 MVE	MMM	MM	MMM	MMM	MMM	MMM	MMM
 MVD	MMM	MMM	MMM	MMM	MM	MMM	MMM
 MAF	MMM	MMM	MMM	MMM	MM	MMM	MM
 MAFQ	MMM	MMM	MMM	MMM	MM	MMM	MM
 MPVB	MMM	MM	MM	MMM	MM	MMM	MMM
 MPVE	MMM	MM	MM	MM	MM	MMM	MMM
 MAB	MMM	MM	MM	MM	MM	MM	MM
 MAE	MMM	MM	MM	MM	MM	MM	MM
 MVS	MMM	MM	M	M	M	M	MM
 MVBR	MMM	MM	MMM	MM	M	MMM	MMM
 MVER	MMM	MM	MMM	MM	M	MMM	MMM
 MVDR	MMM	MMM	MMM	MM	M	MMM	MMM
 MAFR	MMM	MMM	MMM	MM	M	MMM	MMM

M Standard标准    MM Good强    MMM Maximum最强



# Model selection

Indication for model selection / 机型型号表示

MVB ——— 090 ——— 10 ——— P1 ——— K(□) ——— 1FK7040-5AK71-1

Model / 系列	Size / 规格	Ratio / 减速比 *	Precision / 精度	Output Shaft 输出轴	Motor reference 马达型号
MVB	040/060/090/120/140/180/220	3~100	P0≤1 arcmin P1≤3 arcmin P2≤5 arcmin P3≤standard	K:带键轴 S:光轴 C:非标轴 T:超载	<b>REXROTH</b> <b>SIEMENS</b> <b>SCHNEIDER</b> <b>PARKER</b> <b>MITSUBISHI</b> <b>PANASONIC</b> <b>YASKAWA</b> .....
MVE	040/060/090/120/155/205/235/330	3~100			
MVD	060/075/100/140/180/210/240	3~100			
MAF	047/064/090/110/140/200/255/285	4~100			
MAFQ	047/064/090/110/140/200/255/285	4~100			
MPVB	060A/060B/090A/090B/115A/115B	3~100			
MPVE	060A/060B/090A/090B/115A/115B	3~100			
MAB	060/090/115/140	3~100			
MAE	060/090/115/155	3~100			
MVS	060/080/100/125	3~100			
MVBR	040/060/090/120/140/180/220	3~100			
MVER	040/060/090/120/155/205/235	3~100			
MVDR	040/060/090/120/140/180/220	3~100			
MAFR	047/064/090/110/140/200/255	4~100			

\* MAB/MAE系列  
 减速比 6, 18, 24, 36, 42, 48, 54, 60  
 8, 32, 48, 56, 64, 72, 80  
 9, 27, 45, 63, 81, 90 公司暂不生产。

\* 1 Stage ( 3~10 ), 2 Stages ( 12~100 ) 3~10为1级, 12~100为2级  
 The following two stage transmission ratios are also available /两级传动亦可做出以下传动比:  
 3×4=12, 3×7=21, 3×9=27, 4×4=16, 4×6=24, 4×7=28 .....

## Formula symbols and indices

Designation	项目	Symbol /代码	Unit/单位
Reduction ratio	减速比	$i$	
Nominal output torque	额定输出力矩	$T_{2N}$	Nm
Peak acceleration torque	最大加速力矩	$T_{2B}$	Nm
Emergency braking torque	紧急制动力矩	$T_{2Not}$	Nm
Nominal input shaft speed	额定输入转速	$n_{1N}$	rpm
Max. input shaft speed	最大输入转速	$n_{1Max}$	rpm
Backlash	回程间隙	$j_t$	arcmin
Torsional stiffness	扭转刚性	$C_{2t}$	Nm/arcmin
Max. radial load	最大径向力	$F_{2RMax}$	N
Max. axial load	最大轴向力	$F_{2AMax}$	N
Rotational Inertia	转动惯量	$J_1$	$kgcm^2$
Working efficiency	工作效率	$\eta$	%
Working lifetime	工作寿命	$L_h$	h
Operating temperature	环境温度	$T$	$^{\circ}C$
Lubrication Method	润滑方式	Lub	
Protection class	防护等级	PC	
Mounting position	安装方向	MP	
Noise	噪音	dB	

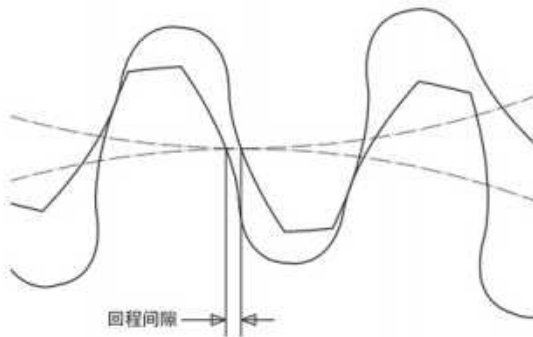
The following table indicates all the symbols and the units that are used in this catalogue. For the 14 gearbox series, all the technical data refer to the present table.

以上表格是所有产品性能表各参数的项目、符号、单位的文字备注，接下来14个系列产品的性能表，请对照此表格进行阅读

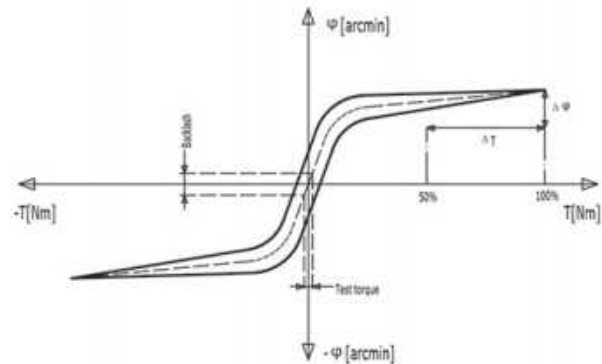
## Basic definitions

keyword 关键词	Explanation/解释说明
弧分	1度等于60弧分 ( $1^\circ = 60 \text{ arcmin}$ )。当回程间隙为1 arcmin时，齿轮箱旋转一圈传递到输出端的角偏差为1/60度。
回程间隙	是指减速机输出轴与输入轴回转时产生的最大偏差角，测量时先将减速机的输入轴固定，然后在输出端用力矩仪加载到一定的力矩，以克服齿轮箱内的摩擦力。
迟滞曲线	检测迟滞是为了得出减速机的扭转刚度，通过检测可以得出迟滞曲线。检测时，先将减速机的输入端固定，然后在输出端的两个旋向分别持续的加载到T2B（最大加速力矩）后逐步卸载，可绘制出对应扭矩的扭转角，能得到一条闭合的曲线，从迟滞曲线里可以计算出减速机的回程间隙和扭转刚度。
扭转刚度	由加载力矩和所产生的扭转角之间的比率来定义， $C2t = \Delta T / \Delta \varphi$ 。 在迟滞曲线上能计算出需要用多大的扭矩才能把输出轴转动一弧分。
转动惯量	表示物体绕轴转动时保持其匀速圆周运动或静止的特性参数。

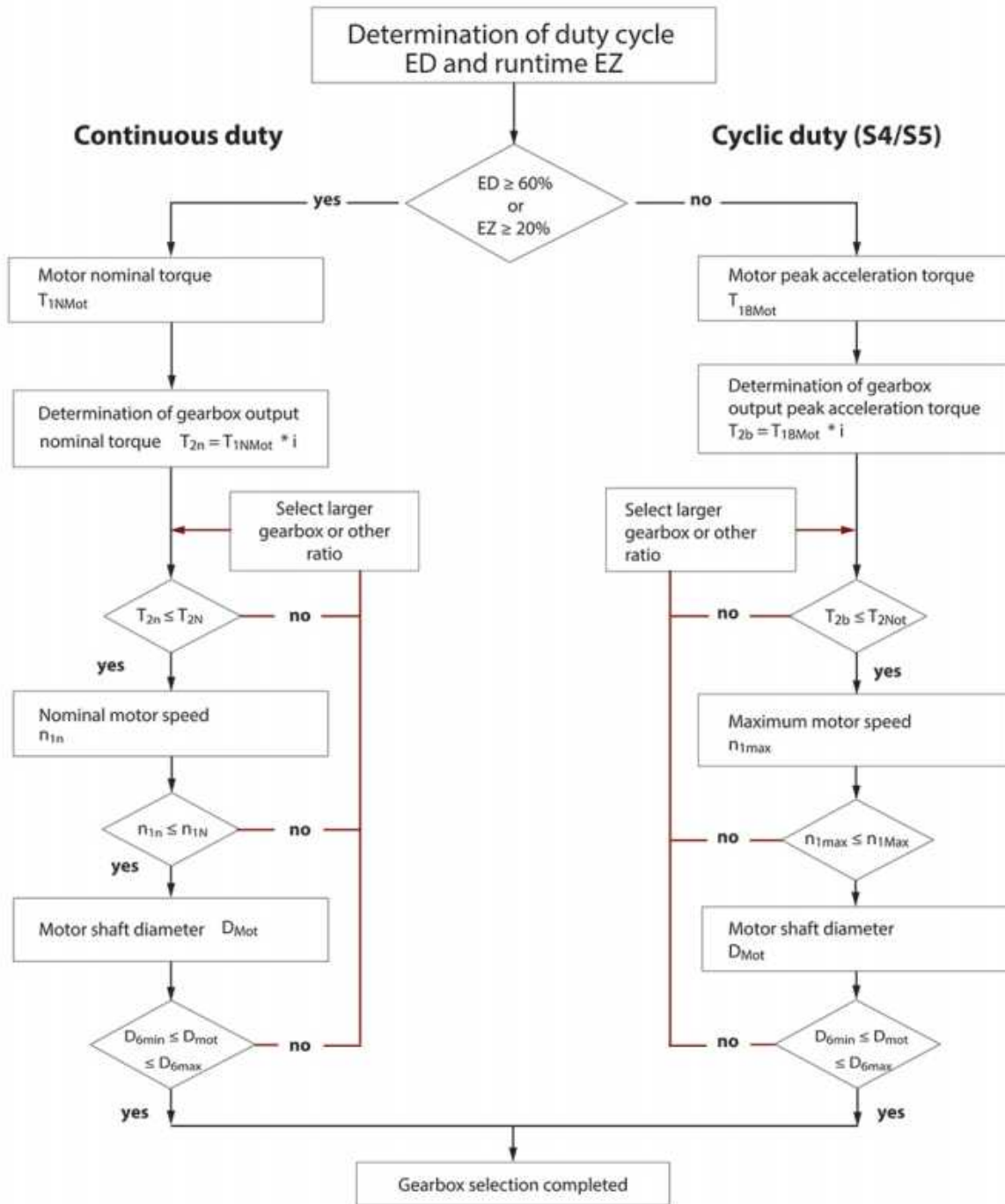
回程间隙示意图



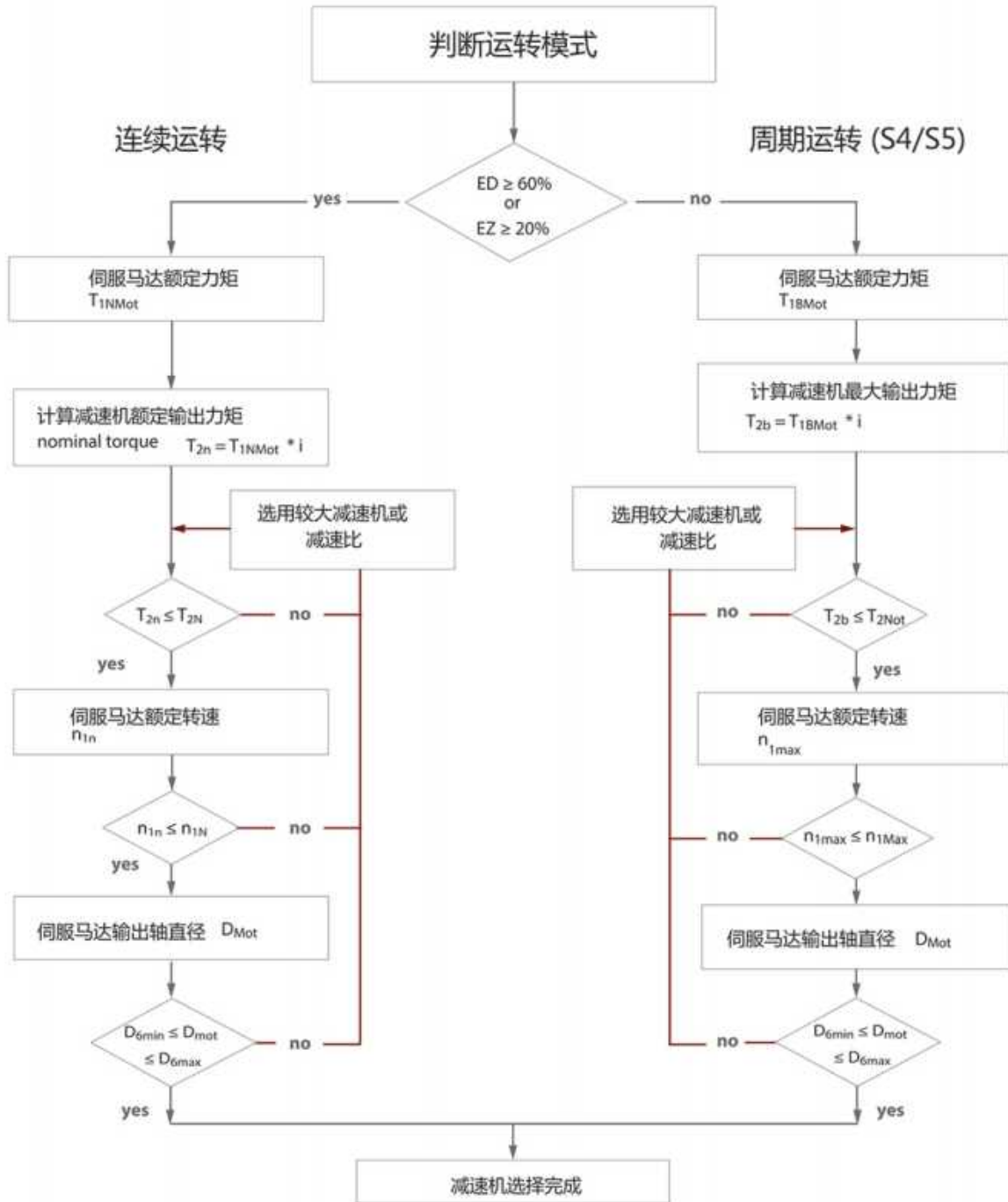
迟滞曲线示意图



# Ordering process



- |                    |                |                   |  |
|--------------------|----------------|-------------------|--|
| i                  | from catalogue | n <sub>1n</sub>   | nominal motor speed                        |
| T <sub>2N</sub>    | from catalogue | n <sub>1N</sub>   | gearbox nominal input speed from catalogue |
| T <sub>2Not</sub>  | from catalogue | n <sub>1max</sub> | maximum motor speed                        |
| T <sub>18Mot</sub> | motor data     | n <sub>1Max</sub> | gearbox maximum input speed from catalogue |
| T <sub>1NMot</sub> | motor data     |                   |  |



i 见样本参数  
 T<sub>2N</sub> 见样本参数  
 T<sub>2Not</sub> 见样本参数  
 T<sub>1BMot</sub> 见伺服马达参数  
 T<sub>1NMot</sub> 见伺服马达参数

n<sub>1n</sub> 伺服马达额定转速  
 n<sub>1N</sub> 减速机额定输入转速 见样本参数  
 n<sub>1max</sub> 伺服马达最大转速  
 n<sub>1Max</sub> 减速机最大输入转速  
 见样本参数

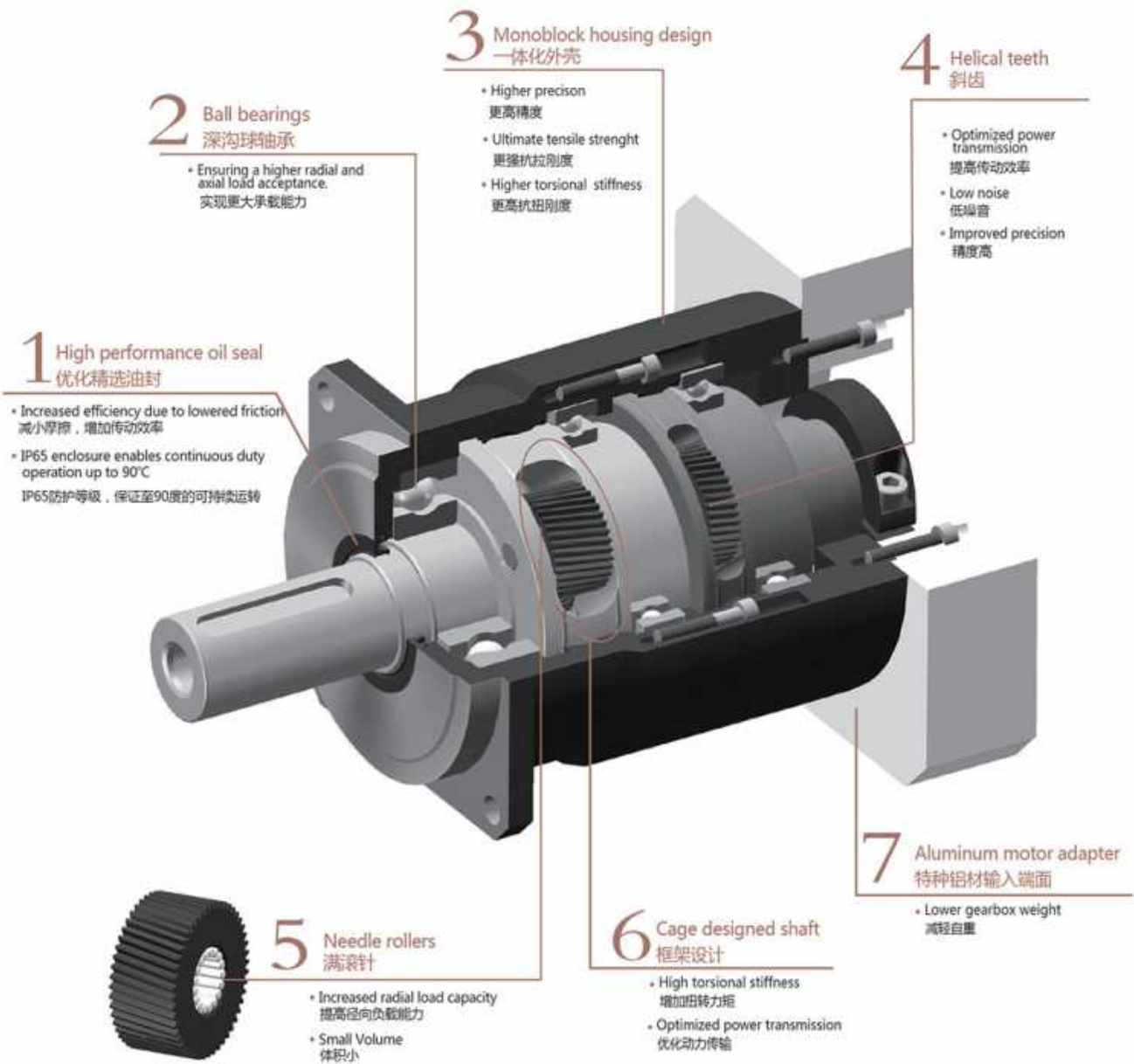


**MVB SERIES**



专门为频繁反复和紧急加速而设计，MVB系列可提供高精度、高刚性和高扭矩。

Powerful, robust and precise, this planetary gearbox is designed to work under heavy operating duty.



### 造型数据:

### Selection data:

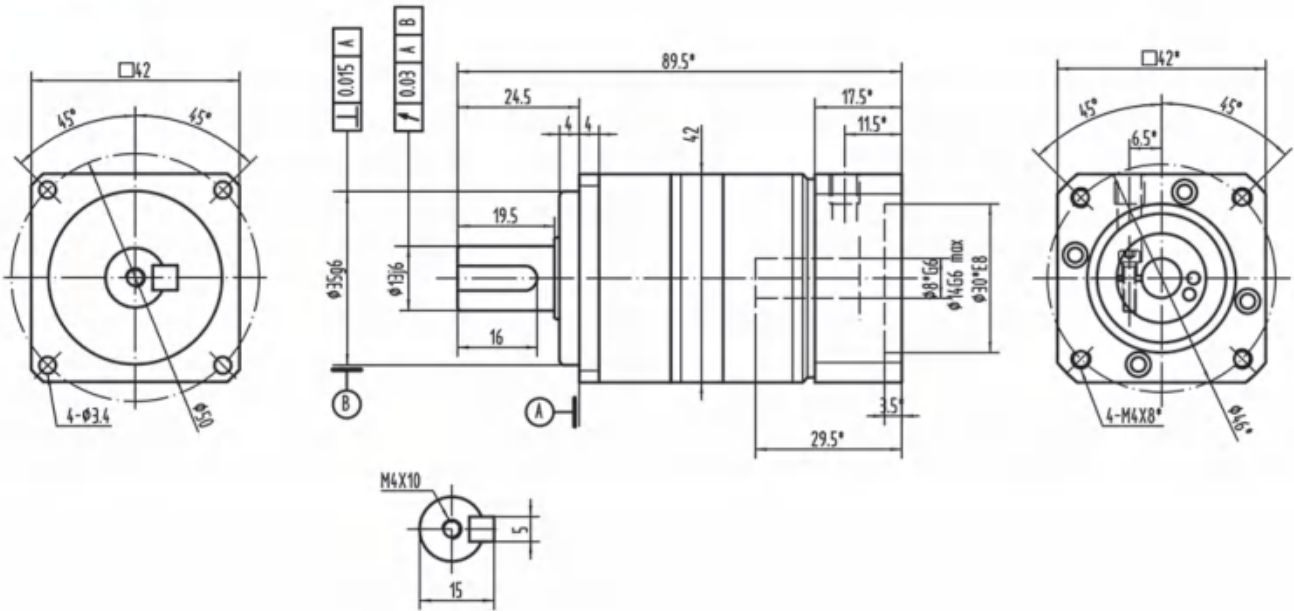
扭矩 ( Nm )	14-1900
速比	3-100
背隙 ( arcmin )	3-5
最大工作温度 ( °C )	90
噪音 ( dB )	63-77

Nominal output torque ( Nm )	14-1900
Reduction ratio	3-100
Backlash ( arcmin )	3-5
Max.working temperature ( °C )	90
Noise ( dB )	63-77

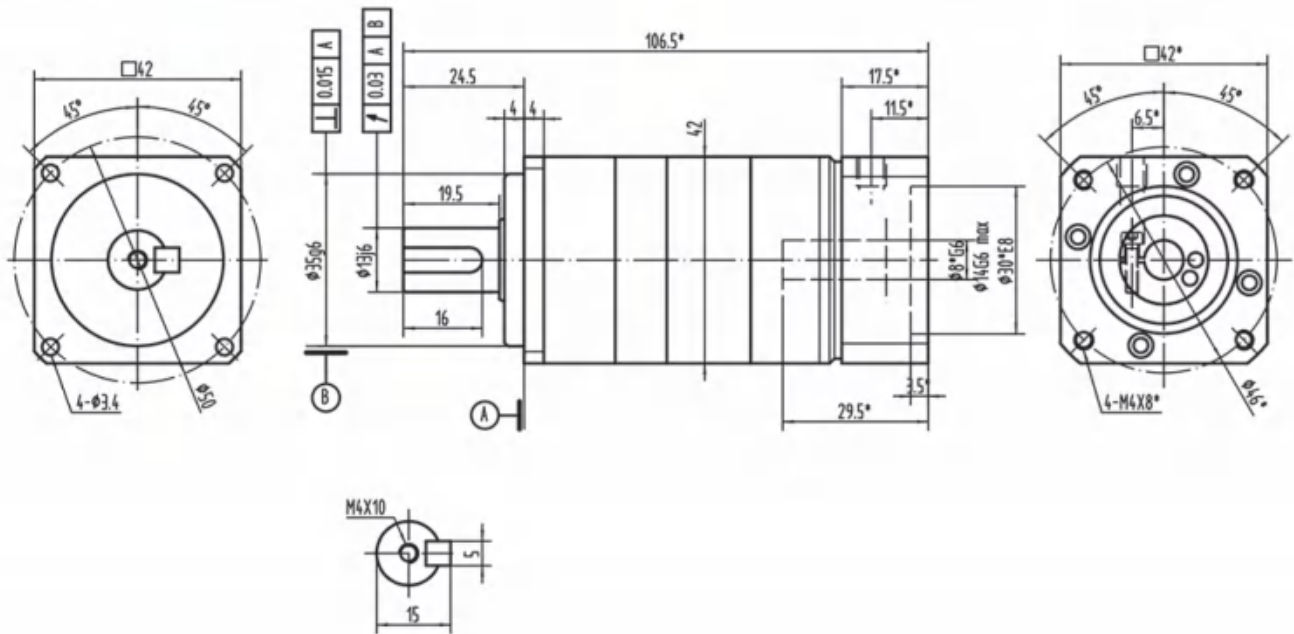
# Drawing / Size

MVB

## MVB-040-L1



## MVB-040-L2

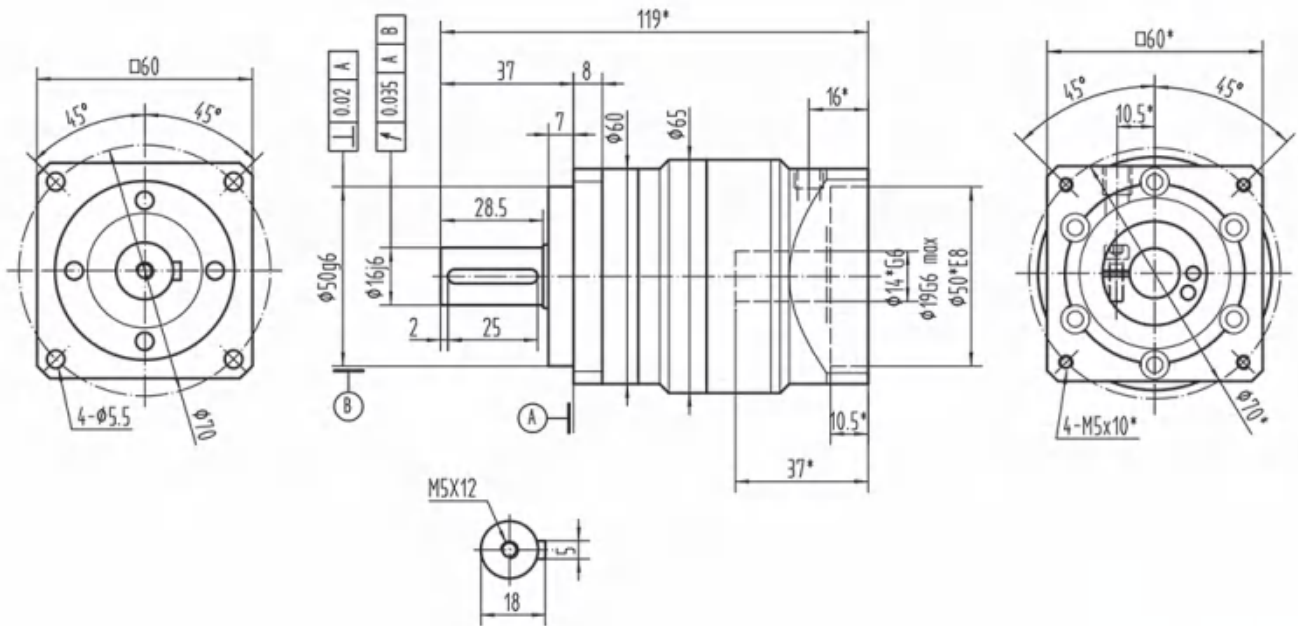


\* Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

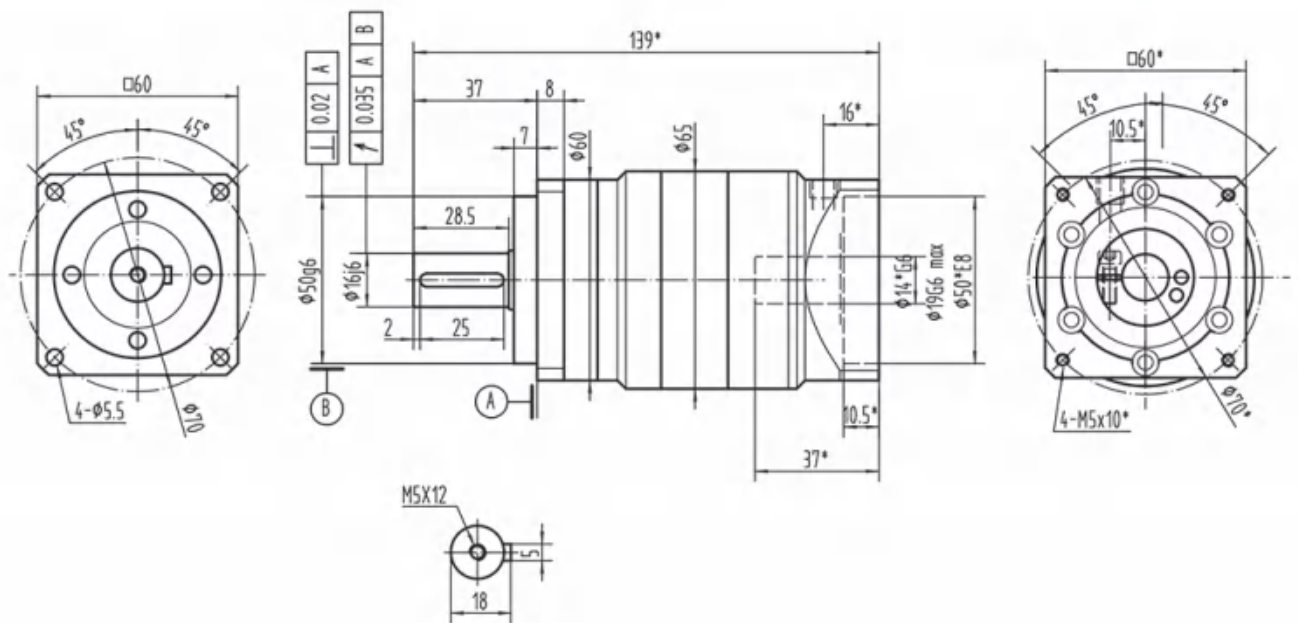
# Drawing / Size

MVB

MVB-060-L1



MVB-060-L2

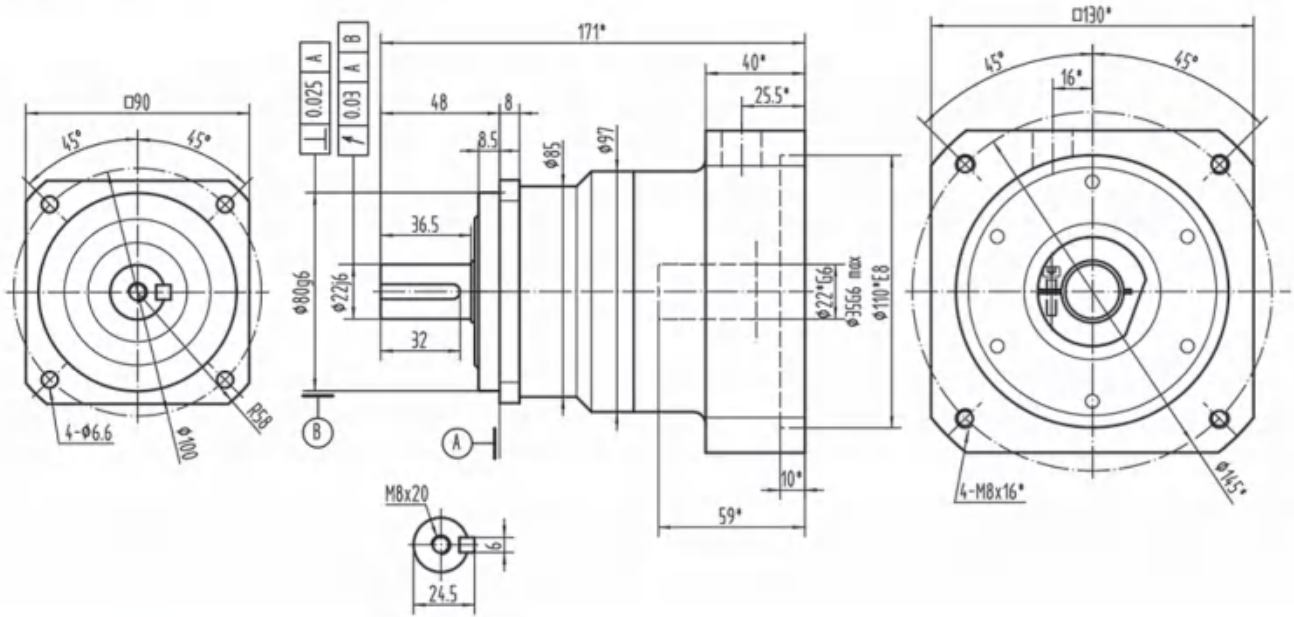


\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

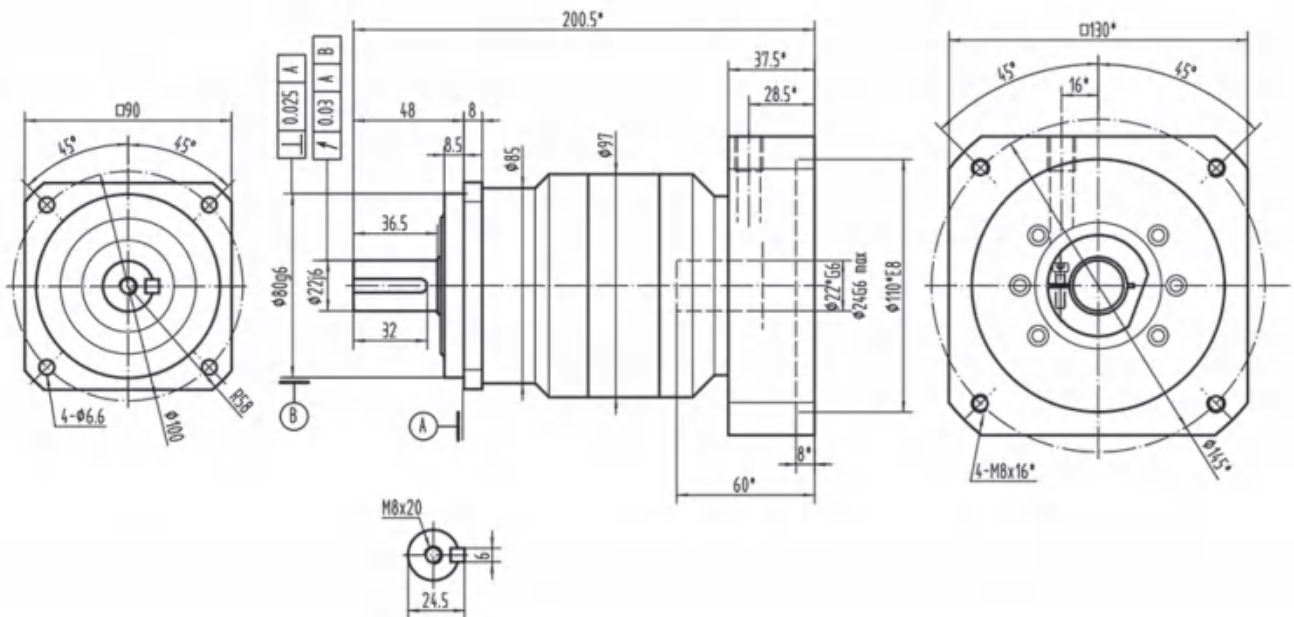
# Drawing / Size

MVB

MVB-090-L1



MVB-090-L2

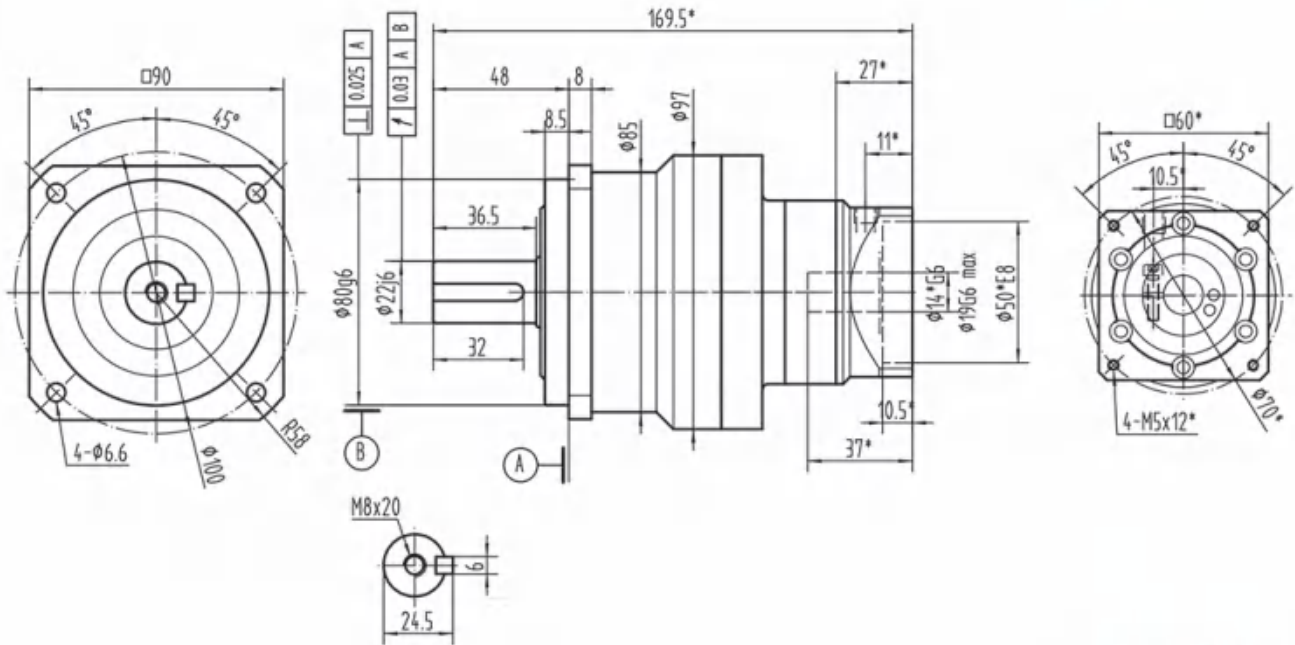


\* Dimensions based on servo-motor, please contact us for custom made order.  
 注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

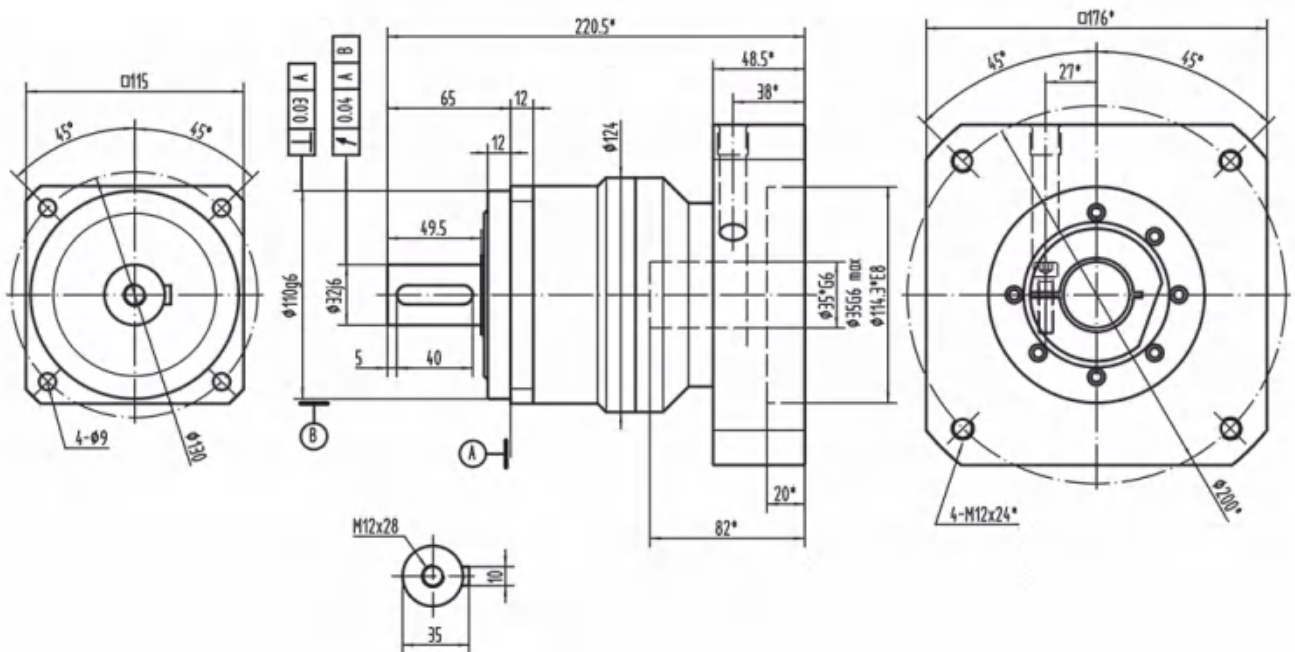


## Drawing / Size

**MVB-090-L2**  
(Smaller hole)



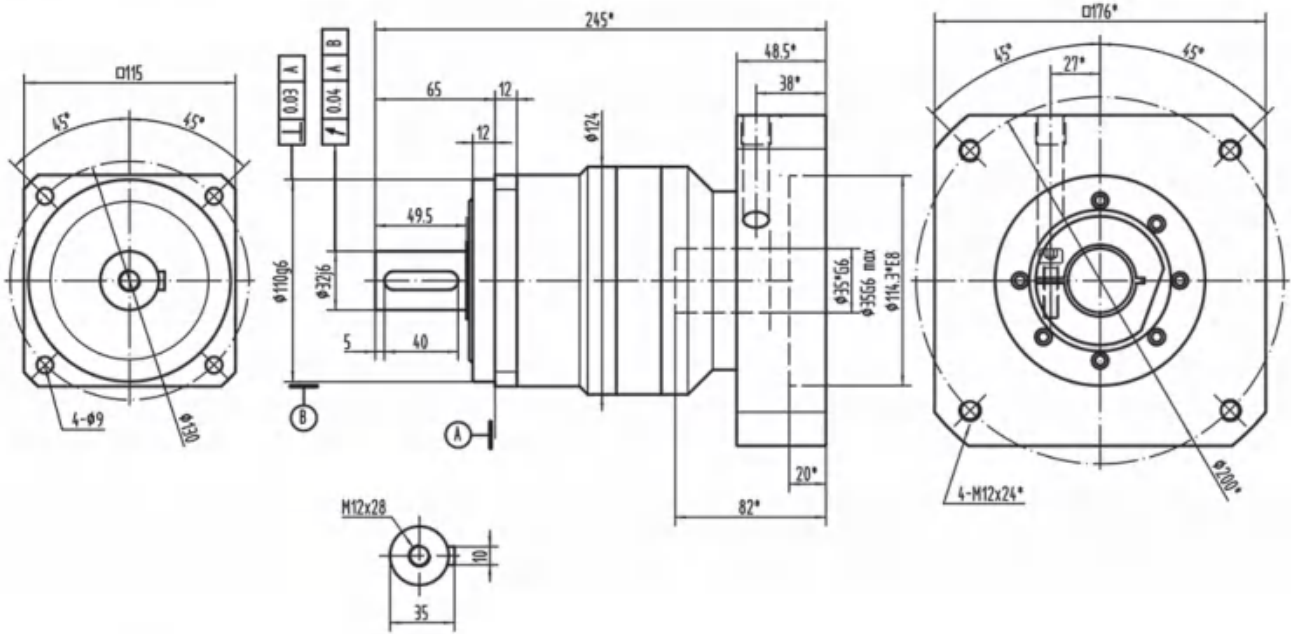
**MVB-120-L1**



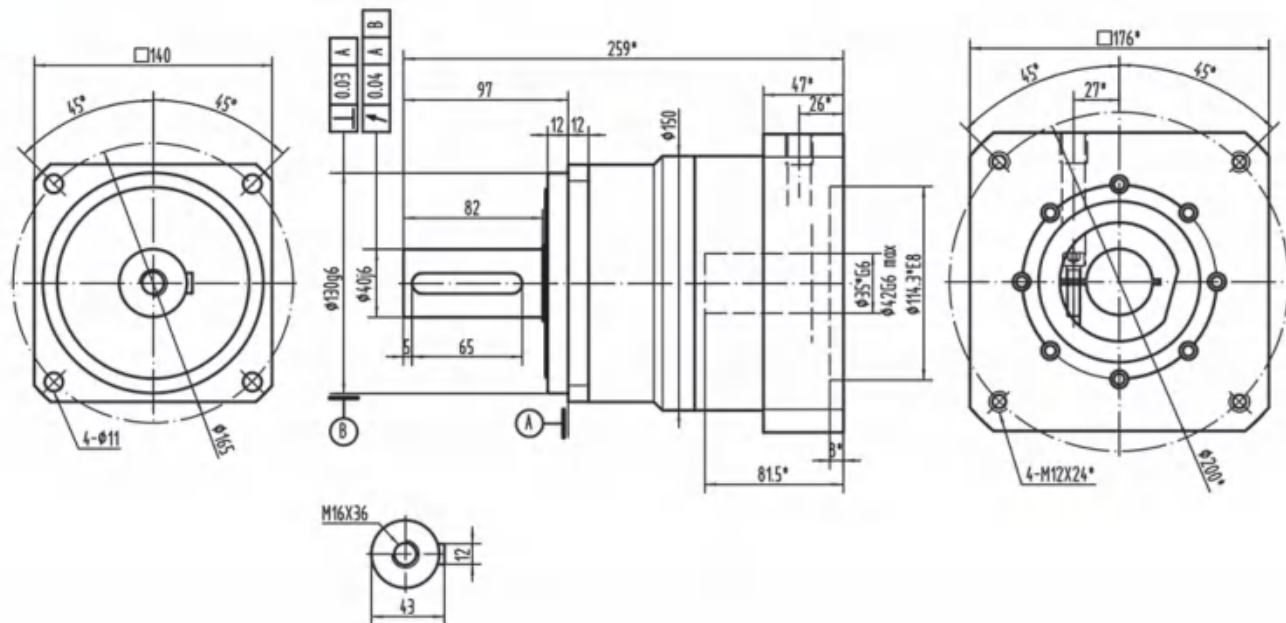
\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

# Drawing / Size

## MVB-120-L2



## MVB-140-L1

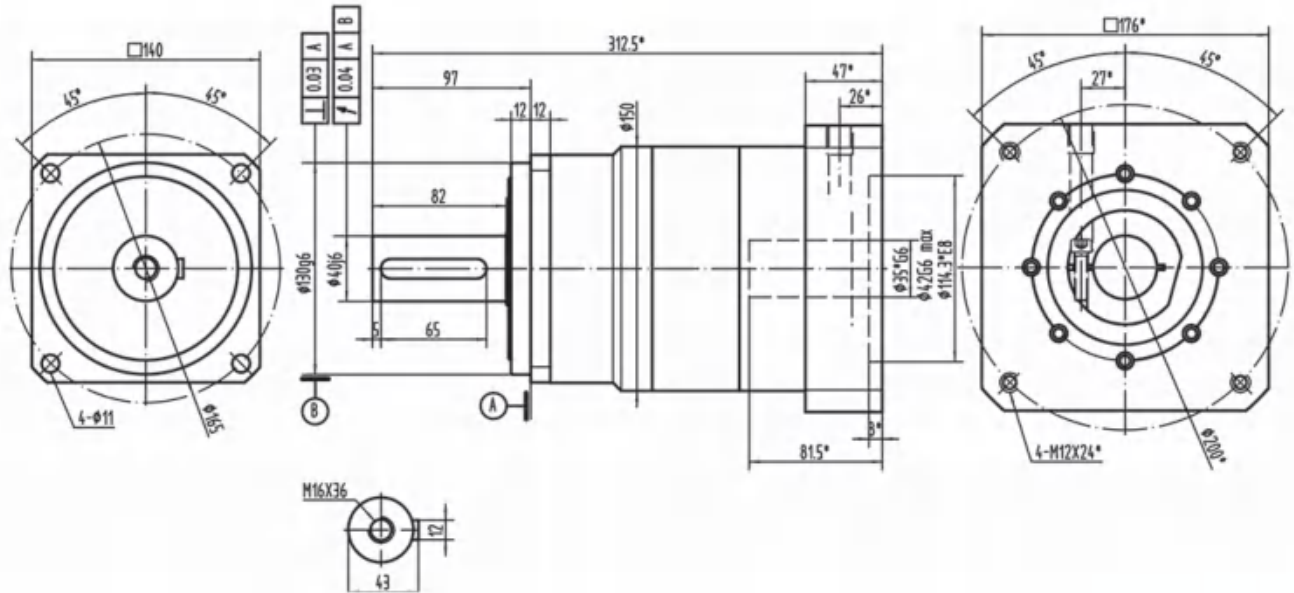


\* Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

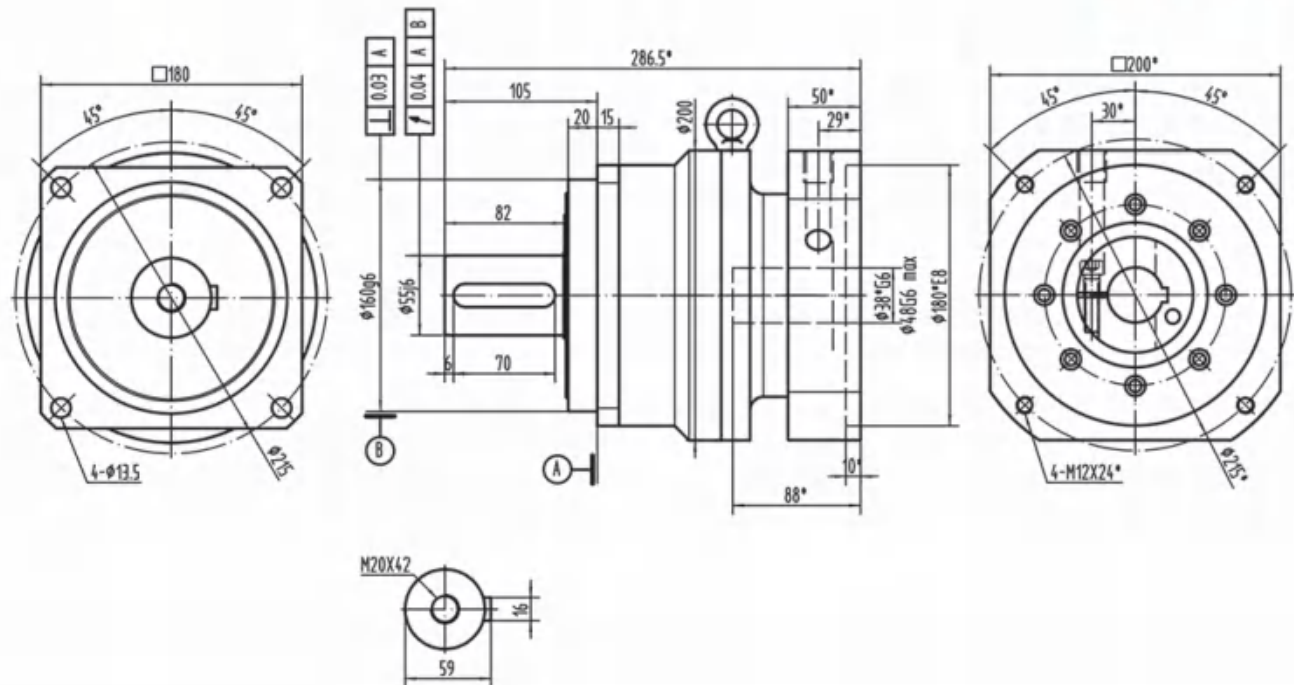
Drawing / Size

MVB-140-L2

MVB



MVB-180-L1

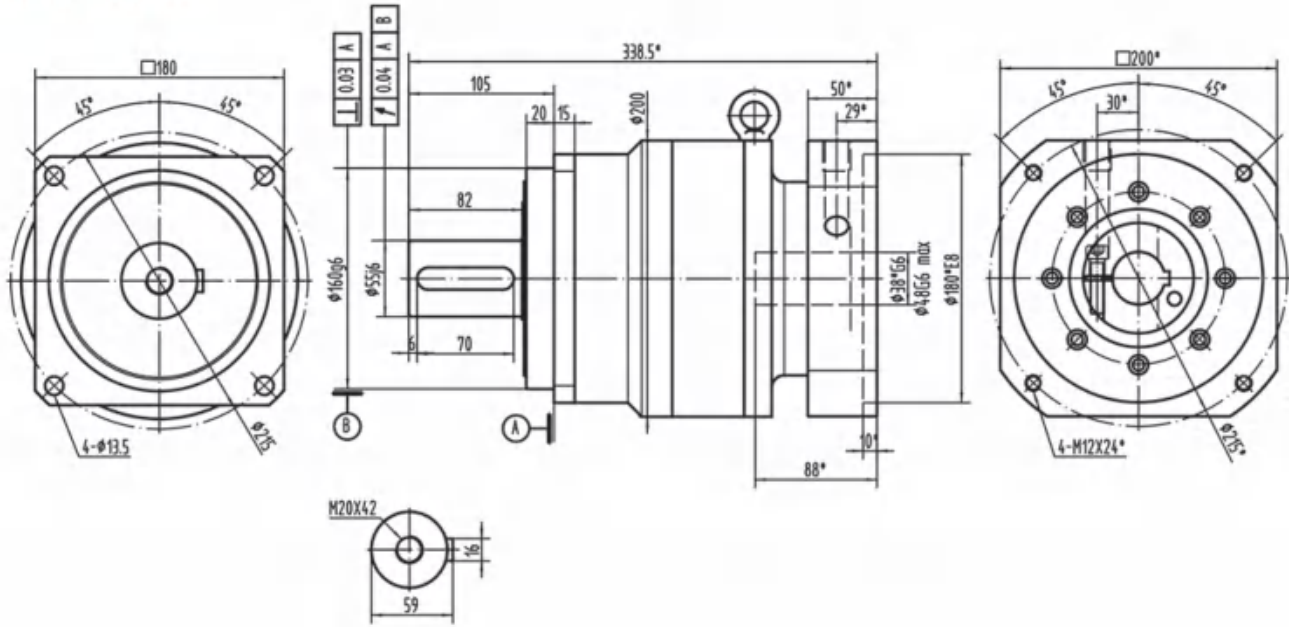


\* Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

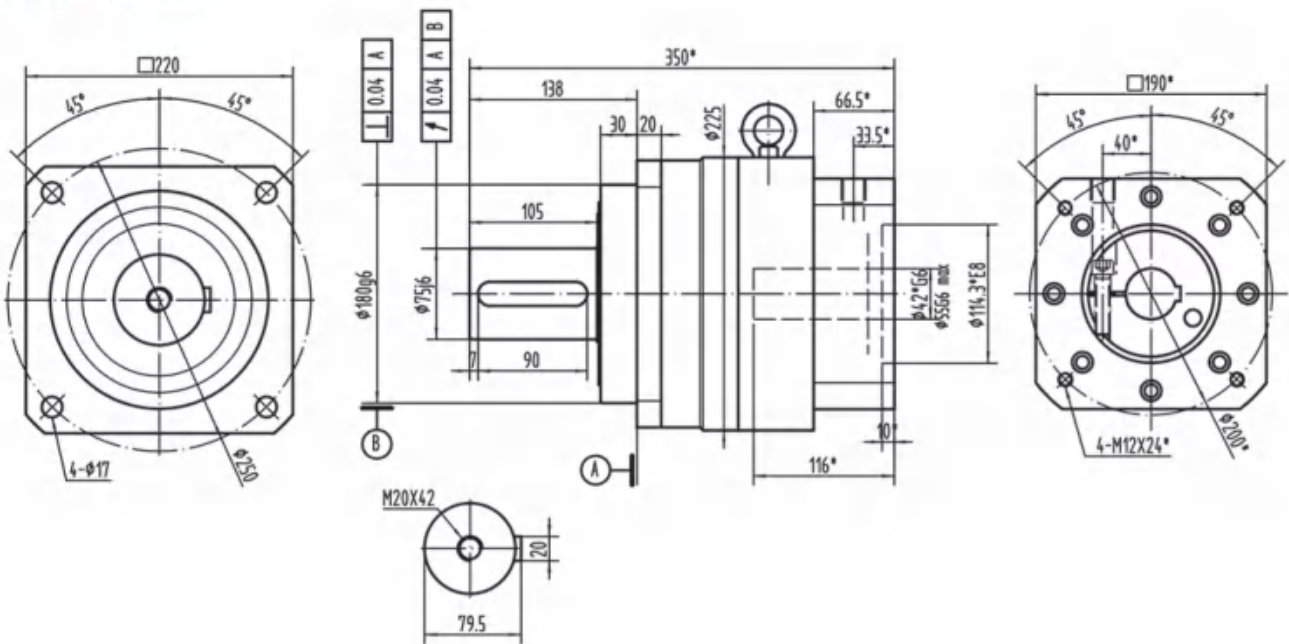
Drawing / Size

MVB

MVB-180-L2



MVB-220-L1



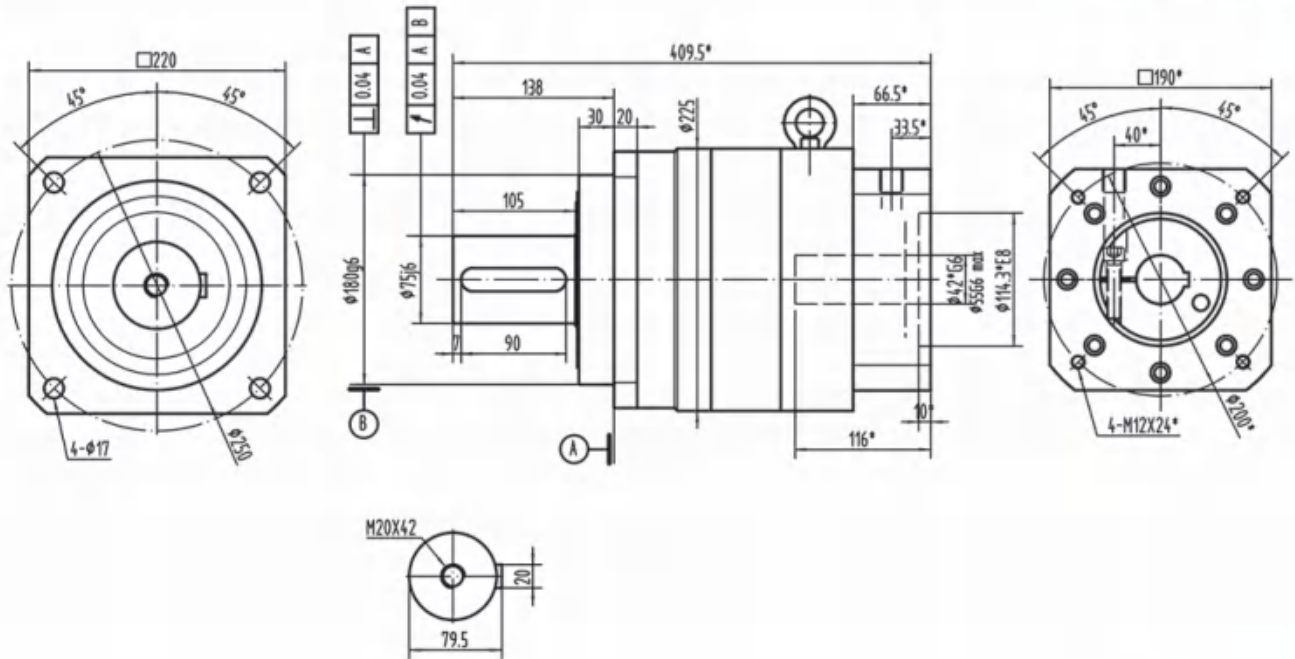
\* Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！



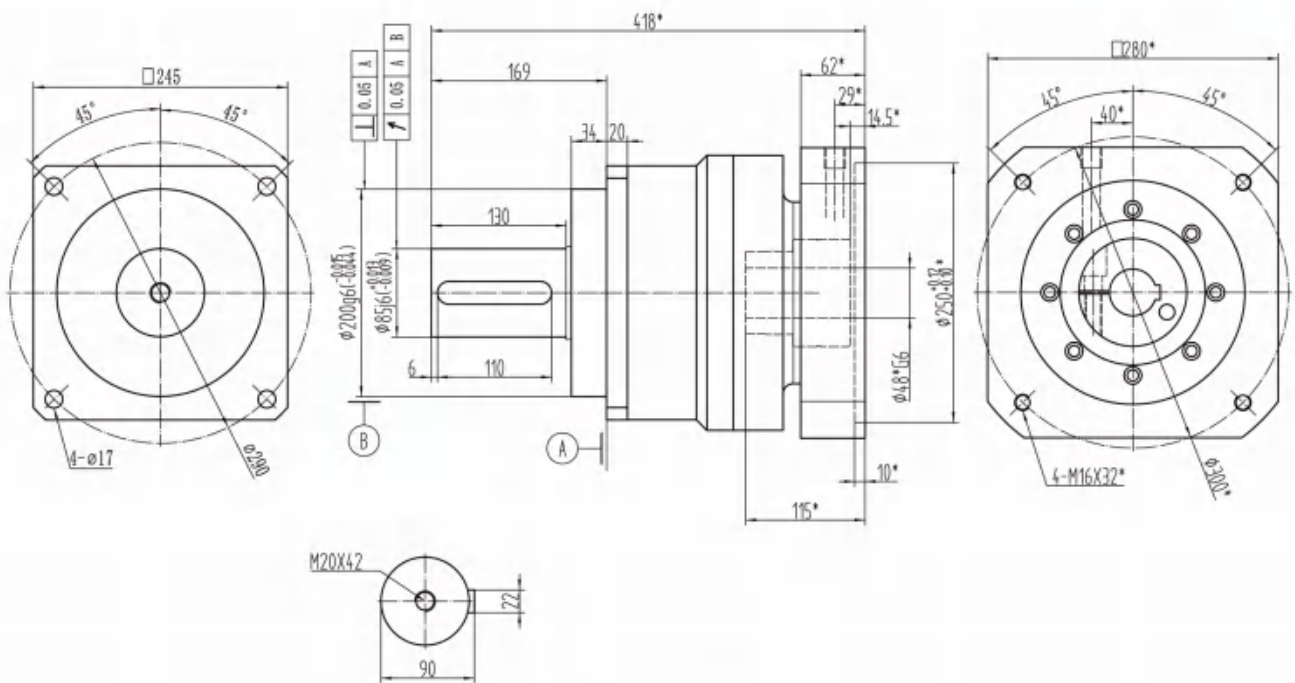
Drawing / Size

MVB-220-L2

MVB



MVB-240-L1

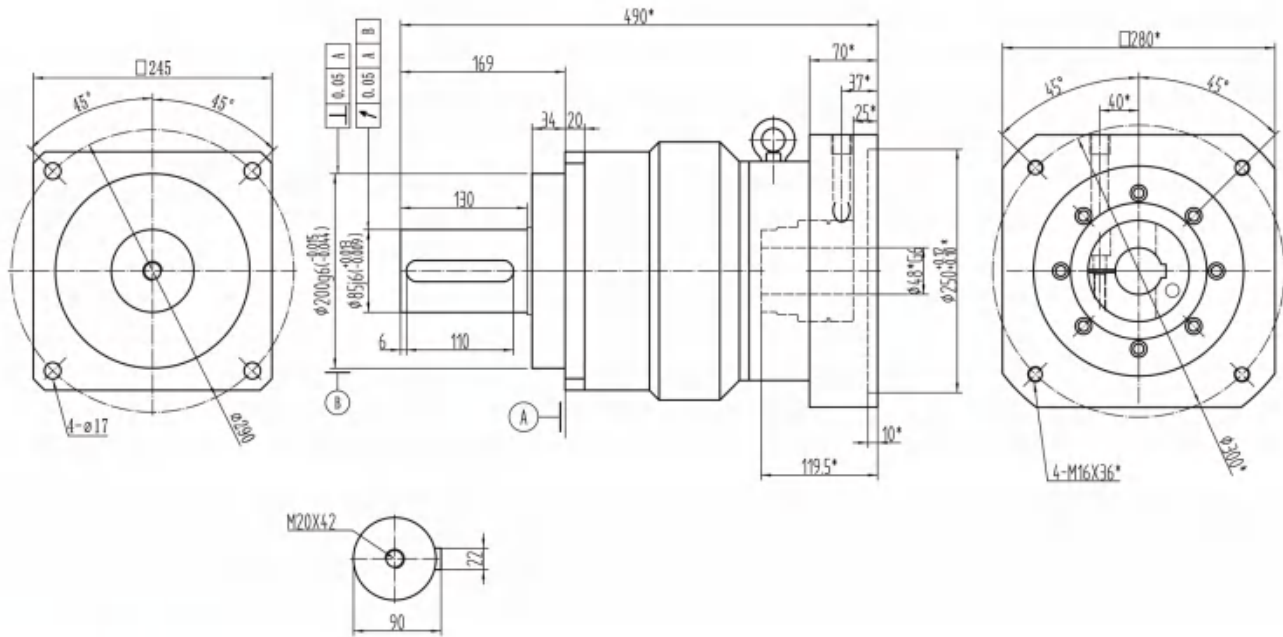


\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

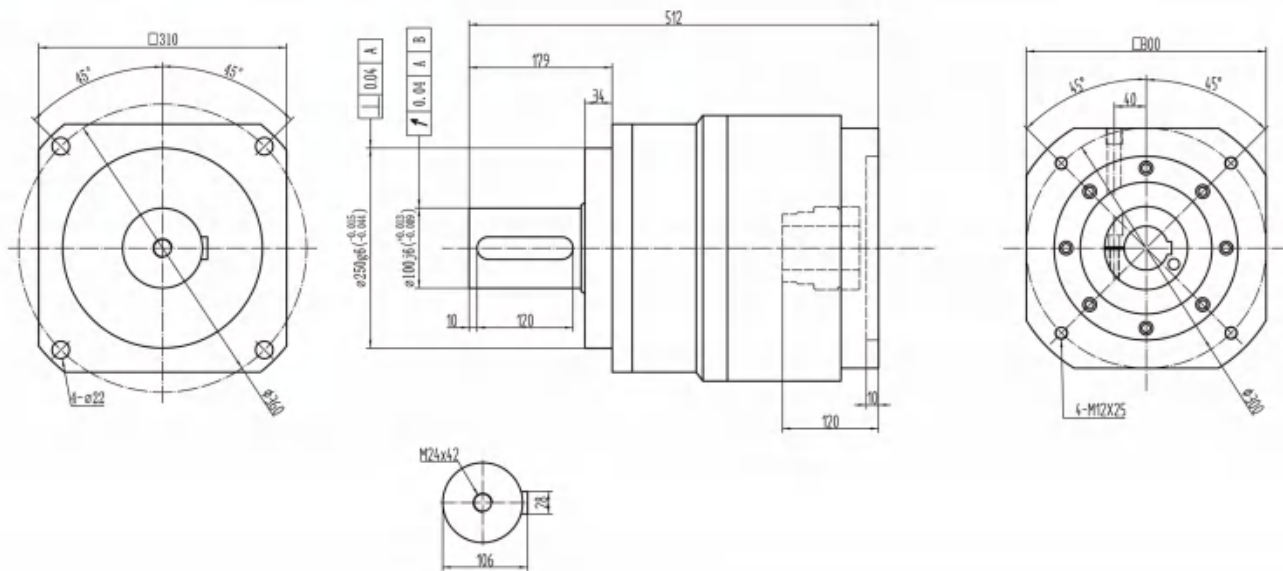
# Drawing / Size

MVB

## MVB-240-L2

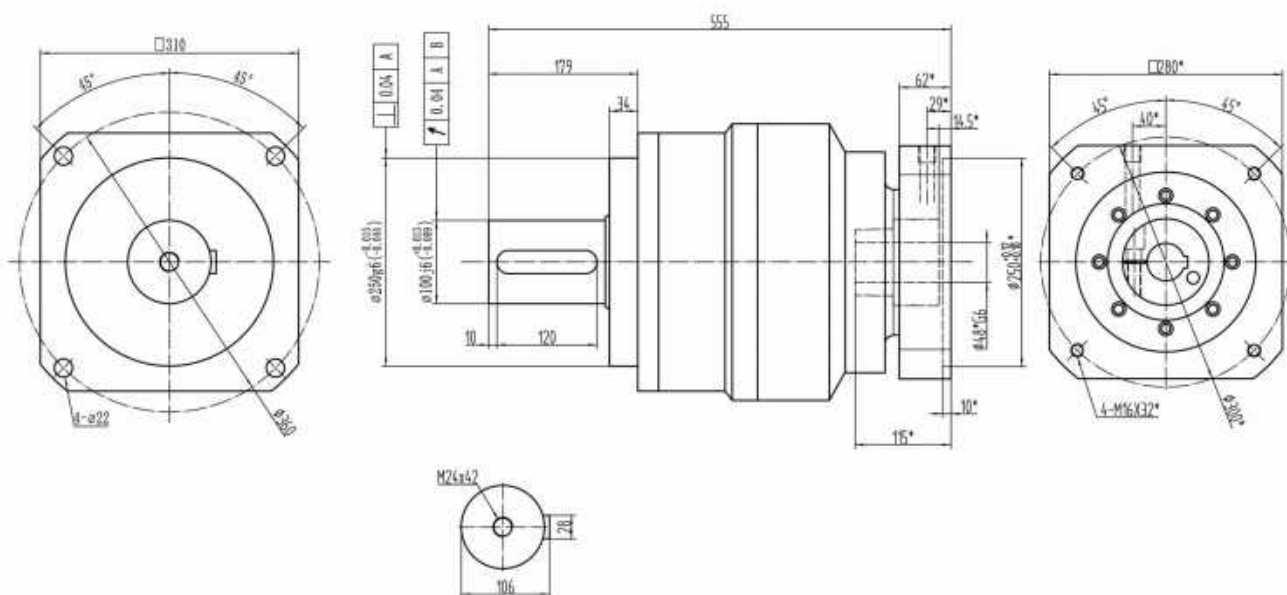


## MVB-300-L1



\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！





MVB-040																		
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>i</sub>	C <sub>2r</sub>	F <sub>2PMax</sub>	F <sub>2MMax</sub>	J <sub>2</sub>	η	U <sub>h</sub>	T	Lub	PC	MP	dB	
Unit.		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	Nm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C					
I STAGE	3	14	2×T <sub>2N</sub>	4000	8000	≤3	3	700	610	0.03	≥95	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤63	
	4	14					3											
	5	20					3											
	6	20					3											
	7	20					2.2											
	8	20					3											
	9	14					3											
II STAGE	10	14	2×T <sub>2N</sub>	4000	8000	≤5	2.2	700	610	0.03	≥90	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤63	
	15	14					3											
	20	14					3											
	35	20					3											
	40	20					3											
	50	20					3											
	80	20					3											
100	14	2.2																

\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

# Performance table

MVB

MVB-060																																
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>t</sub>	C <sub>t</sub>	F <sub>20Max</sub>	F <sub>30Max</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB															
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	Nm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C																			
I STAGE	3	40	2×T <sub>2N</sub>	3000	6000	≤3	8	1500	1050	0.16	≥95	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤63															
	4	45								0.14																						
	5	60								0.13																						
	6	55								0.13																						
	7	55								0.13																						
	8	55								0.13																						
	9	40								0.13																						
	10	40								0.13																						
	II STAGE	15								40								2×T <sub>2N</sub>	3000	6000	≤5	8	1500	1050	0.13	≥90	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤63
		20								45															0.13							
35		60	0.13																													
40		55	0.13																													
50		55	0.13																													
80		55	0.13																													
100		40	0.13																													

MVB-090																																
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>t</sub>	C <sub>t</sub>	F <sub>20Max</sub>	F <sub>30Max</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB															
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	Nm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C																			
I STAGE	3	100	2×T <sub>2N</sub>	3000	6000	≤3	20	3200	2300	0.61	≥95	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤67															
	4	110								0.48																						
	5	150								0.47																						
	6	150								0.47																						
	7	150								0.45																						
	8	140								0.45																						
	9	100								0.42																						
	10	100								0.4																						
	II STAGE	15								100								2×T <sub>2N</sub>	3000	6000	≤5	20	3200	2300	0.13	≥90	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤67
		20								110															0.13							
35		150	0.13																													
40		150	0.13																													
50		150	0.13																													
80		140	0.13																													
100		100	0.13																													

MVB-120																															
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	j <sub>1</sub>	C <sub>12</sub>	F <sub>2RMMax</sub>	F <sub>2MMMax</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP															
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	Nm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C				dB														
I STAGE	3	240	2×T <sub>2N</sub>	3000	6000	≤3	41	6000	4100	3.25	≥95	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤70														
	4	320					41			2.74																					
	5	360					41			2.71																					
	6	350					41			2.6																					
	7	360					41			2.6																					
	8	360					41			2.6																					
	9	240					41			2.6																					
	10	240					41			2.6																					
	II STAGE	15					240			2×T <sub>2N</sub>								3000	6000	≤5	41	6000	4100	0.45	≥90	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤70
		20					320														41			0.45							
35		360	41	0.45																											
40		360	41	0.45																											
50		360	41	0.4																											
80		360	41	0.4																											
100		240	41	0.4																											

MVB-140																															
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	j <sub>1</sub>	C <sub>12</sub>	F <sub>2RMMax</sub>	F <sub>2MMMax</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP															
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	Nm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C				dB														
I STAGE	3	350	2×T <sub>2N</sub>	3000	6000	≤3	50	9000	8300	9.21	≥95	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤72														
	4	550					50			7.54																					
	5	600					50			7.42																					
	6	600					50			7.42																					
	7	600					50			7.14																					
	8	550					50			7.14																					
	9	380					50			7.08																					
	10	380					50			7.03																					
	II STAGE	15					460			2×T <sub>2N</sub>								3000	6000	≤5	50	9000	8300	2.63	≥90	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤72
		20					650														50			2.63							
35		700	50	2.43																											
40		700	50	2.43																											
50		700	50	2.39																											
80		700	50	2.39																											
100		460	50	2.39																											

# Performance table

MVB

MVB-180																																			
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	j <sub>1</sub>	C <sub>2t</sub>	F <sub>200Max</sub>	F <sub>200Min</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP																			
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	Nm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C					dB																	
I STAGE	3	600	2×T <sub>2N</sub>	2000	4000	≤3	145	14500	13500	28.98	≥95	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤75																		
	4	1000					145			23.67																									
	5	1000					145			23.29																									
	6	1000					145			22.29																									
	7	1000					145			22.48																									
	8	1000					145			22.48																									
	9	650					145			22.40																									
	10	650					145			22.51																									
	II STAGE	15					980			2×T <sub>2N</sub>										2000	4000	≤5	145	14500	13500	7.3	≥90	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤75		
		20					1350																145			7.3									
35		1400	145	7.1																															
40		1350	145	6.92																															
50		1400	145	6.92																															
80		1400	145	6.72																															
100		980	145	6.72																															

MVB-220																																			
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	j <sub>1</sub>	C <sub>2t</sub>	F <sub>200Max</sub>	F <sub>200Min</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP																			
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	Nm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C					dB																	
I STAGE	3	1100	2×T <sub>2N</sub>	1500	3000	≤3	225	20500	19000	69.61	≥95	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤77																		
	4	1600					225			54.37																									
	5	1800					225			53.27																									
	6	1800					225			53.27																									
	7	1800					225			50.97																									
	8	1800					225			50.88																									
	9	1200					225			50.73																									
	10	1200					225			50.56																									
	II STAGE	15					1300			2×T <sub>2N</sub>										1500	3000	≤5	225	20500	19000	22.79	≥90	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤77		
		20					1800																225			22.79									
35		1900	225	22.59																															
40		1900	225	21.83																															
50		1900	225	21.83																															
80		1900	225	21.70																															
100		1300	225	21.60																															

## Performance table

MVB-240																	
Symb.	i	T <sub>2N</sub>	T <sub>2Net</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>t</sub>	C <sub>t</sub>	F <sub>205Max</sub>	F <sub>2Max</sub>	J <sub>t</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	Nm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C				dB
I STAGE	3	3000								180	≥95			Life Lubrication 终身润滑	IP65	Any 任何方向	≤77
	4	3000							180								
	5	3150							170								
	6	3150							170								
	7	3150				≤3			170								
	8	3000							170								
	9	2400	2×T <sub>2N</sub>	1000	2500		540	29000	26500	150							
	10	2200							150								
II STAGE	15	3000								64	≥90						
	20	3000								64							
	25	3150								64							
	50	3150				≤5				64							
	80	3150								64							
	100	2300								64							

MVB-300																	
Symb.	i	T <sub>2N</sub>	T <sub>2Net</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>t</sub>	C <sub>t</sub>	F <sub>205Max</sub>	F <sub>2Max</sub>	J <sub>t</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	Nm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C				dB
I STAGE	3	8150								252.96	≥95			Life Lubrication 终身润滑	IP65	Any 任何方向	≤75
	4	8730							230.72								
	5	8660							226.05								
	7	8520				≤3			216.29								
	10	8310							214.55								
II STAGE	15	8150	2×T <sub>2N</sub>	2000	3000		980	224500	112000	185.05	≥90	> 20000	-15~45				
	20	8730							185.05								
	25	8660							185.05								
	35	8520							183.43								
	40	8440				≤5			183.43								
	50	8660							183.43								
	70	8520							177.26								
	100	8310							175.39								



**MVE SERIES**



专门为频繁反复和紧急加速而设计，MVE系列可提供高精度、高刚性和高扭矩。  
Powerful, robust and precise, this planetary gearbox is designed to work under heavy operating duty.



造型数据：  
Selection data:

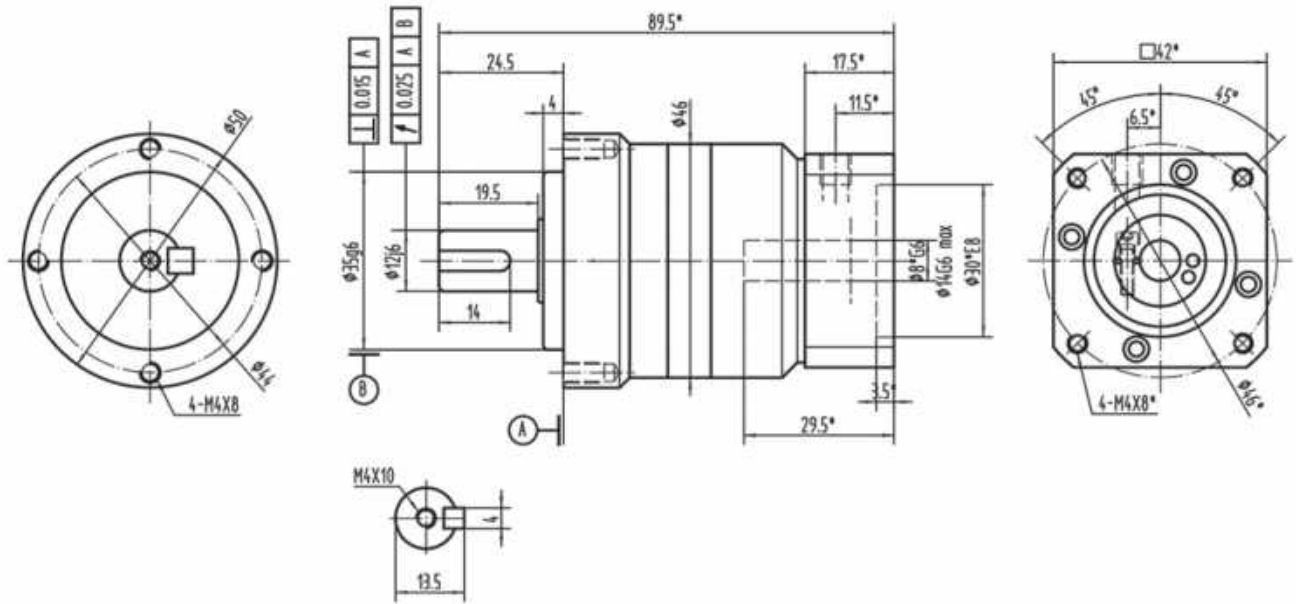
扭矩 ( Nm )	14-1900
速比	3-100
背隙 ( arcmin )	3-5
最大工作温度 ( °C )	90
噪音 ( dB )	63-77

Nominal output torque ( Nm )	14-1900
Reduction ratio	3-100
Backlash ( arcmin )	3-5
Max.working temperature ( °C )	90
Noise ( dB )	63-77

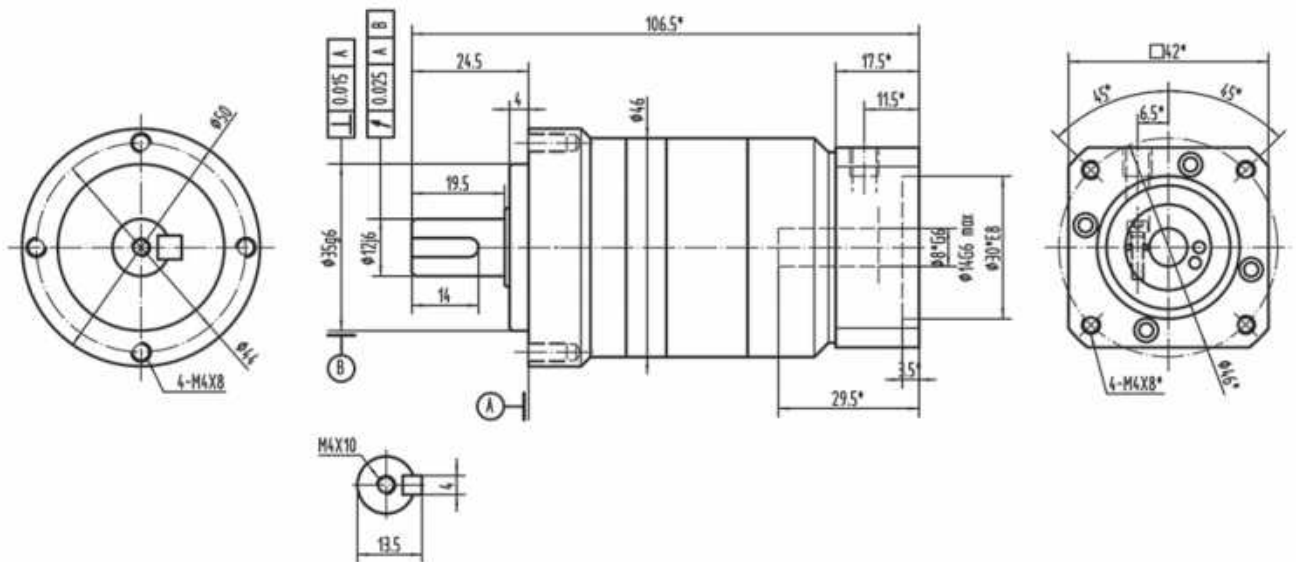
# Drawing / Size

## MVE-040-L1

MVE



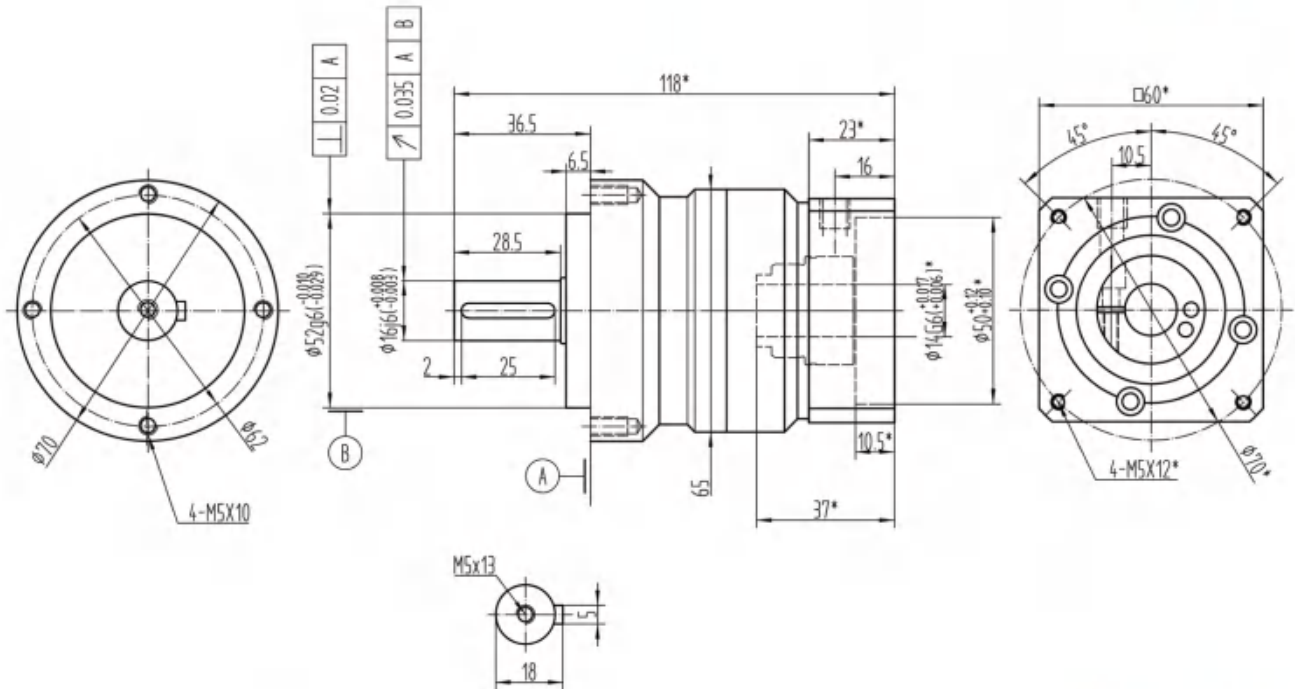
## MVE-040-L2



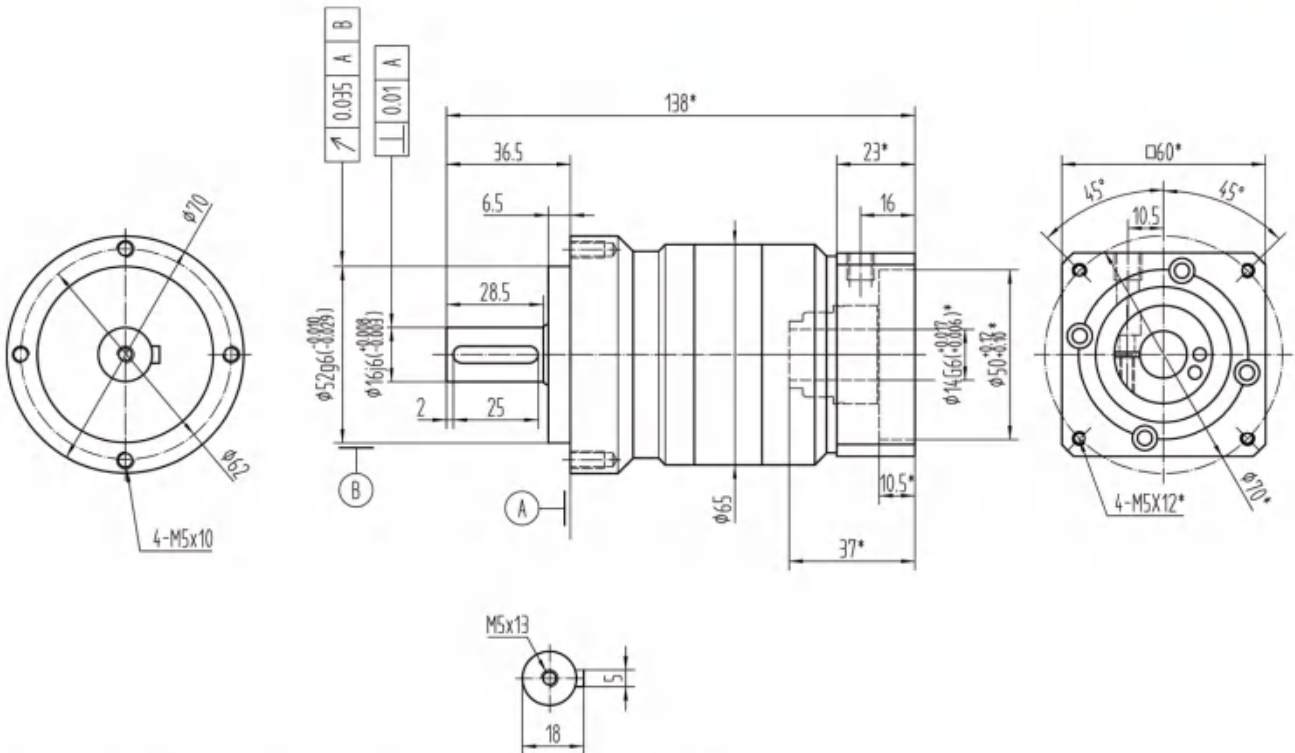
\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

# Drawing / Size

MVE-060-L1



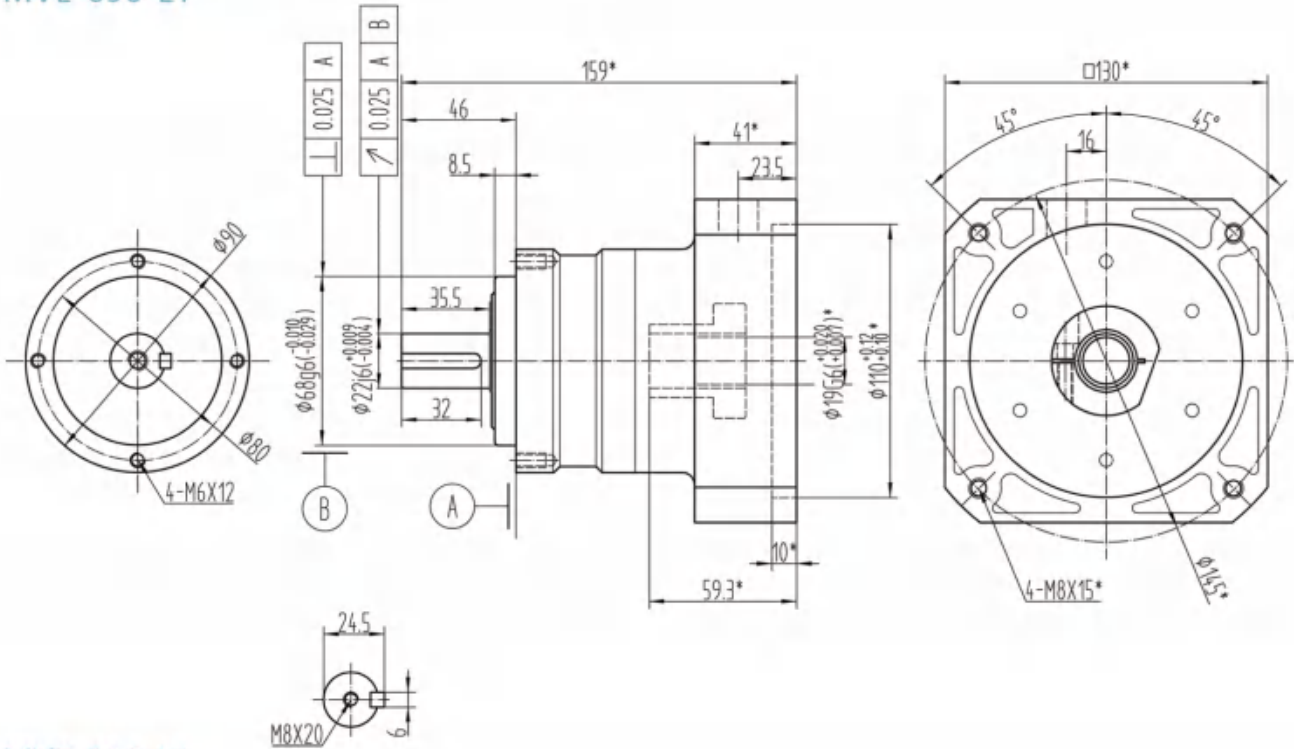
MVE-060-L2



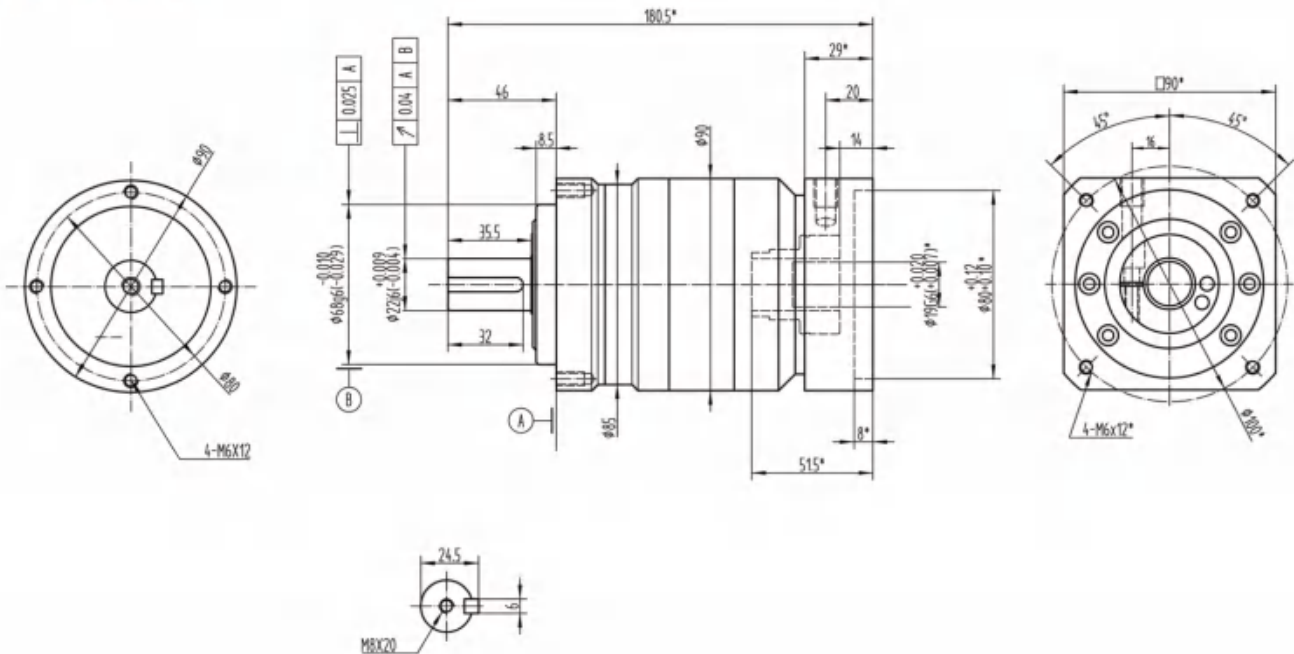
\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

# Drawing / Size

## MVE-090-L1



## MVE-090-L2

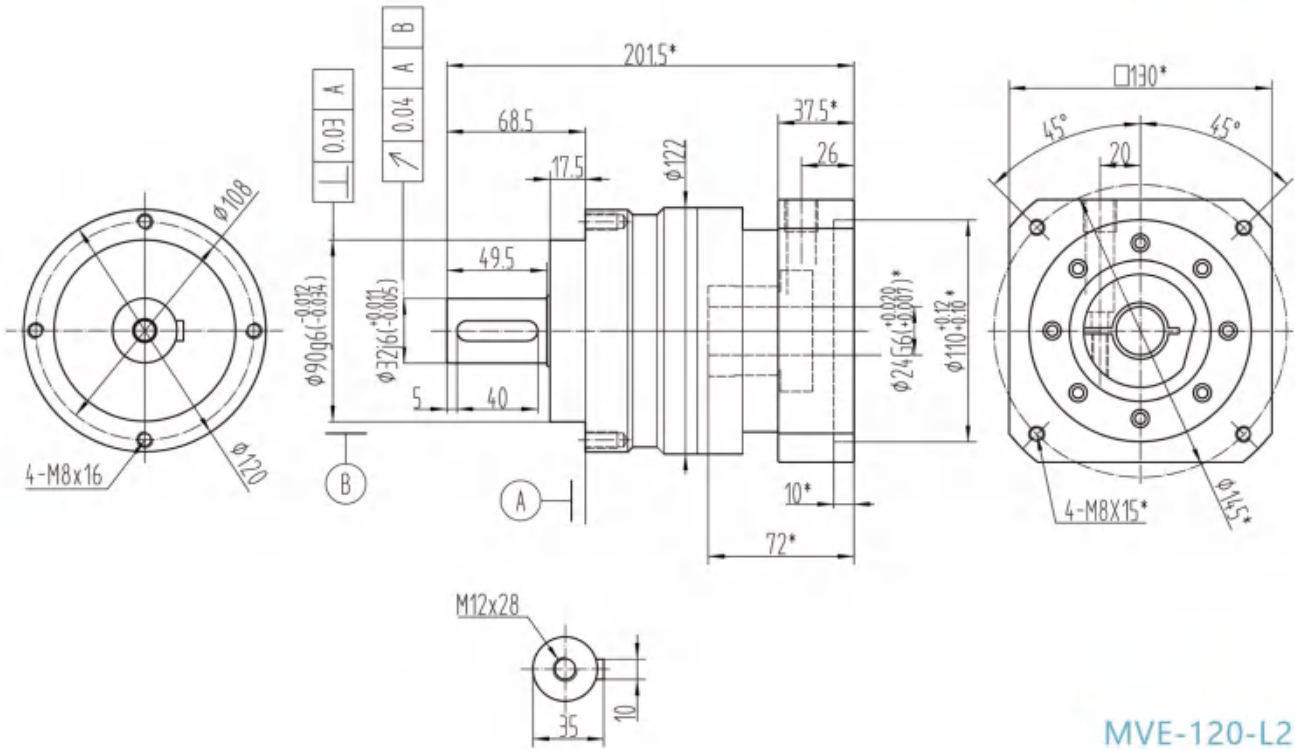


\* Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

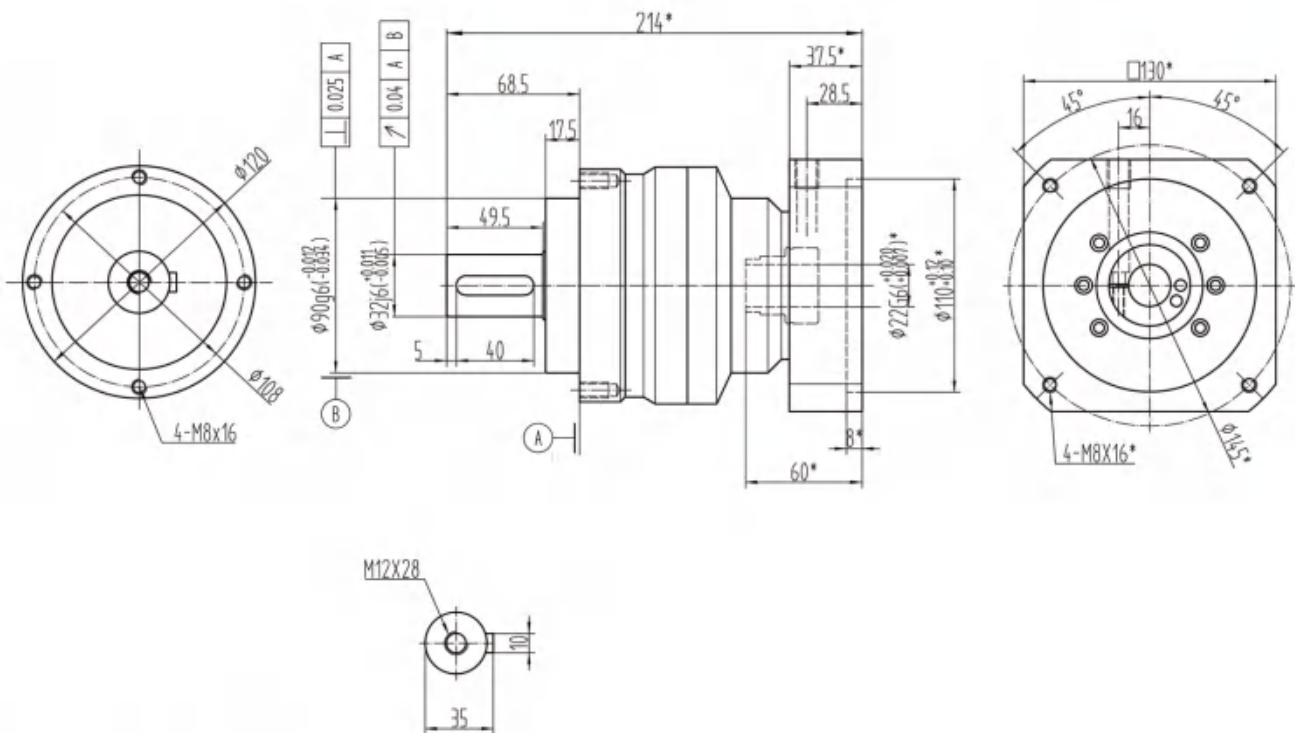


# Drawing / Size

## MVE-120-L1



## MVE-120-L2

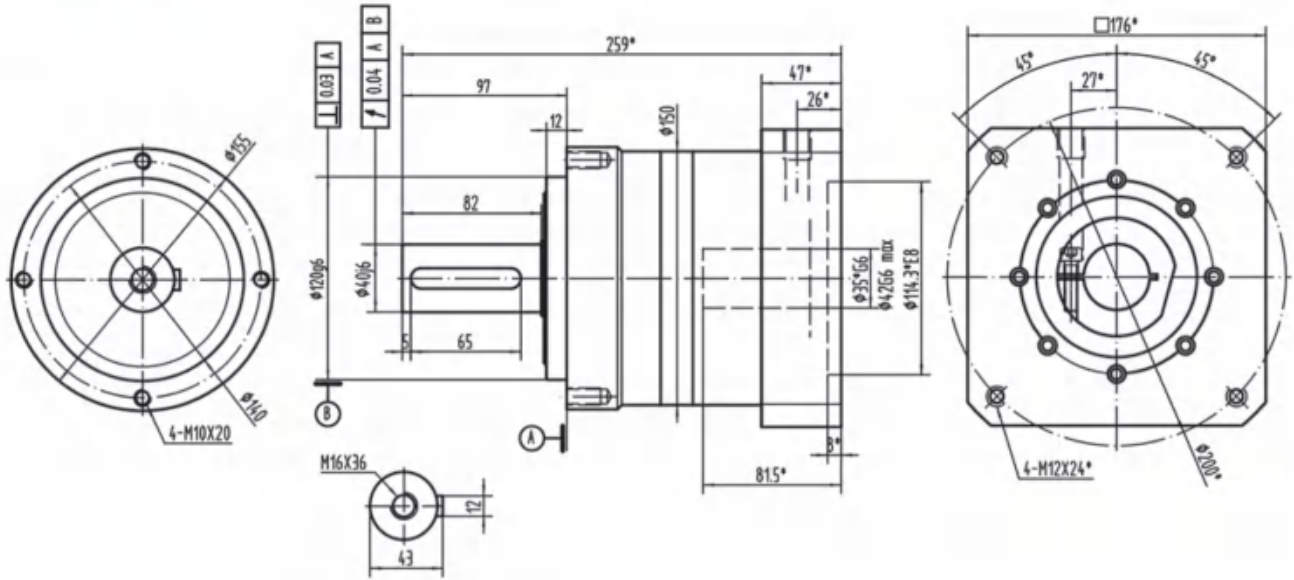


\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

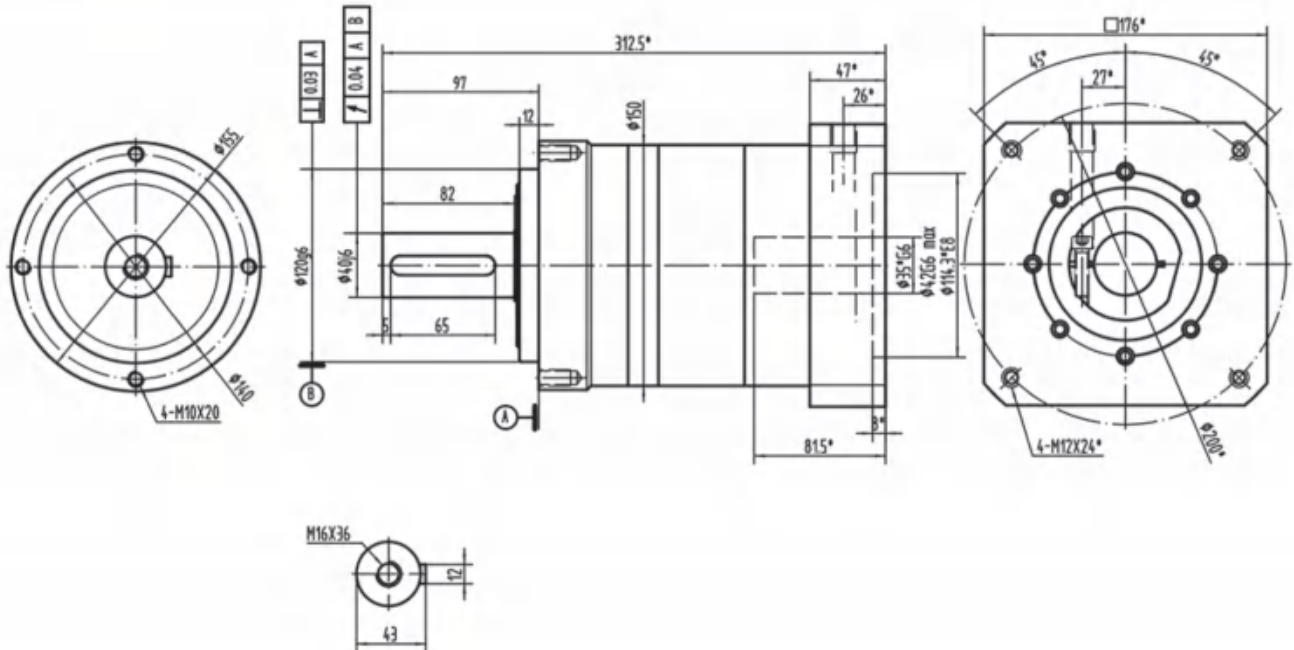
# Drawing / Size

## MVE-155-L1

MVE



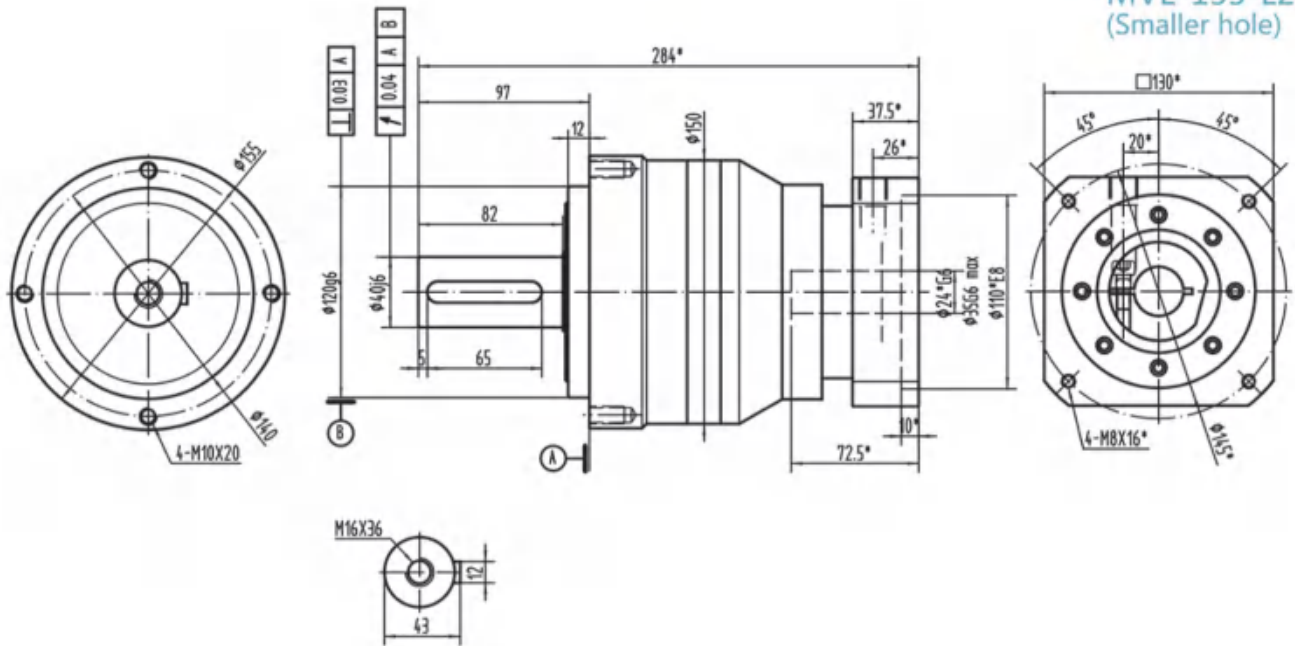
## MVE-155-L2



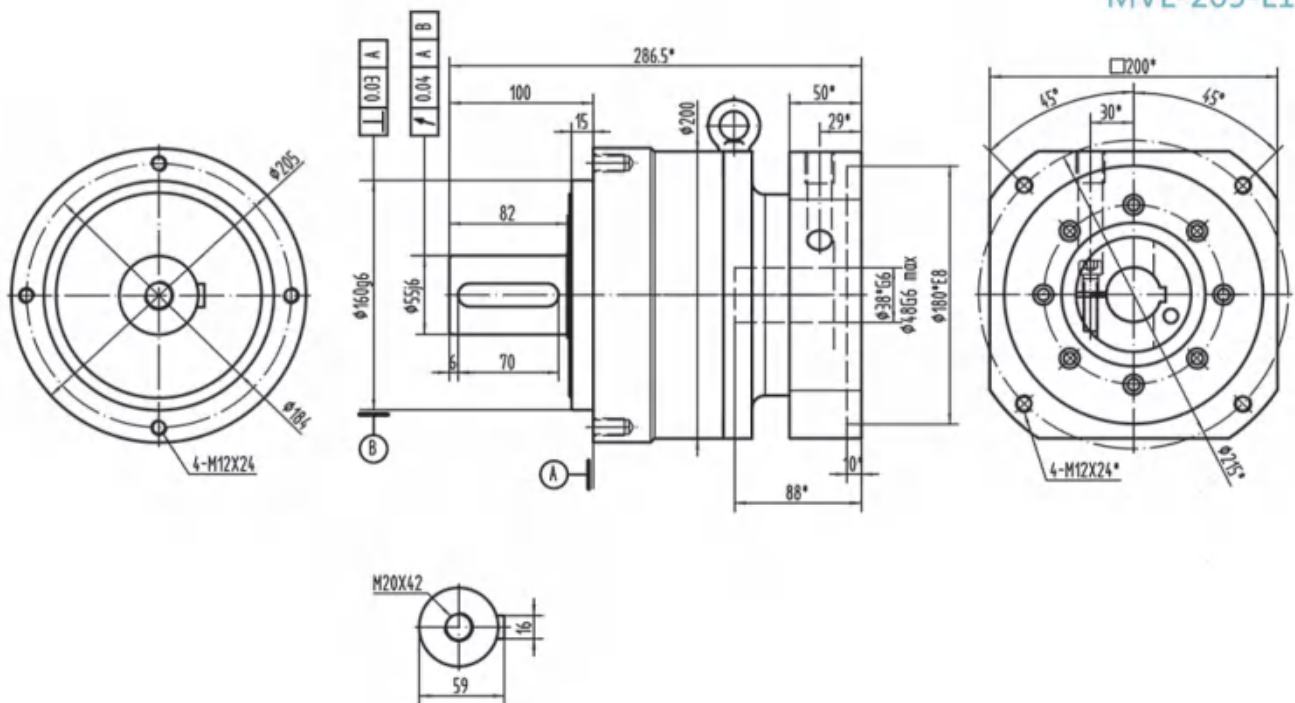
\* Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

# Drawing / Size

**MVE-155-L2**  
(Smaller hole)



**MVE-205-L1**

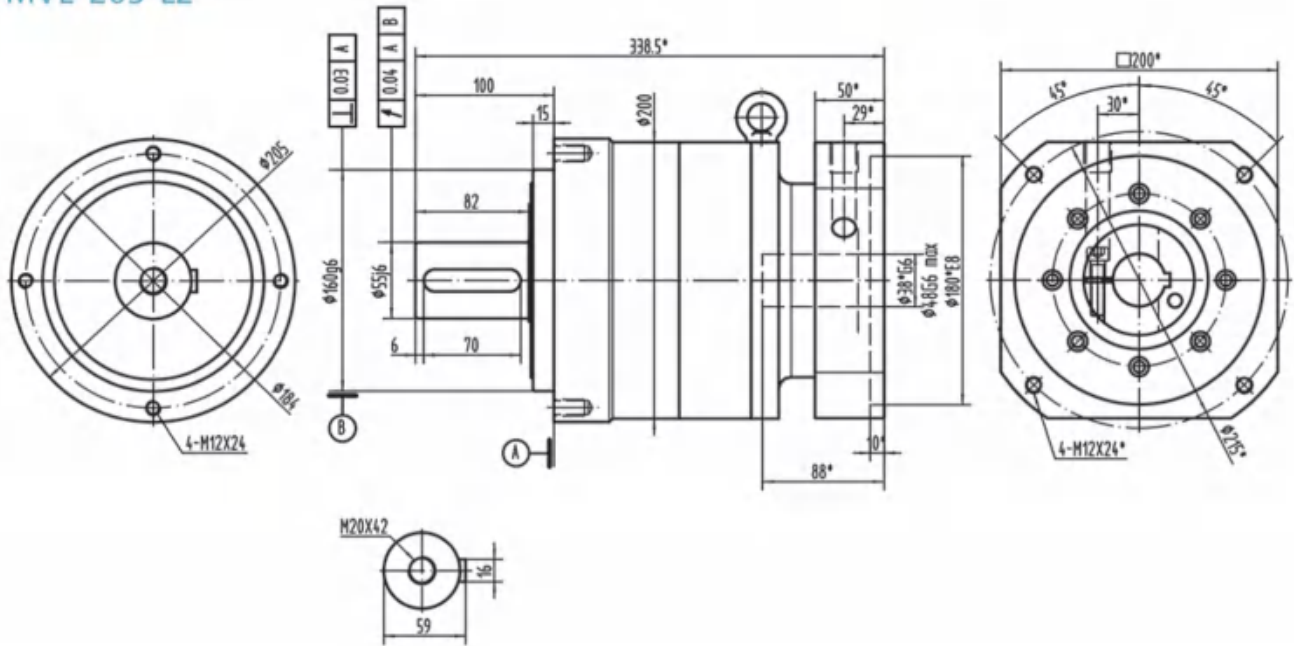


\* Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

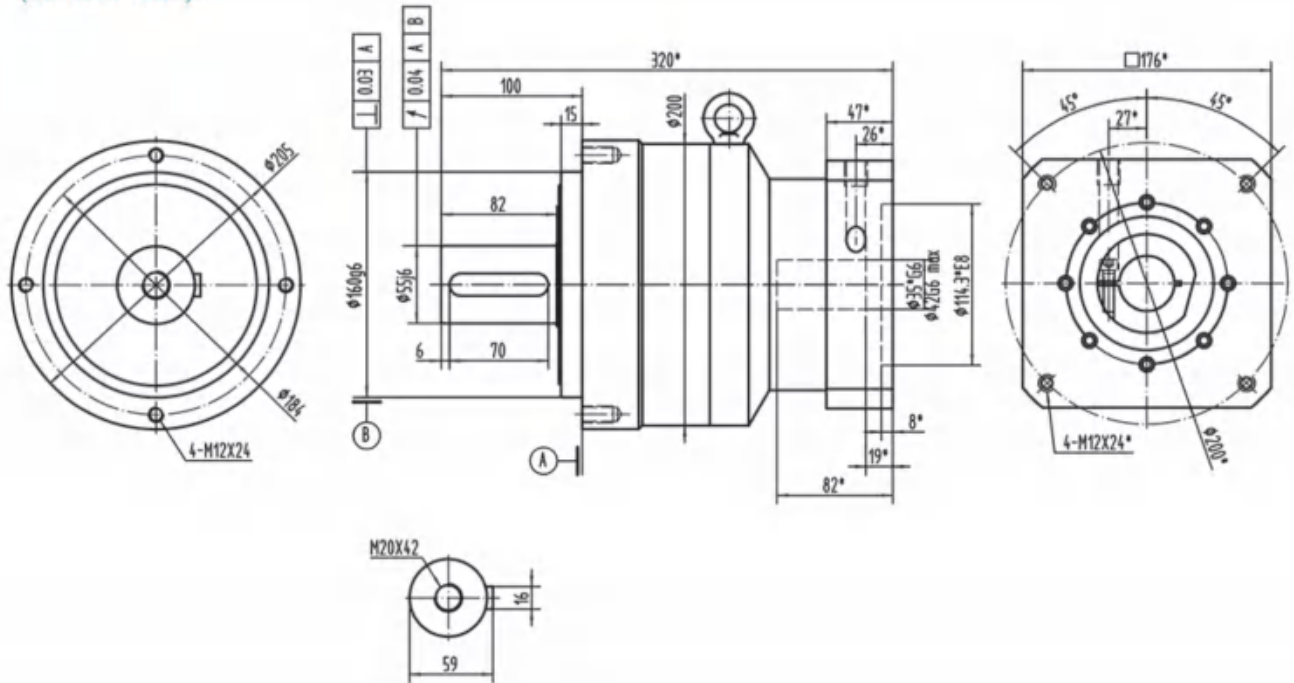
# Drawing / Size

## MVE-205-L2

MVE



## MVE-205-L2 (Smaller hole)

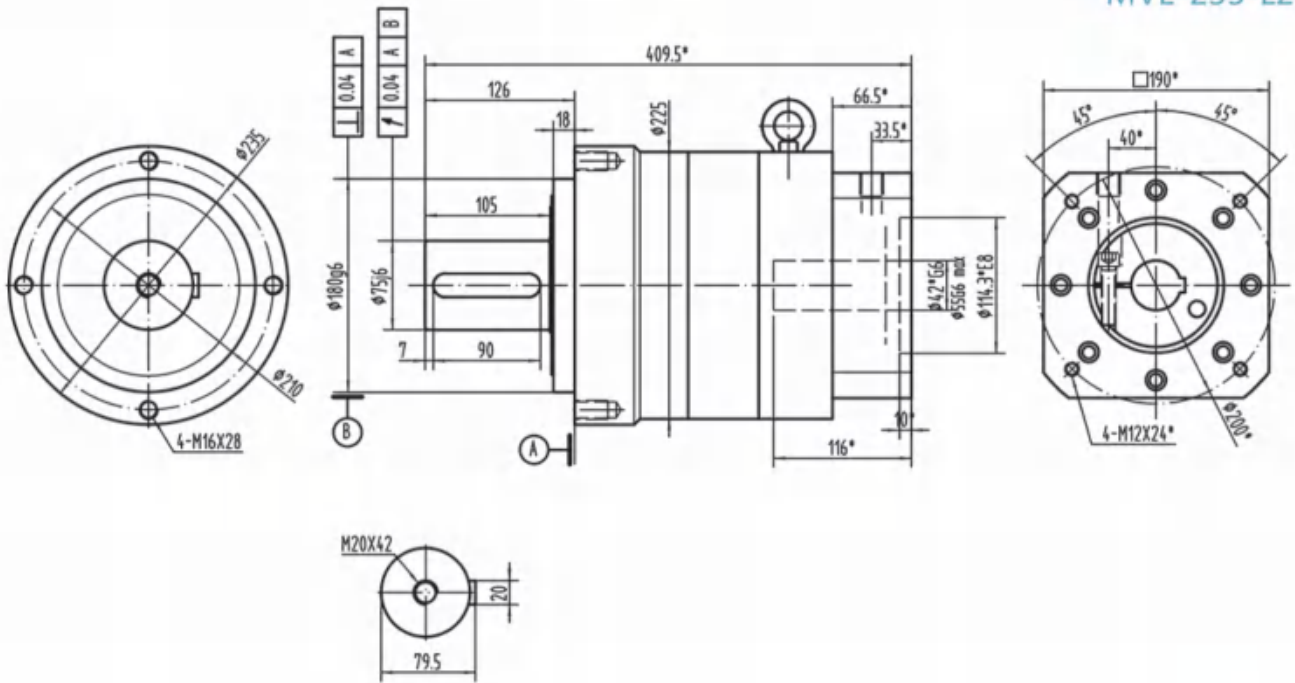


\* Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

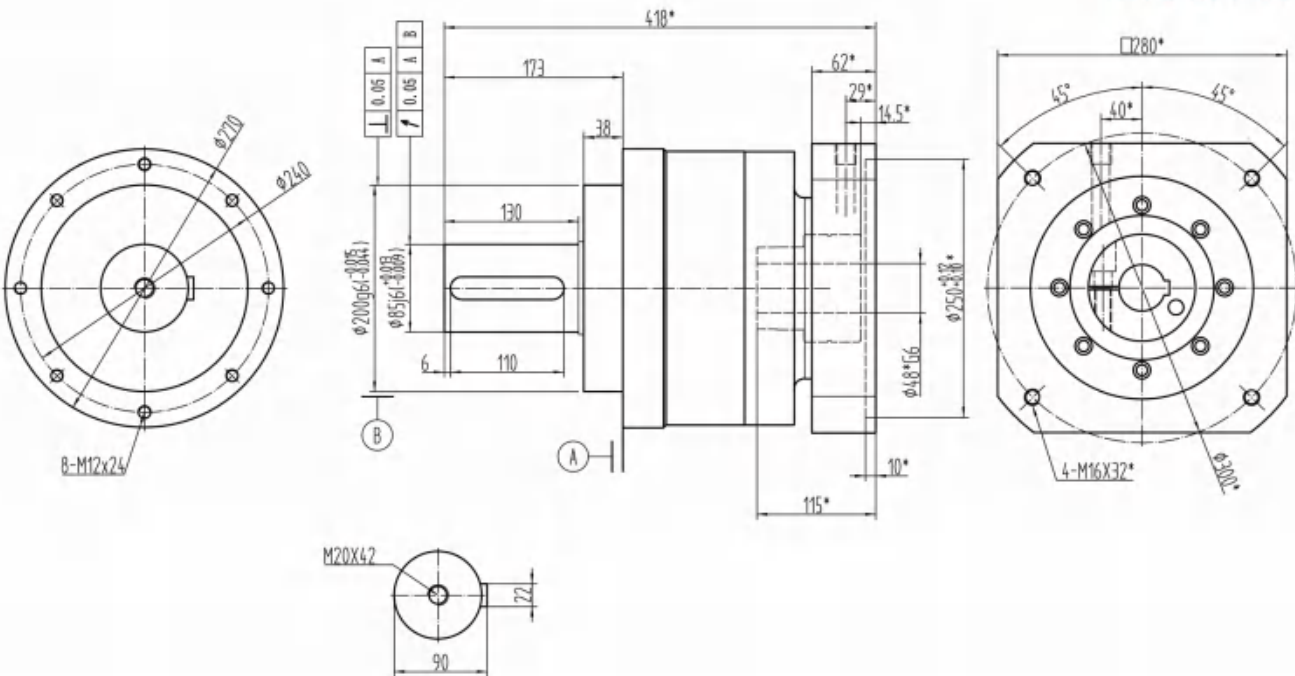


Drawing / Size

MVE-235-L2



MVE-270-L1

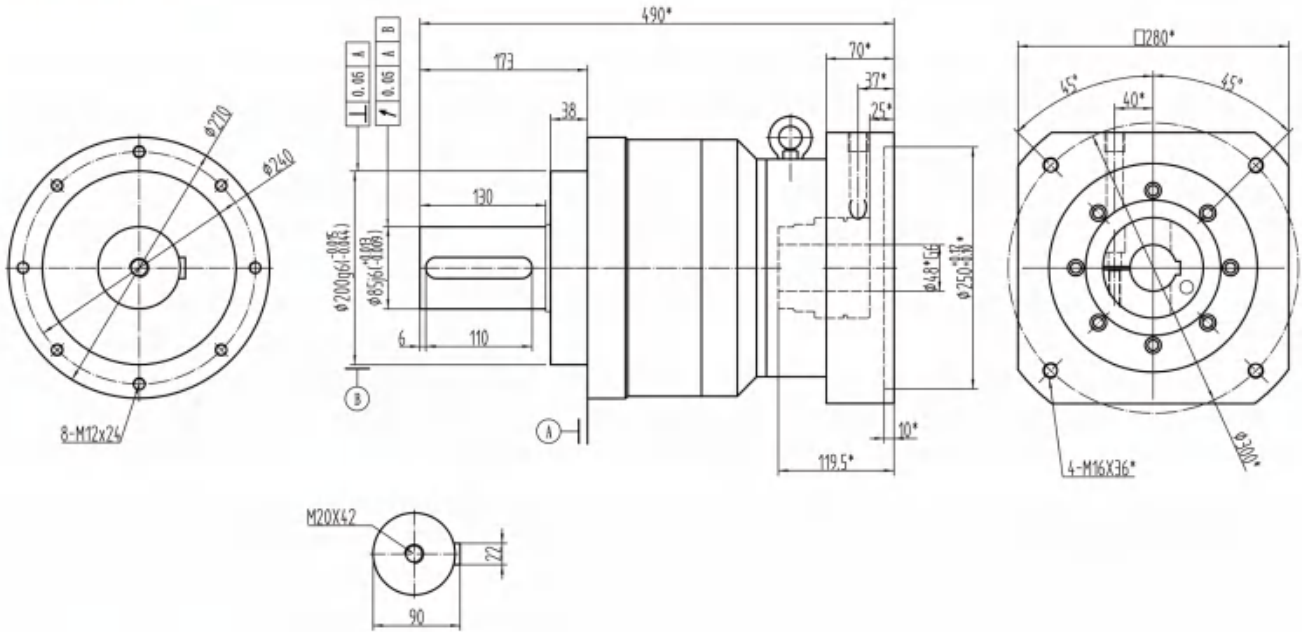


\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

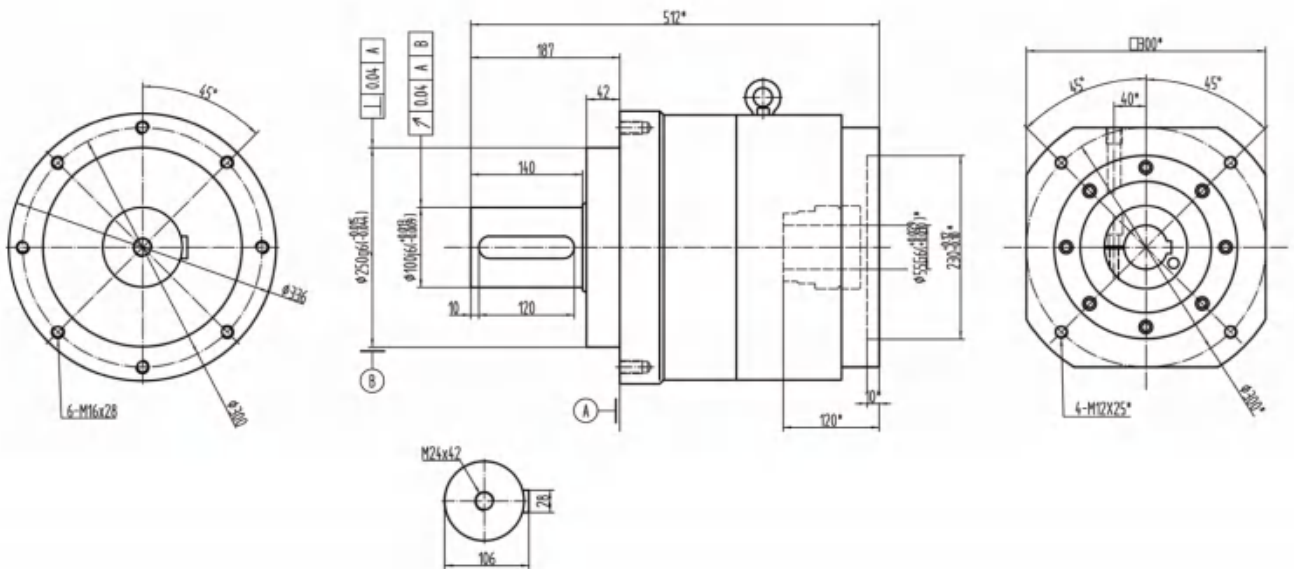
# Drawing / Size

## MVE-270-L2

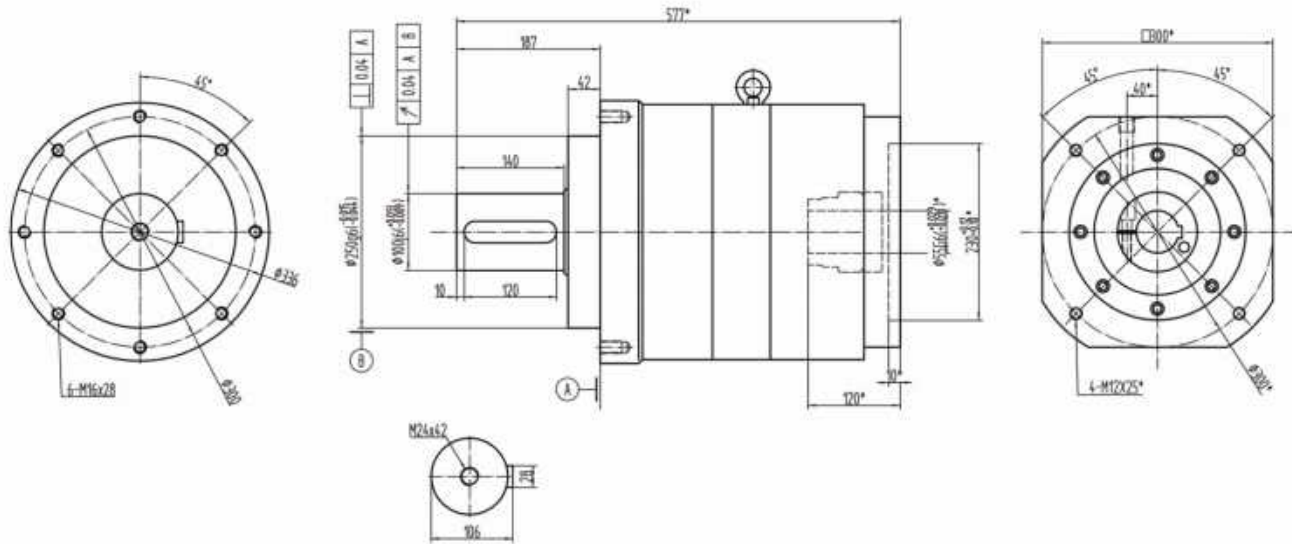
MVE



## MVE-330-L1



\* Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！



MVE-040																			
Symb.	i	T <sub>2N</sub>	T <sub>2Nst</sub>	n <sub>2N</sub>	n <sub>1Max</sub>	J <sub>1</sub>	C <sub>21</sub>	F <sub>210Max</sub>	F <sub>210Min</sub>	J <sub>2</sub>	η	L <sub>1</sub>	T	Lub	PC	MP	dB		
Unit		Nm	Nm	rpm	rpm	arcmin	Nm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C						
I STAGE	3	14	2×T <sub>2N</sub>	4000	8000	≤3	2.2	700	610	0.03	≥95	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤63		
	4	14																3	
	5	20																3	
	6	20																3	
	7	20																2.2	
	8	20																3	
	9	14																3	
	10	14																2.2	
	II STAGE	15																14	3
		20																14	3
35		20	3																
40		20	3																
50		20	3																
80		20	3																
100		14	2.2																

\*Dimensions based on servo-motor, please contact us for custom made order.  
 注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

# Performance table

MVE

MVE-060																															
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	j <sub>1</sub>	C <sub>21</sub>	F <sub>21Max</sub>	F <sub>22Max</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB														
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	Nm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C																		
I STAGE	3	40	2×T <sub>2N</sub>	3000	6000	≤3	8	1500	1050	0.16	≥95	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤63														
	4	45					8			0.14																					
	5	60					8			0.13																					
	6	55					8			0.13																					
	7	55					8			0.13																					
	8	55					8			0.13																					
	9	40					8			0.13																					
	10	40					8			0.13																					
	II STAGE	15					40			2×T <sub>2N</sub>								3000	6000	≤5	8	1500	1050	0.13	≥90	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤63
		20					45														8			0.13							
35		60	8	0.13																											
40		55	8	0.13																											
50		55	8	0.13																											
80		55	8	0.13																											
100		40	8	0.13																											

MVE-090																															
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	j <sub>1</sub>	C <sub>21</sub>	F <sub>21Max</sub>	F <sub>22Max</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB														
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	Nm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C																		
I STAGE	3	100	2×T <sub>2N</sub>	3000	6000	≤3	20	3200	2300	0.61	≥95	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤67														
	4	110					20			0.48																					
	5	150					20			0.47																					
	6	150					20			0.47																					
	7	150					20			0.45																					
	8	140					20			0.45																					
	9	100					20			0.42																					
	10	100					20			0.4																					
	II STAGE	15					100			2×T <sub>2N</sub>								3000	6000	≤5	20	3200	2300	0.13	≥90	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤67
		20					110														20			0.13							
35		150	20	0.13																											
40		150	20	0.13																											
50		150	20	0.13																											
80		140	20	0.13																											
100		100	20	0.13																											



# Performance table

MVE

MVE-120																																
Symb.	i	T <sub>2N</sub>	T <sub>2Net</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>i</sub>	C <sub>2</sub>	F <sub>200Max</sub>	F <sub>2Max</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB															
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	mm/worm	N	N	kgcm <sup>2</sup>	%	h	°C																			
I STAGE	3	240	2×T <sub>2N</sub>	3000	6000	≤3	41	6000	4100	3.25	≥95	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤70															
	4	320								2.74																						
	5	360								2.71																						
	6	350								2.6																						
	7	360								2.6																						
	8	360								2.6																						
	9	240								2.6																						
	10	240								2.6																						
	II STAGE	15								240								2×T <sub>2N</sub>	3000	6000	≤5	41	6000	4100	0.45	≥90	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤70
		20								320															0.45							
35		360	0.45																													
40		360	0.45																													
50		360	0.4																													
80		360	0.4																													
100		240	0.4																													

MVE-155																																
Symb.	i	T <sub>2N</sub>	T <sub>2Net</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>i</sub>	C <sub>2</sub>	F <sub>200Max</sub>	F <sub>2Max</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB															
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	mm/worm	N	N	kgcm <sup>2</sup>	%	h	°C																			
I STAGE	3	350	2×T <sub>2N</sub>	3000	6000	≤3	50	9000	8300	9.21	≥95	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤72															
	4	550								7.54																						
	5	600								7.42																						
	6	600								7.42																						
	7	600								7.14																						
	8	550								7.14																						
	9	380								7.08																						
	10	380								7.03																						
	II STAGE	15								460								2×T <sub>2N</sub>	3000	6000	≤5	50	9000	8300	2.63	≥90	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤72
		20								650															2.63							
35		700	2.43																													
40		700	2.43																													
50		700	2.39																													
80		700	2.39																													
100		460	2.39																													

# Performance table

MVE

MVE-205																															
Symb.	i	T <sub>2N</sub>	T <sub>2Hot</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	j <sub>1</sub>	C <sub>21</sub>	F <sub>21Max</sub>	F <sub>22Max</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB														
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	Nm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C																		
I STAGE	3	600	2×T <sub>2N</sub>	2000	4000	≤3	145	14500	13500	28.98	≥95	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤75														
	4	1000					145			23.67																					
	5	1000					145			23.29																					
	6	1000					145			22.29																					
	7	1000					145			22.48																					
	8	1000					145			22.48																					
	9	650					145			22.40																					
	10	650					145			22.51																					
	II STAGE	15					980			2×T <sub>2N</sub>								2000	4000	≤5	145	14500	13500	7.3	≥90	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤75
		20					1350														145			7.3							
35		1400	145	7.1																											
40		1350	145	6.92																											
50		1400	145	6.92																											
80		1400	145	6.72																											
100		980	145	6.72																											

MVE-235																															
Symb.	i	T <sub>2N</sub>	T <sub>2Hot</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	j <sub>1</sub>	C <sub>21</sub>	F <sub>21Max</sub>	F <sub>22Max</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB														
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	Nm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C																		
I STAGE	3	1100	2×T <sub>2N</sub>	1500	3000	≤3	225	20500	19000	69.61	≥95	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤77														
	4	1600					225			54.37																					
	5	1800					225			53.27																					
	6	1800					225			53.27																					
	7	1800					225			50.97																					
	8	1800					225			50.88																					
	9	1200					225			50.73																					
	10	1200					225			50.56																					
	II STAGE	15					1300			2×T <sub>2N</sub>								1500	3000	≤5	225	20500	19000	22.79	≥90	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤77
		20					1800														225			22.79							
35		1900	225	22.59																											
40		1900	225	21.83																											
50		1900	225	21.83																											
80		1900	225	21.70																											
100		1300	225	21.60																											

# Performance table

MVE

MVE-270																	
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>t</sub>	C <sub>2t</sub>	F <sub>200Max</sub>	F <sub>2Max</sub>	J <sub>t</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	mm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C				
I STAGE	3	3000	2xT <sub>2N</sub>	1000	2500	≤3	540	29000	26500	180	≥95	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤77
	4	3000								180							
	5	3150								170							
	6	3150								170							
	7	3150								170							
	8	3000								170							
	9	2400								150							
	10	2200								150							
II STAGE	15	3000	2xT <sub>2N</sub>	1000	2500	≤5	540	29000	26500	64	≥90	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤77
	20	3000								64							
	25	3150								64							
	50	3150								64							
	80	3150								64							
	100	2300								64							

MVE-330																	
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>t</sub>	C <sub>2t</sub>	F <sub>200Max</sub>	F <sub>2Max</sub>	J <sub>t</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	mm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C				
I STAGE	3	8150	2xT <sub>2N</sub>	2000	3000	≤3	980	224500	112000	252.96	≥95	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤75
	4	8730								230.72							
	5	8660								226.05							
	7	8520								216.29							
	10	8310								214.55							
II STAGE	15	8150	2xT <sub>2N</sub>	2000	3000	≤5	980	224500	112000	185.05	≥90	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤75
	20	8730								185.05							
	25	8660								185.05							
	35	8520								183.43							
	40	8440								183.43							
	50	8660								183.43							
	70	8520								177.26							
	100	8310								175.39							

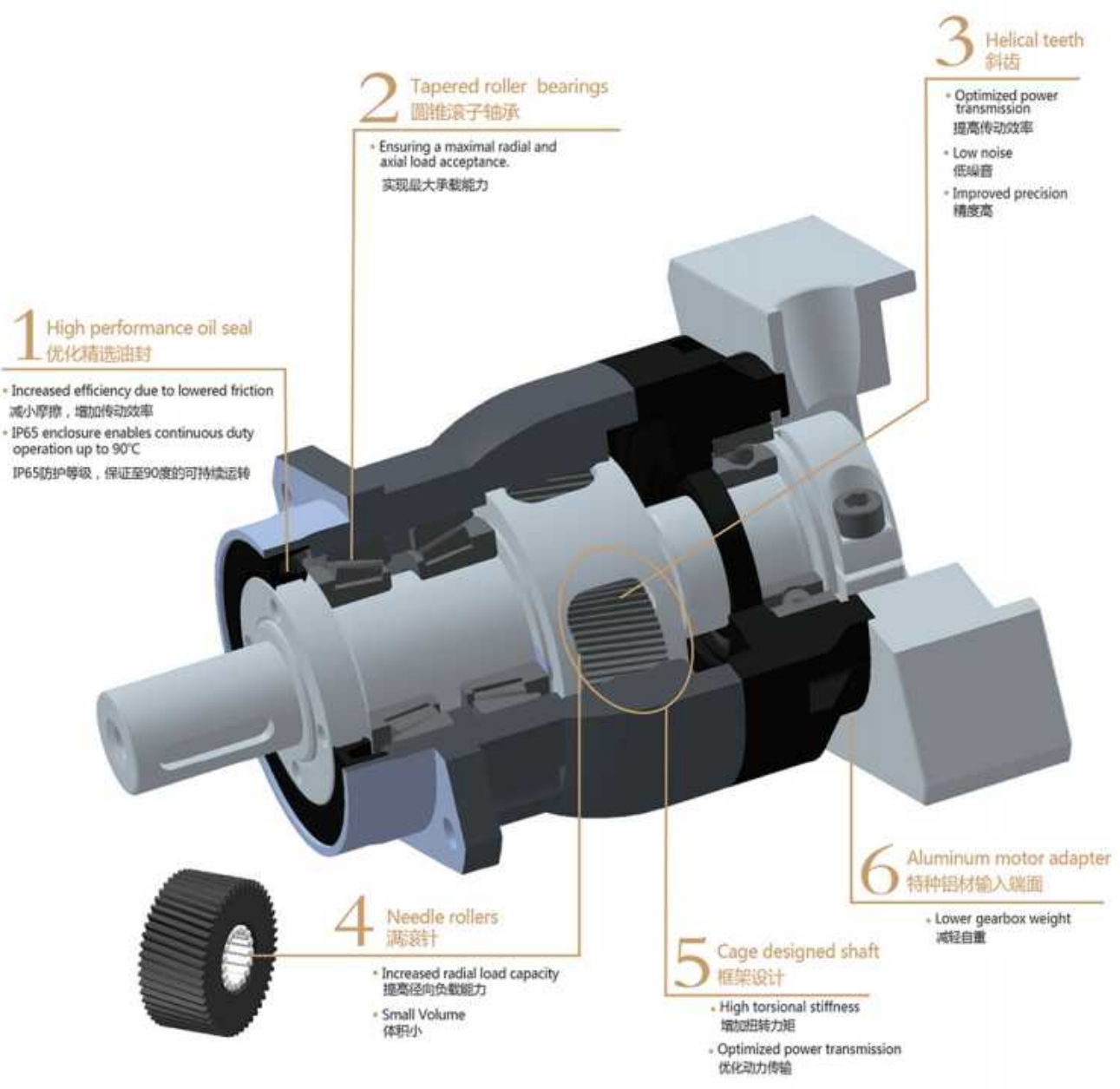
**MVD SERIES**



MVD 高端系列代表最高精度、最大扭矩和轴向/径向负载抗力。

The MVD high-end series symbolize optimum precision, maximum torque and resistance to radial & axial loads.





**1 High performance oil seal**  
优化精选油封

- Increased efficiency due to lowered friction  
减小摩擦，增加传动效率
- IP65 enclosure enables continuous duty operation up to 90°C  
IP65防护等级，保证至90度的可持续运转

**2 Tapered roller bearings**  
圆锥滚子轴承

- Ensuring a maximal radial and axial load acceptance.  
实现最大承载能力

**3 Helical teeth**  
斜齿

- Optimized power transmission  
提高传动效率
- Low noise  
低噪音
- Improved precision  
精度高

**4 Needle rollers**  
滚针设计

- Increased radial load capacity  
提高径向负载能力
- Small Volume  
体积小

**5 Cage designed shaft**  
框架设计

- High torsional stiffness  
增加扭转力矩
- Optimized power transmission  
优化动力传输

**6 Aluminum motor adapter**  
特种铝材输入端面

- Lower gearbox weight  
减轻自重

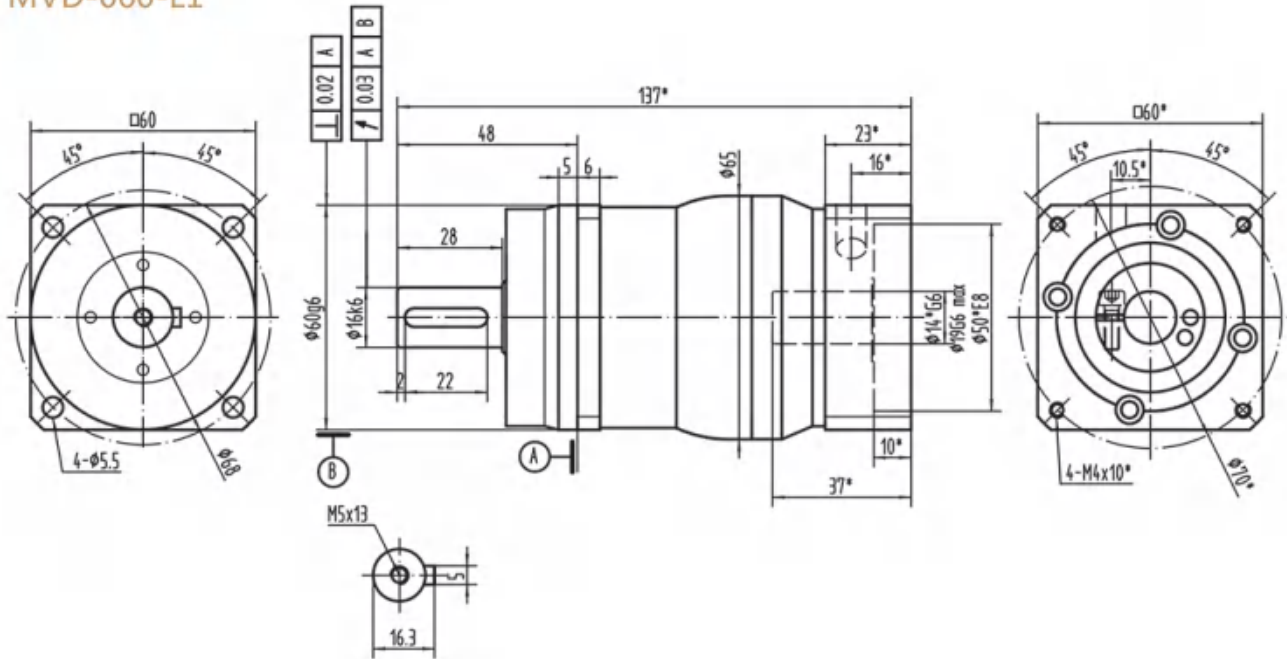
造型数据：  
Selection data:

扭矩 ( Nm )	25-2550
速比	3-100
背隙 ( arcmin )	3-5
最大工作温度 ( °C )	90
噪音 ( dB )	60-77

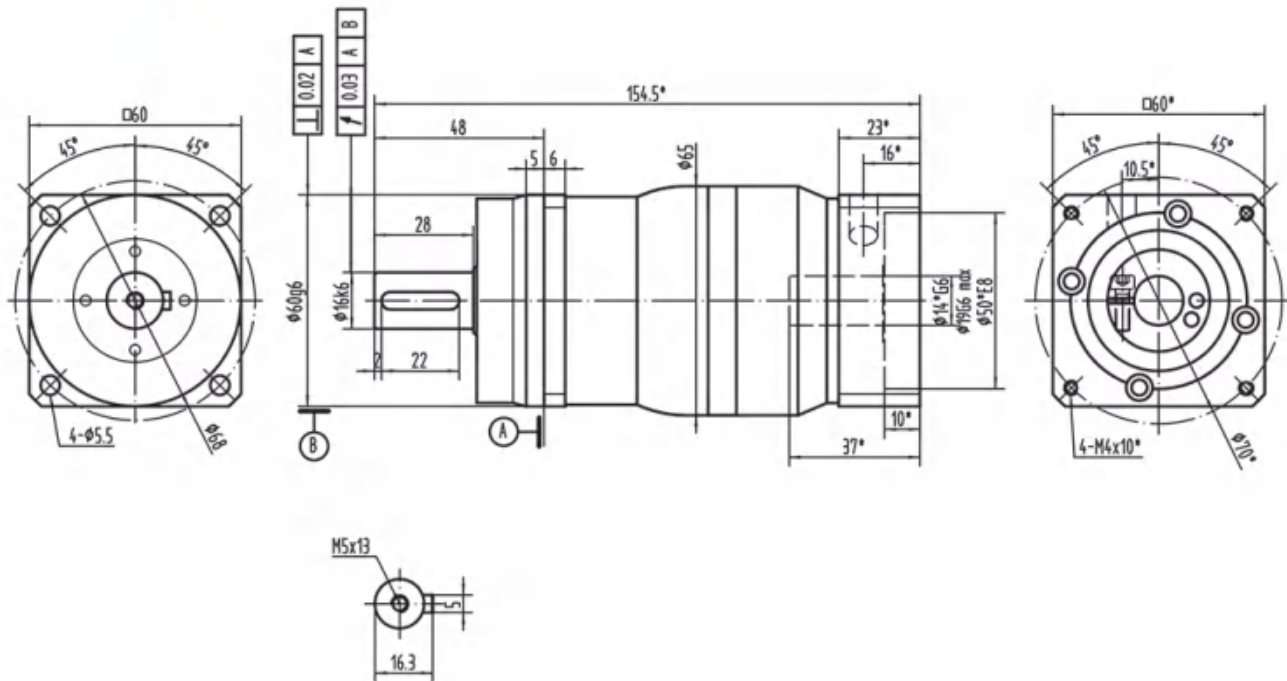
Nominal output torque ( Nm )	25-2550
Reduction ratio	3-100
Backlash ( arcmin )	3-5
Max.working temperature ( °C )	90
Noise ( dB )	60-77

# Drawing / Size

## MVD-060-L1



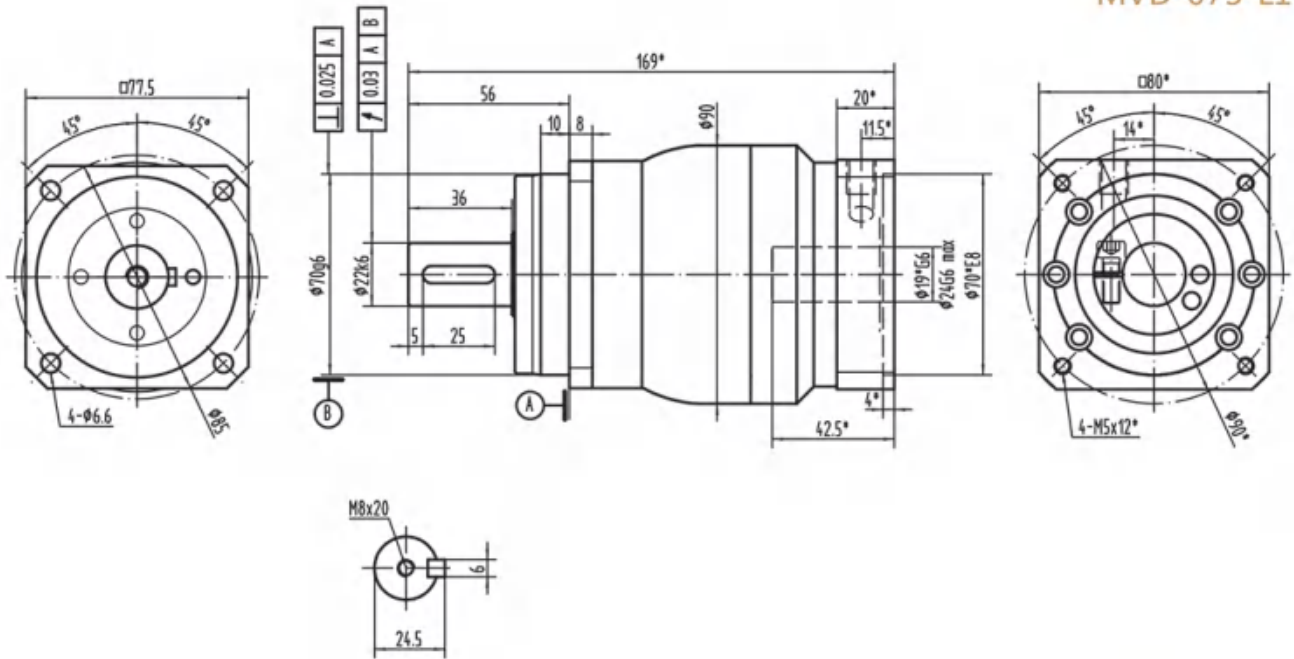
## MVD-060-L2



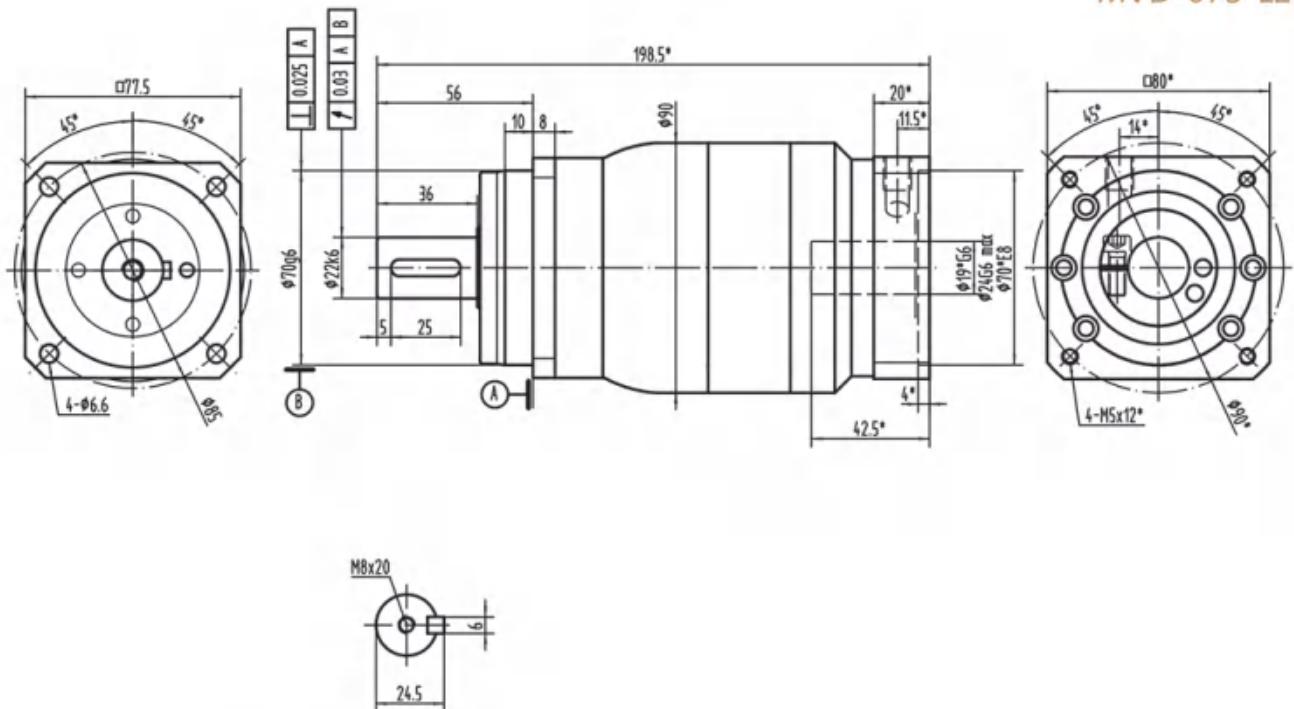
\* Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

# Drawing / Size

MVD-075-L1



MVD-075-L2

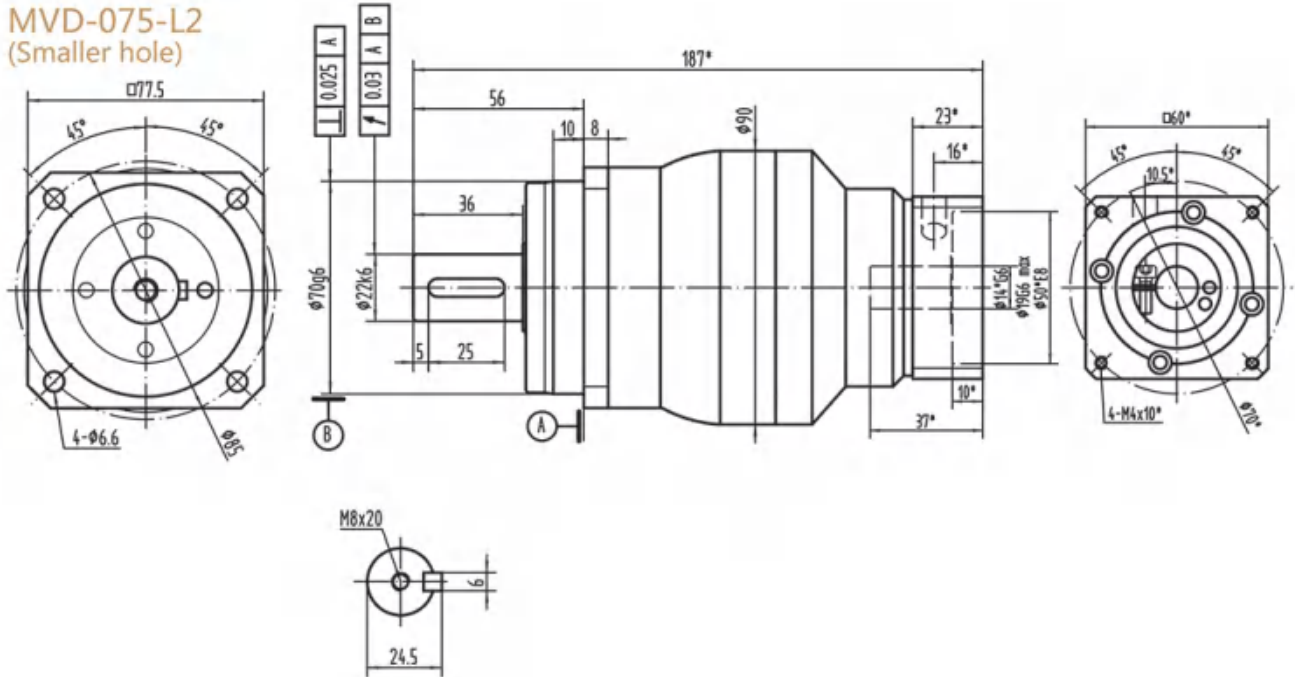


\* Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

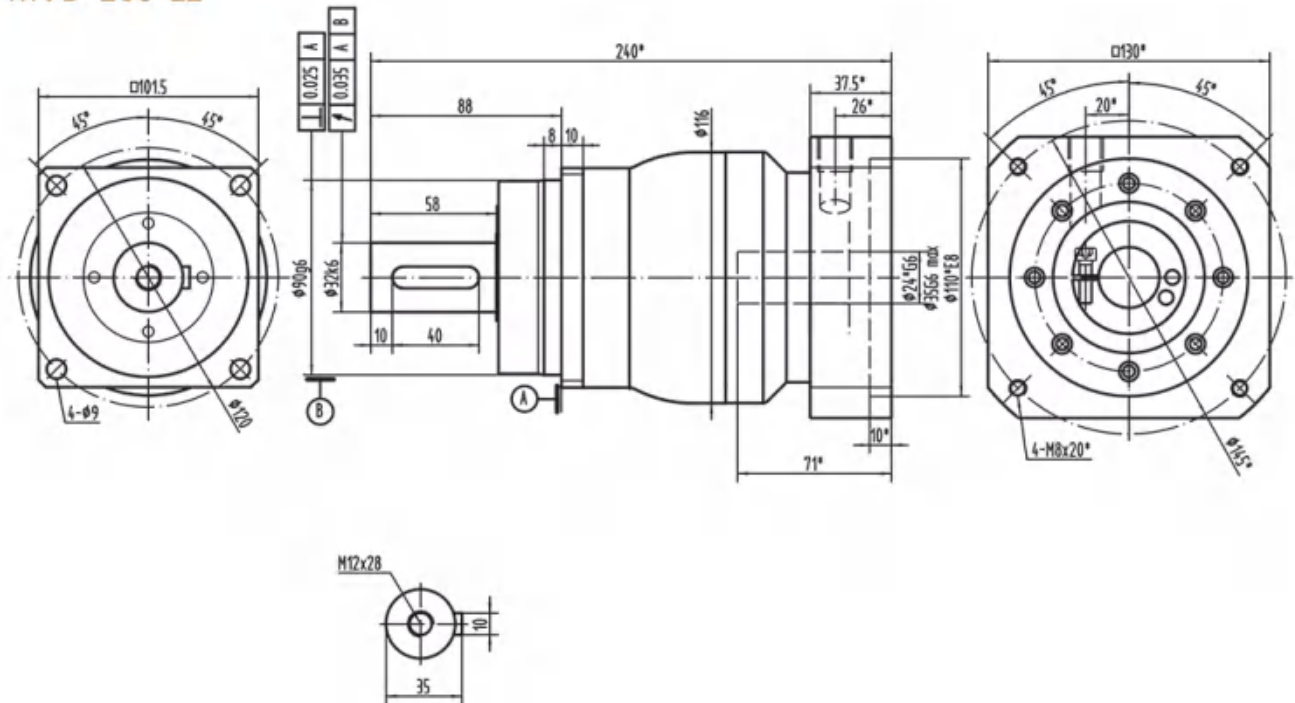
MVD

## Drawing / Size

**MVD-075-L2**  
(Smaller hole)



**MVD-100-L1**

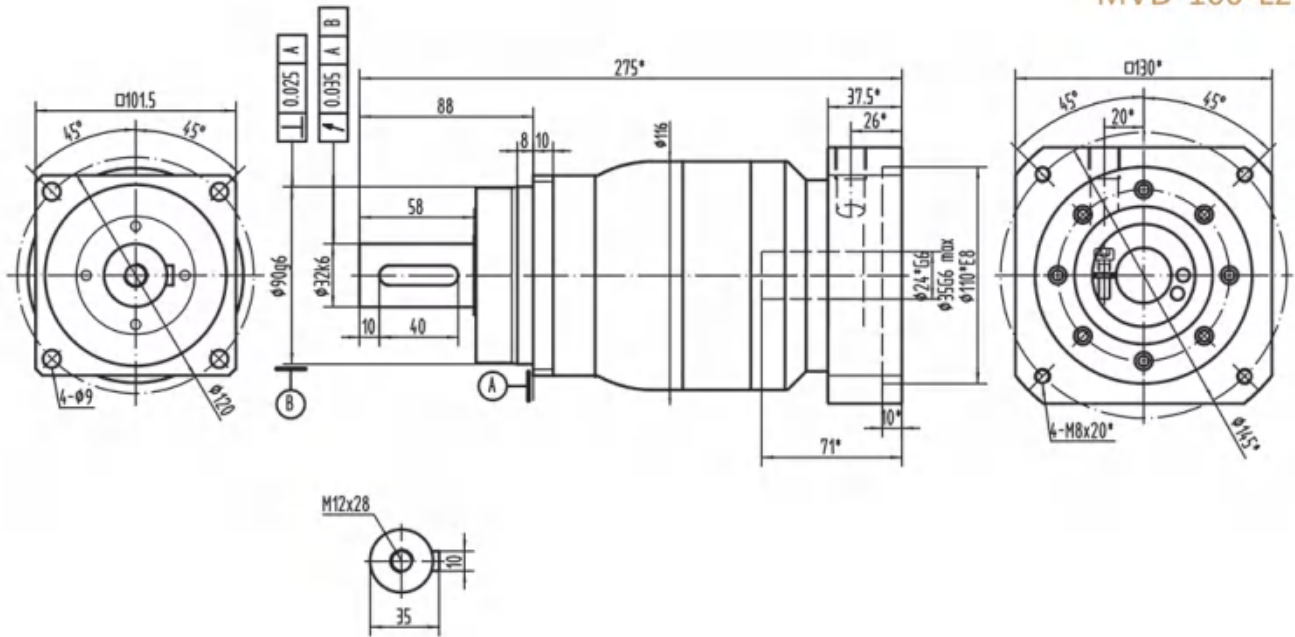


\* Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！



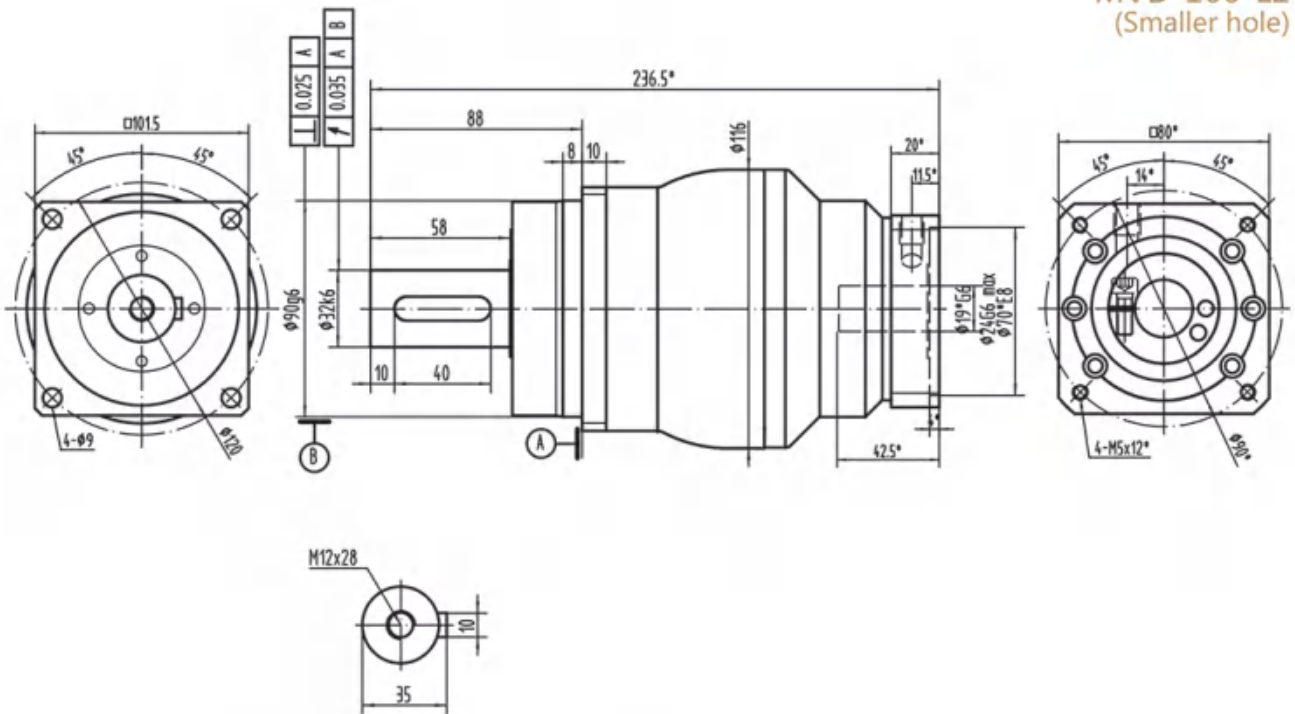
# Drawing / Size

## MVD-100-L2



MVD

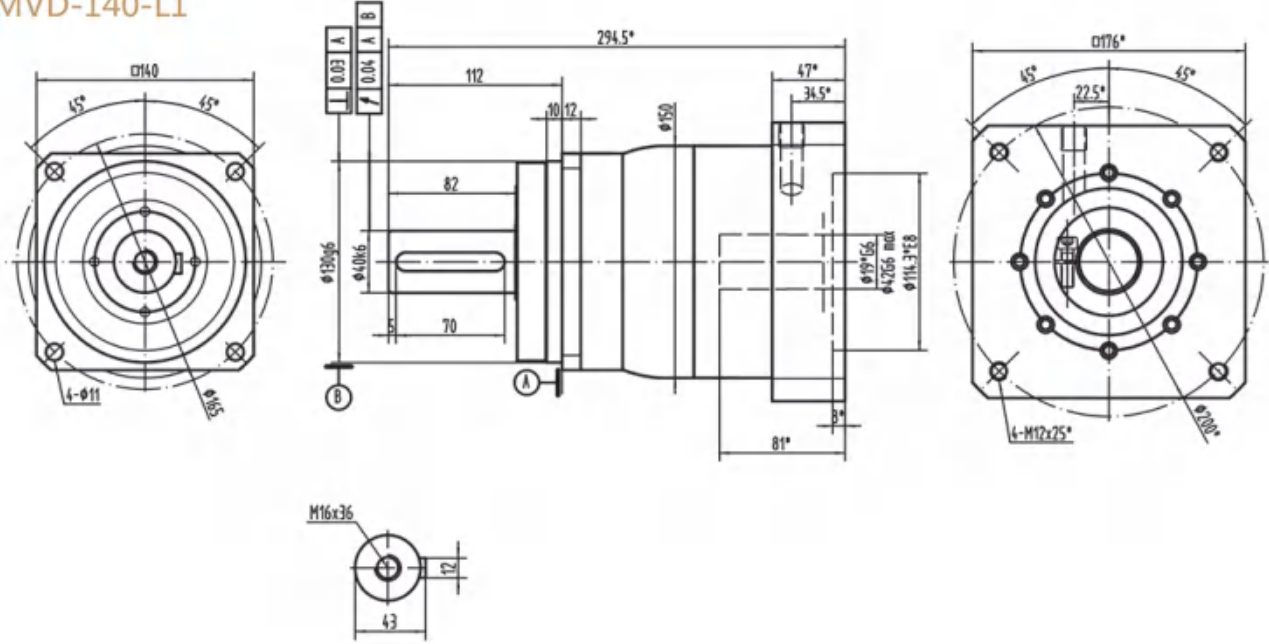
## MVD-100-L2 (Smaller hole)



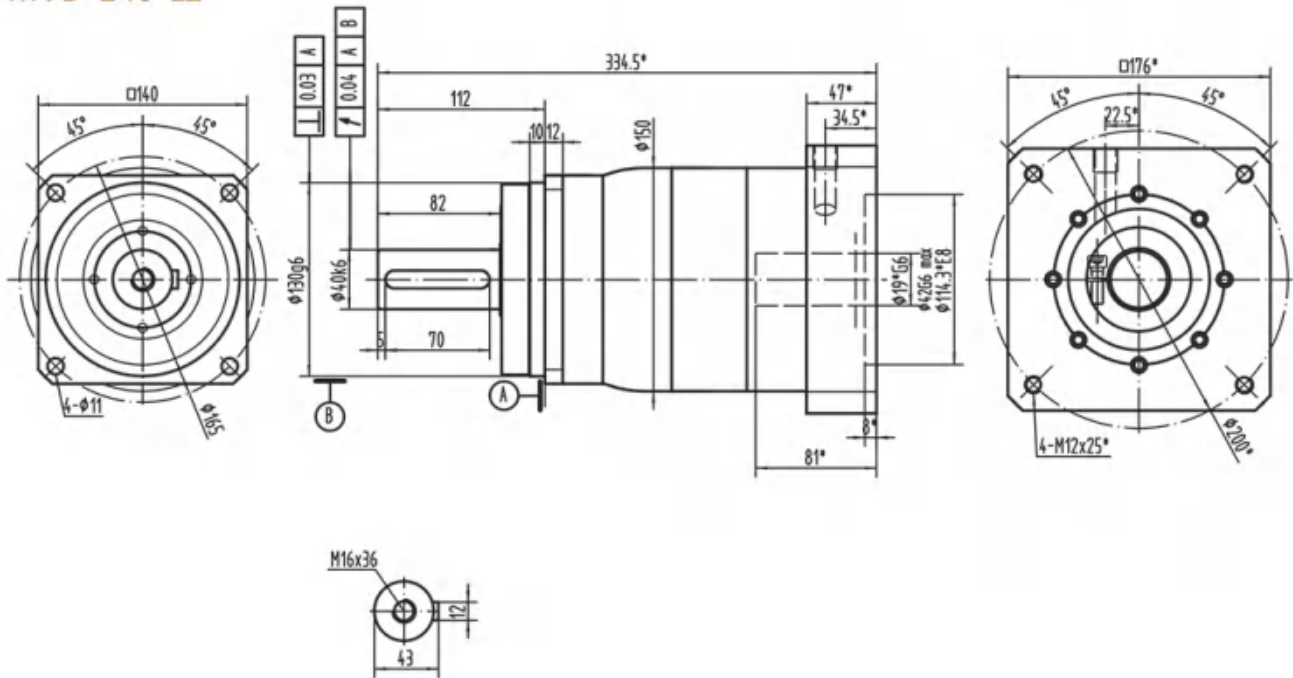
\* Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸: 代表可根据客户需求定制产品, 如有需要, 请联系我们!

## Drawing / Size

### MVD-140-L1



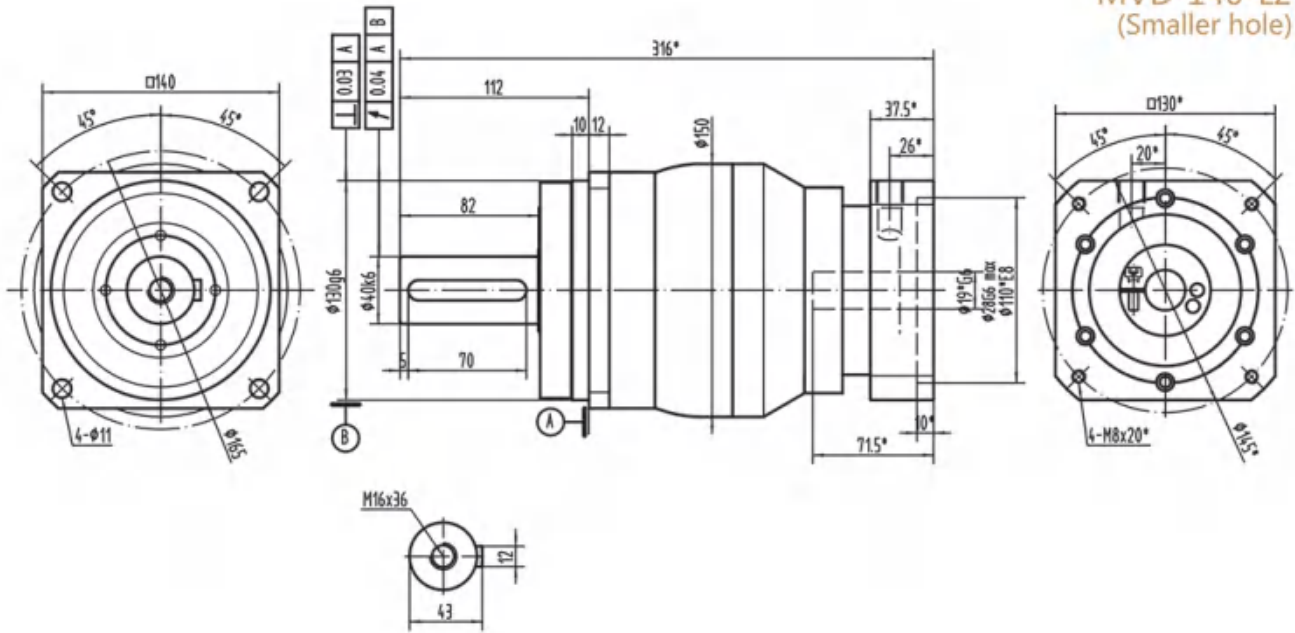
### MVD-140-L2



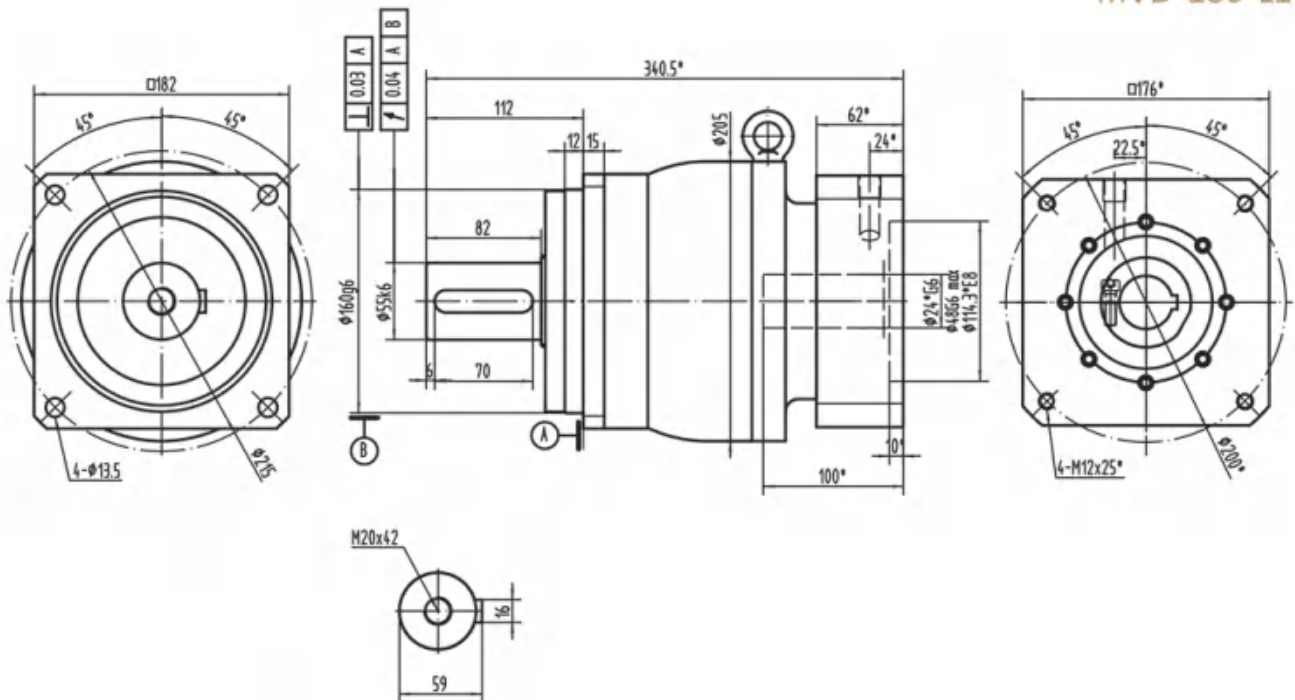
\* Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

## Drawing / Size

**MVD-140-L2**  
(Smaller hole)



**MVD-180-L1**



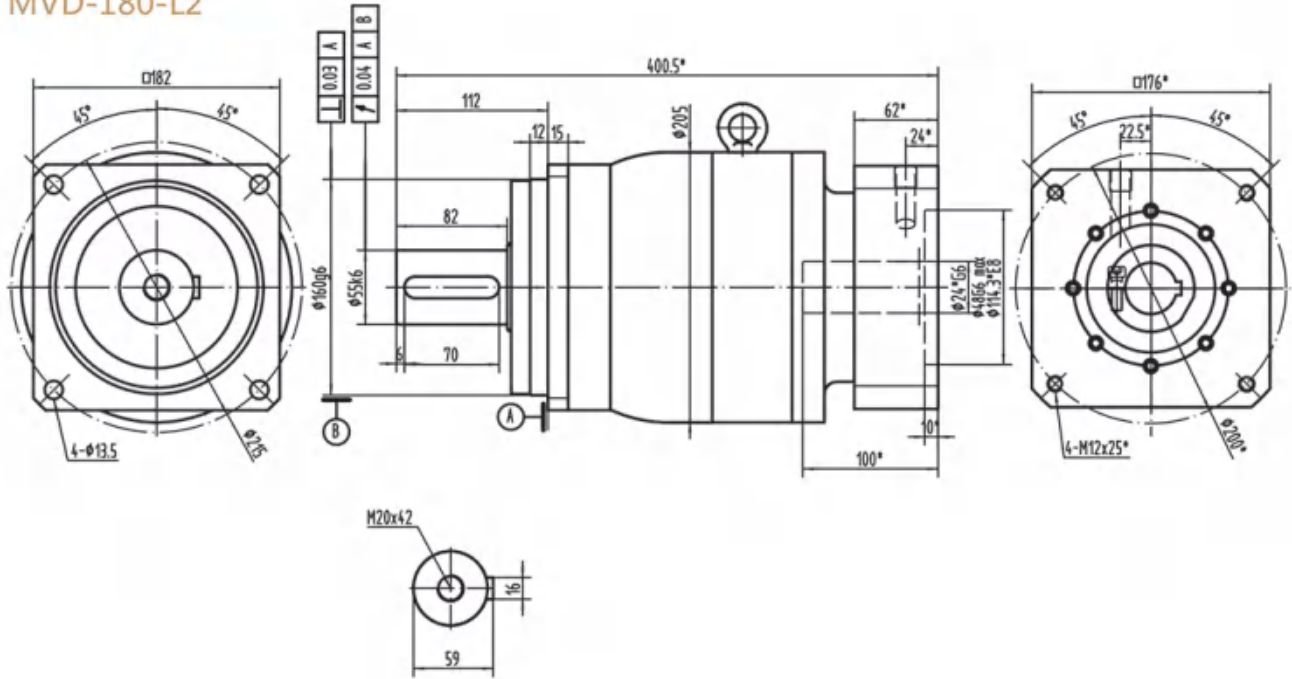
\* Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

MVD

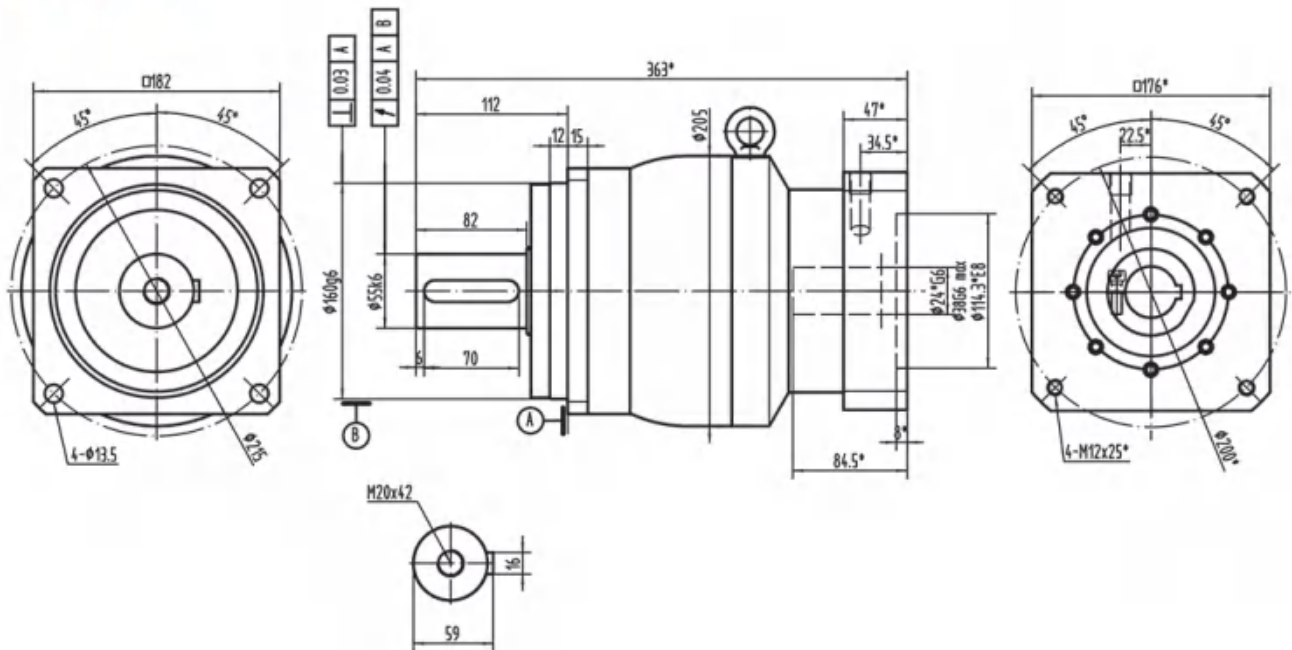
# Drawing / Size

## MVD-180-L2

MVD



## MVD-180-L2 (Smaller hole)

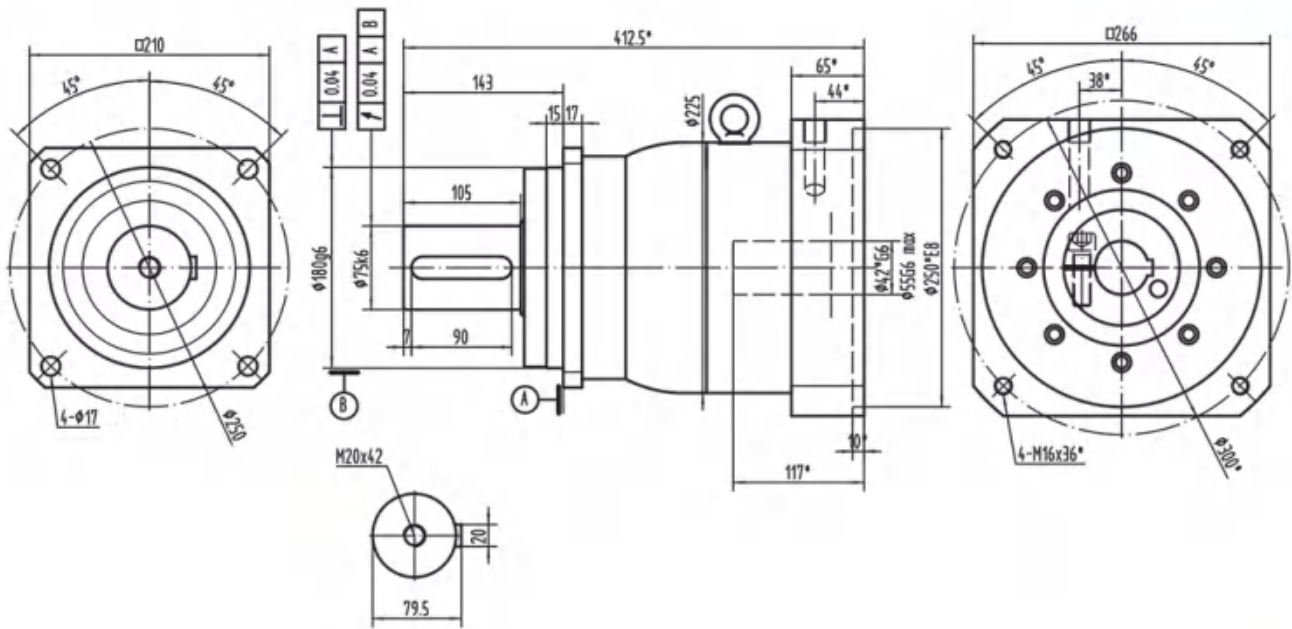


\* Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

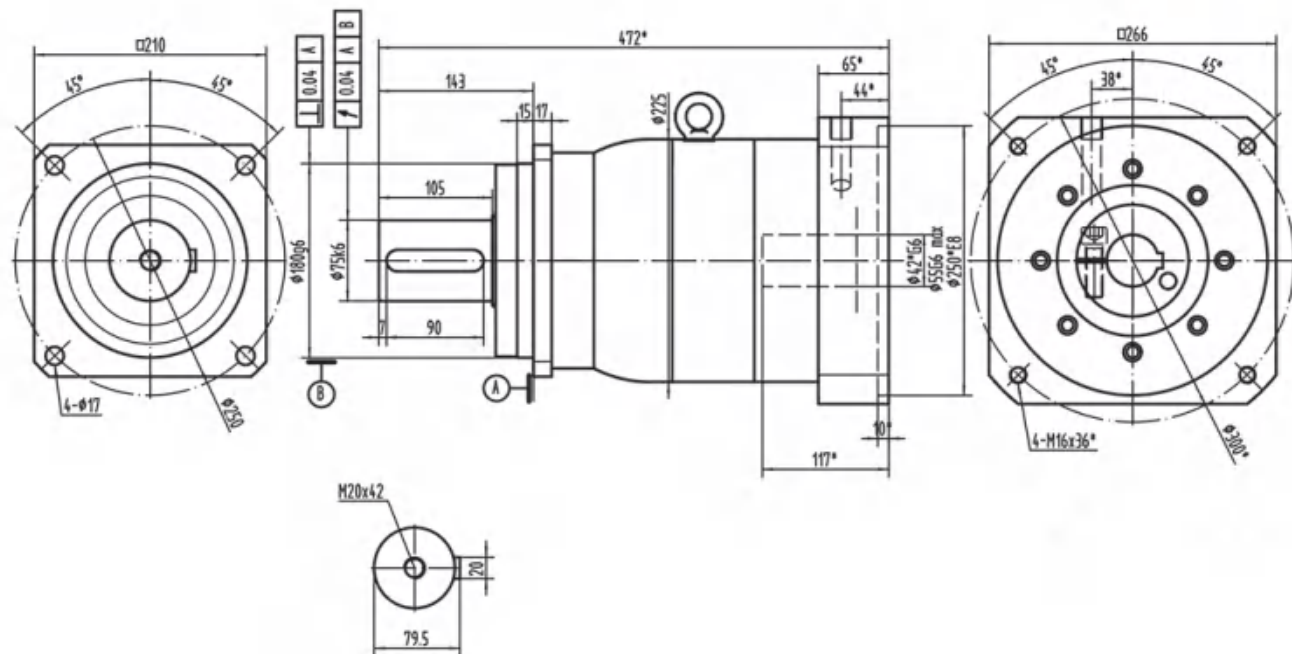


# Drawing / Size

## MVD-210-L1



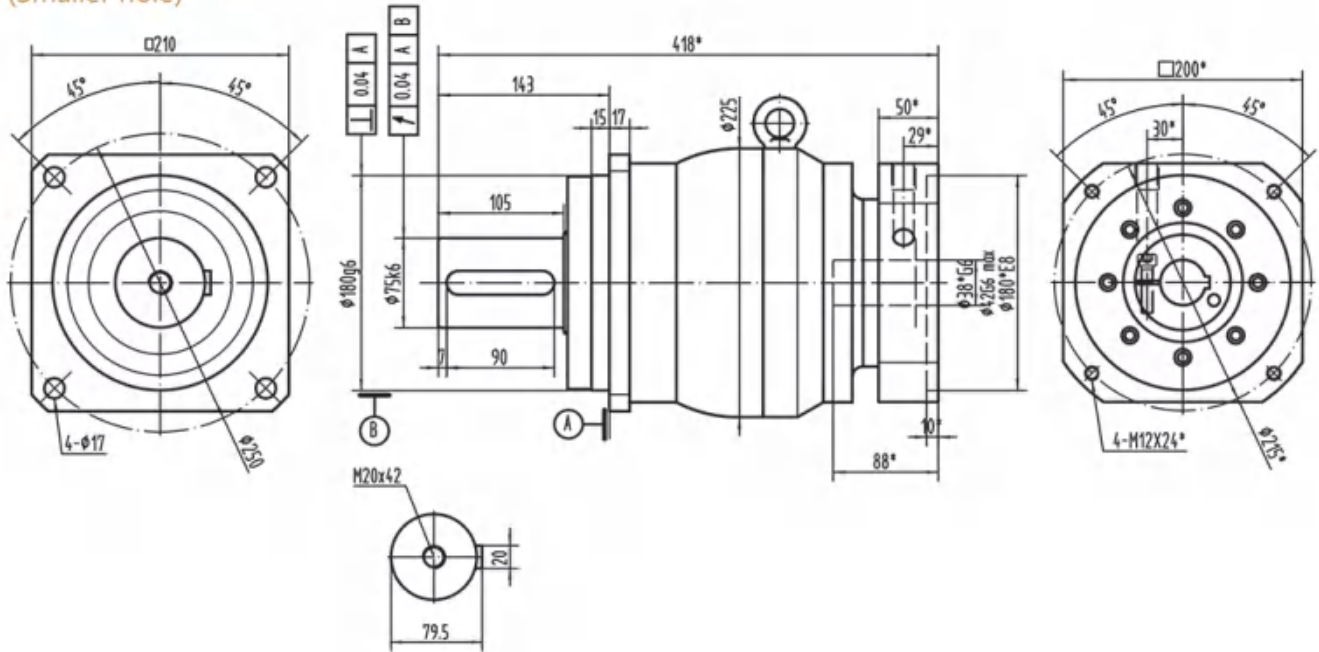
## MVD-210-L2



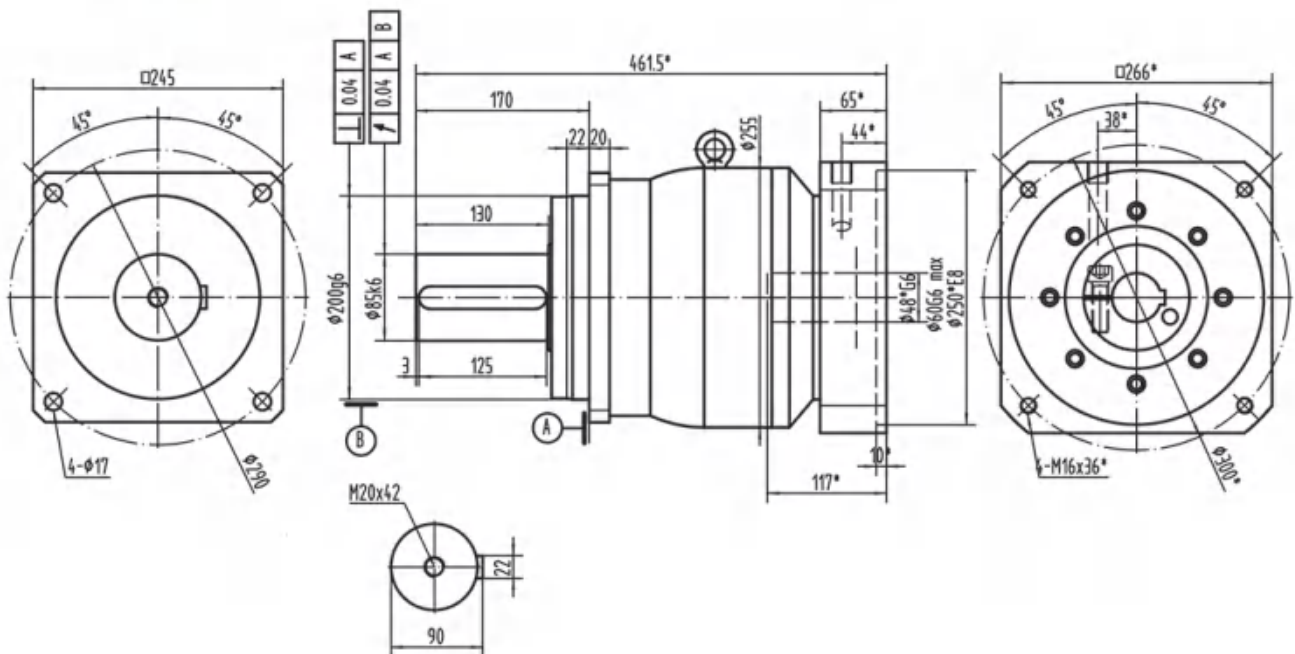
\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

## Drawing / Size

### MVD-210-L2 (Smaller hole)



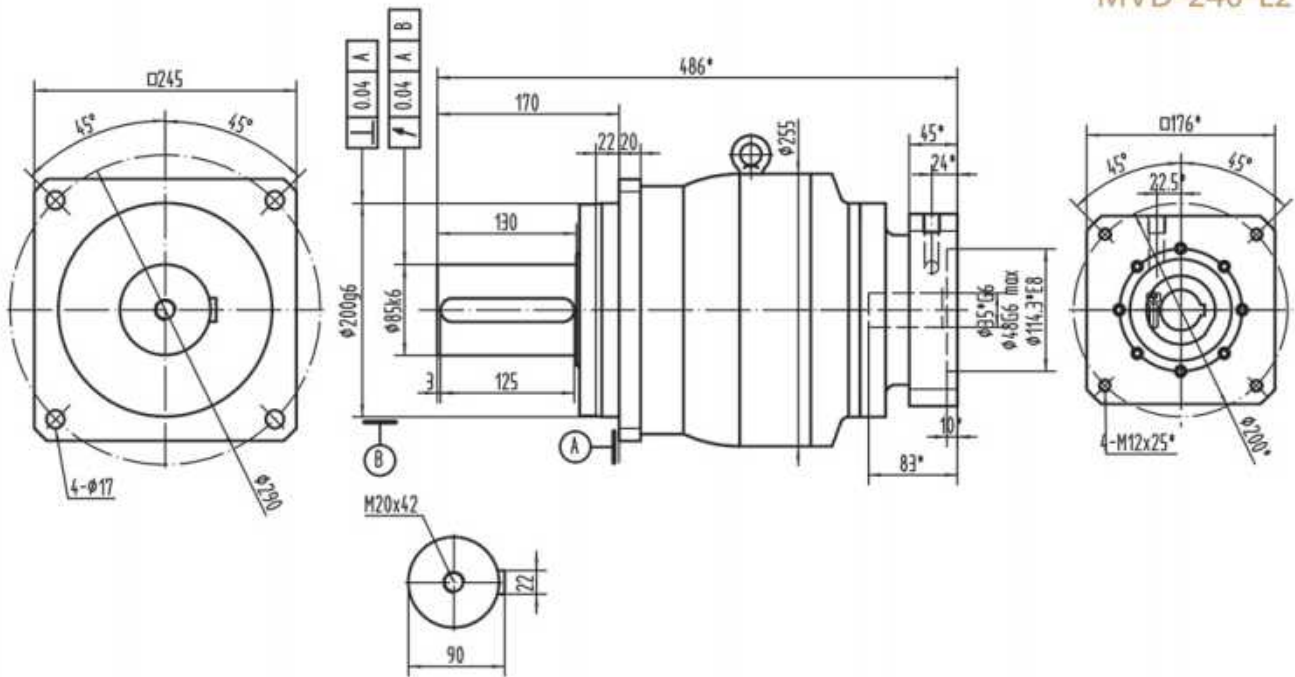
### MVD-240-L1



\* Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸: 代表可根据客户需求定制产品, 如有需要, 请联系我们!

# Drawing / Size

MVD-240-L2



MVD

\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

# Performance table

MVD

MVD-060																																
Symb.	i	T <sub>2N</sub>	T <sub>2Ntot</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	j <sub>1</sub>	C <sub>21</sub>	F <sub>2Ntot</sub>	F <sub>2NMax</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB															
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	1/100mm	N	N	kgcm <sup>2</sup>	%	h	°C																			
I STAGE	3	25	2×T <sub>2N</sub>	3300	6000	≤3	6	3000	2700	0.40	≥95	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤60															
	4	40								0.32																						
	5	40								0.28																						
	6	40								0.28																						
	7	40								0.25																						
	8	40								0.25																						
	9	25								0.25																						
	10	25								0.25																						
	II STAGE	15								34								2×T <sub>2N</sub>	3300	6000	≤5	6	3000	2700	0.38	≥90	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤60
		20								50															0.33							
25		50	0.30																													
50		50	0.27																													
80		50	0.26																													
100		35	0.25																													

MVD-075																																
Symb.	i	T <sub>2N</sub>	T <sub>2Ntot</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	j <sub>1</sub>	C <sub>21</sub>	F <sub>2Ntot</sub>	F <sub>2NMax</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB															
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	1/100mm	N	N	kgcm <sup>2</sup>	%	h	°C																			
I STAGE	3	80	2×T <sub>2N</sub>	3000	6000	≤3	10	4200	3900	1.01	≥95	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤62															
	4	120								0.78																						
	5	125								0.68																						
	6	125								0.68																						
	7	125								0.59																						
	8	125								0.59																						
	9	80								0.59																						
	10	80								0.57																						
	II STAGE	15								80								2×T <sub>2N</sub>	3000	6000	≤5	10	4200	3900	0.95	≥90	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤62
		20								125															0.82							
25		125	0.76																													
50		125	0.67																													
80		125	0.63																													
100		80	0.59																													



## Performance table

MVD-100																								
Symb.	i	T <sub>2N</sub>	T <sub>2Max</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	j <sub>1</sub>	C <sub>21</sub>	F <sub>20Max</sub>	F <sub>21Max</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB							
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	kg/mm <sup>2</sup>	N	N	kg/cm <sup>2</sup>	%	h	°C											
I STAGE	3	160	2×T <sub>2N</sub>	2500	6000	≤3	31	6800	6200	3.14	≥95	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤65							
	4	220								2.40														
	5	260								2.16														
	6	260								2.16														
	7	260								1.93														
	8	260								1.93														
	9	160								1.93														
	10	160								1.90														
	II STAGE	15								220								2.95	≤5	53	11000	9800	2.95	≥90
		20								300								2.57						
25		350	2.38																					
50		350	2.14																					
80		360	2.05																					
100		220	1.97																					

MVD

MVD-140																								
Symb.	i	T <sub>2N</sub>	T <sub>2Max</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	j <sub>1</sub>	C <sub>21</sub>	F <sub>20Max</sub>	F <sub>21Max</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB							
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	kg/mm <sup>2</sup>	N	N	kg/cm <sup>2</sup>	%	h	°C											
I STAGE	3	350	2×T <sub>2N</sub>	2000	5000	≤3	53	11000	9800	16.77	≥95	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤66							
	4	550								12.61														
	5	600								10.31														
	6	600								10.31														
	7	600								8.73														
	8	550								8.73														
	9	380								8.64														
	10	380								8.35														
	II STAGE	15								460								15.19	≤5	53	11000	9800	15.19	≥90
		20								650								13.05						
25		700	11.89																					
50		700	10.28																					
80		700	9.39																					
100		460	8.76																					

# Performance table

MVD

MVD-180																																
Symb.	i	T <sub>2N</sub>	T <sub>2rot</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>f</sub>	C <sub>21</sub>	F <sub>20Max</sub>	F <sub>21Max</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB															
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	kg/cm <sup>2</sup>	N	N	kg/cm <sup>2</sup>	%	h	°C																			
I STAGE	3	1100	2xT <sub>2N</sub>	1500	3500	≤3	175	18500	16000	542	≥95	>20000	-15-45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤71															
	4	1600								3944																						
	5	1800								3338																						
	6	1800								3302																						
	7	1800								2749																						
	8	1800								2700																						
	9	1200								2737																						
	10	1200								47.00																						
	II STAGE	15								1300								≤5							345	≥90						
		20								1800															315							
25		1900	308																													
50		1900	283																													
80		1900	2637																													
100		1300	3036																													

MVD-210																																
Symb.	i	T <sub>2N</sub>	T <sub>2rot</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>f</sub>	C <sub>21</sub>	F <sub>20Max</sub>	F <sub>21Max</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB															
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	kg/cm <sup>2</sup>	N	N	kg/cm <sup>2</sup>	%	h	°C																			
I STAGE	3	1500	2xT <sub>2N</sub>	1200	3000	≤3	400	23000	21000	139	≥95	>20000	-15-45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤75															
	4	2100								835																						
	5	2200								681																						
	6	2200								681																						
	7	2200								544																						
	8	2200								522																						
	9	1600								493																						
	10	1500								47.0																						
	II STAGE	15								2400								≤5							345	≥90						
		20								2400															315							
25		2550	308																													
50		2550	283																													
80		2550	281																													
100		1900	280																													

# Performance table

MVD-240																																				
Symb.	i	T <sub>2N</sub>	T <sub>2Max</sub>	n <sub>N</sub>	n <sub>Max</sub>	j <sub>t</sub>	C <sub>2t</sub>	F <sub>2Max</sub>	F <sub>2Max</sub>	J <sub>t</sub>	η	L <sub>h</sub>	T	Lub	PC	MP																				
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	mm/mm	N	N	kg/cm <sup>2</sup>	%	h	°C						dB																	
I STAGE	3	3000	2xT <sub>2N</sub>	1000	2500	≤3	540	29000	26500	180	≥95	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向																				
	4	3000								180																										
	5	3150								170																										
	6	3150								170																										
	7	3150								170																										
	8	3000								170																										
	9	2400								150																										
	10	2200								150																										
	II STAGE	15								3000										≤5	64	≥90														
		20								3000																										
25		3150	64																																	
50		3150	64																																	
80		3150	64																																	
100		2300	64																																	

MVD

**MAF SERIES**



高性能系列适应于最恶劣工况。MAF精密行星提供高刚性、最大扭矩、最高精度和小体积。

High-performance series for heaviest operating duties, MAF gearboxes present high torsional stiffness, maximum power, optimum precision and compactness.





MAF

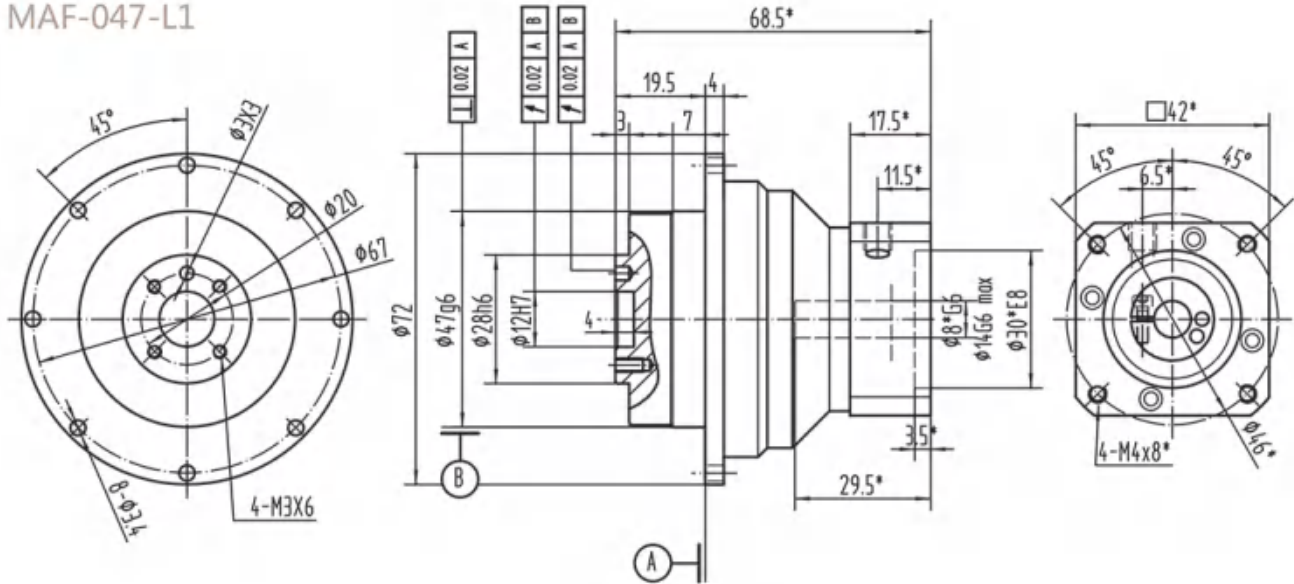
**造型数据:**  
**Selection data:**

扭矩 ( Nm )	14-3150
速比	4-100
背隙 ( arcmin )	3-5
最大工作温度 ( °C )	90
噪音 ( dB )	58-79

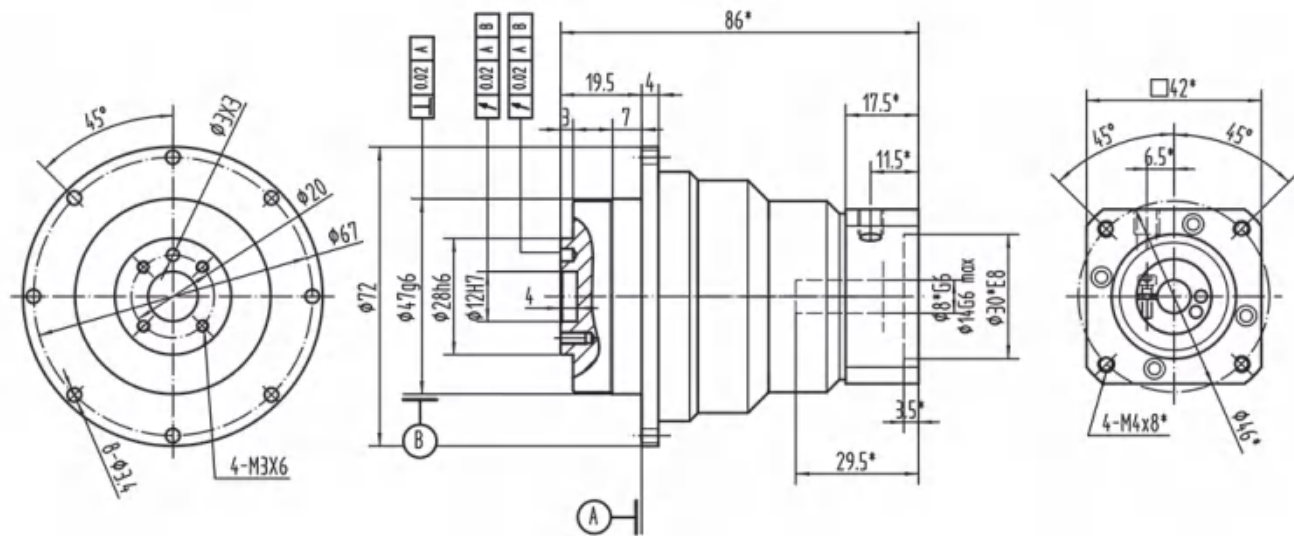
Nominal output torque ( Nm )	14-3150
Reduction ratio	4-100
Backlash ( arcmin )	3-5
Max.working temperature ( °C )	90
Noise ( dB )	58-79

Drawing / Size

MAF-047-L1



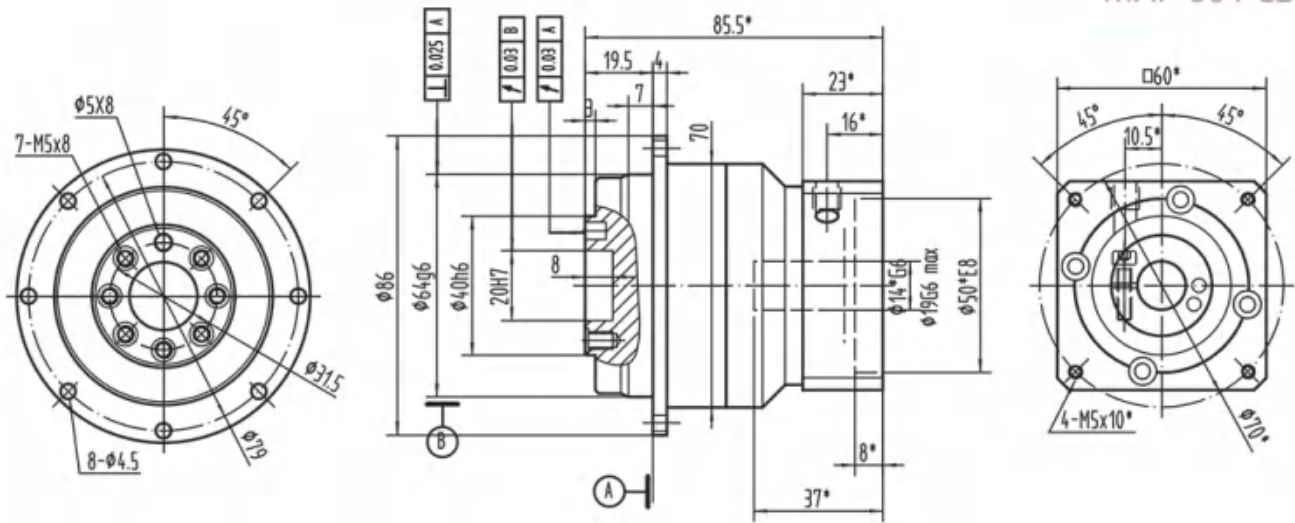
MAF-047-L2



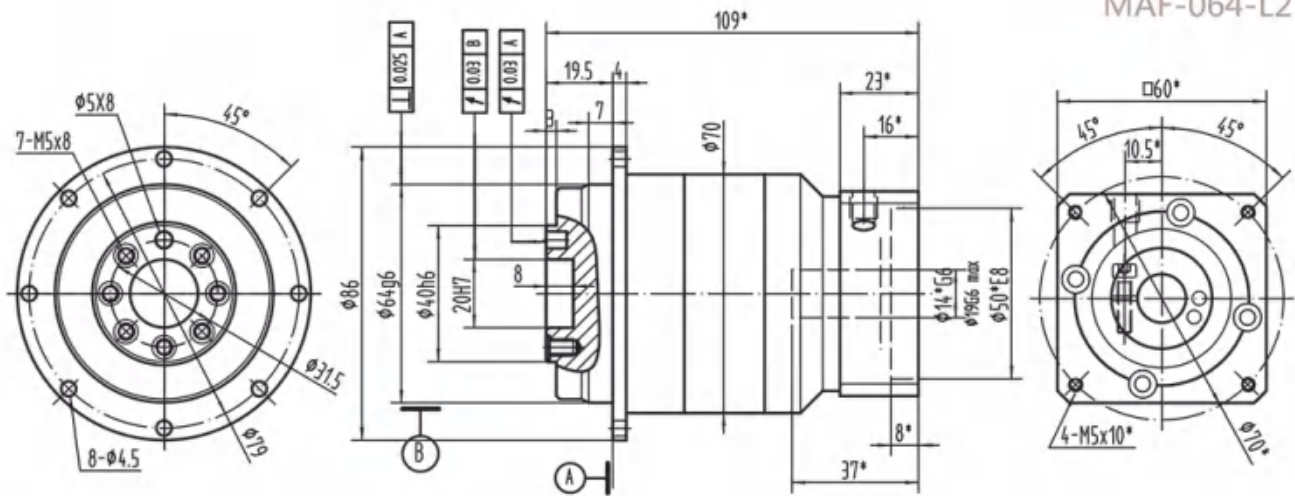
\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

Drawing / Size

MAF-064-L1



MAF-064-L2

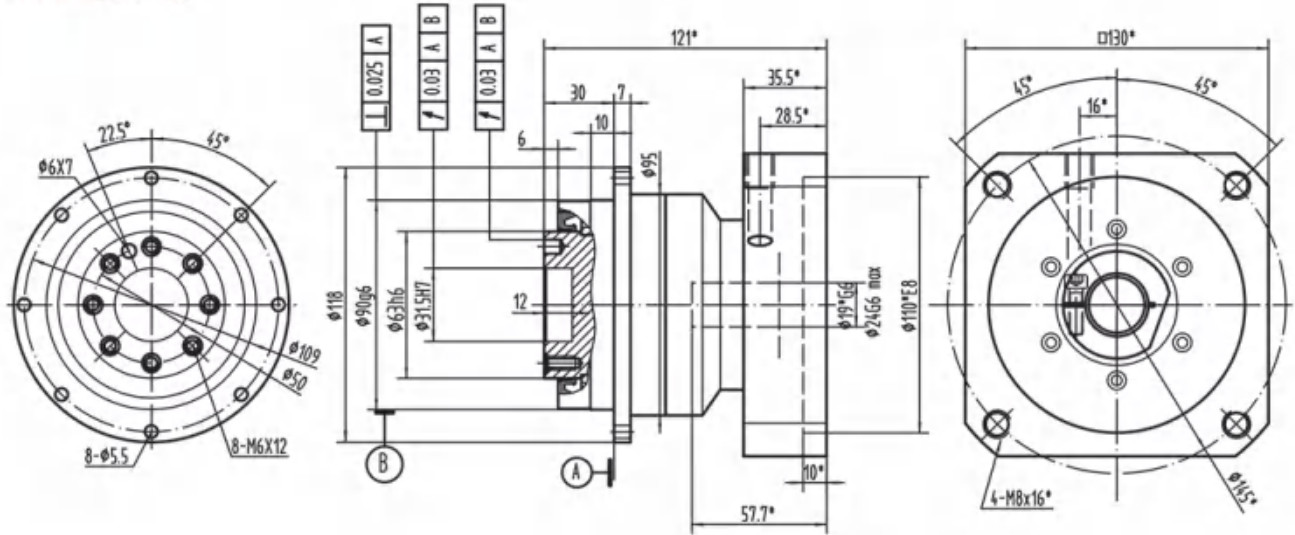


\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

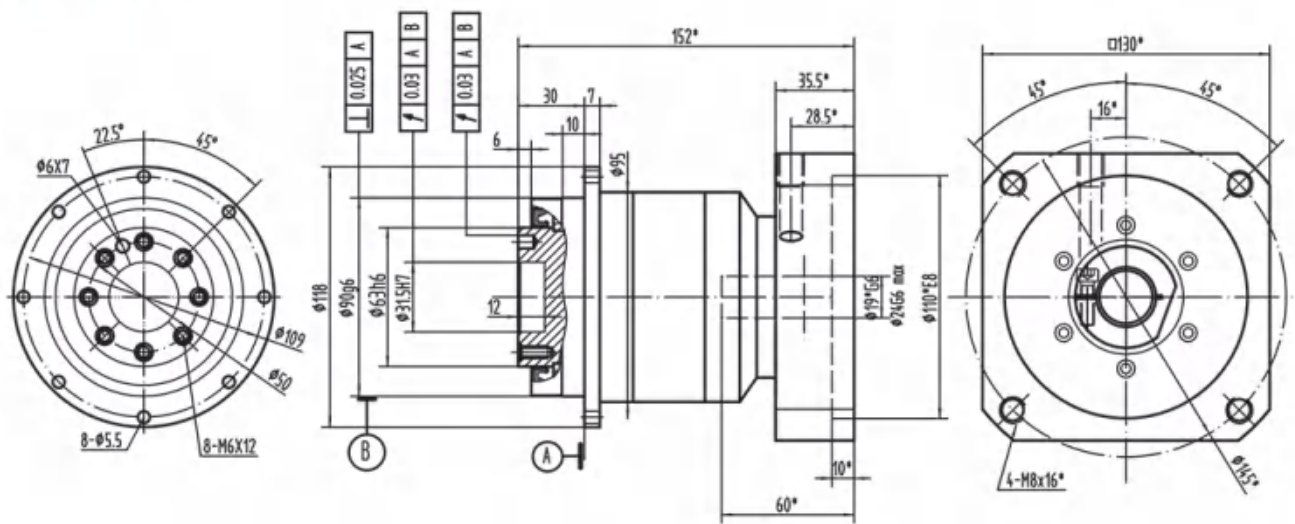
MAF

# Drawing / Size

MAF-090-L1



MAF-090-L2

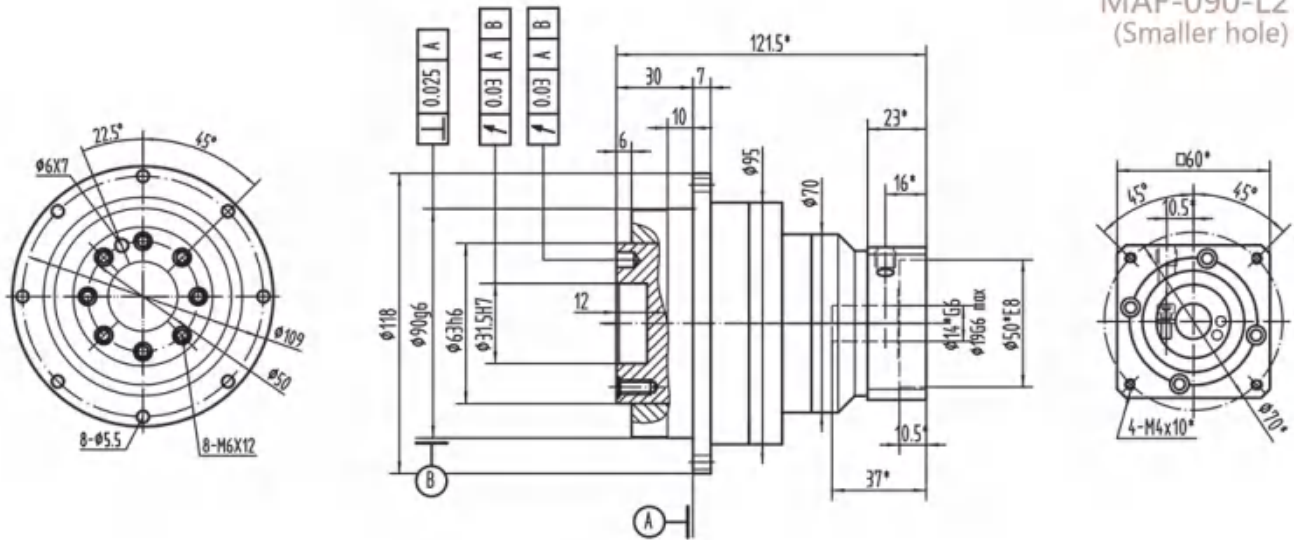


\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！



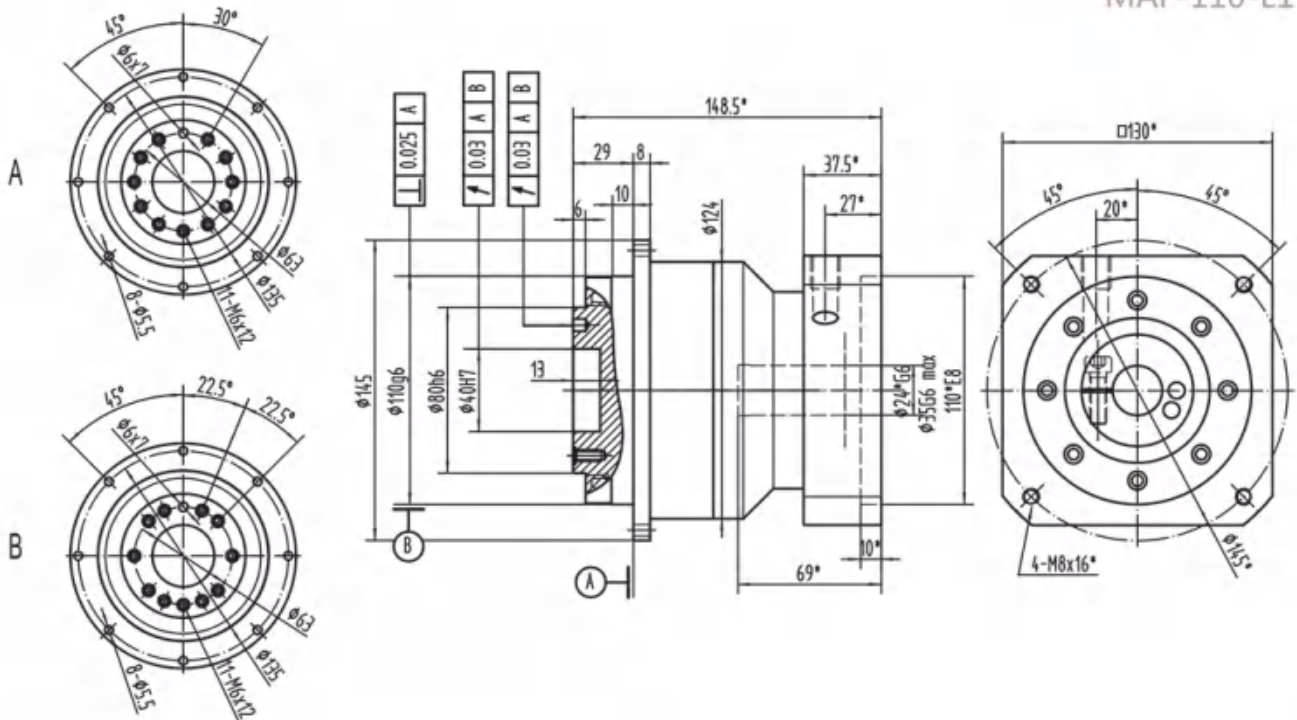
## Drawing / Size

MAF-090-L2  
(Smaller hole)



MAF

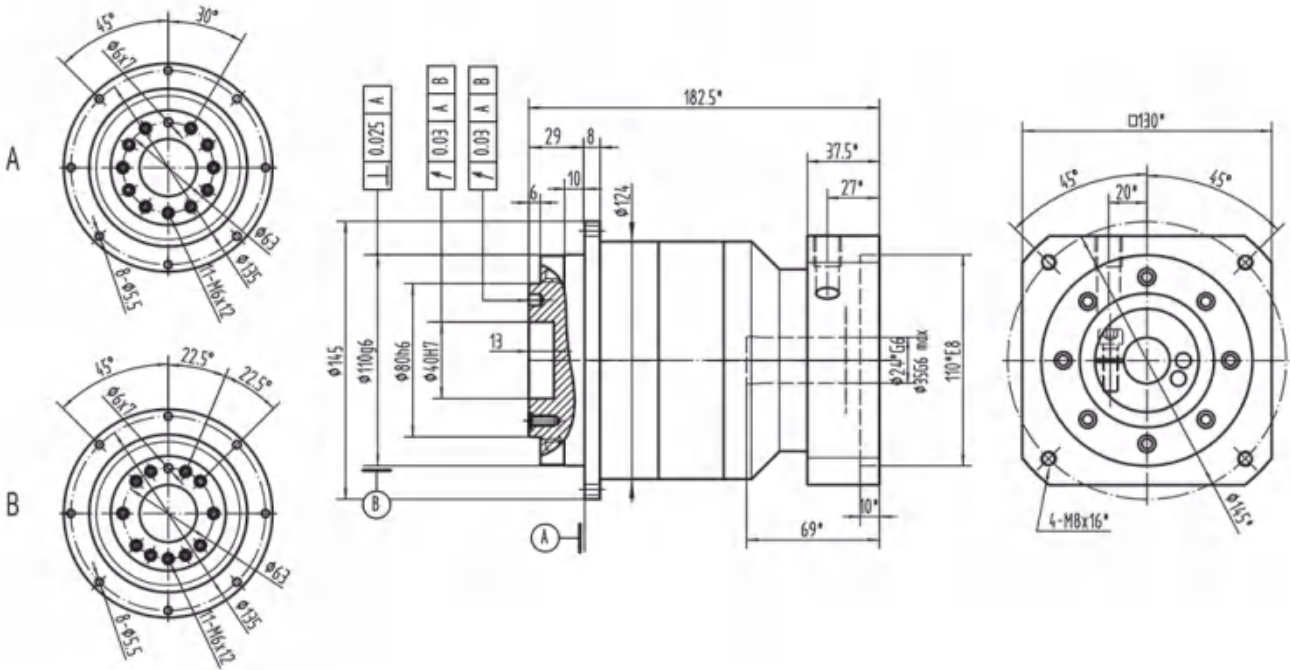
MAF-110-L1



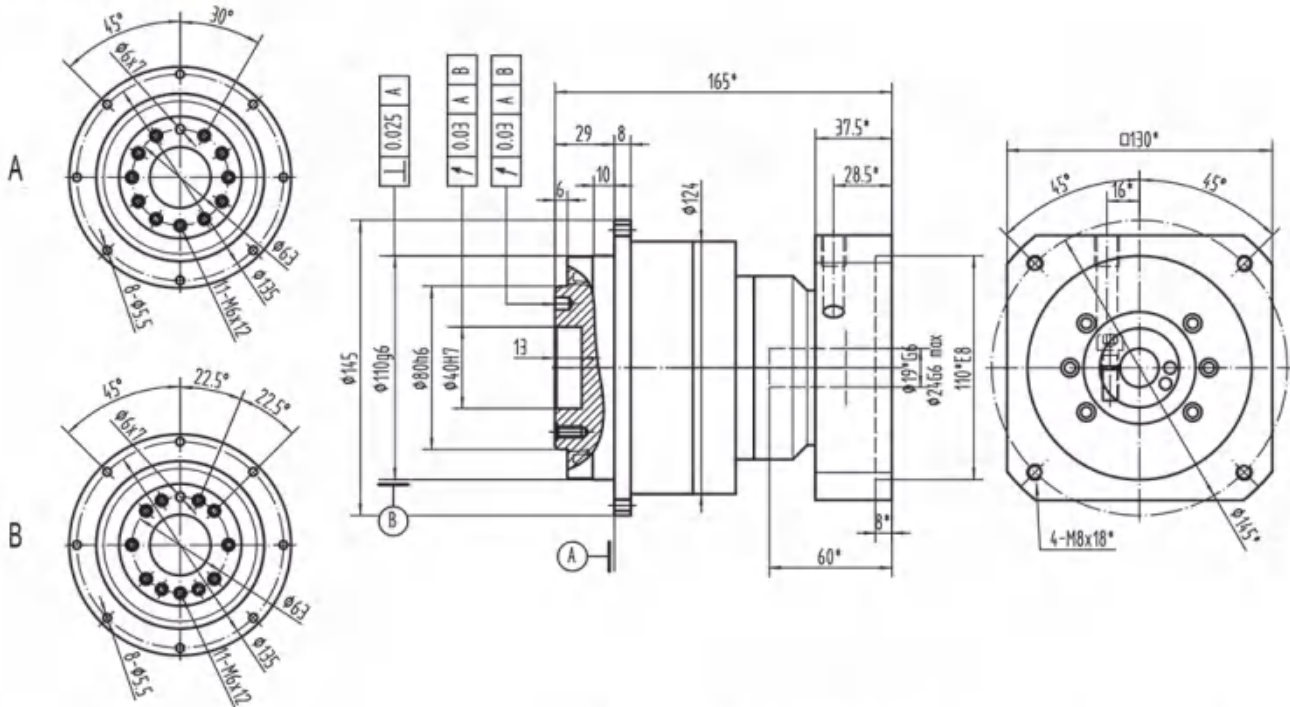
\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

## Drawing / Size

MAF-110-L2



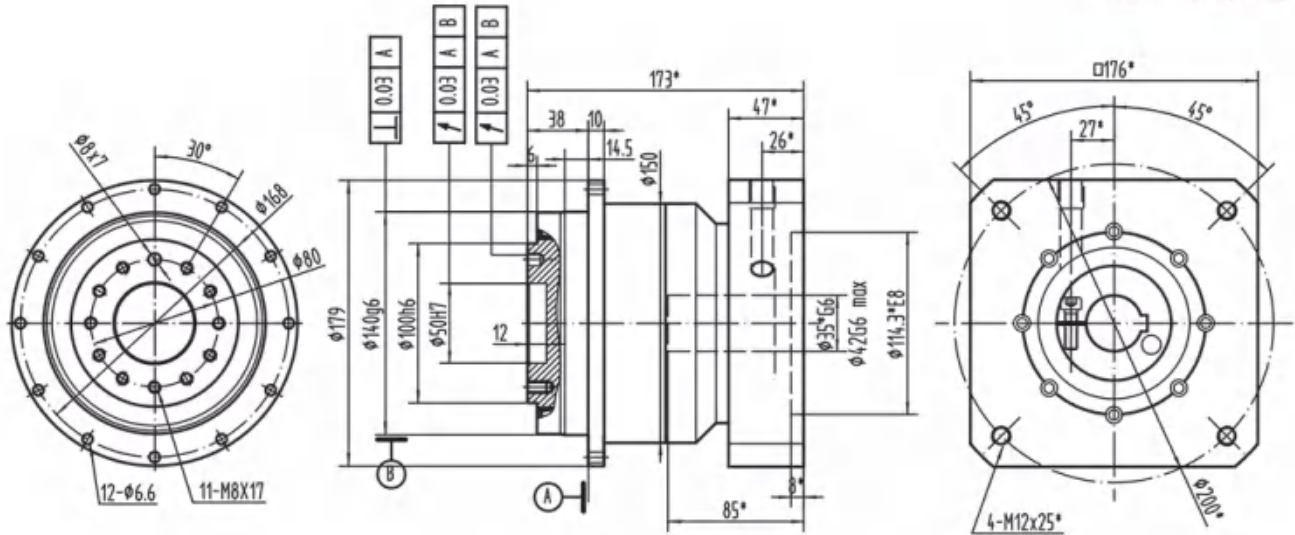
MAF-110-L2  
(Smaller hole)



\* Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

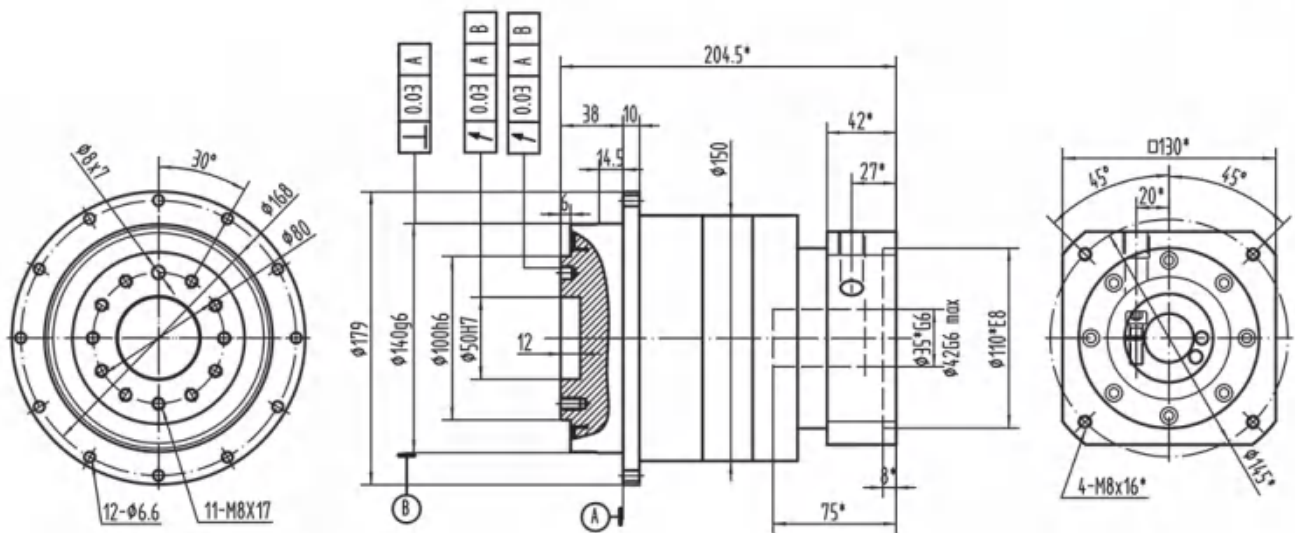
# Drawing / Size

MAF-140-L1



MAF

MAF-140-L2

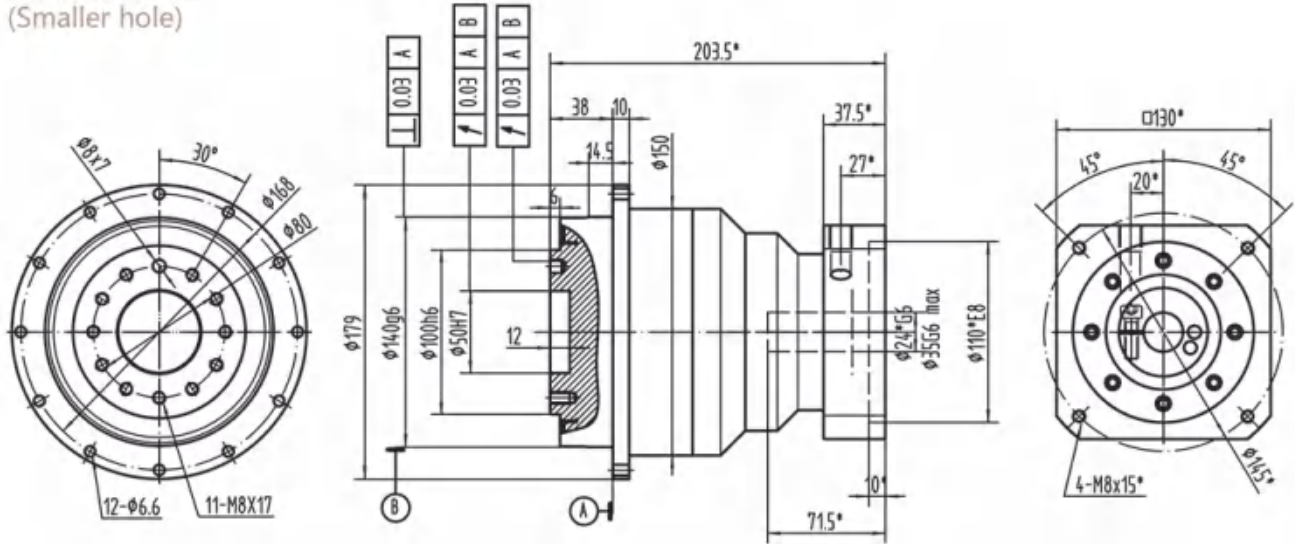


\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸: 代表可根据客户需求定制产品, 如有需要, 请联系我们!

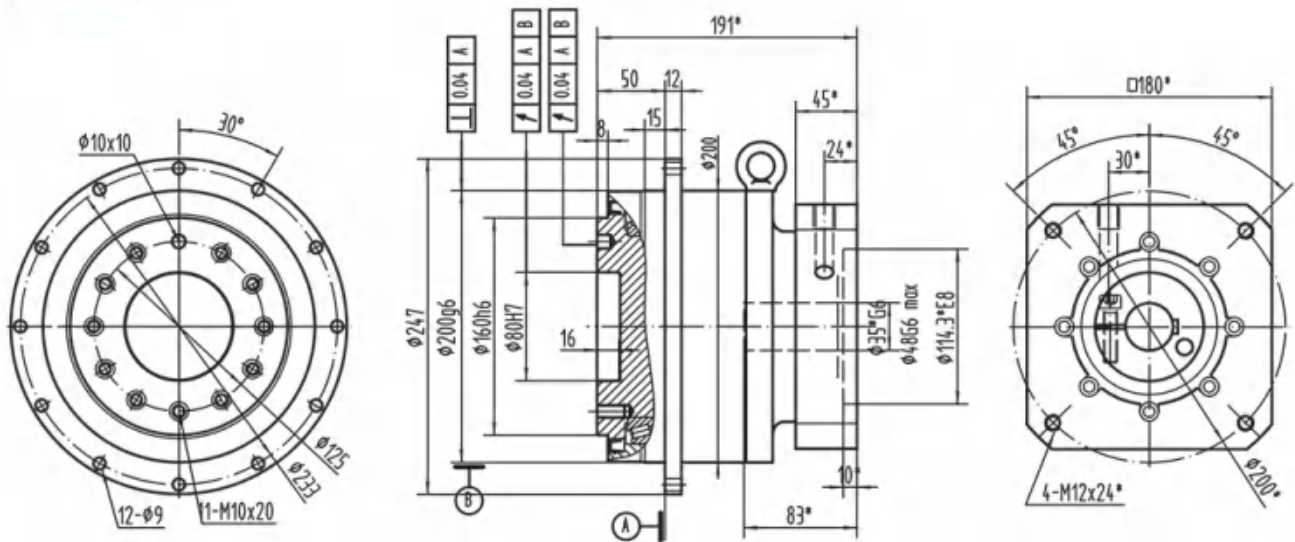


## Drawing / Size

MAF-140-L2  
(Smaller hole)



MAF-200-L1

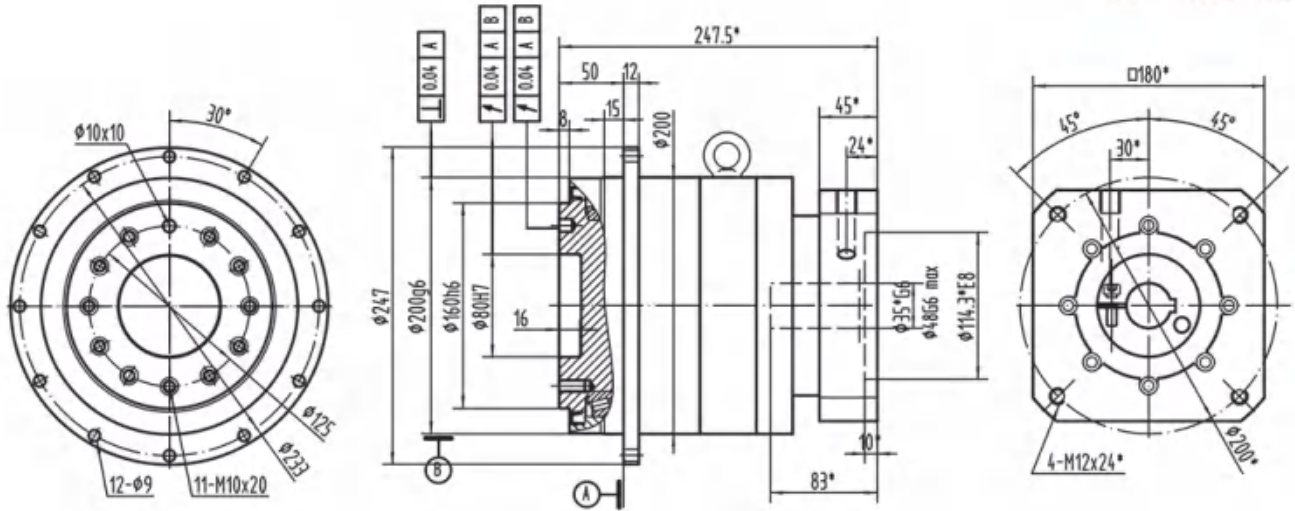


\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！



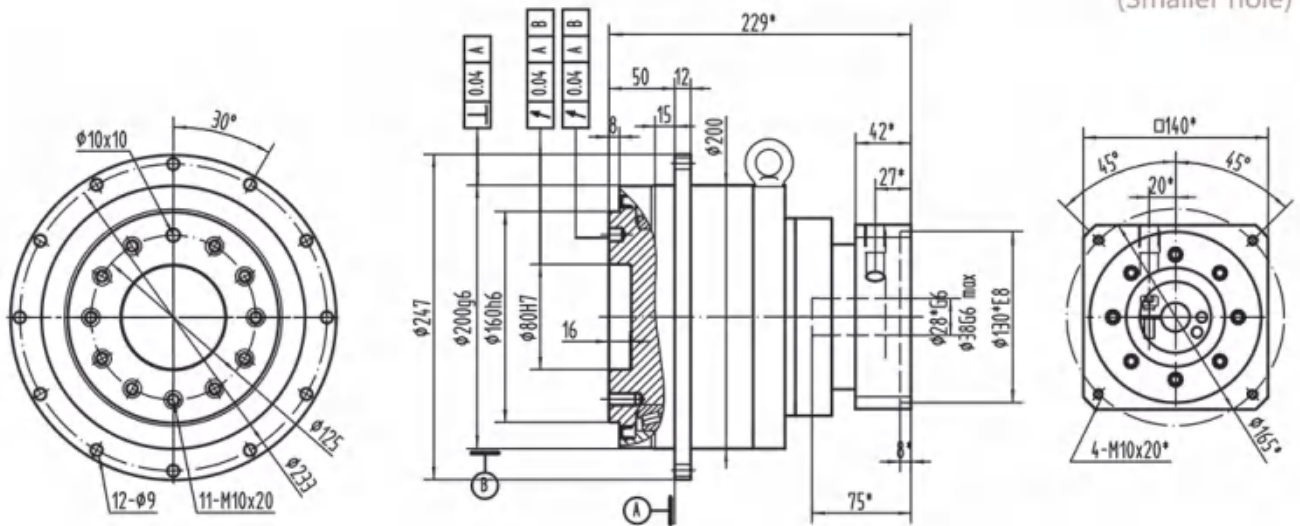
Drawing / Size

MAF-200-L2



MAF

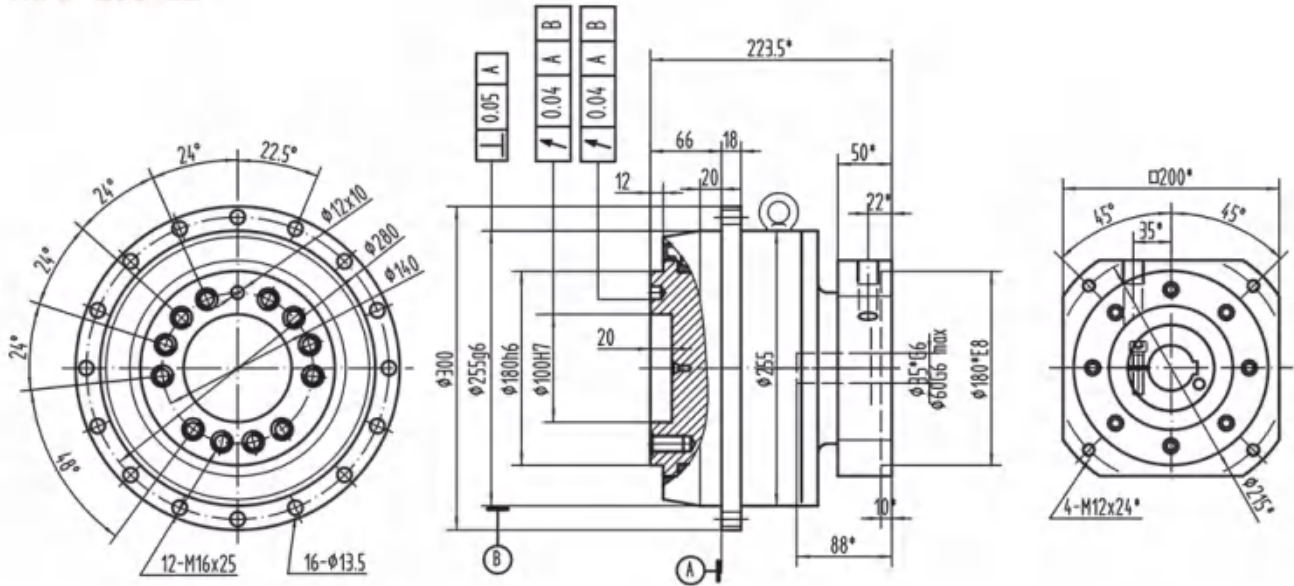
MAF-200-L2  
(Smaller hole)



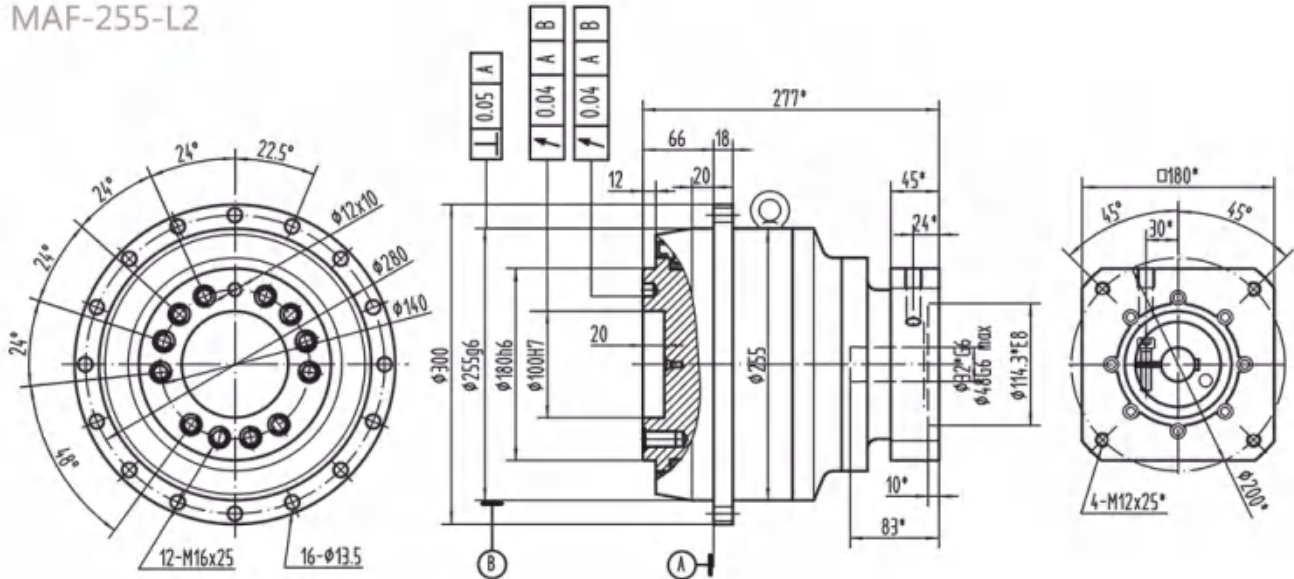
\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

## Drawing / Size

MAF-255-L1



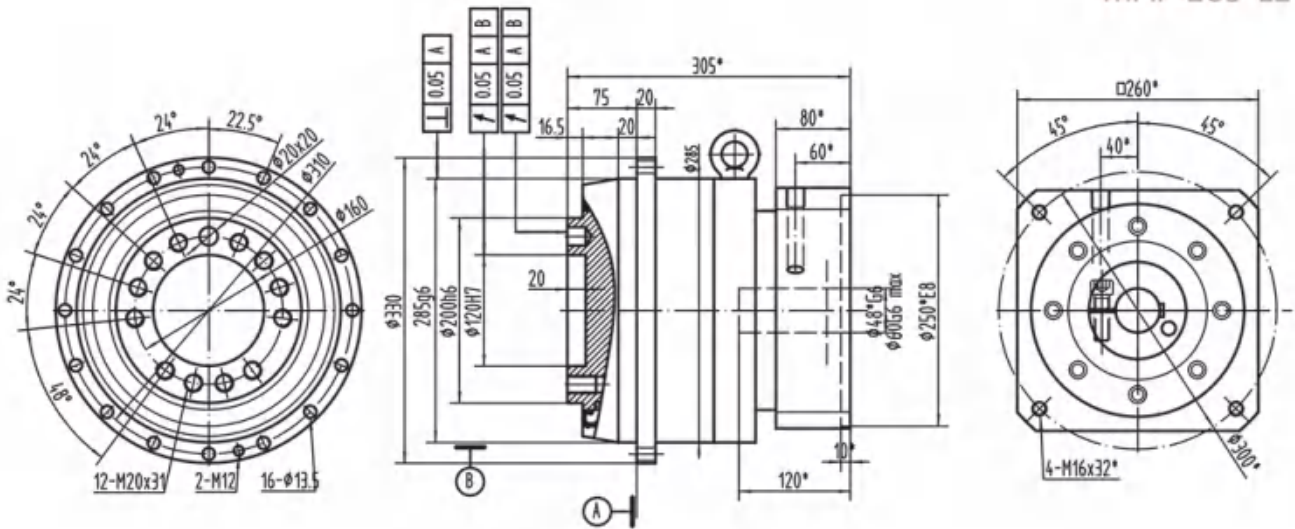
MAF-255-L2



\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸: 代表可根据客户需求定制产品, 如有需要, 请联系我们!

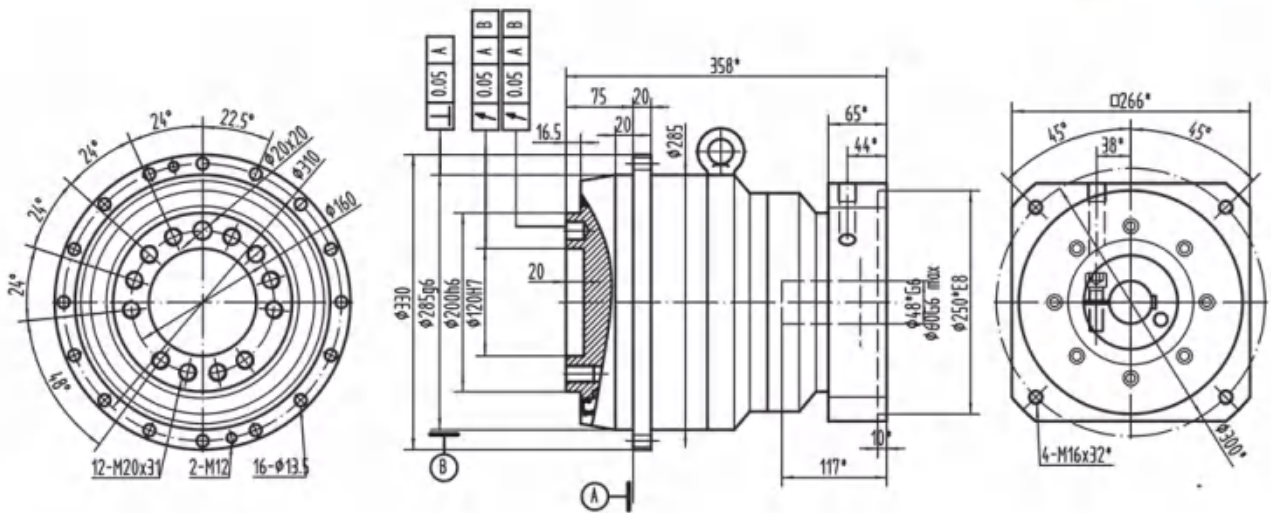
# Drawing / Size

MAF-285-L1



MAF

MAF-285-L2



\* Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

# Performance table

MAF

MAF-047																		
Symb.	i	T <sub>2N</sub>	T <sub>2Max</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>i</sub>	C <sub>2i</sub>	F <sub>20Max</sub>	F <sub>25Max</sub>	J <sub>i</sub>	η	L <sub>h</sub>	T	Lub.	PC	MP	dB	
Unit		N <sub>in</sub>	N <sub>in</sub>	rpm	rpm	arcmin	mm/mm	N	N	kg/cm <sup>2</sup>	%	h	°C					
I STAGE	4	14	2×T <sub>2N</sub>	4000	8000	≤3	5	800	500	3	≥95	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤58	
	5	20								3								
	6	20								3								
	7	20								2.2								
	8	20								3								
	9	14								3								
	10	14								2.2								
II STAGE	20	14	2×T <sub>2N</sub>	4000	8000	≤5	5	800	500	3	≥90	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤58	
	25	20								3								
	50	20								3								
	80	20								3								
	100	14								2.2								

MAF-064																		
Symb.	i	T <sub>2N</sub>	T <sub>2Max</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>i</sub>	C <sub>2i</sub>	F <sub>20Max</sub>	F <sub>25Max</sub>	J <sub>i</sub>	η	L <sub>h</sub>	T	Lub.	PC	MP	dB	
Unit		N <sub>in</sub>	N <sub>in</sub>	rpm	rpm	arcmin	mm/mm	N	N	kg/cm <sup>2</sup>	%	h	°C					
I STAGE	4	40	2×T <sub>2N</sub>	3300	6000	≤3	13	1300	680	0.13	≥95	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤60	
	5	40								0.13								
	6	40								0.13								
	7	40								0.13								
	8	40								0.03								
	9	25								0.03								
	10	25								0.03								
II STAGE	20	50	2×T <sub>2N</sub>	3300	6000	≤5	13	1300	680	0.03	≥90	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤60	
	25	50								0.03								
	50	50								0.03								
	80	50								0.03								
	100	35								0.03								



## Performance table

MAF-090																	
Symb.	i	T <sub>2N</sub>	T <sub>2Max</sub>	n <sub>2N</sub>	n <sub>2Max</sub>	J <sub>t</sub>	C <sub>2t</sub>	F <sub>200Max</sub>	F <sub>2Max</sub>	J <sub>t</sub>	η	L <sub>n</sub>	T	Lub	PC	MP	dB
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	mm/mm	N	N	kg/cm <sup>2</sup>	%	h	°C				
I STAGE	4	120	2×T <sub>2N</sub>	2600	6000	≤3	31	3100	1650	0.51	≥95	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤63
	5	125								0.47							
	6	125								0.47							
	7	125								0.45							
	8	125								0.45							
	9	80								0.44							
	10	80								0.44							
II STAGE	20	120	2×T <sub>2N</sub>	2600	6000	≤5	31	3100	1650	0.13	≥90	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤63
	25	125								0.13							
	50	125								0.13							
	80	125								0.44							
	100	80								0.13							

MAF

MAF-110																	
Symb.	i	T <sub>2N</sub>	T <sub>2Max</sub>	n <sub>2N</sub>	n <sub>2Max</sub>	J <sub>t</sub>	C <sub>2t</sub>	F <sub>200Max</sub>	F <sub>2Max</sub>	J <sub>t</sub>	η	L <sub>n</sub>	T	Lub	PC	MP	dB
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	mm/mm	N	N	kg/cm <sup>2</sup>	%	h	°C				
I STAGE	4	220	2×T <sub>2N</sub>	2300	6000	≤3	82	7800	4000	2.87	≥95	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤65
	5	260								2.71							
	6	260								2.71							
	7	260								2.62							
	8	260								2.61							
	9	160								2.58							
	10	160								2.57							
II STAGE	20	300	2×T <sub>2N</sub>	2300	6000	≤5	82	7800	4000	0.47	≥90	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤65
	25	350								0.47							
	50	350								0.44							
	80	350								0.44							
	100	220								0.44							



# Performance table

MAF

MAF-140																	
Symb.	i	T <sub>2N</sub>	T <sub>2Max</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	j <sub>1</sub>	C <sub>21</sub>	F <sub>20Max</sub>	F <sub>2Max</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB
Unit		N <sub>in</sub>	N <sub>in</sub>	rpm	rpm	arcmin	mm/mm	N	N	kg/cm <sup>2</sup>	%	h	°C				
I STAGE	4	550	2×T <sub>2N</sub>	2000	5000	≤3	151	12000	8100	7.54	≥95	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤66
	5	600								7.42							
	6	600								7.42							
	7	600								7.14							
	8	550								7.13							
	9	380								7.08							
	10	380								7.03							
II STAGE	20	650	2×T <sub>2N</sub>	2000	5000	≤5	151	12000	8100	2.71	≥90	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤66
	25	700								2.71							
	50	700								2.57							
	80	700								2.57							
	100	460								2.57							

MAF-200																	
Symb.	i	T <sub>2N</sub>	T <sub>2Max</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	j <sub>1</sub>	C <sub>21</sub>	F <sub>20Max</sub>	F <sub>2Max</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB
Unit		N <sub>in</sub>	N <sub>in</sub>	rpm	rpm	arcmin	mm/mm	N	N	kg/cm <sup>2</sup>	%	h	°C				
I STAGE	4	1000	2×T <sub>2N</sub>	2000	4000	≤3	450	18520	15500	23.4	≥95	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤73
	5	1000								23.4							
	6	1000								23.4							
	7	1000								23.4							
	8	1000								21.8							
	9	650								21.8							
	10	650								21.8							
II STAGE	20	1350	2×T <sub>2N</sub>	2000	4000	≤5	450	18520	15500	21.8	≥90	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤73
	25	1400								21.8							
	50	1400								21.8							
	80	1400								21.8							
	100	980								21.8							

## Performance table

MAF-255																	
Symb.	i	T <sub>2N</sub>	T <sub>2Max</sub>	n <sub>2N</sub>	n <sub>2Max</sub>	J <sub>1</sub>	C <sub>21</sub>	F <sub>20Max</sub>	F <sub>25Max</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	1/1000mm	N	N	kg/cm <sup>2</sup>	%	h	°C				
I STAGE	4	2100	2×T <sub>2N</sub>	2000	3000	≤3	1023	27000	24000	180	≥95	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤77
	5	2200								170							
	6	2200								170							
	7	2200								170							
	8	2200								170							
	9	1600								150							
	10	1500								150							
II STAGE	20	2400	64	≥90													
	25	2550	64														
	50	2550	64														
	80	2550	64														
	100	1900	64														

MAF

MAF-285																	
Symb.	i	T <sub>2N</sub>	T <sub>2Max</sub>	n <sub>2N</sub>	n <sub>2Max</sub>	J <sub>1</sub>	C <sub>21</sub>	F <sub>20Max</sub>	F <sub>25Max</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	1/1000mm	N	N	kg/cm <sup>2</sup>	%	h	°C				
I STAGE	4	3000	2×T <sub>2N</sub>	1500	2500	≤3	1300	44000	37000	128.3	≥95	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤79
	5	3150								128.3							
	6	3150								128.3							
	7	3150								128.3							
	8	3000								128.3							
	9	2400								128.3							
	10	2200								128.3							
II STAGE	20	3000	64.3	≥90													
	25	3150	64.3														
	50	3150	64.3														
	80	3150	64.3														
	100	2300	64.3														

**MAFQ SERIES**



MAFQ相对于MAF有更高的扭矩

The MAFQ has a higher torque than the MAF



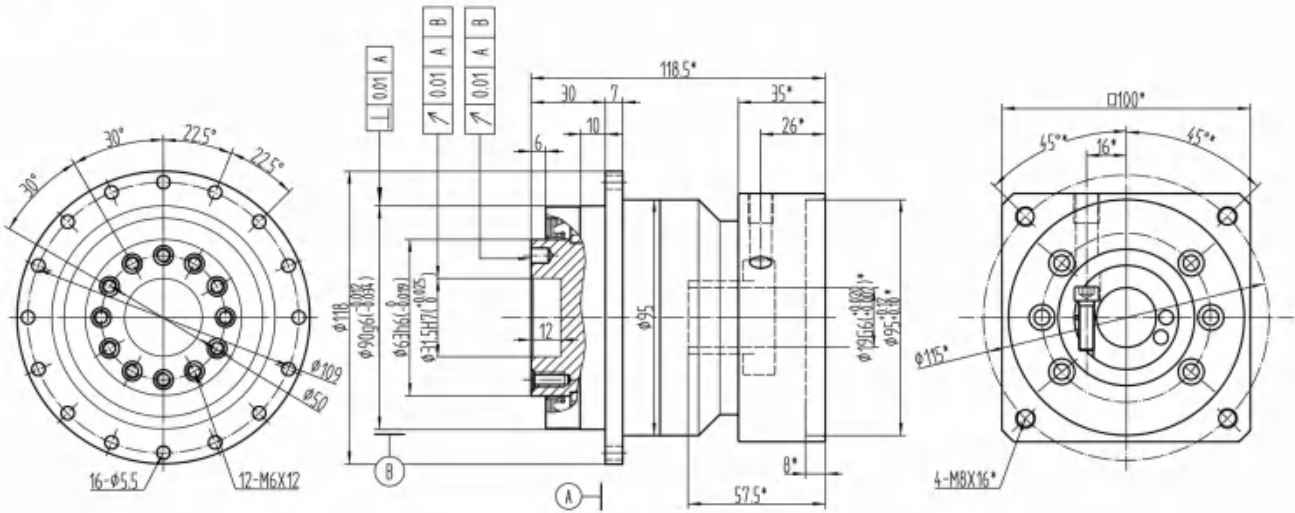
造型数据：  
Selection data:

扭矩 ( Nm )	100-25000
速比	5.5的倍数
背隙 ( arcmin )	3-5
最大工作温度 ( °C )	90
噪音 ( dB )	58-79

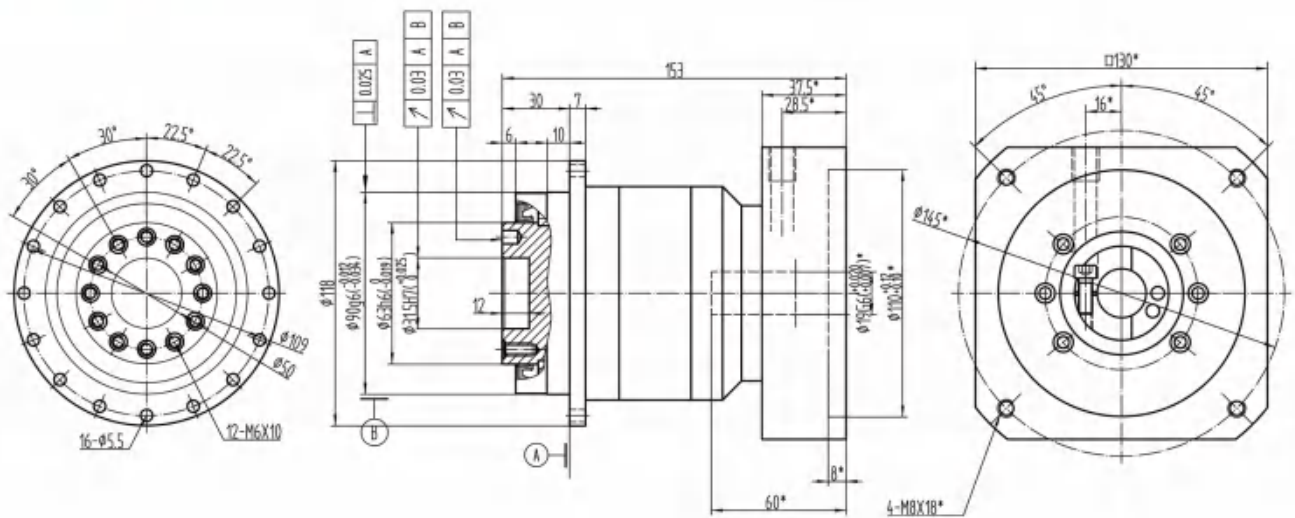
Nominal output torque ( Nm )	100-25000
Reduction ratio	5.5的倍数
Backlash ( arcmin )	3-5
Max.working temperature ( °C )	90
Noise ( dB )	58-79

Drawing / Size

MAFQ-090-L1



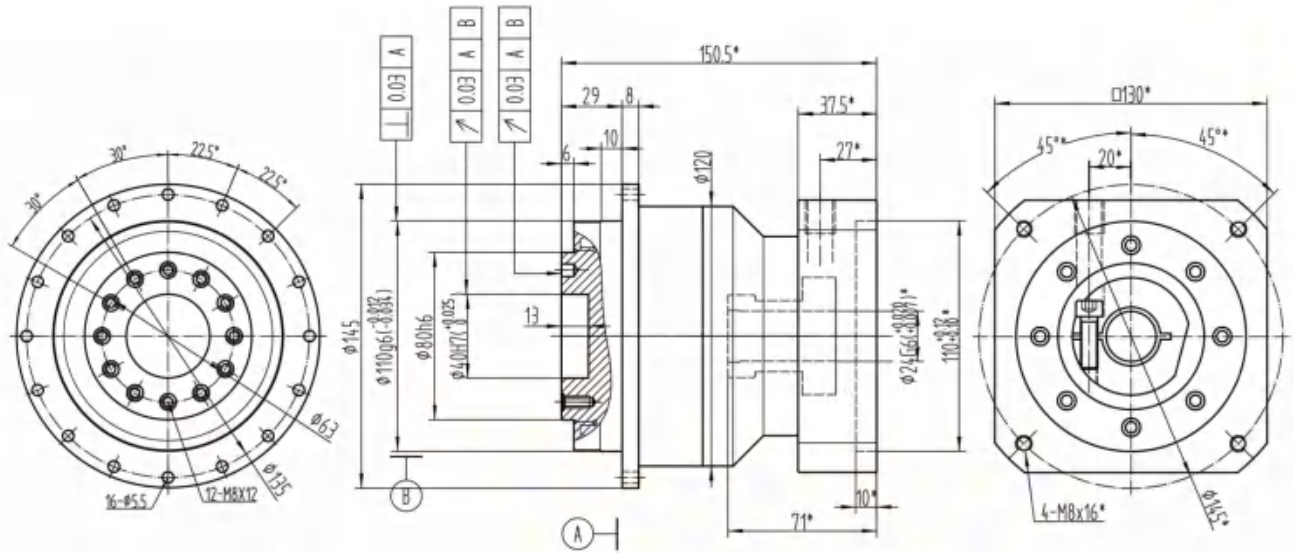
MAFQ-090-L2



\* Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸；代表可根据客户需求定制产品，如有需要，请联系我们！

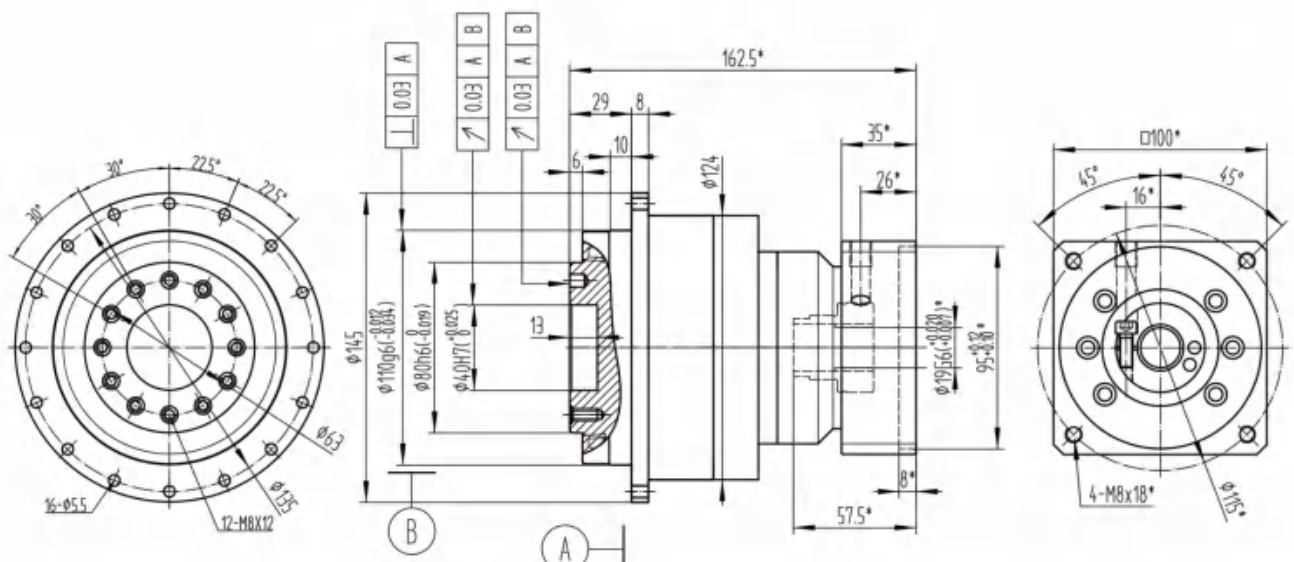


## MAFQ-110-L1



MAFQ

## MAFQ-110-L2

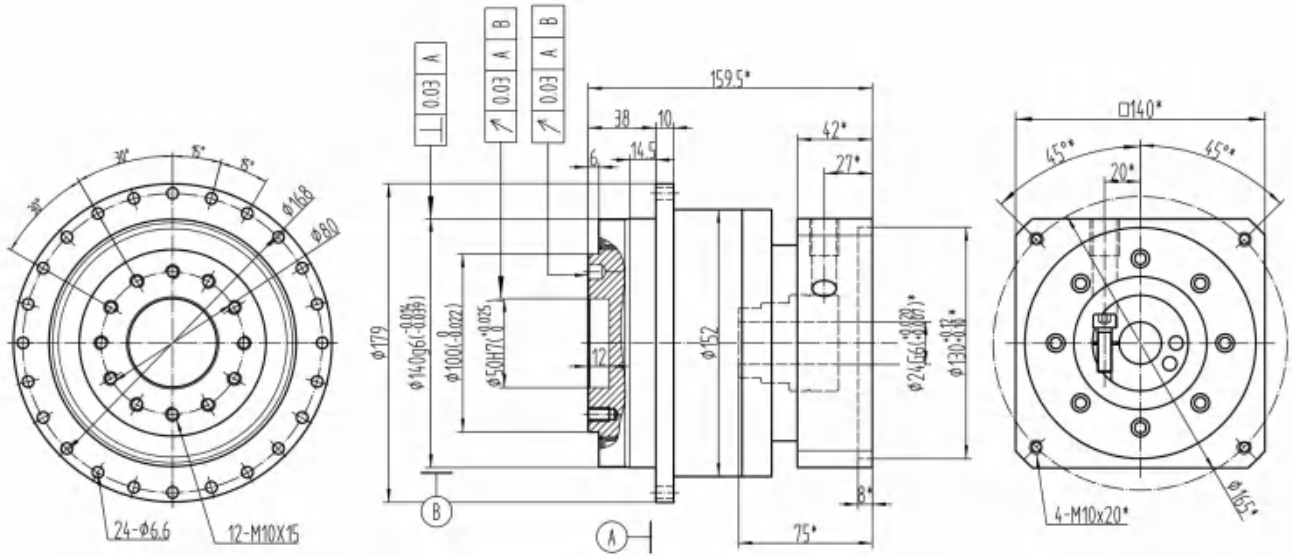


\*Dimensions based on servo-motor, please contact us for custom made order.  
 注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

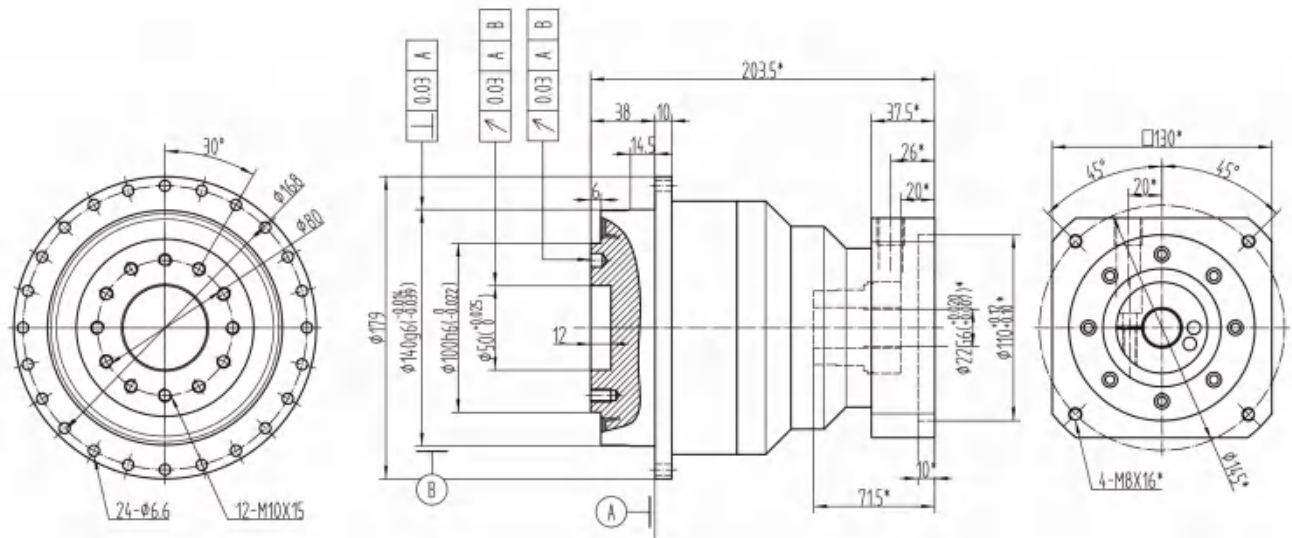
Drawing / Size

MAFQ-140-L1

MAFQ



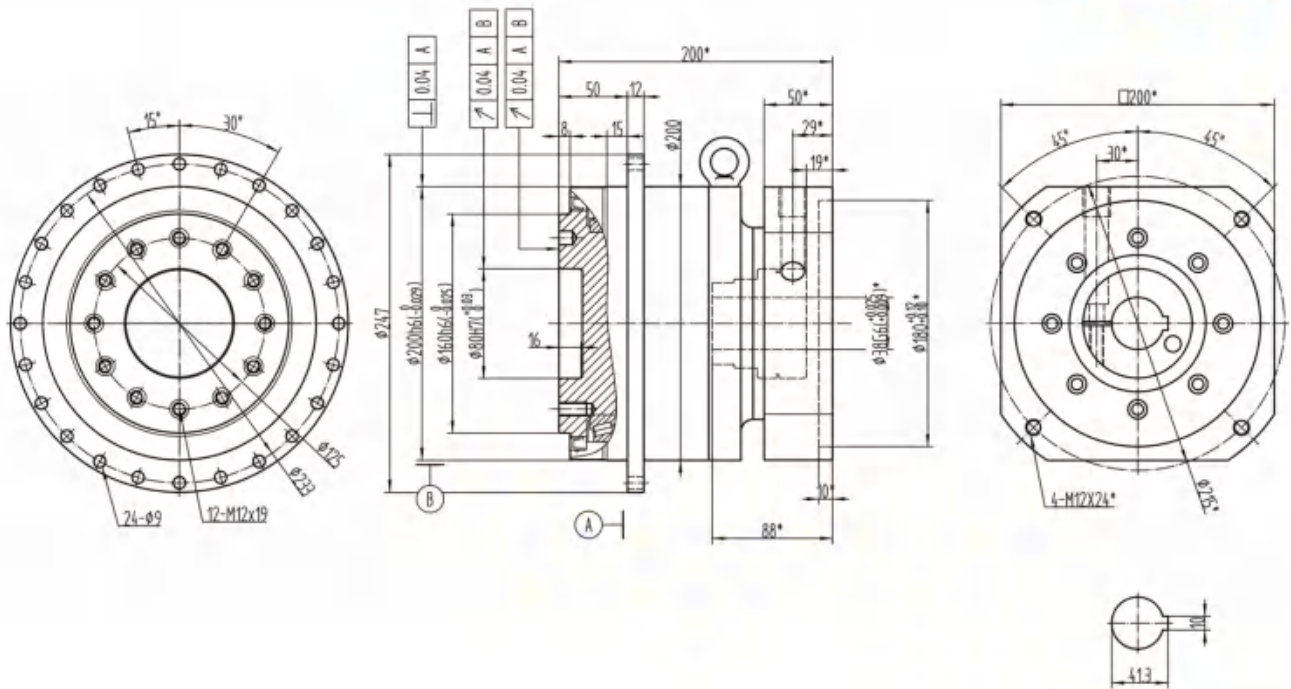
MAFQ-140-L2



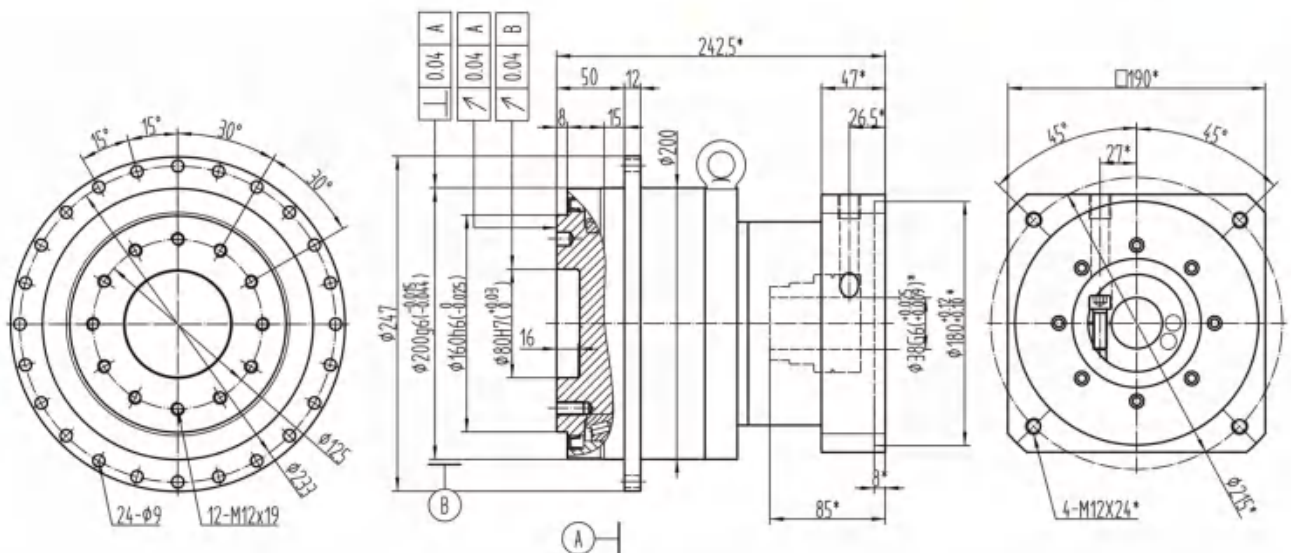
\* Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸；代表可根据客户需求定制产品，如有需要，请联系我们！

## Drawing / Size

### MAFQ-200-L1



### MAFQ-200-L2

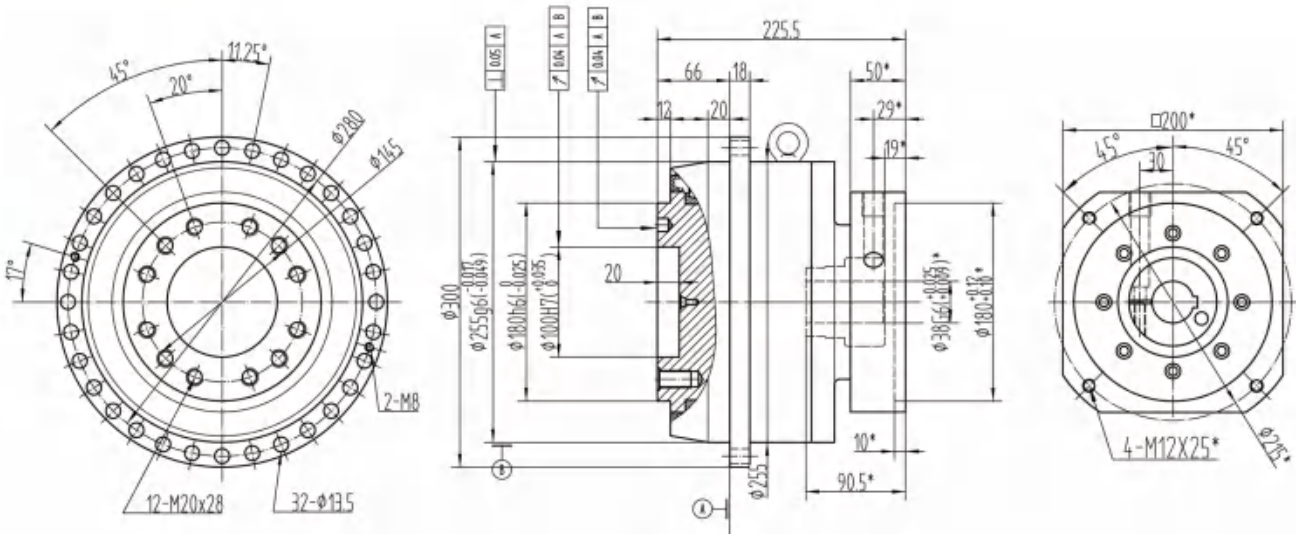


\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

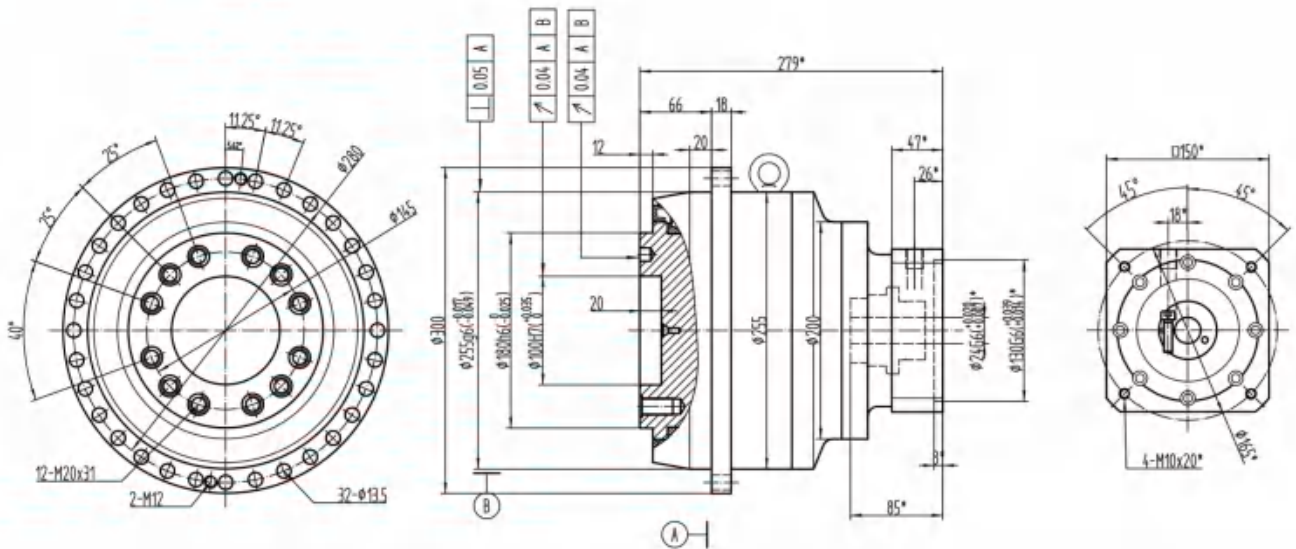


# Drawing / Size

## MAFQ-255-L1

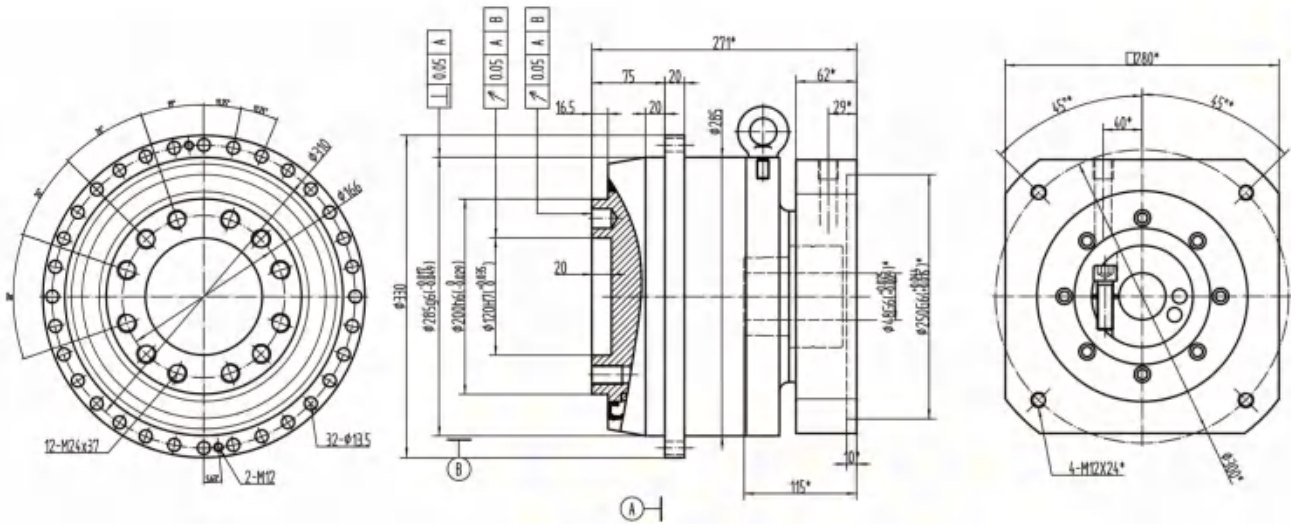


## MAFQ-255-L2

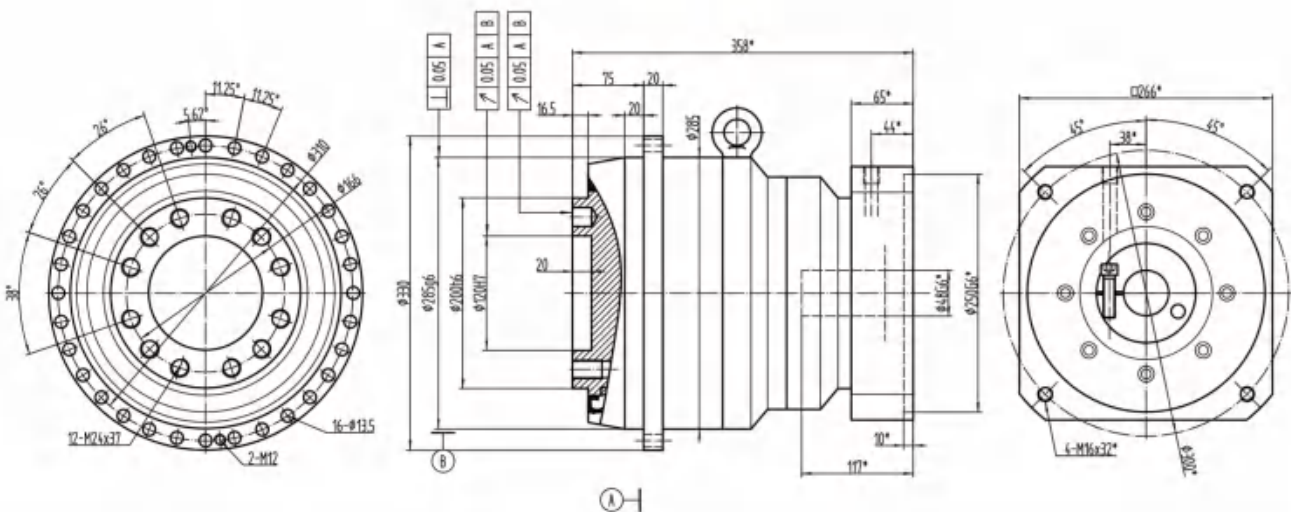


\* Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！



**MAFQ-285-L1**


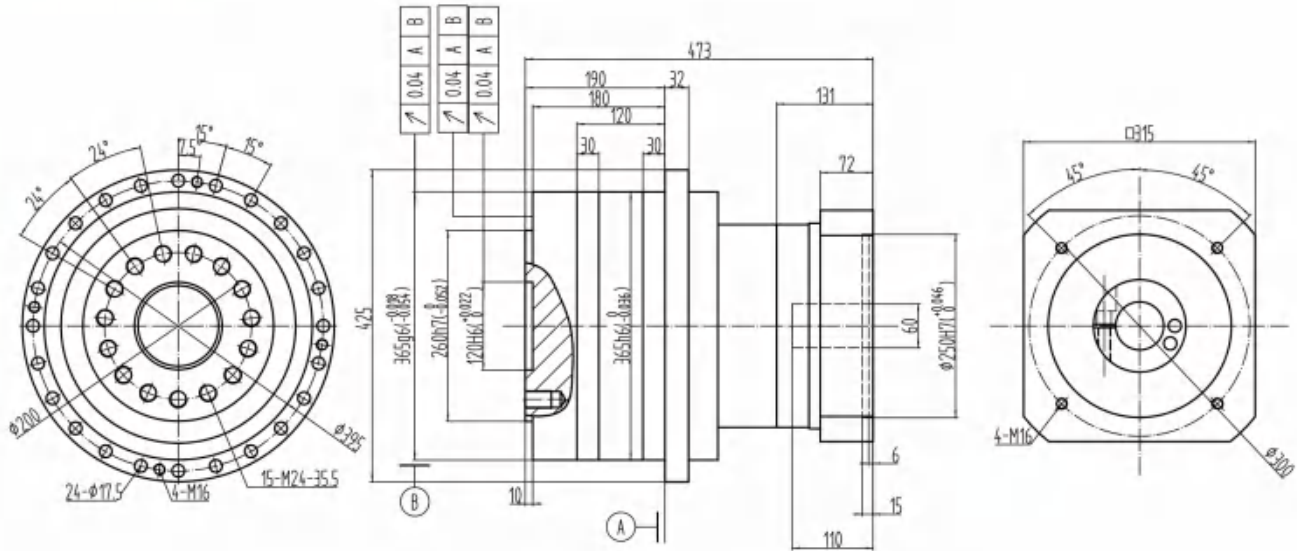
MAFQ

**MAFQ-285-L2**


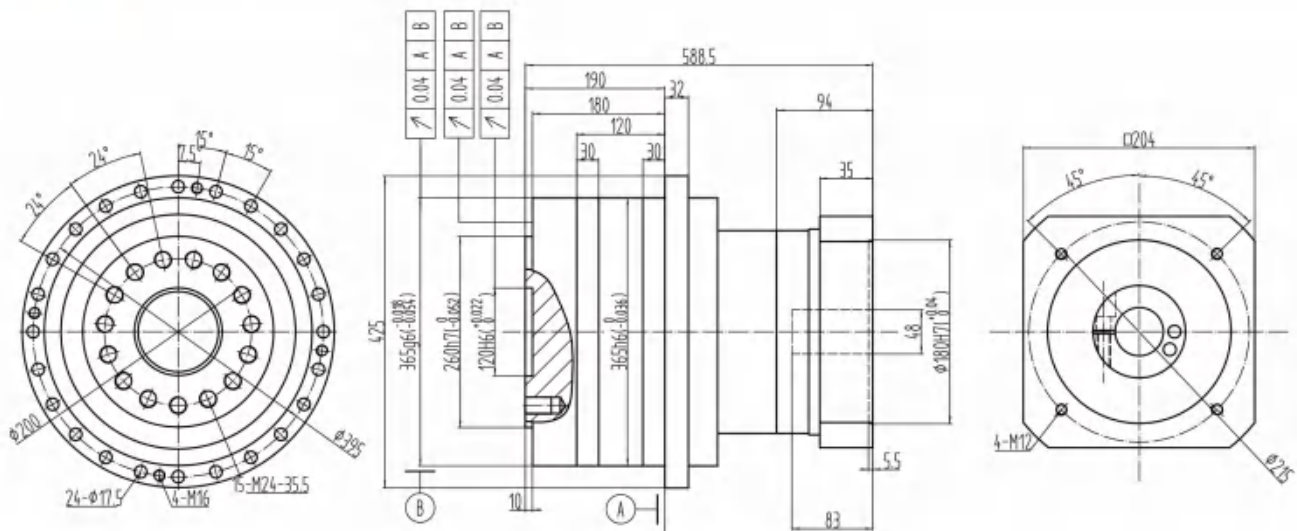
\* Dimensions based on servo-motor, please contact us for custom made order.  
 注有\*尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

# Drawing / Size

## MAFQ-365-L1

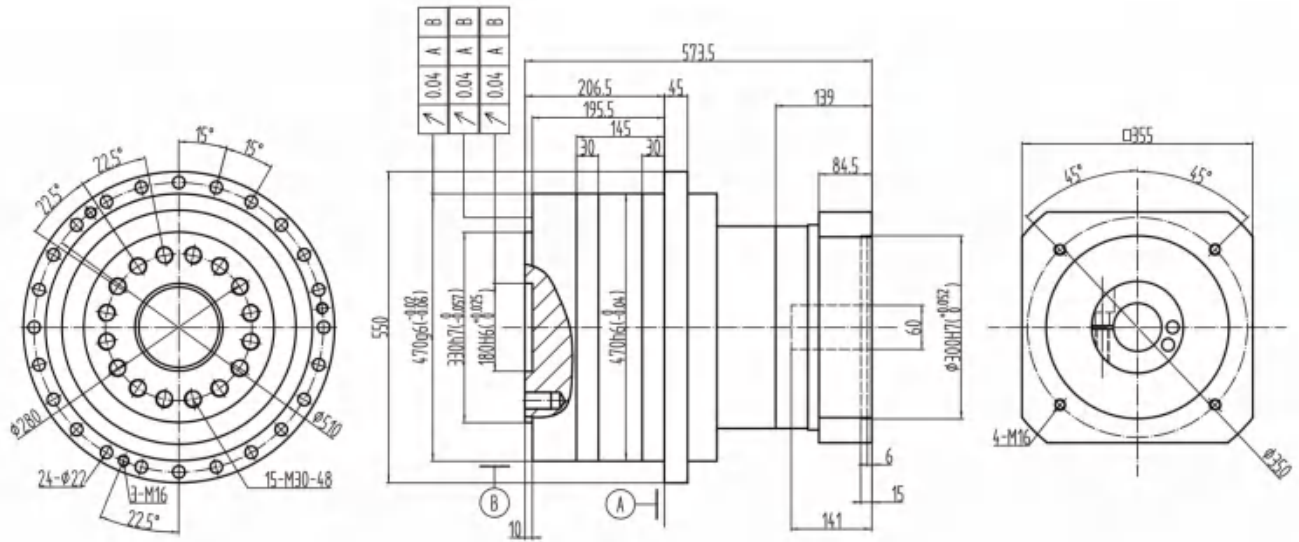


## MAFQ-365-L2



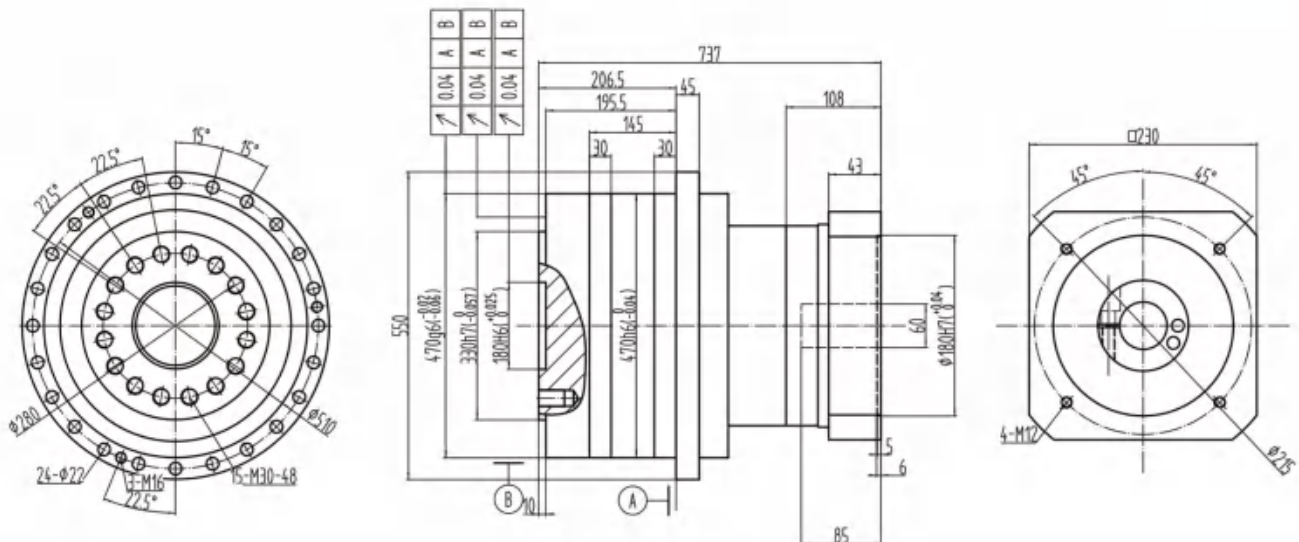
\* Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

## MAFQ-470-L1



MAFQ

## MAFQ-470-L2



\* Dimensions based on servo-motor, please contact us for custom made order.  
 注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

# Performance table

MAFQ

MAFQ-90																	
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>1</sub>	C <sub>21</sub>	F <sub>2RMax</sub>	F <sub>2SMMax</sub>	J <sub>1</sub>	η	U <sub>1</sub>	T	Lub	PC	MP	dB
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	N <sub>vis</sub> arcmin	N	N	kgcm <sup>2</sup>	%	h	°C				
I STAGE	5.5	100	2xT <sub>2N</sub>	2800	6000	≤3	41	3100	1650	0.47	≥95	>20000	-15-45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤63
	22	120															
II STAGE	27.5	120															
	38.5	130				≤5				0.13	≥90						
	55	130															

MAFQ-110																	
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>1</sub>	C <sub>21</sub>	F <sub>2RMMax</sub>	F <sub>2SMMax</sub>	J <sub>1</sub>	η	U <sub>1</sub>	T	Lub	PC	MP	dB
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	N <sub>vis</sub> arcmin	N	N	kgcm <sup>2</sup>	%	h	°C				
I STAGE	5.5	280	2xT <sub>2N</sub>	2300	6000	≤3	101	7800	4000	2.71	≥95	>20000	-15-45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤64
	22	290															
II STAGE	27.5	300															
	38.5	320				≤5				0.44	≥90						
	55	320															



MAFQ-140																	
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>t</sub>	C <sub>2t</sub>	F <sub>2BMax</sub>	F <sub>2DMax</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	1/100mm	N	N	kgcm <sup>2</sup>	%	h	°C				
I STAGE	55	500	2xT <sub>2N</sub>	2000	5000	≤3	216	12000	8100	7.42	≥95	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤65
	22	650															
II STAGE	275	650															
	385	680				≤5				2.71	≥90						
	55	680															

MAFQ

MAFQ-200																	
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>t</sub>	C <sub>2t</sub>	F <sub>2BMax</sub>	F <sub>2DMax</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	1/100mm	N	N	kgcm <sup>2</sup>	%	h	°C				
I STAGE	55	1400	2xT <sub>2N</sub>	2000	4000	≤3	621	18520	15500	234	≥95	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤66
	22	1700															
II STAGE	275	1700															
	385	1700				≤5				218	≥90						
	55	1700															

# Performance table

MAFQ

MAFQ-255																		
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	j <sub>1</sub>	C <sub>2t</sub>	F <sub>255Max</sub>	F <sub>255Min</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB	
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	Nm/turn	N	N	kgcm <sup>2</sup>	%	h	°C					
I STAGE	5.5	3800	2xT <sub>2N</sub>	2000	3000	≤3	1191	27000	24000	170	≥95	>20000	-15-45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤68	
	22	3800				≤5				64	≥90							
II STAGE	27.5	3800				≤5				64	≥90							
	38.5	3800				≤5				64	≥90							
	55	3800				≤5				64	≥90							

MAFQ-285																		
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	j <sub>1</sub>	C <sub>2t</sub>	F <sub>285Max</sub>	F <sub>285Min</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB	
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	Nm/turn	N	N	kgcm <sup>2</sup>	%	h	°C					
I STAGE	5.5	6500	2xT <sub>2N</sub>	1500	2500	≤3	1940	44000	37000	128.3	≥95	>20000	-15-45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤70	
	22	6500				≤5				64.3	≥90							
II STAGE	27.5	6500				≤5				64.3	≥90							
	38.5	6500				≤5				64.3	≥90							
	55	6500				≤5				64.3	≥90							

MAFQ-365																	
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>1</sub>	C <sub>2t</sub>	F <sub>2RMax</sub>	F <sub>2MMax</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	mm	N	N	kgcm <sup>2</sup>	%	h	°C				
I STAGE	5.5	13000				≤3					≥95			Life Lubrication 终身润滑	IP65	Any 任何方向	≤72
	22	13000	2xT <sub>2N</sub>	1500	2000	≤5	3515	55000	49000	242.2	≥90	>20000	-15~45				
II STAGE	27.5	13000															
	38.5	13000															
	55	13000															

MAFQ

MAFQ-470																	
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>1</sub>	C <sub>2t</sub>	F <sub>2RMax</sub>	F <sub>2MMax</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	mm	N	N	kgcm <sup>2</sup>	%	h	°C				
I STAGE	5.5	25000				≤3					≥95			Life Lubrication 终身润滑	IP65	Any 任何方向	≤75
	22	25000	2xT <sub>2N</sub>	1200	2000	≤5	6153	66000	54000	451.7	≥90	>20000	-15~45				
II STAGE	27.5	25000															
	38.5	25000															
	55	25000															

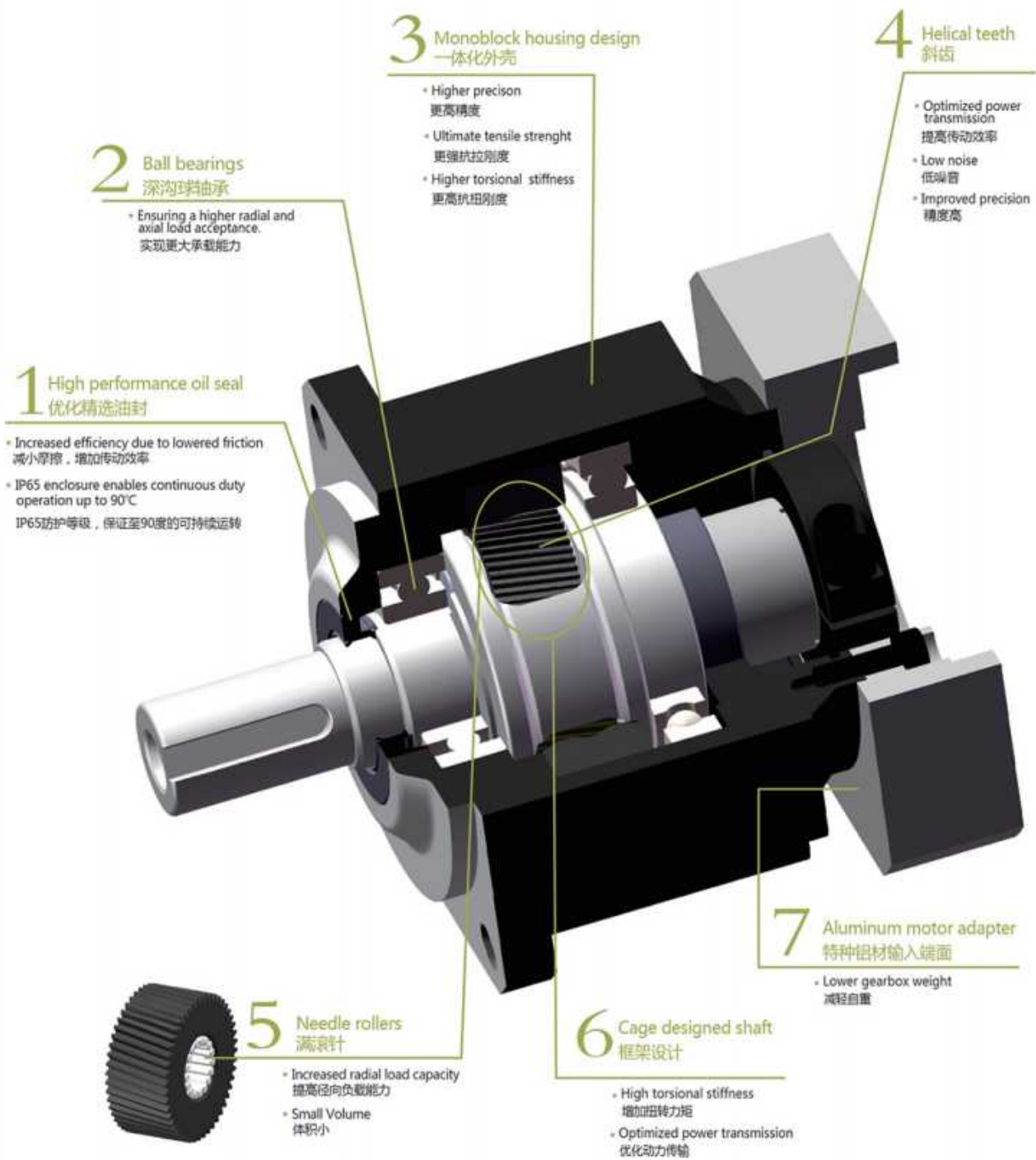
**MPVB SERIES**



此标准系列可以在中等精度要求的不同领域使用。

Standard series for servo applications that do not require optimum precision.





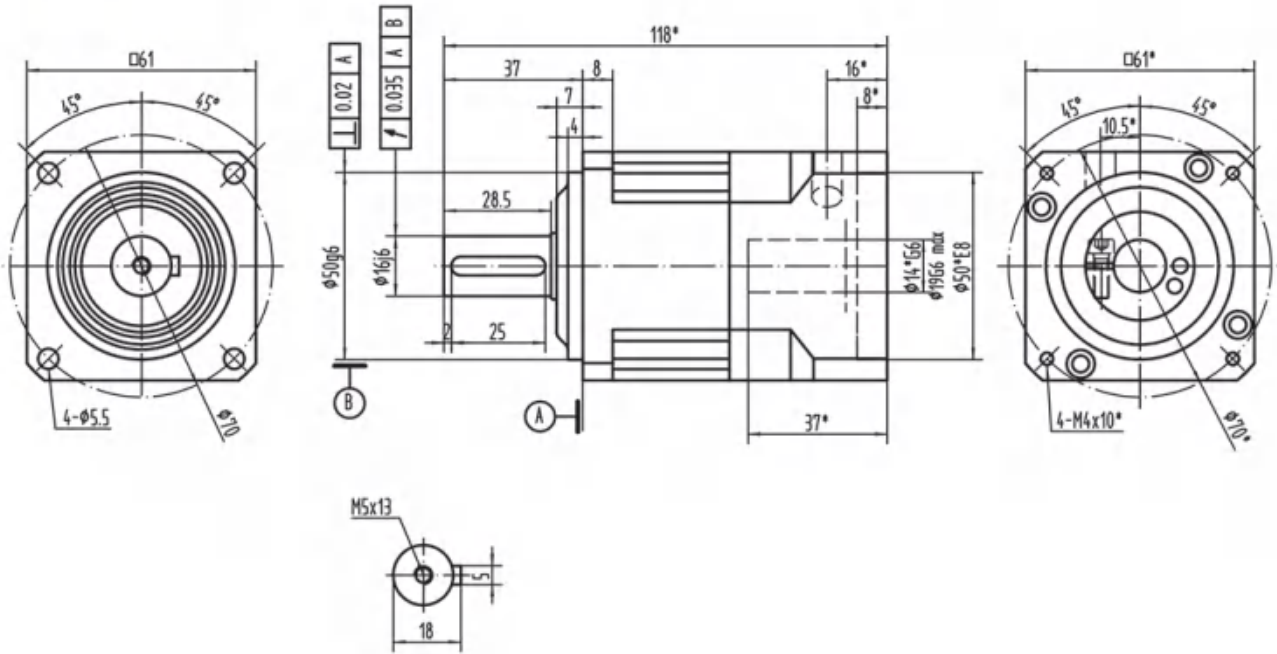
造型数据：  
Selection data:

扭矩 ( Nm )	25-360
速比	3-100
背隙 ( arcmin )	3-5
最大工作温度 ( °C )	90
噪音 ( dB )	67-70

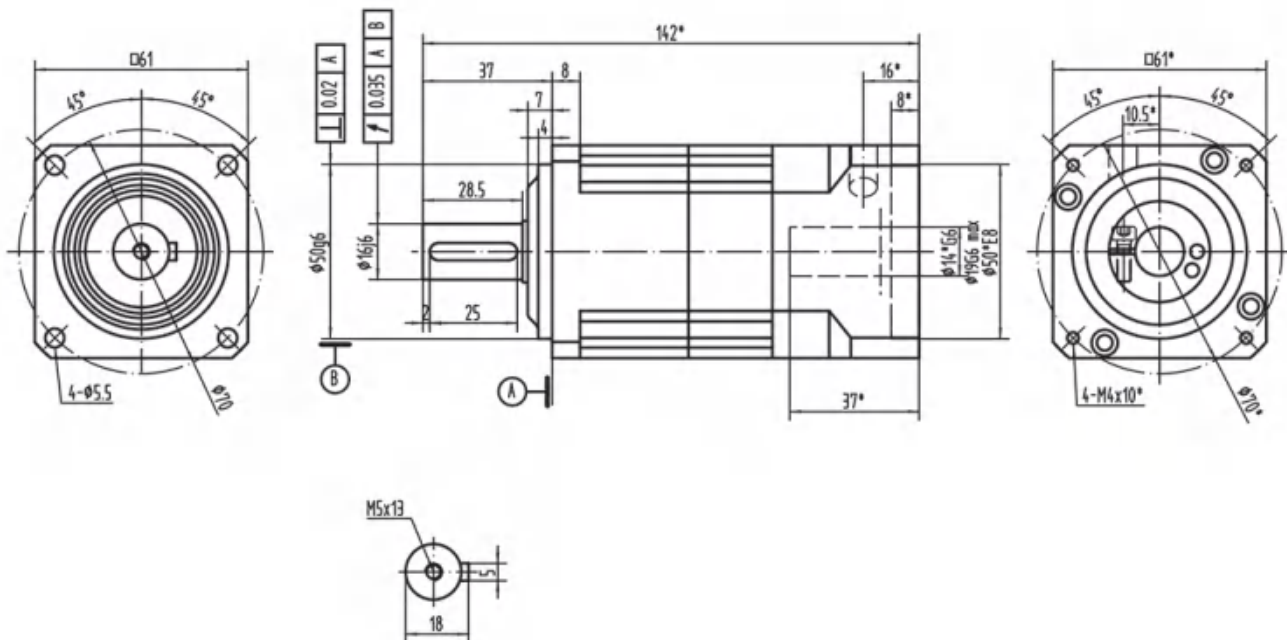
Nominal output torque ( Nm )	25-360
Reduction ratio	3-100
Backlash ( arcmin )	3-5
Max.working temperature ( °C )	90
Noise ( dB )	67-70

Drawing / Size

MPVB-060A-L1



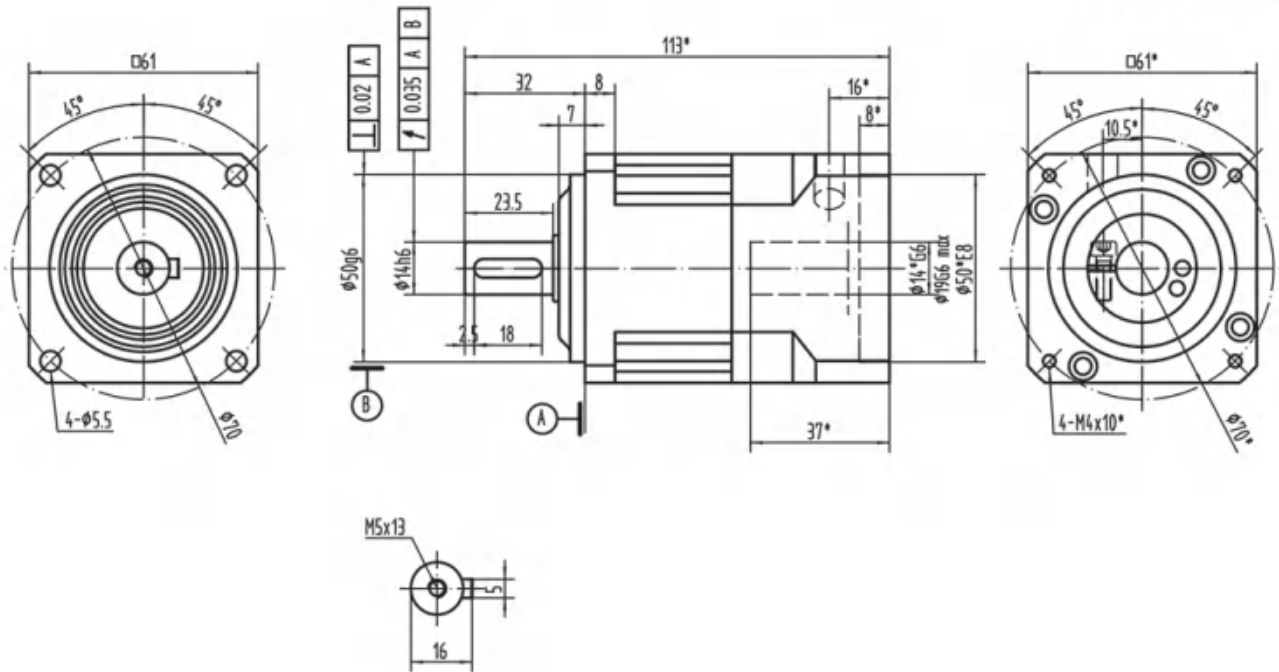
MPVB-060A-L2



\* Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

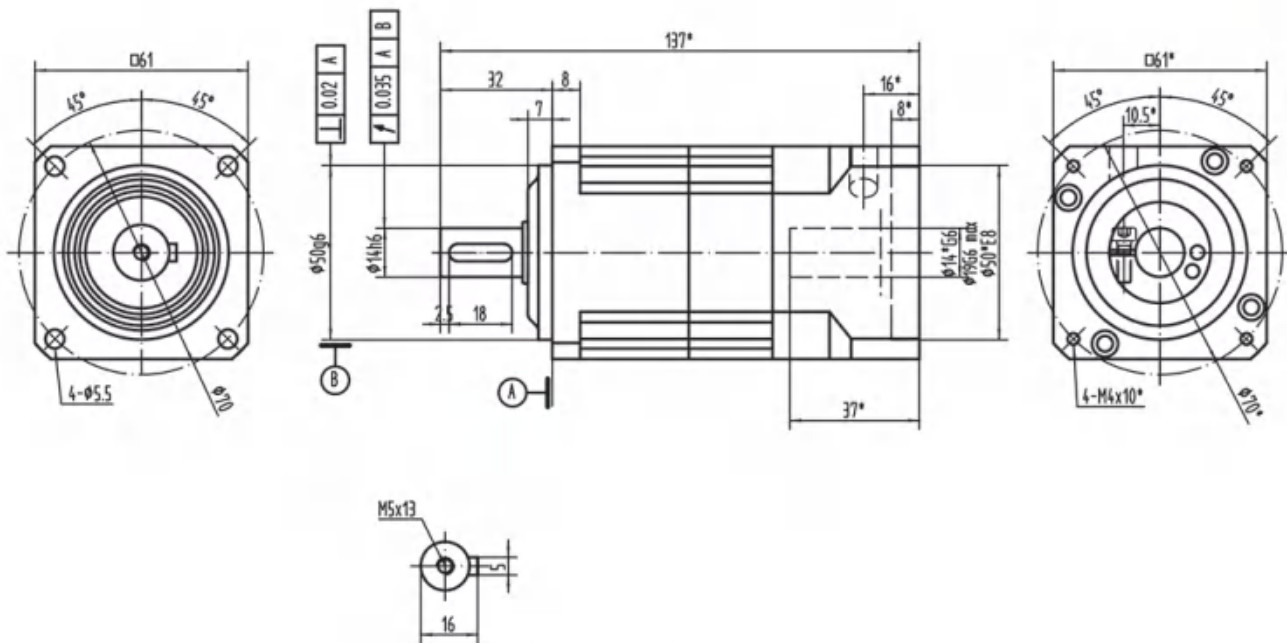
Drawing / Size

MPVB-060B-L1



MPVB

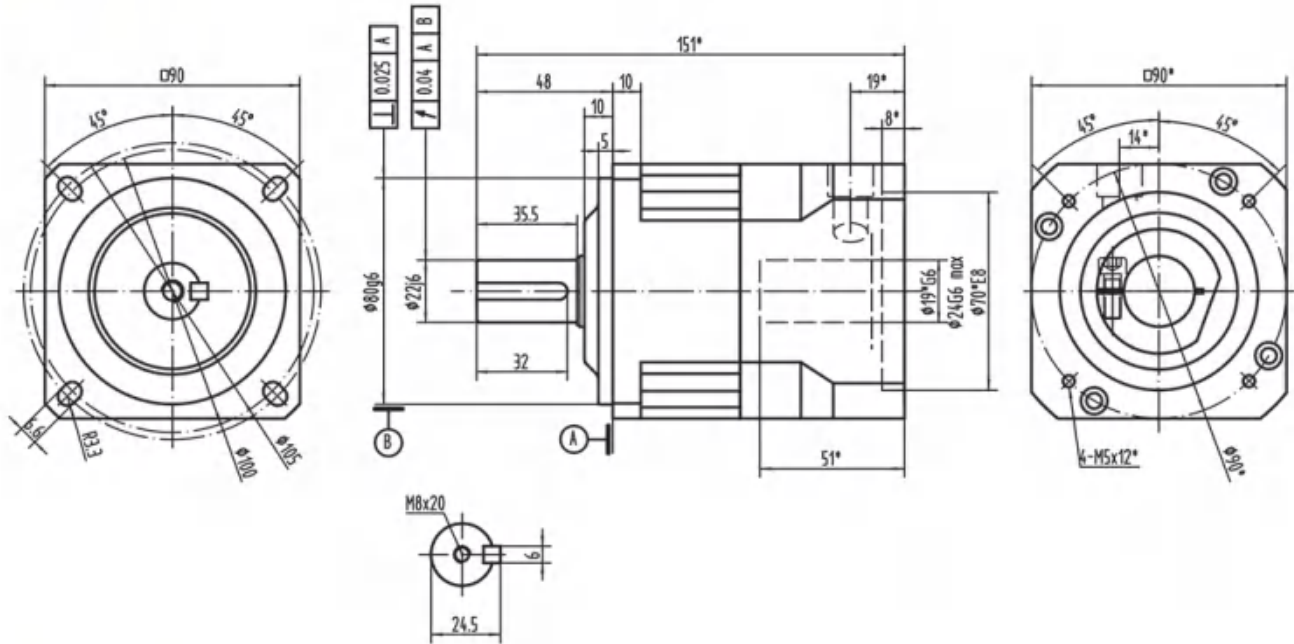
MPVB-060B-L2



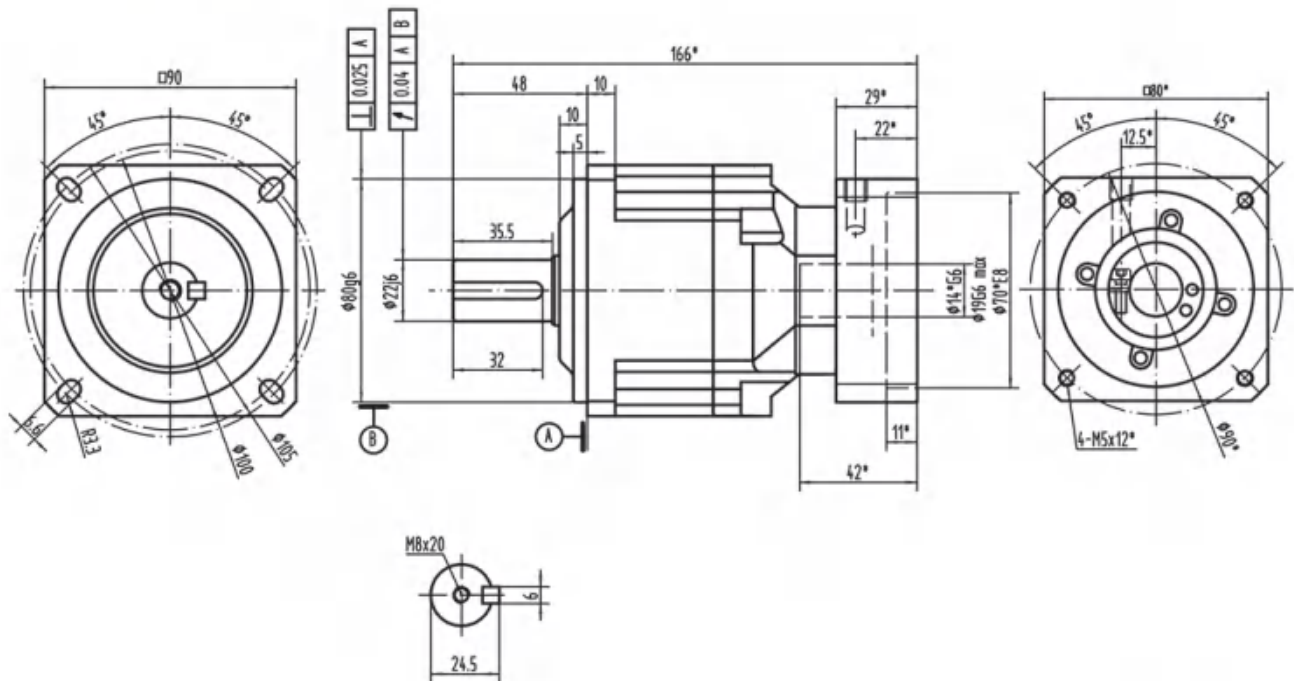
\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

# Drawing / Size

## MPVB-090A-L1



## MPVB-090A-L2

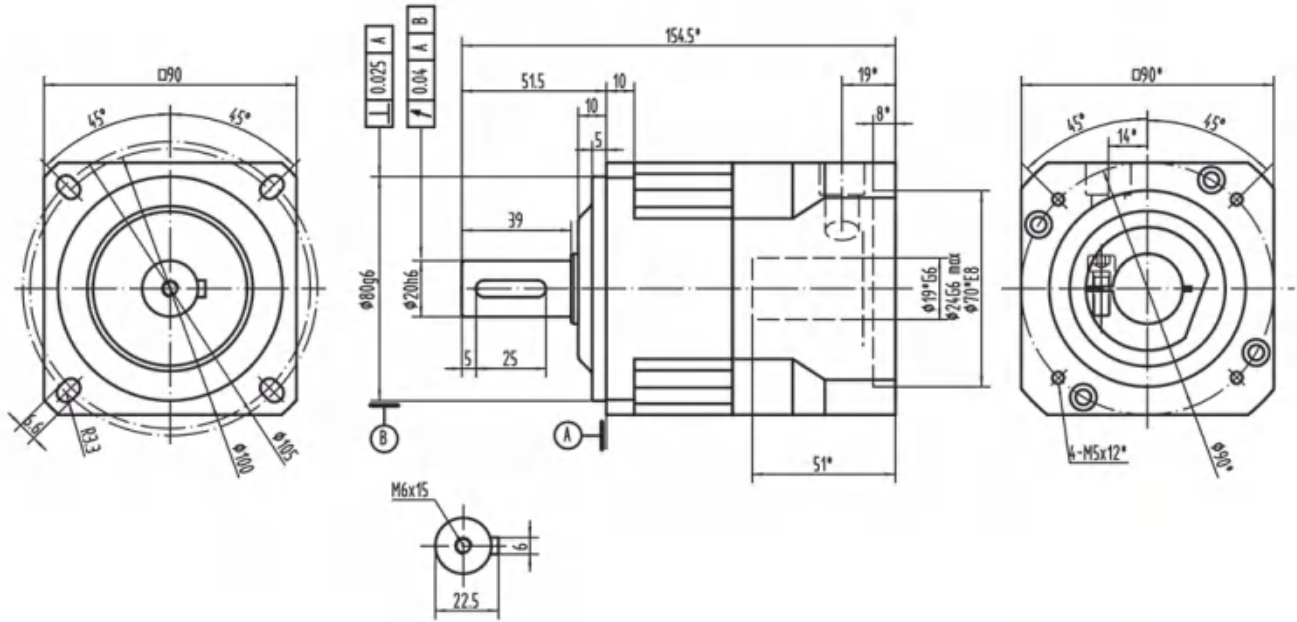


\* Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！



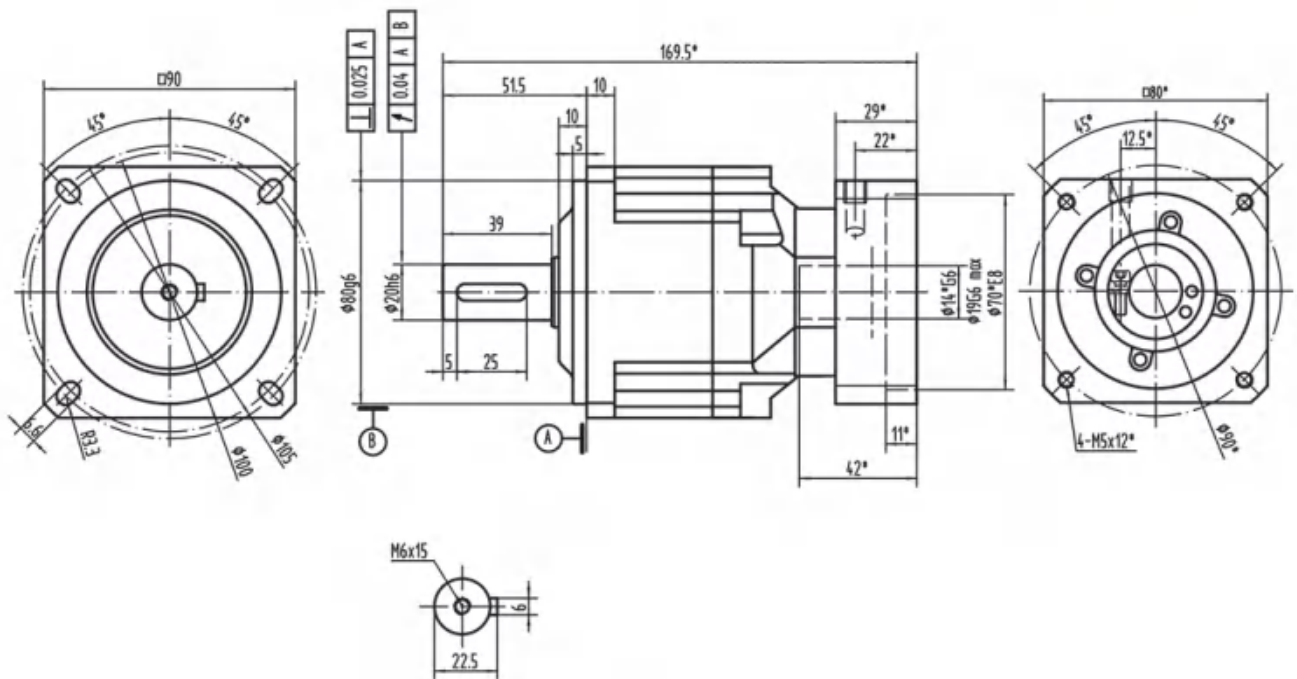
# Drawing / Size

## MPVB-090B-L1



MPVB

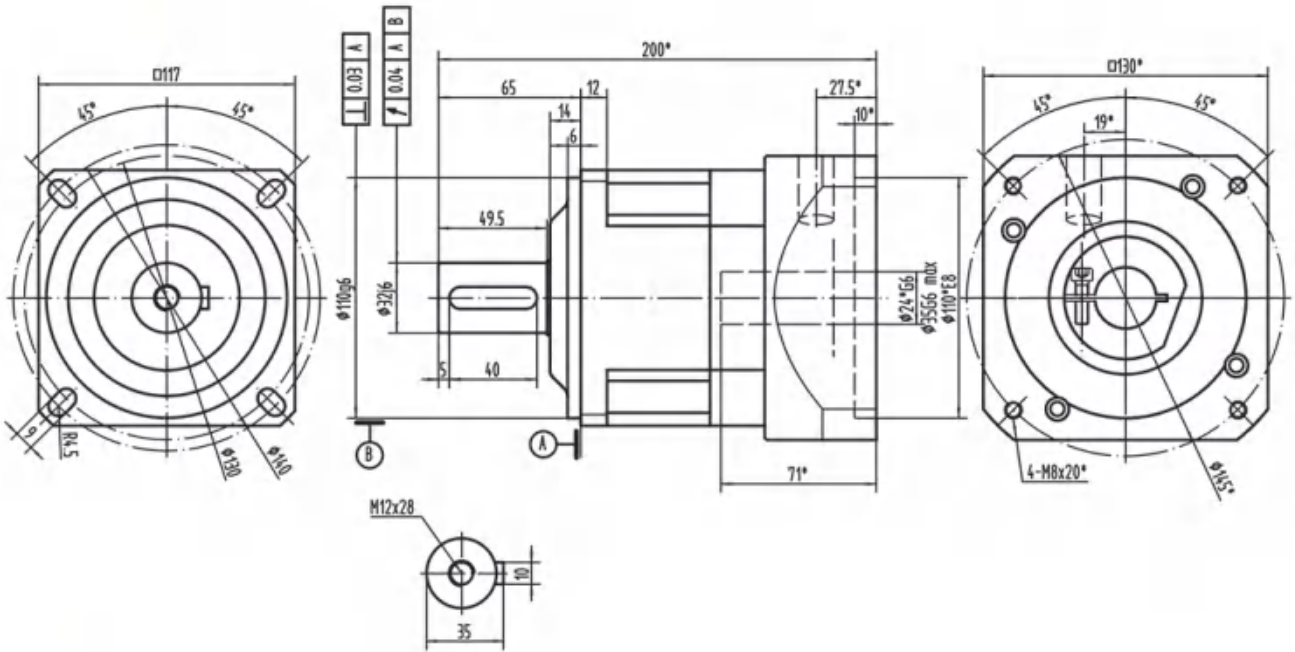
## MPVB-090B-L2



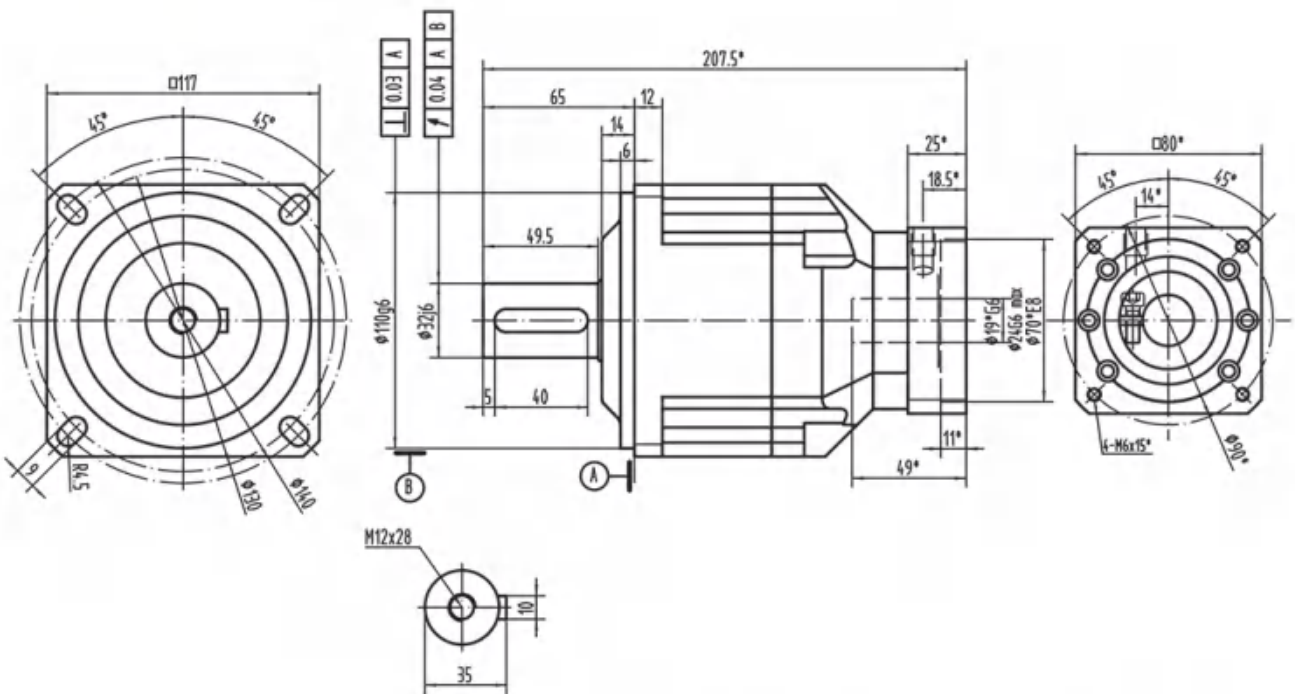
\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

# Drawing / Size

## MPVB-115A-L1



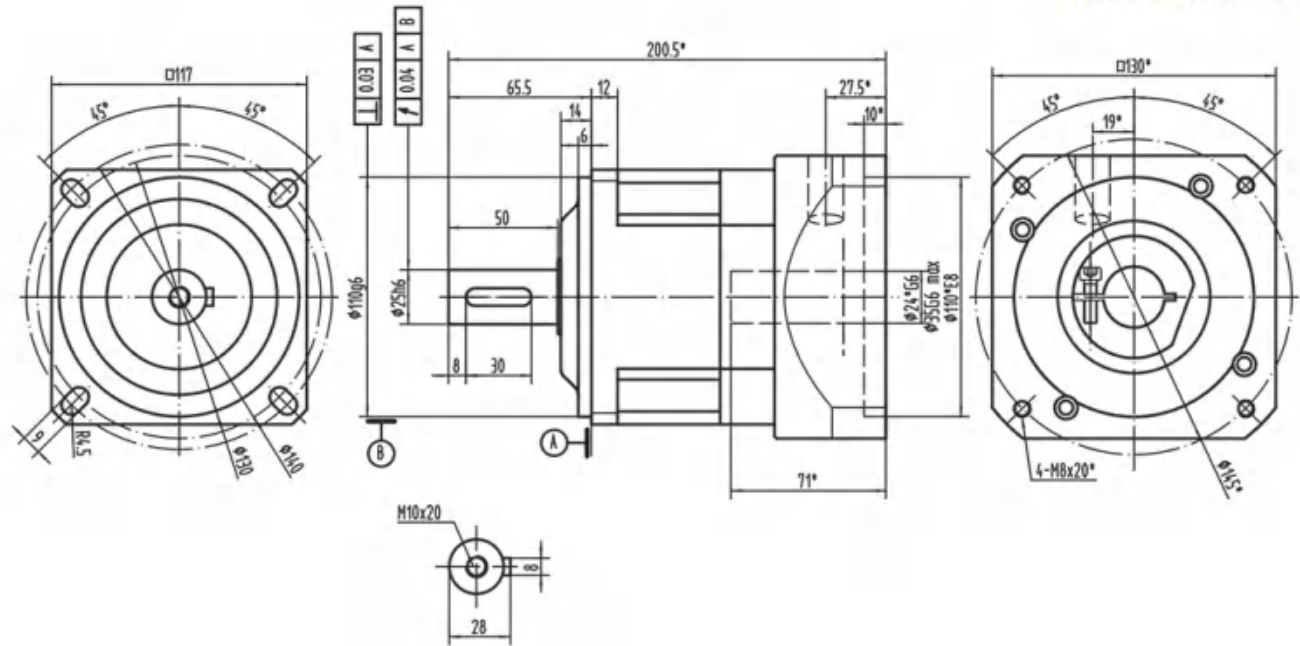
## MPVB-115A-L2



\* Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

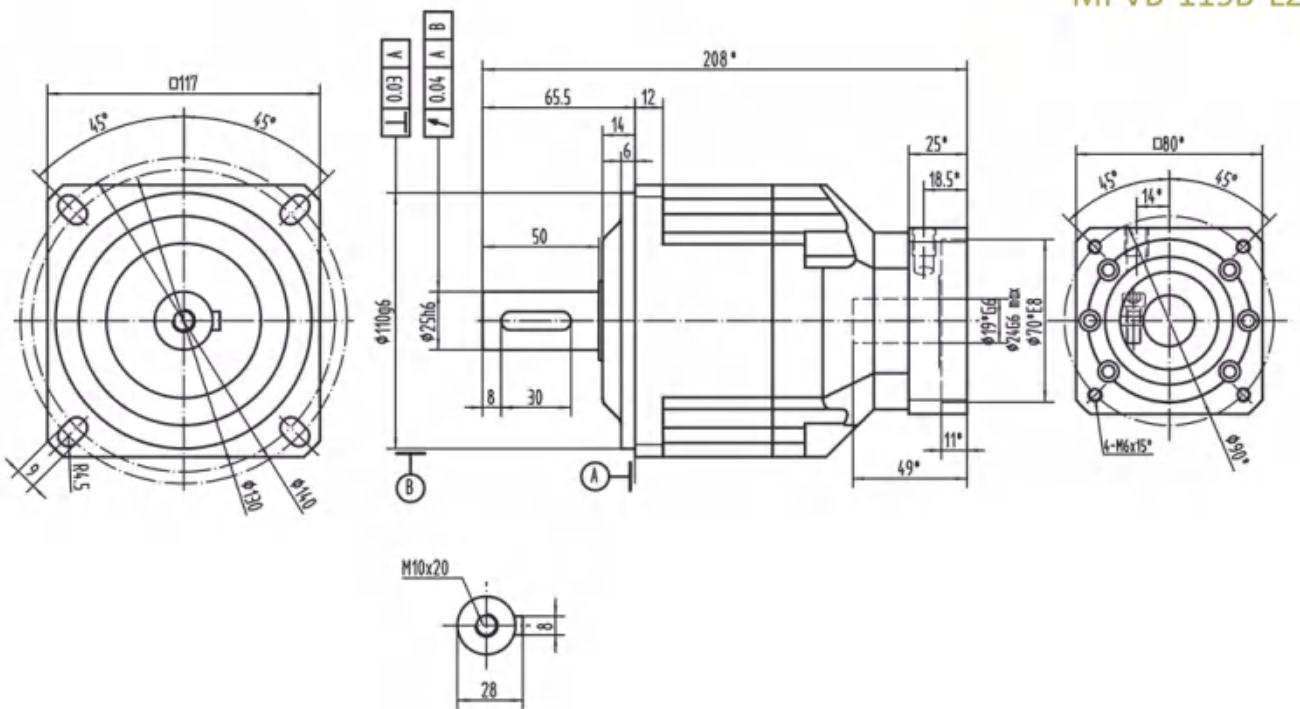
# Drawing / Size

## MPVB-115B-L1



MPVB

## MPVB-115B-L2



\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

# Performance table

MPVB

MPVB-060																																
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	j <sub>1</sub>	C <sub>21</sub>	F <sub>2RMax</sub>	F <sub>2MMax</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB															
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	mm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C																			
I STAGE	3	25	2×T <sub>2N</sub>	3000	6000	≤3	7	1200	1050	0.16	≥95	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤67															
	4	40								0.14																						
	5	40								0.13																						
	6	40								0.13																						
	7	40								0.13																						
	8	40								0.13																						
	9	25								0.13																						
	10	25								0.13																						
	II STAGE	15								35								2×T <sub>2N</sub>	3000	6000	≤5	7	1200	1050	0.13	≥90	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤67
		20								50															0.13							
35		50	0.13																													
40		50	0.13																													
50		50	0.13																													
80		50	0.13																													
100		35	0.13																													

MPVB-090																																
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	j <sub>1</sub>	C <sub>21</sub>	F <sub>2RMax</sub>	F <sub>2MMax</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB															
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	mm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C																			
I STAGE	3	80	2×T <sub>2N</sub>	3000	6000	≤3	14	2450	2200	0.61	≥95	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤68															
	4	120								0.48																						
	5	125								0.47																						
	6	125								0.47																						
	7	125								0.45																						
	8	125								0.45																						
	9	80								0.42																						
	10	80								0.4																						
	II STAGE	15								80								2×T <sub>2N</sub>	3000	6000	≤5	14	2450	2200	0.13	≥90	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤68
		20								125															0.13							
35		125	0.13																													
40		125	0.13																													
50		125	0.13																													
80		125	0.13																													
100		80	0.13																													



## Performance table

MPVB-115																		
Symb.	i	T <sub>2N</sub>	T <sub>2Nom</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>i</sub>	C <sub>21</sub>	F <sub>2RMax</sub>	F <sub>2MMax</sub>	J <sub>i</sub>	η	U <sub>h</sub>	T	Lub	PC	MP		
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	Nm/arcmm	N	N	kgcm <sup>2</sup>	%	h	°C					dB
I STAGE	3	160	2×T <sub>2N</sub>	3000	6000	≤3	25	4400	4000	3.25	≥95	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤70	
	4	220								2.74								
	5	260								2.71								
	6	260								2.71								
	7	260								2.62								
	8	260								2.6								
	9	160								2.59								
	10	160								2.57								
II STAGE	15	220	2×T <sub>2N</sub>	3000	6000	≤5	25	4400	4000	0.45	≥90	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤70	
	20	300								0.45								
	35	350								0.45								
	40	360								0.45								
	50	350								0.4								
	80	360								0.4								
	100	220								0.4								

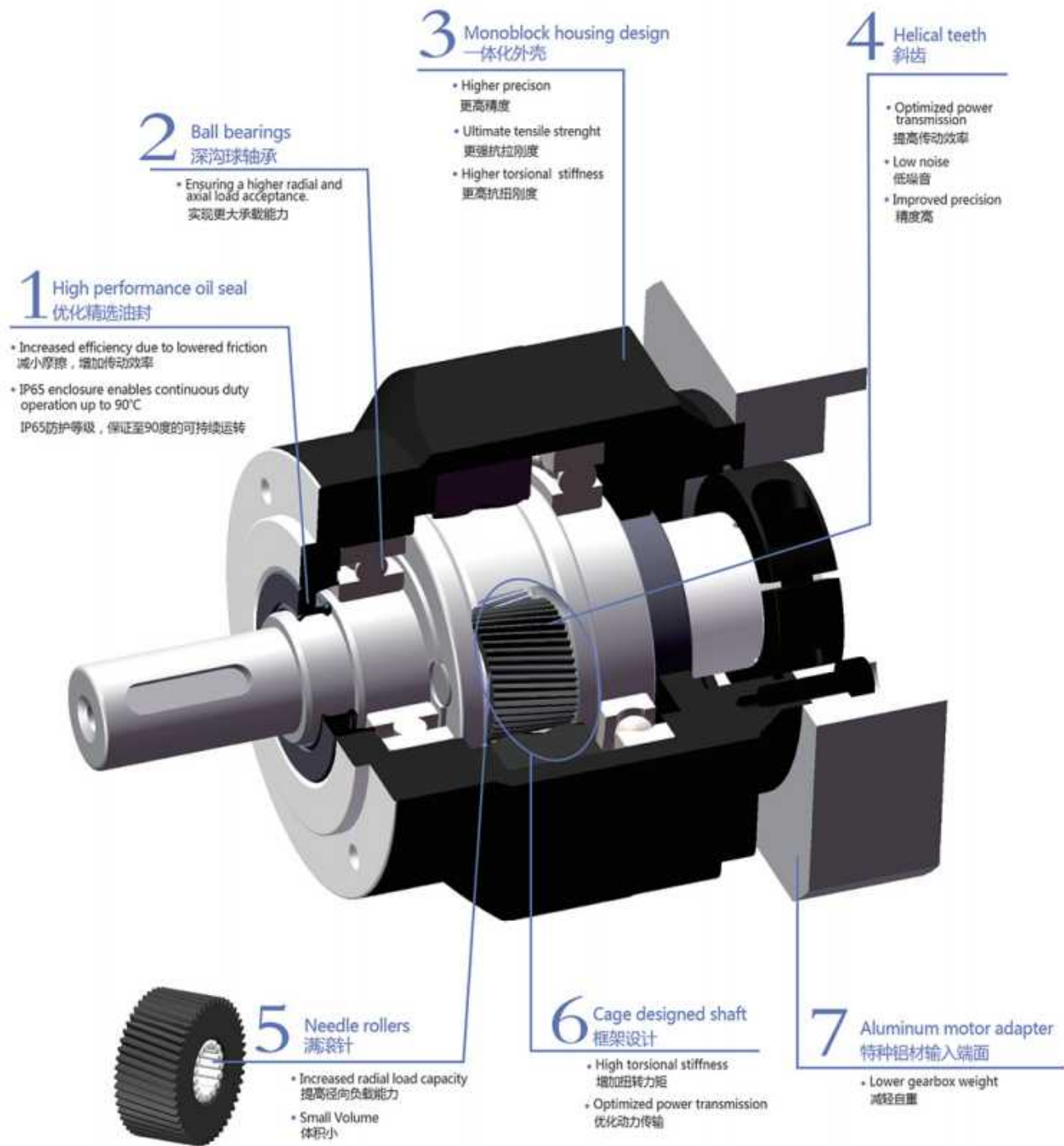
MPVB

**MPVE SERIES**



此标准系列可以在中等精度要求的不同领域使用。

Standard series for servo applications that do not require optimum precision.



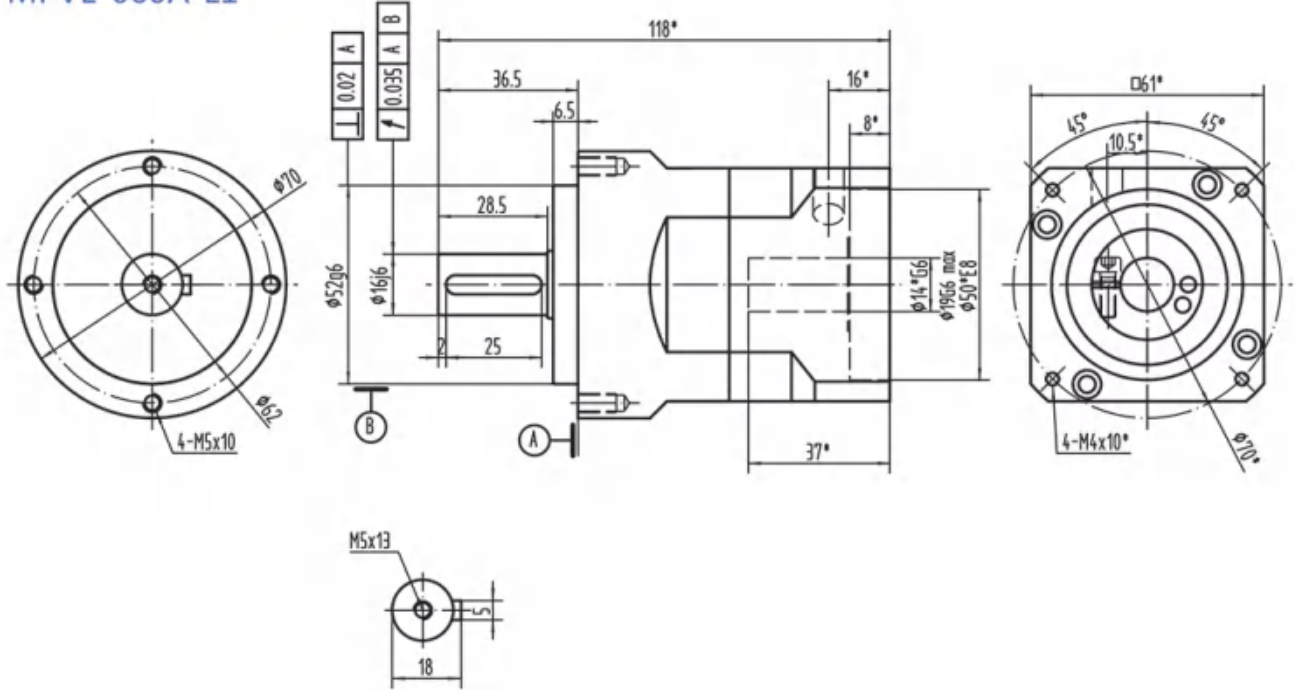
**造型数据:**  
Selection data:

扭矩 ( Nm )	25-360
速比	3-100
背隙 ( arcmin )	3-5
最大工作温度 ( °C )	90
噪音 ( dB )	67-70

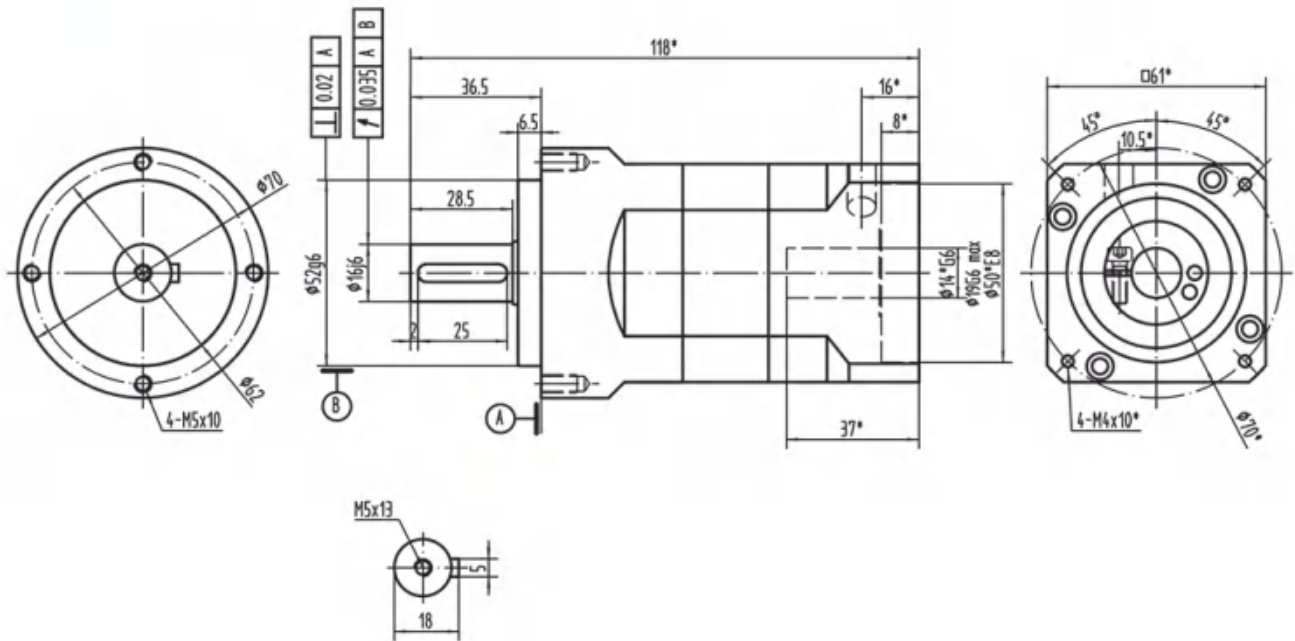
Nominal output torque ( Nm )	25-360
Reduction ratio	3-100
Backlash ( arcmin )	3-5
Max.working temperature ( °C )	90
Noise ( dB )	67-70

# Drawing / Size

## MPVE-060A-L1



## MPVE-060A-L2

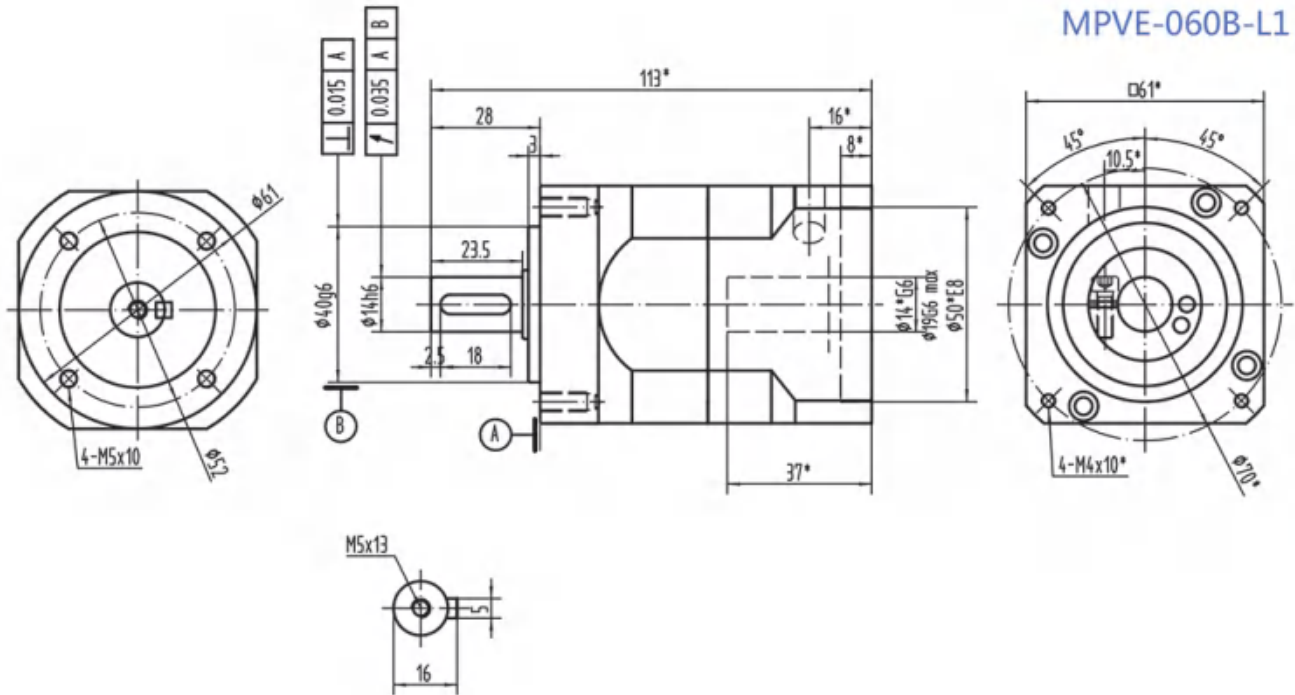


\* Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

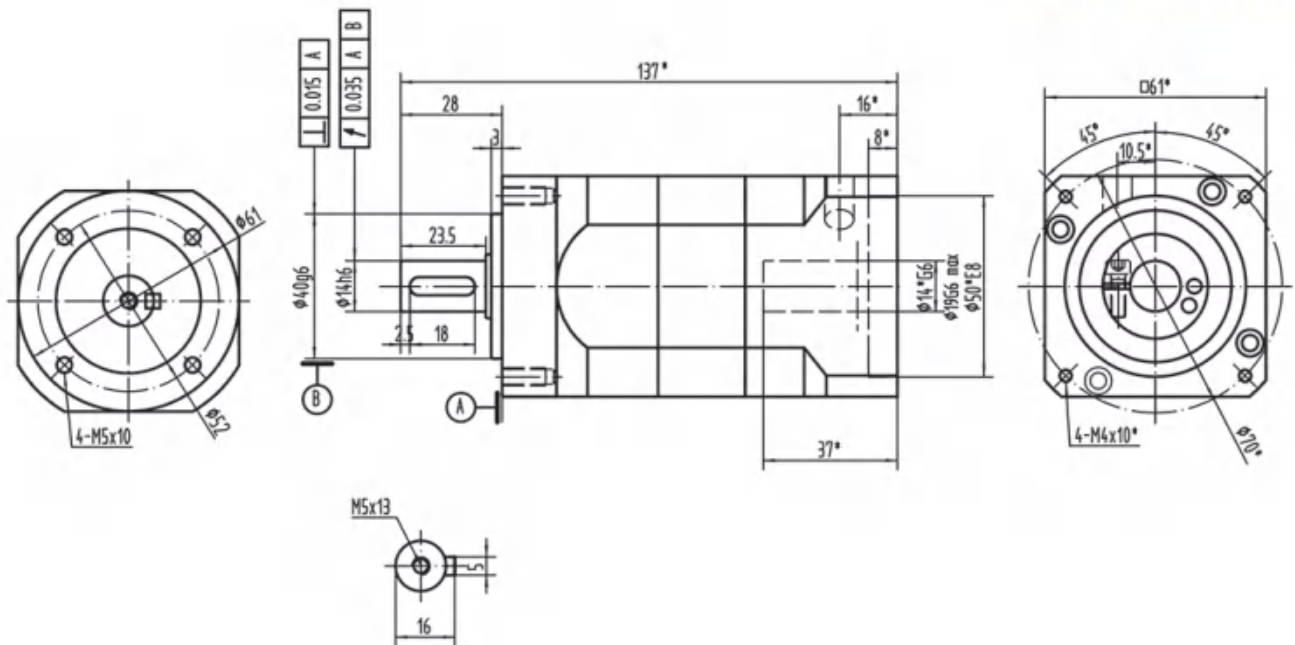


# Drawing / Size

MPVE-060B-L1



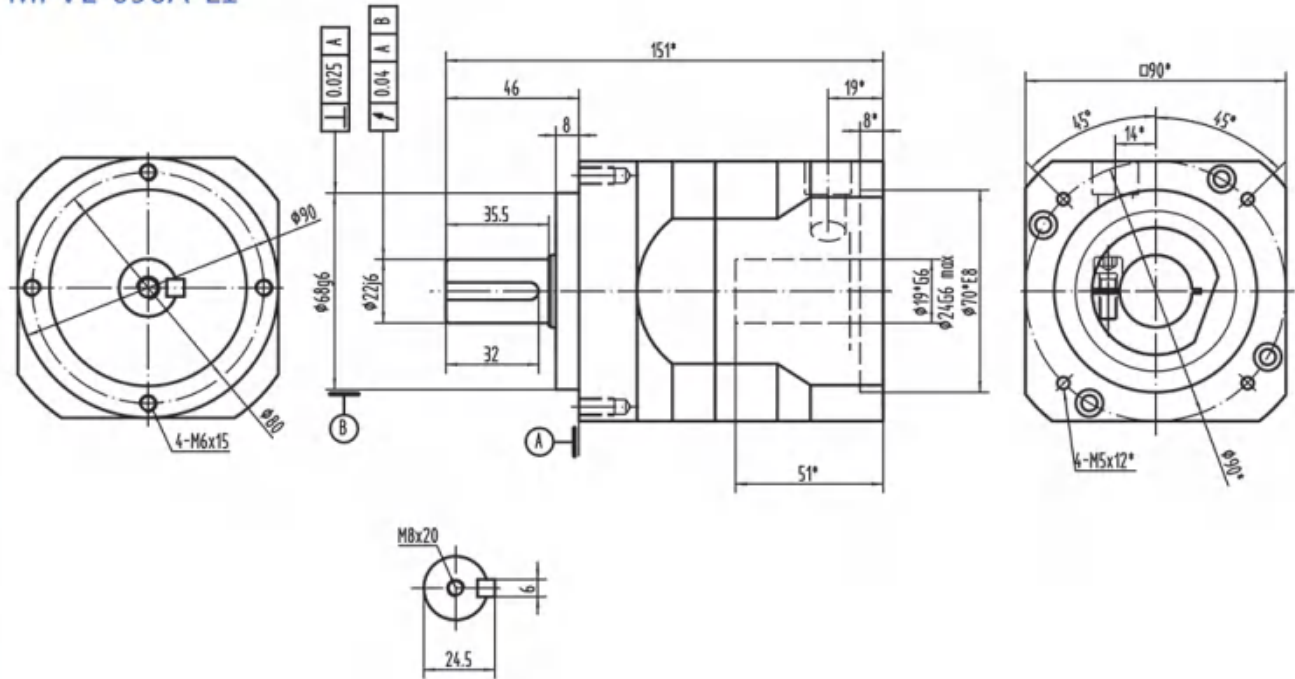
MPVE-060B-L2



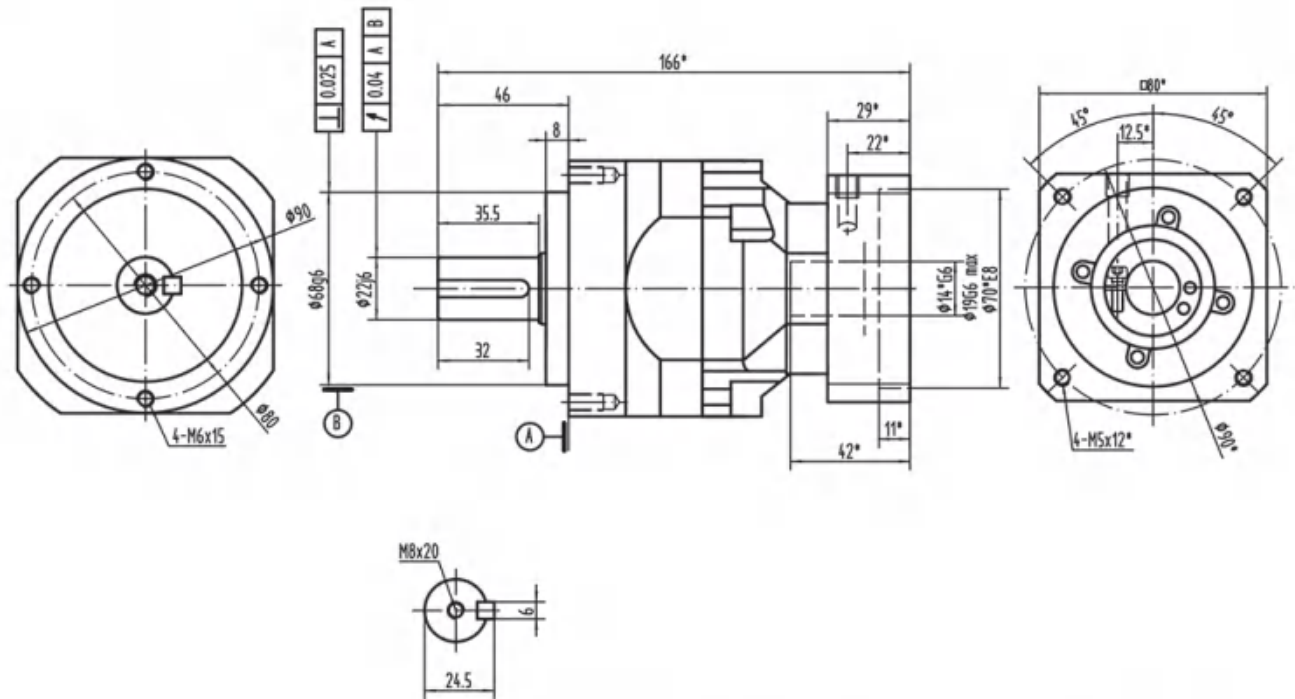
\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

# Drawing / Size

## MPVE-090A-L1



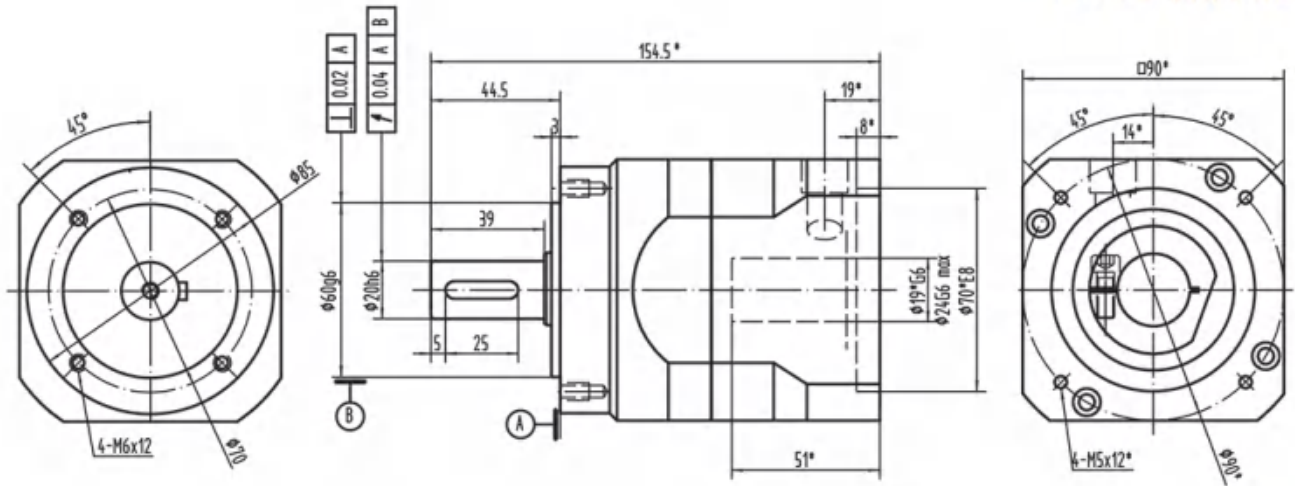
## MPVE-090A-L2



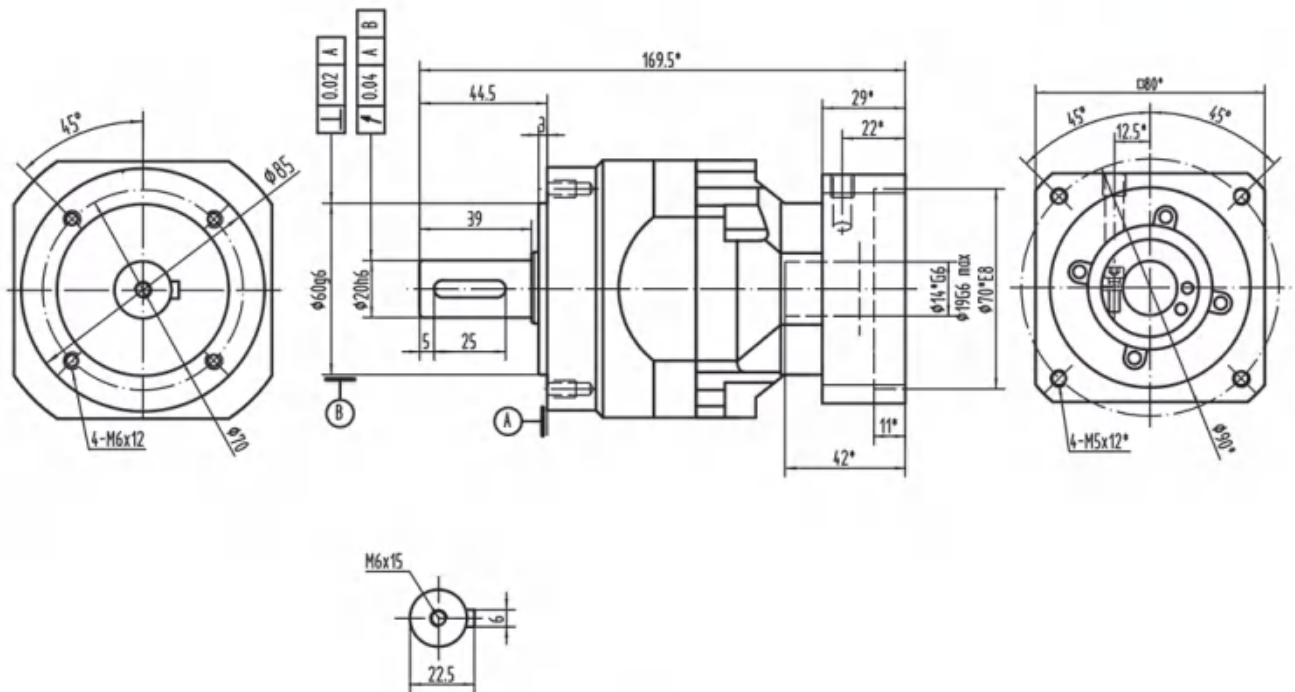
\* Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

# Drawing / Size

## MPVE-090B-L1



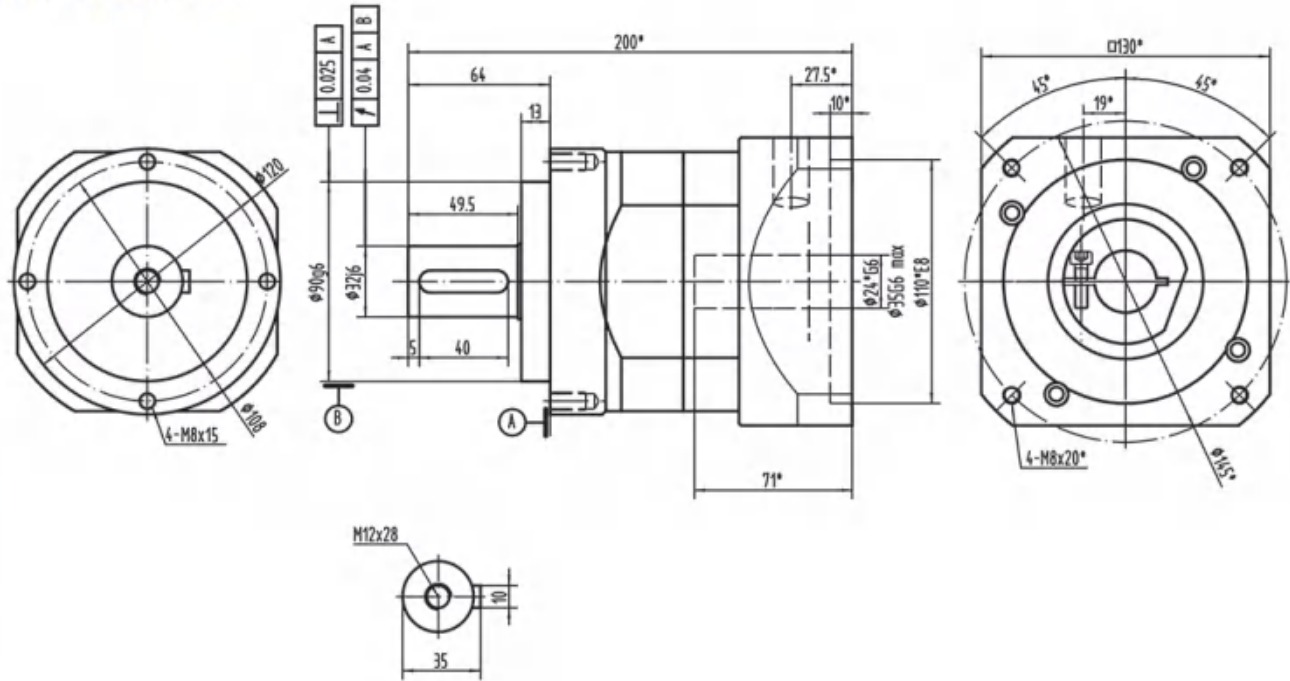
## MPVE-090B-L2



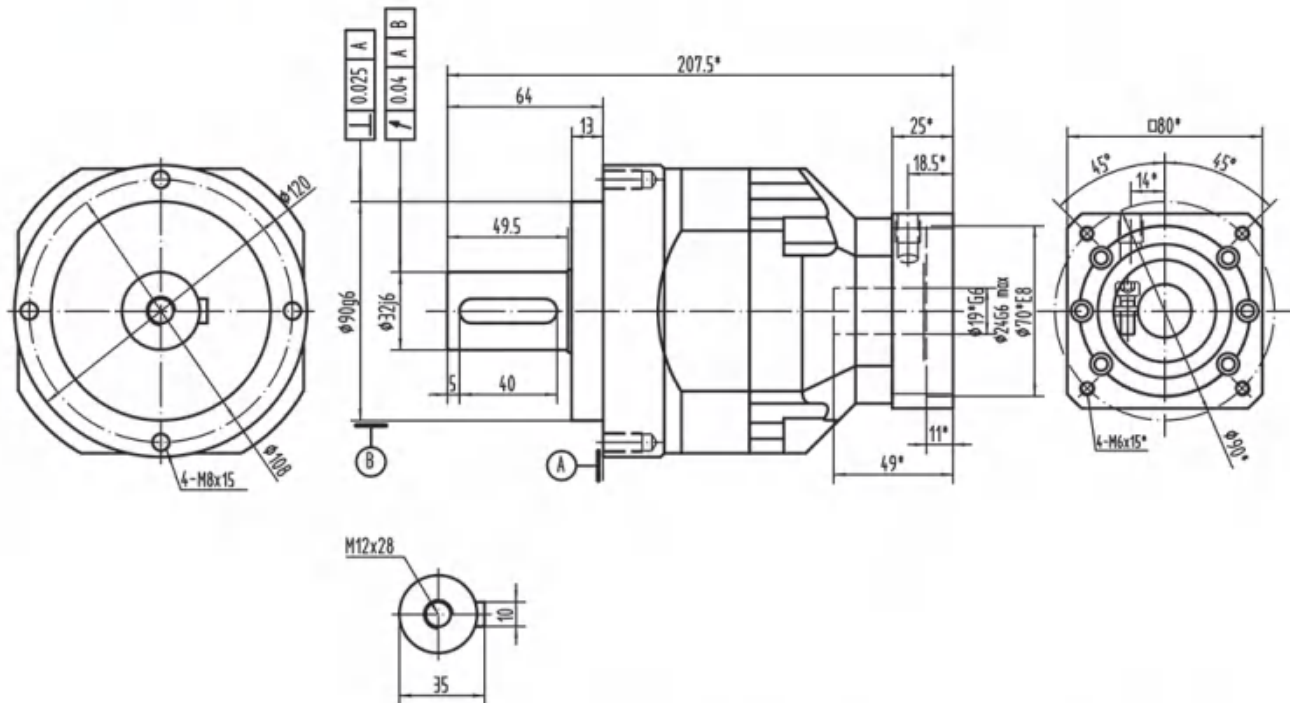
\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

## Drawing / Size

### MPVE-115A-L1



### MPVE-115A-L2

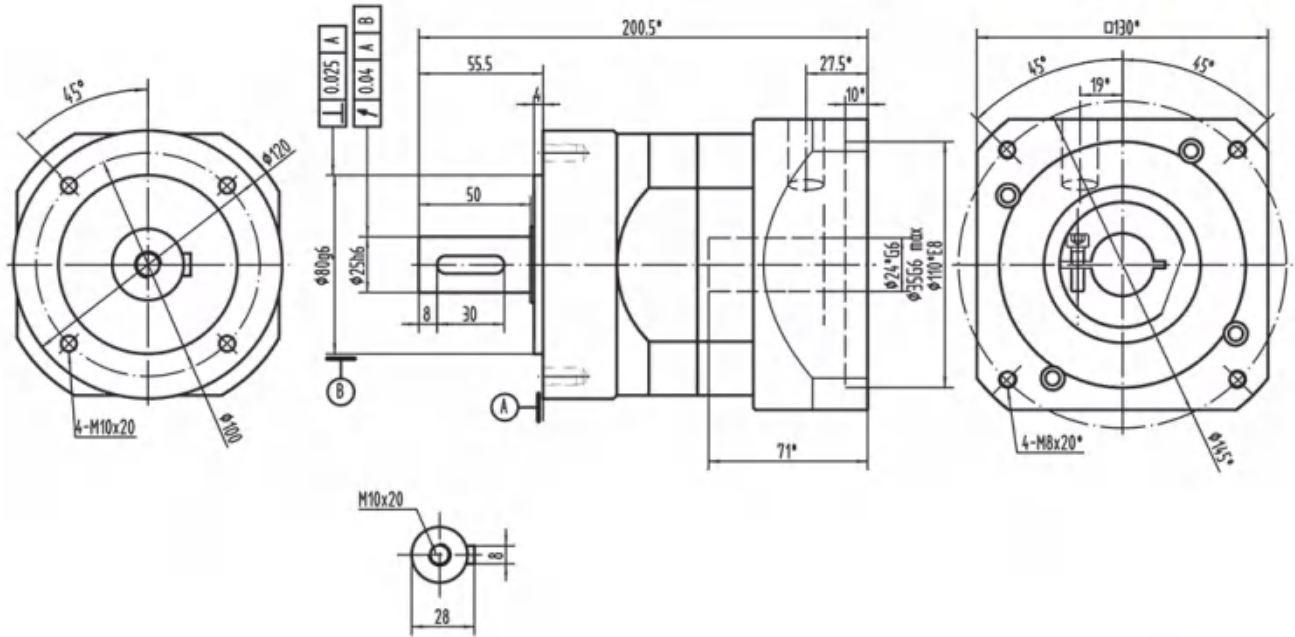


\* Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

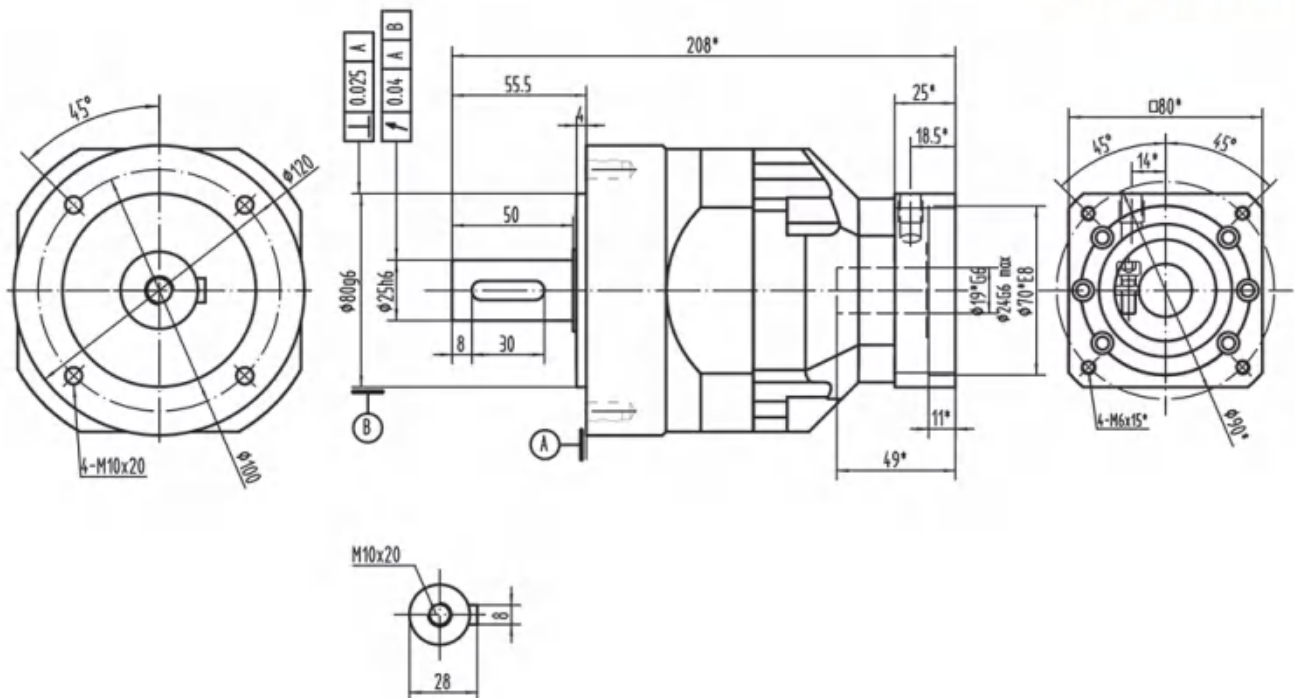


# Drawing / Size

## MPVE-115B-L1



## MPVE-115B-L2



\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！



# Performance table

MPVE

MPVE-060																		
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>1</sub>	C <sub>21</sub>	F <sub>2RMMax</sub>	F <sub>2MMMax</sub>	J <sub>2</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB	
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	Nm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C					
I STAGE	3	25	2×T <sub>2N</sub>	3000	6000	≤3	7	1200	1050	0.16	≥95	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤67	
	4	40								0.14								
	5	40								0.13								
	6	40								0.13								
	7	40								0.13								
	8	40								0.13								
	9	25								0.13								
	10	25								0.13								
II STAGE	15	35	2×T <sub>2N</sub>	3000	6000	≤5	7	1200	1050	0.13	≥90	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤67	
	20	50								0.13								
	35	50								0.13								
	40	50								0.13								
	50	50								0.13								
	80	50								0.13								
	100	35								0.13								

MPVE-090																		
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>1</sub>	C <sub>21</sub>	F <sub>2RMMax</sub>	F <sub>2MMMax</sub>	J <sub>2</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB	
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	Nm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C					
I STAGE	3	80	2×T <sub>2N</sub>	3000	6000	≤3	14	2450	2200	0.61	≥95	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤68	
	4	120								0.48								
	5	125								0.47								
	6	125								0.47								
	7	125								0.45								
	8	125								0.45								
	9	80								0.42								
	10	80								0.4								
II STAGE	15	80	2×T <sub>2N</sub>	3000	6000	≤5	14	2450	2200	0.13	≥90	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤68	
	20	125								0.13								
	35	125								0.13								
	40	125								0.13								
	50	125								0.13								
	80	125								0.13								
	100	80								0.13								

## Performance table

MPVE-115																	
Symb.	i	T <sub>2N</sub>	T <sub>2Net</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>1</sub>	C <sub>21</sub>	F <sub>2RMax</sub>	F <sub>2MMax</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	Nm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C				
I STAGE	3	160	2×T <sub>2N</sub>	3000	6000	≤3	25	4400	4000	3.25	≥95	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤70
	4	220					25			2.74							
	5	260					25			2.71							
	6	260					25			2.71							
	7	260					25			2.62							
	8	260					25			2.6							
	9	160					25			2.59							
	10	160					25			2.57							
II STAGE	15	220				≤5	25			0.45	≥90						
	20	300					25			0.45							
	35	350	25	0.45													
	40	360	25	0.45													
	50	350	25	0.4													
	80	360	25	0.4													
	100	220	25	0.4													

MPVE

**MAB SERIES**



MAB系列是一款在中等精度领域中性价比最高的机型。

MAB series is one of the most cost-effective models in the field of medium precision.

## 2 Monoblock housing design 一体化外壳

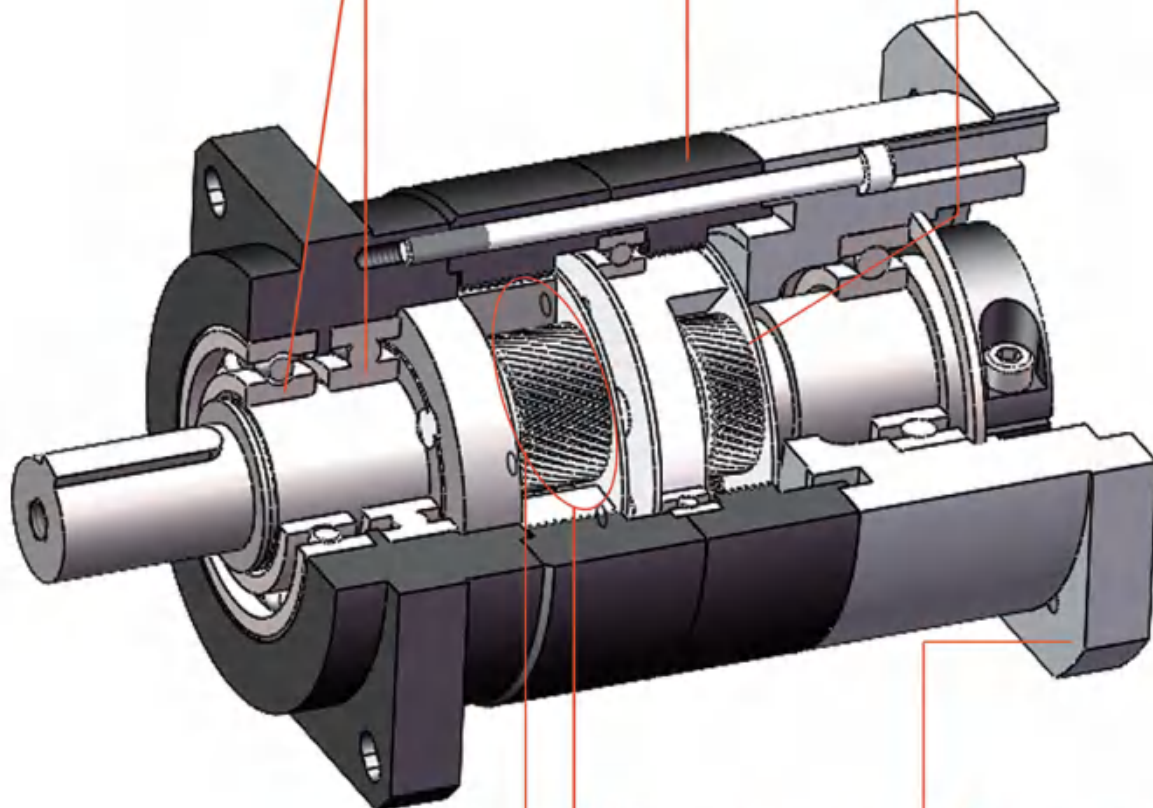
## 1 Double bearing design 双轴承设计

- Improve the bearing capacity  
提高承载能力

- Higher precision  
更高精度
- Ultimate tensile strength  
更强抗拉刚度
- Higher torsional stiffness  
更高抗扭刚度

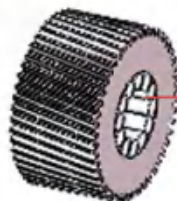
## 3 Helical teeth 斜齿

- Optimized power transmission  
提高传动效率
- Low noise  
低噪音
- Improved precision  
精度高



## 4 Needle rollers 满滚针

- Increased radial load capacity  
提高径向负载能力
- Small Volume  
体积小



## 5 Planet carrier in disc design 行星齿轮架（片状结构）

- Guaranteed torque  
保证扭转力矩
- Optimize rotational output  
优化转动输出

## 6 Aluminum motor adapter 特种铝材输入端面

- Lower gearbox weight  
减轻自重

造型数据:

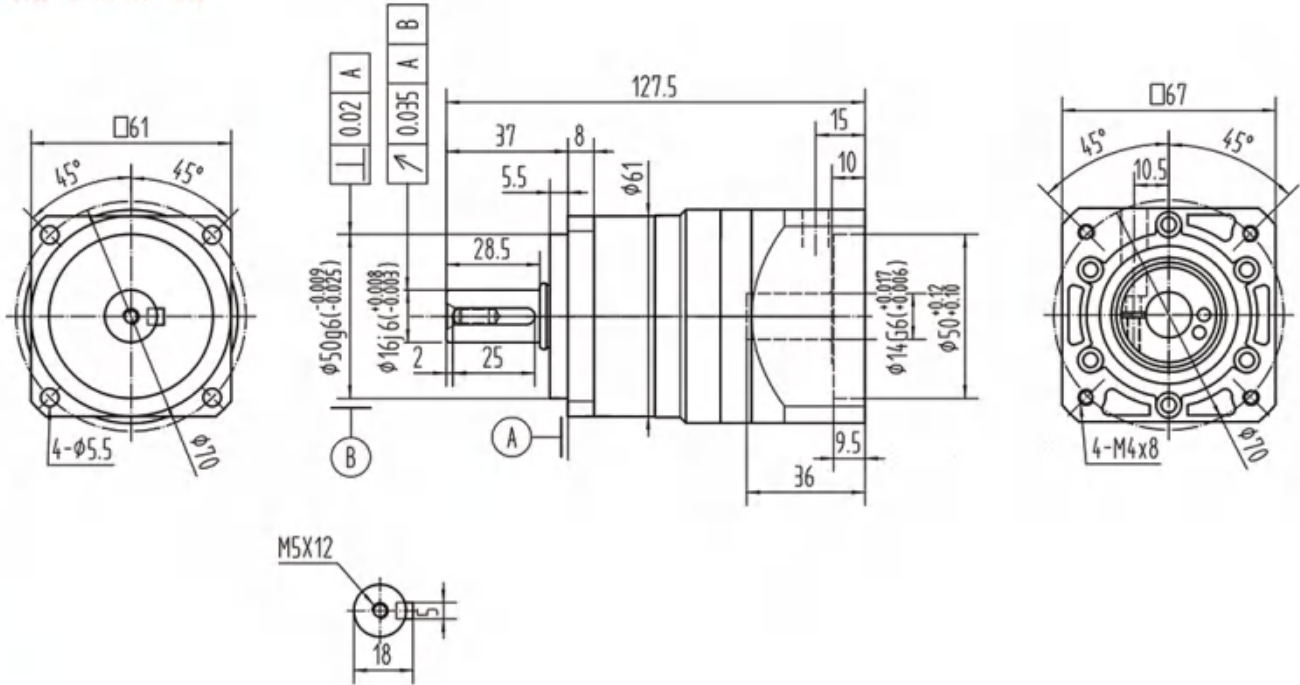
Selection data:

扭矩 ( Nm )	7-1200
速比	3-100
背隙 ( arcmin )	3-5
最大工作温度 ( °C )	90
噪音 ( dB )	65~77

Nominal output torque ( Nm )	7-1200
Reduction ratio	3-100
Backlash ( arcmin )	3-5
Max.working temperature ( °C )	90
Noise ( dB )	65~77

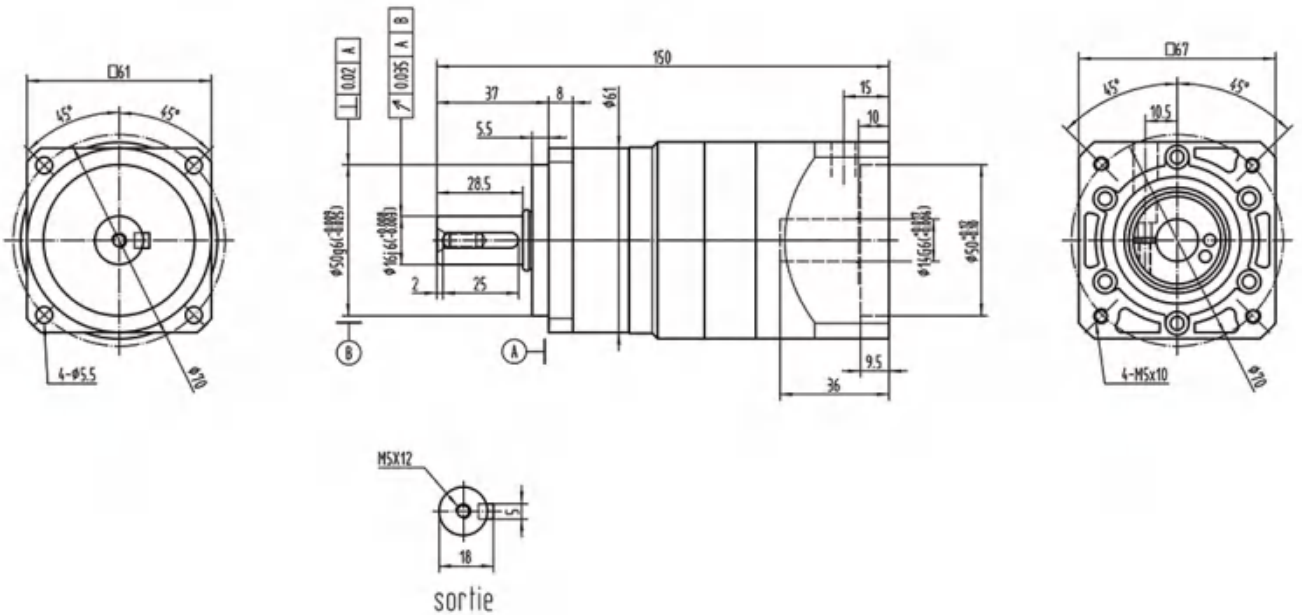
## Drawing / Size

### MAB-060-L1



MAB

### MAB-060-L2

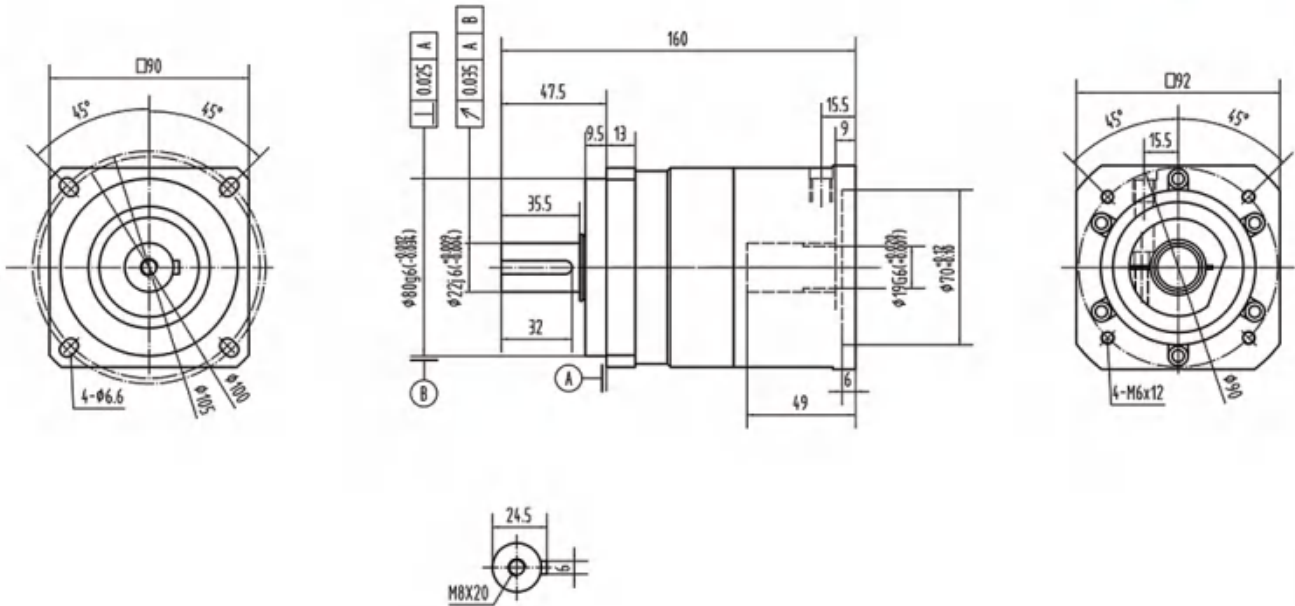


\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸: 代表可根据客户需求定制产品, 如有需要, 请联系我们!

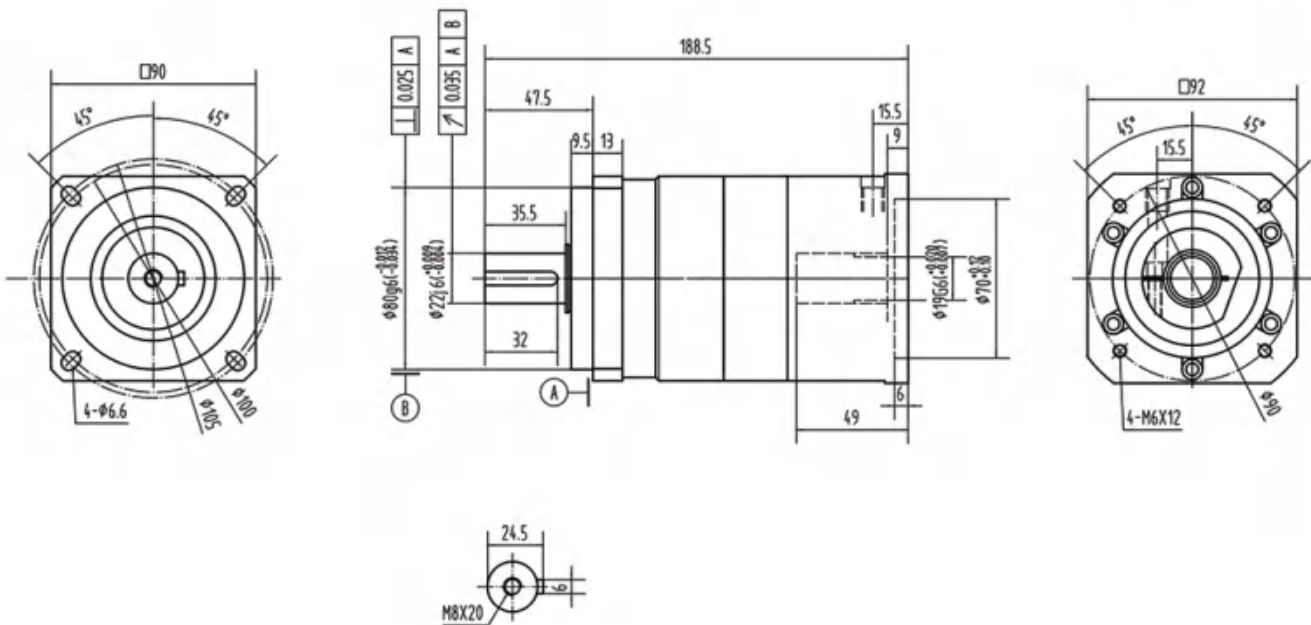


# Drawing / Size

## MAB-090-L1



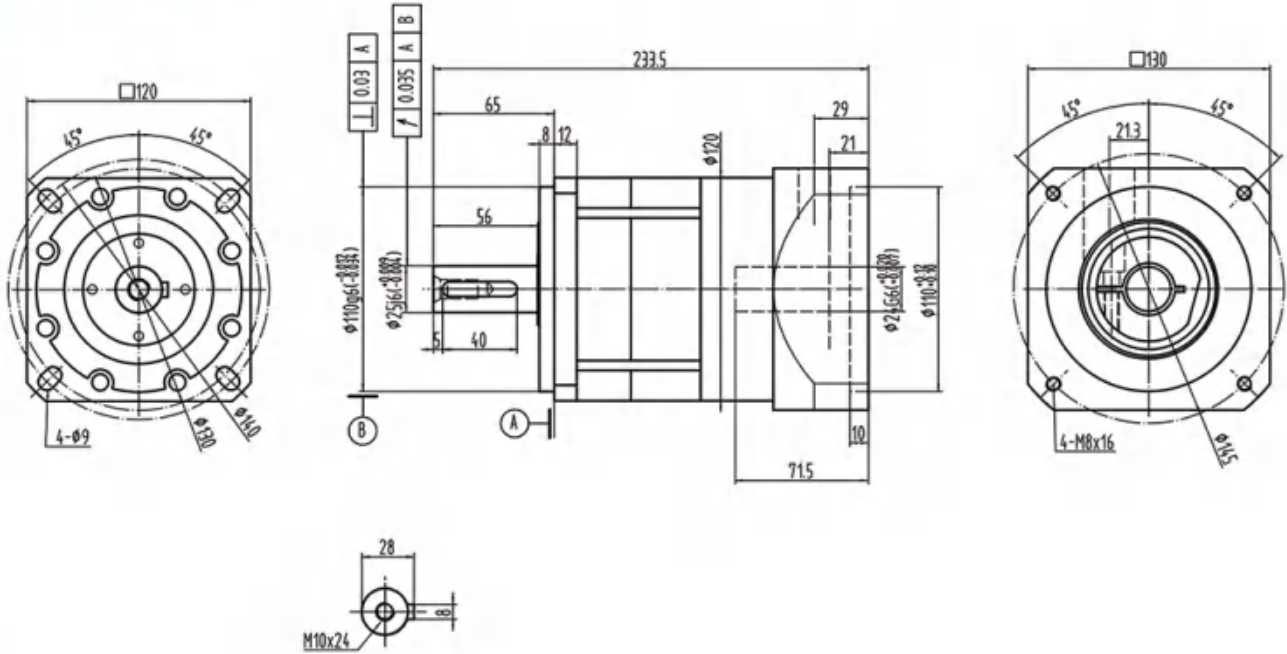
## MAB-090-L2



\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

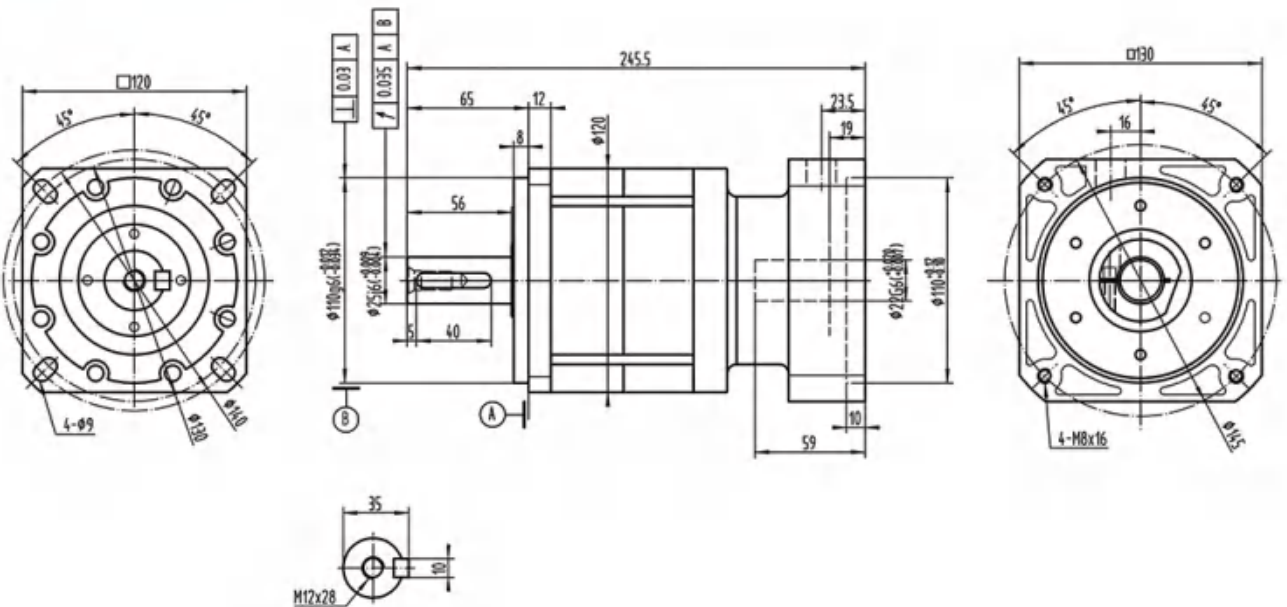
## Drawing / Size

### MAB-115A-L1



MAB

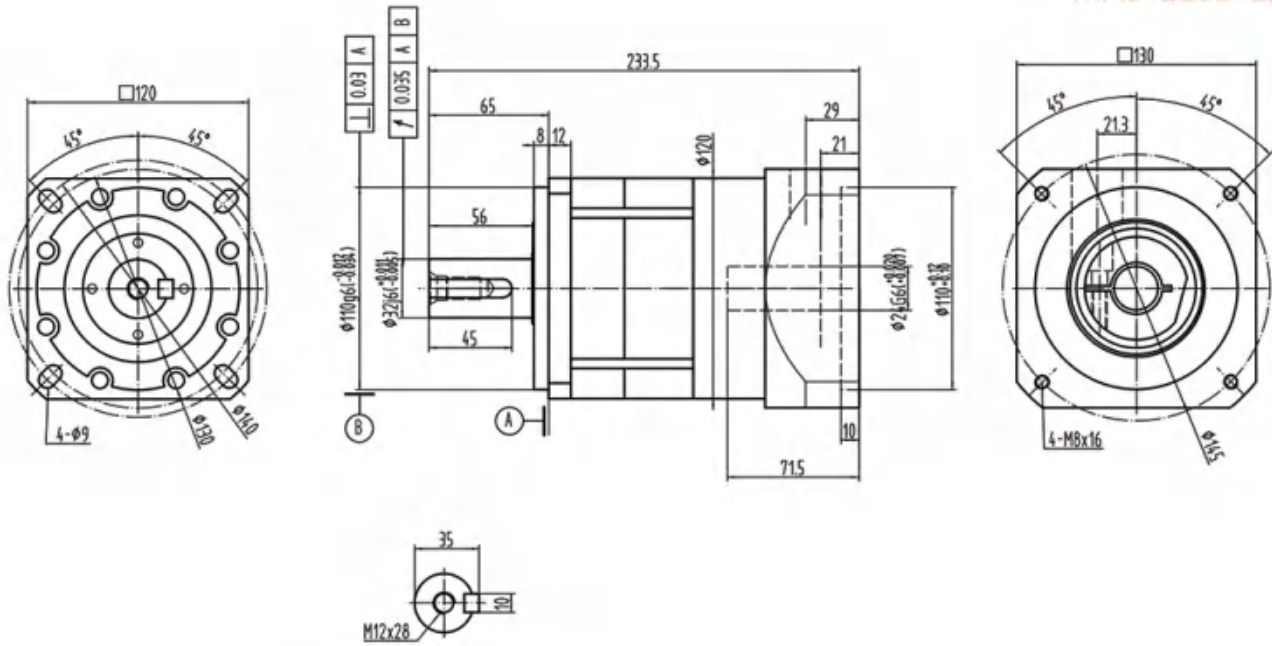
### MAB-115A-L2



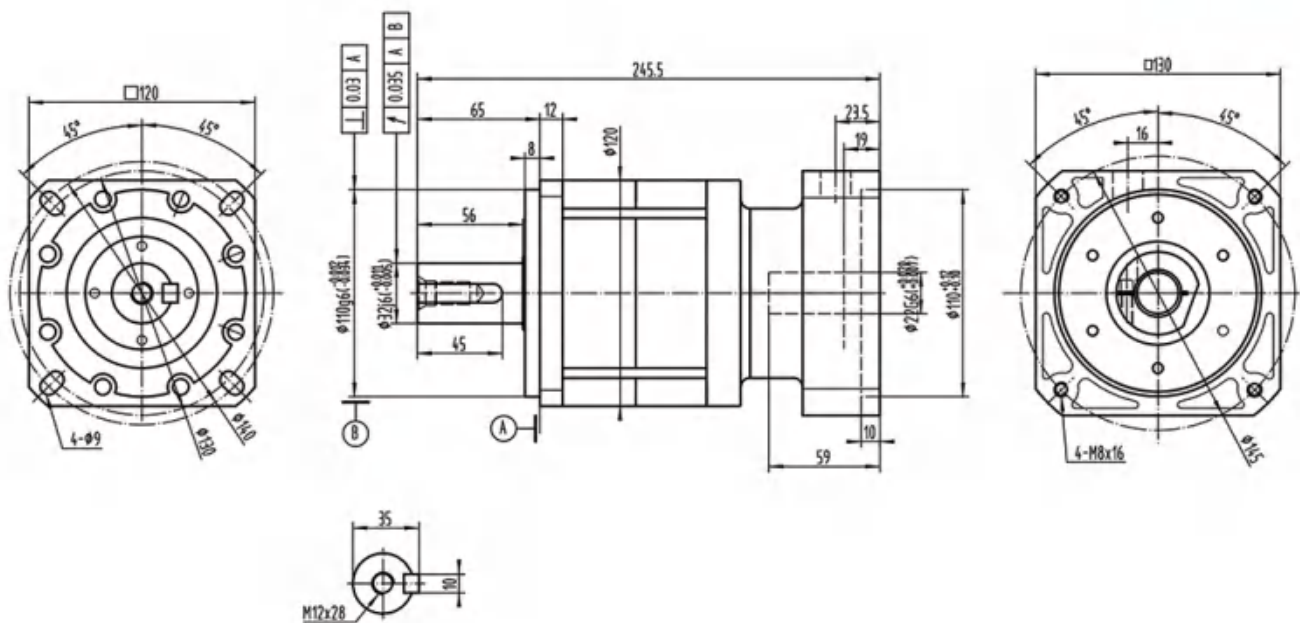
\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

## Drawing / Size

**MAB-115B-L1**



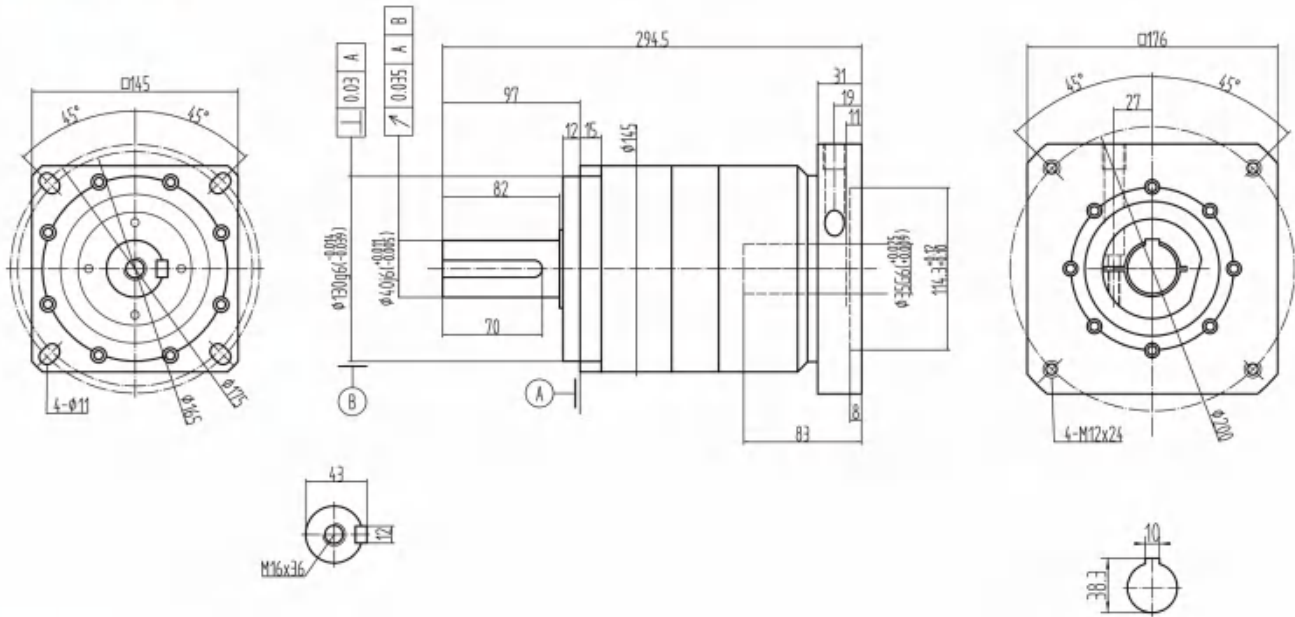
**MAB-115B-L2**



\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

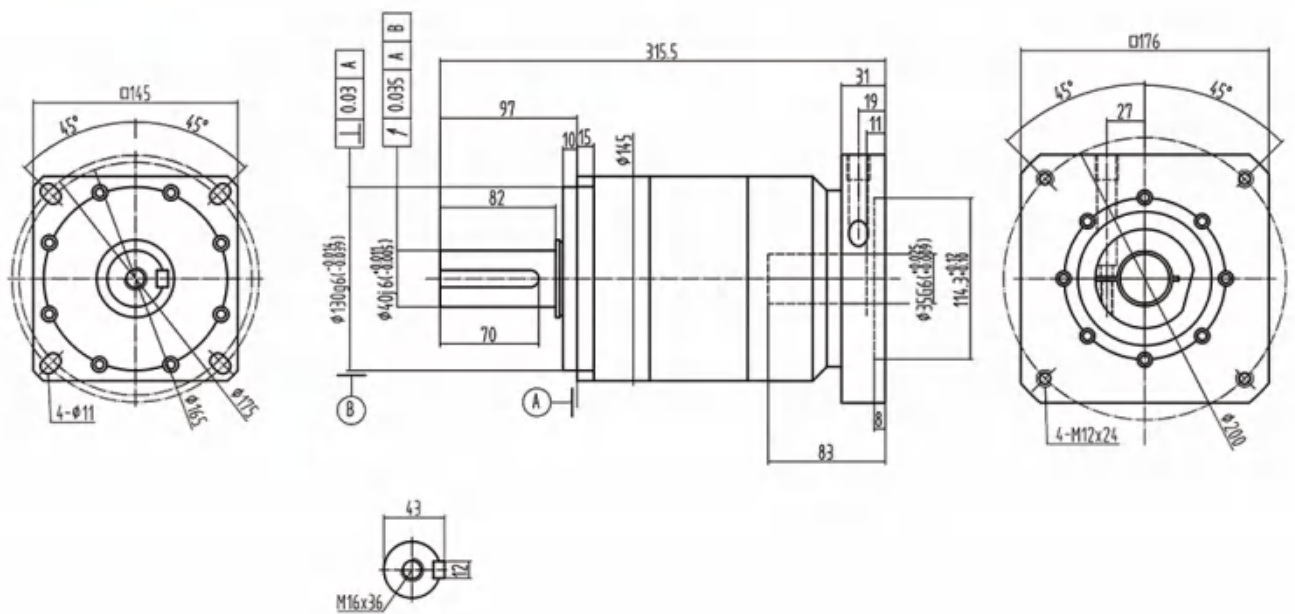
## Drawing / Size

### MAB-140-L1



MAB

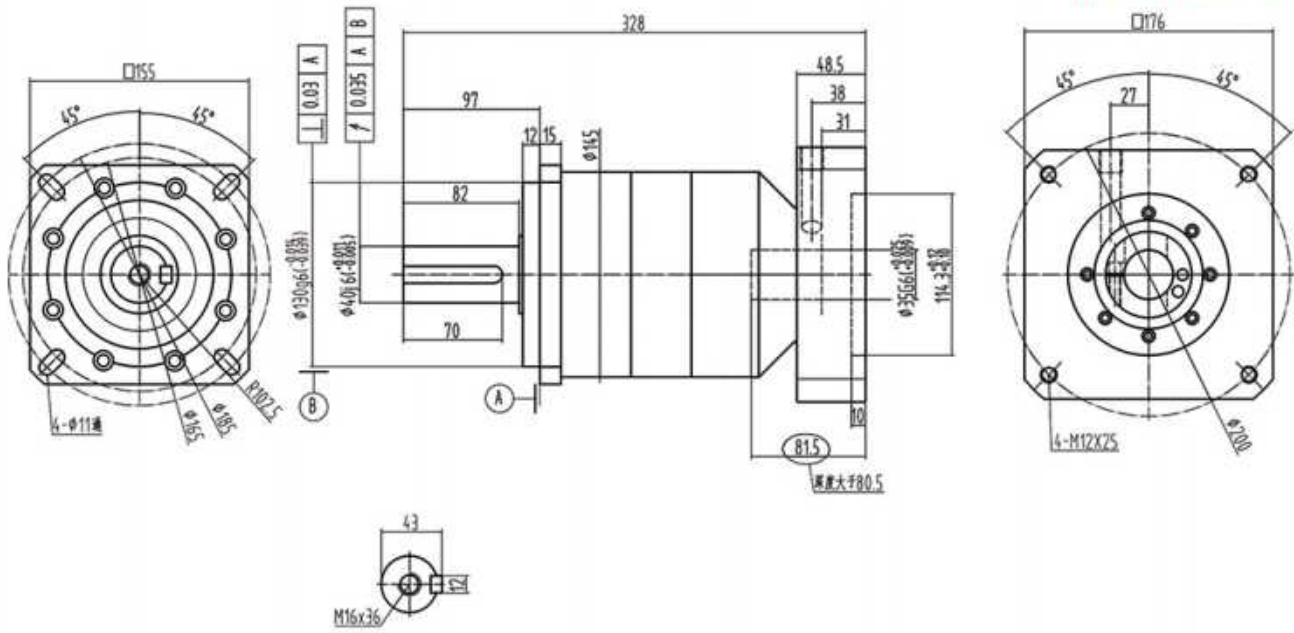
### MAB-140-L2



\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

Drawing / Size

MAB-140-L2-R



\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！



# Performance table

MAB-060																		
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>t</sub>	C <sub>2t</sub>	F <sub>20Max</sub>	F <sub>2AMax</sub>	J <sub>t</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB	
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	min/rpm	N	N	kgcm <sup>2</sup>	%	h	°C					
I STAGE	3	25								0.16								
	4	40								0.14								
	5	40								0.13								
	6	40				≤3				0.13	≥95							
	7	40								0.13								
	8	35								0.13								
	9	25								0.13								
	10	25								0.13								
	15	25	2×T <sub>2n</sub>		4000	8000		7	1060	430	0.13		>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤77
	II STAGE	16	40								0.13							
20		40								0.13								
35		40								0.13								
40		40				≤5				0.13	≥90							
50		35								0.13								
70		35								0.13								
80		35								0.13								
100		25								0.13								

MAB

MAB-090																		
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>t</sub>	C <sub>2t</sub>	F <sub>20Max</sub>	F <sub>2AMax</sub>	J <sub>t</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB	
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	min/rpm	N	N	kgcm <sup>2</sup>	%	h	°C					
I STAGE	3	70								0.61								
	4	100								0.48								
	5	100								0.47								
	6	100								0.47	≥95							
	7	100				≤3				0.45								
	8	100								0.45								
	9	70								0.42								
	10	70								0.40								
	15	70	2×T <sub>2n</sub>		3000	6000		14	1960	2200	0.45		>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤77
	II STAGE	16	100								0.45							
20		100								0.45								
35		100								0.45								
40		100				≤5				0.45	≥90							
50		100								0.40								
70		100								0.40								
80		100								0.40								
100		70								0.40								

## Performance table

MAB-115																	
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>t</sub>	C <sub>2t</sub>	F <sub>2RMax</sub>	F <sub>2JAMax</sub>	J <sub>t</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	mm/kmm	N	N	kgcm <sup>2</sup>	%	h	°C				
I STAGE	3	180								3.25	≥95			Life Lubrication 终身润滑	IP65	Any 任何方向	≤77
	4	240							2.74								
	5	300							2.71								
	6	300				≤3			2.71								
	7	300							2.62								
	8	300							2.60								
	9	180							2.59								
II STAGE	10	180	2×T <sub>2n</sub>	3000	6000		25	4000	3600	2.57	≥90	>20000	-15~45				
	15	180							0.45								
	16	240							0.45								
	20	240							0.45								
	35	300							0.45								
	40	300				≤5			0.45								
	50	300							0.40								
	70	300							0.40								
	80	300							0.40								
	100	180							0.40								

MAB

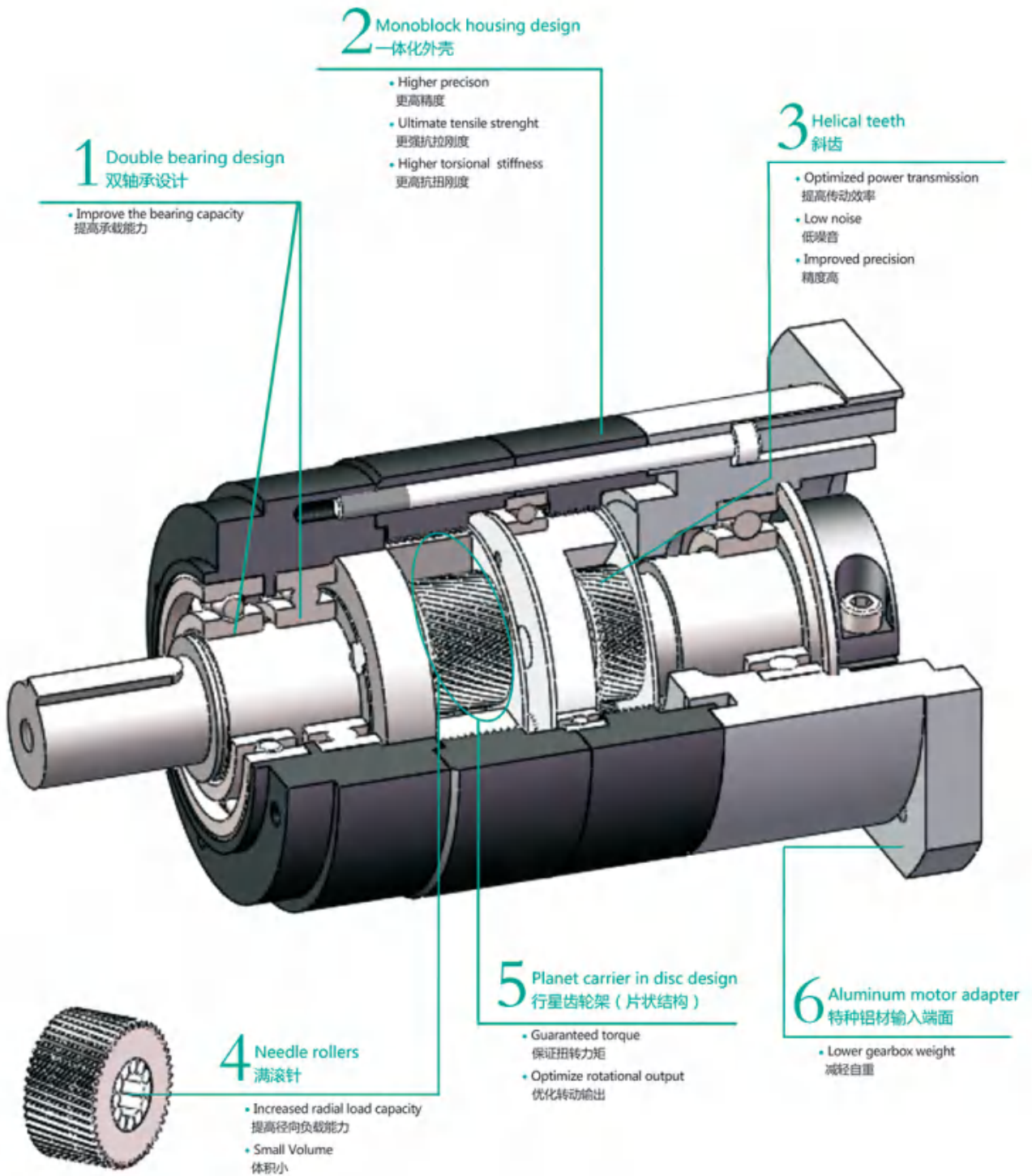
MAB-140																	
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>t</sub>	C <sub>2t</sub>	F <sub>2RMax</sub>	F <sub>2JAMax</sub>	J <sub>t</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	mm/kmm	N	N	kgcm <sup>2</sup>	%	h	°C				
I STAGE	3	380								9.21	≥95			Life Lubrication 终身润滑	IP65	Any 任何方向	≤77
	4	520							7.54								
	5	600							7.42								
	6	600				≤3			7.42								
	7	600							7.14								
	8	600							7.14								
	9	380							7.08								
II STAGE	10	380	2×T <sub>2n</sub>	3000	6000		50	8500	7400	7.03	≥90	>20000	-15~45				
	15	380							2.63								
	16	520							2.63								
	20	520							2.43								
	35	600							2.43								
	40	600				≤5			2.43								
	50	600							2.39								
	70	600							2.39								
	80	600							2.39								
	100	380							2.39								

**MAE SERIES**



MAE系列是一款在中等精度领域中性价比最高的机型。

MAE series is one of the most cost-effective models in the field of medium precision.



MAE

造型数据:

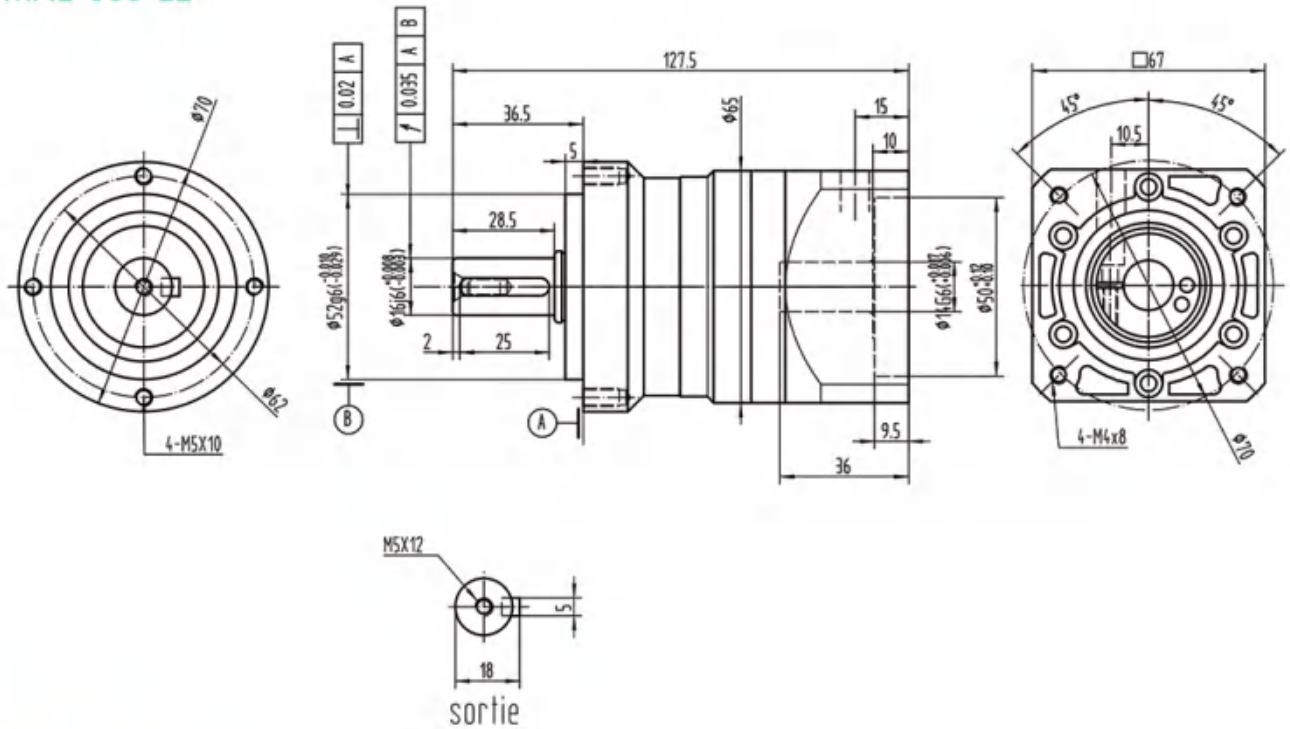
Selection data:

扭矩 ( Nm )	7-1200
速比	3-100
背隙 ( arcmin )	3-5
最大工作温度 ( °C )	90
噪音 ( dB )	65~77

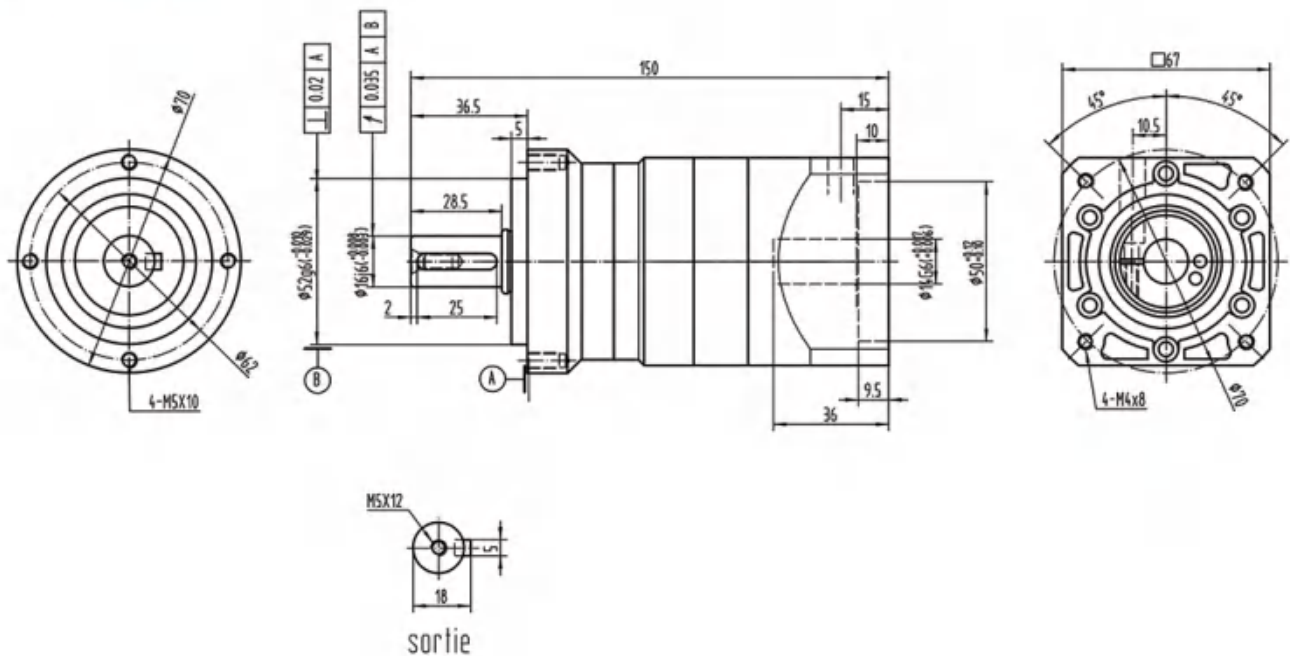
Nominal output torque ( Nm )	7-1200
Reduction ratio	3-100
Backlash ( arcmin )	3-5
Max.working temperature ( °C )	90
Noise ( dB )	65~77

# Drawing / Size

## MAE-060-L1



## MAE-060-L2

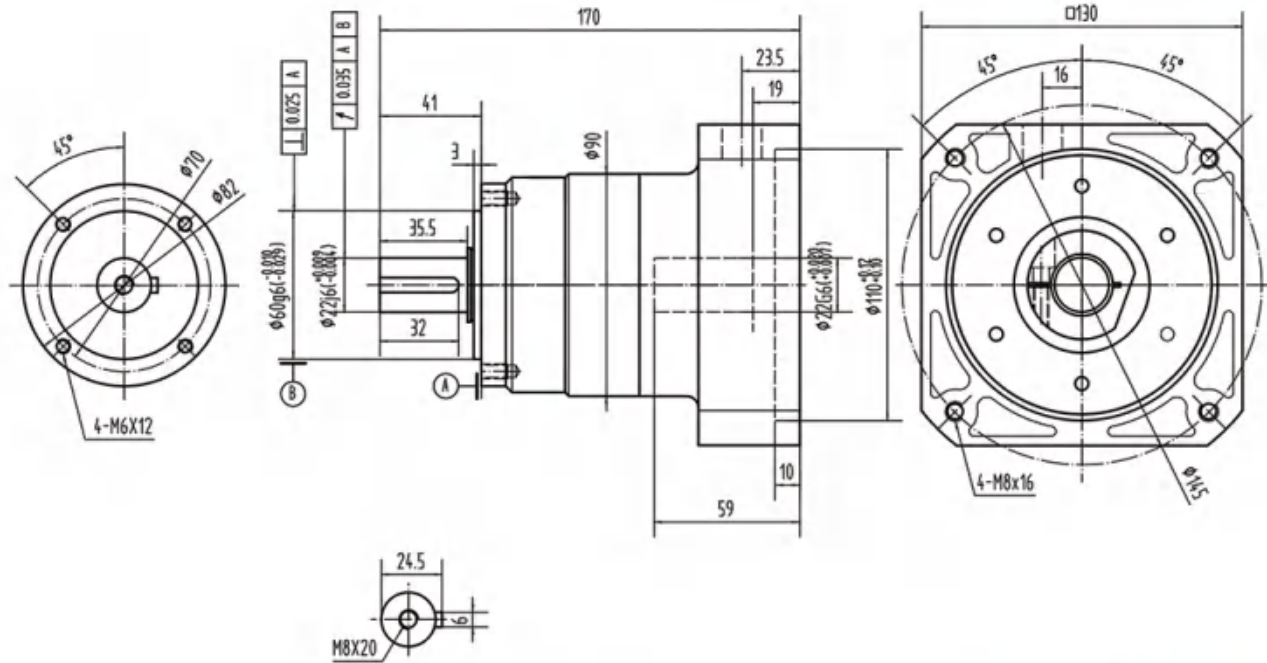


\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

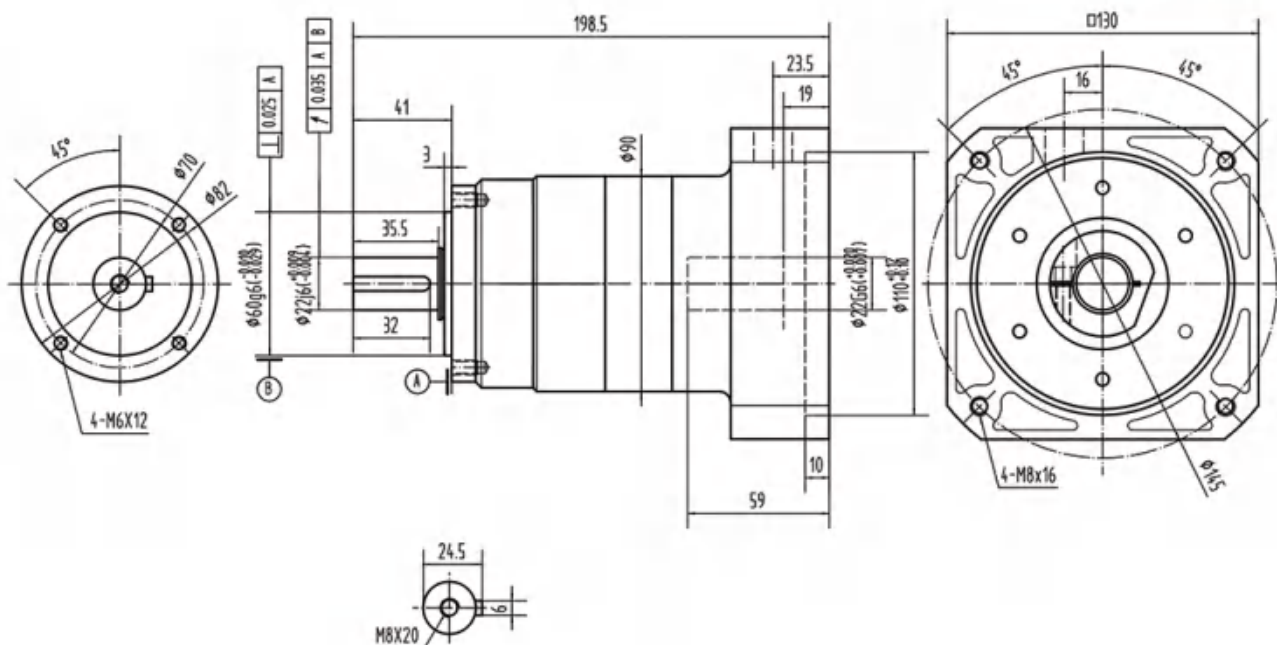


Drawing / Size

MAE-090-L1



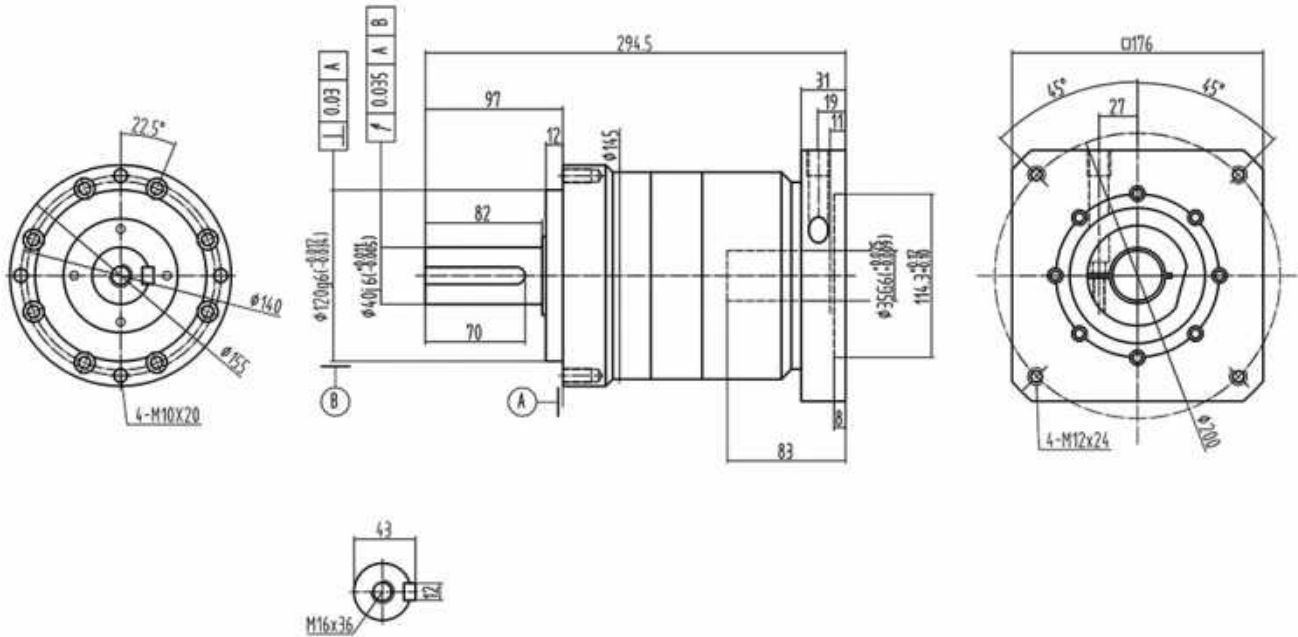
MAE-090-L2



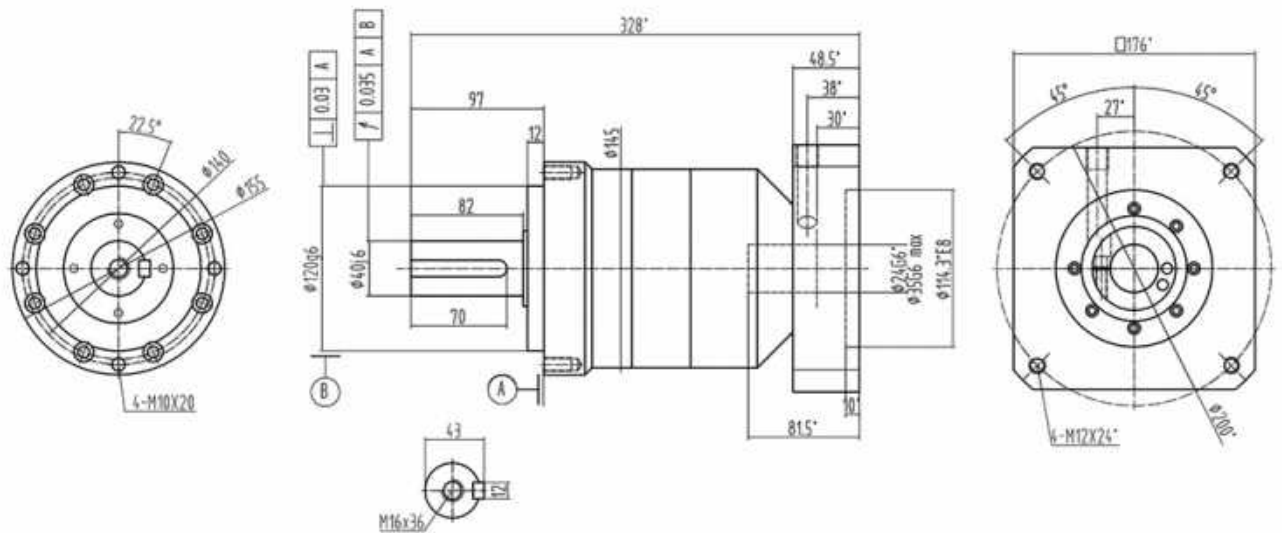
\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

Drawing / Size

MAE-155-L1



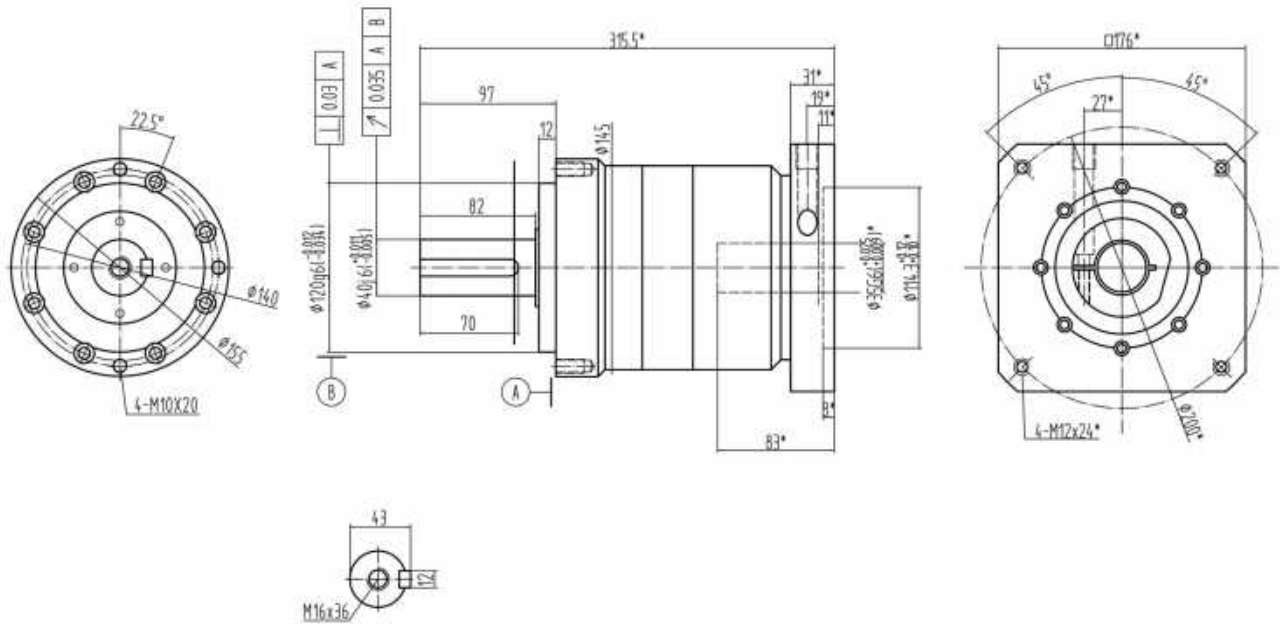
MAE-155-L2



\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

Drawing / Size

MAE-155-L2-P



MAE

\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

# Performance table

MAE-060																		
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>t</sub>	C <sub>2t</sub>	F <sub>2tMax</sub>	F <sub>2tMax</sub>	J <sub>t</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB	
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	mm	N	N	kgcm <sup>2</sup>	%	h	°C					
I STAGE	3	25								0.16								
	4	40								0.14								
	5	40								0.13								
	6	40				≤3				0.13	≥95							
	7	40								0.13								
	8	35								0.13								
	9	25								0.13								
	10	25								0.13								
	15	25	2×T <sub>2n</sub>		4000	8000		7	1060	430	0.13		>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤77
	16	40								0.13								
II STAGE	20	40								0.13								
	35	40								0.13								
	40	40				≤5				0.13	≥90							
	50	35								0.13								
	70	35								0.13								
	80	35								0.13								
	80	35								0.13								
	100	25								0.13								

MAE

MAE-090																		
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>t</sub>	C <sub>2t</sub>	F <sub>2tMax</sub>	F <sub>2tMax</sub>	J <sub>t</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB	
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	mm	N	N	kgcm <sup>2</sup>	%	h	°C					
I STAGE	3	70								0.61								
	4	100								0.48								
	5	100								0.47								
	6	100				≤3				0.47	≥95							
	7	100								0.45								
	8	100								0.45								
	9	70								0.42								
	10	70								0.40								
	15	70	2×T <sub>2n</sub>		3000	6000		14	1960	2200	0.45		>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤77
	16	100								0.45								
II STAGE	20	100								0.45								
	35	100								0.45								
	40	100				≤5				0.45	≥90							
	50	100								0.40								
	70	100								0.40								
	80	100								0.40								
	80	100								0.40								
	100	70								0.40								

# Performance table

MAE-155																	
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>t</sub>	C <sub>2t</sub>	F <sub>2tMax</sub>	F <sub>2AMax</sub>	J <sub>i</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	mm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C				
I STAGE	3	380								9.21	≥95	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤77
	4	520							7.54								
	5	600							7.42								
	6	600				≤3			7.42								
	7	600							7.14								
	8	600							7.14								
	9	380							7.08								
	10	380	2×T <sub>2n</sub>	3000	6000		50	8500	7400	7.03							
	15	380							2.63								
	16	520							2.63								
II STAGE	20	520							2.43	≥90	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤77	
	35	600							2.43								
	40	600				≤5			2.43								
	50	600							2.39								
	70	600							2.39								
	80	600							2.39								
	100	380							2.39								

MAE

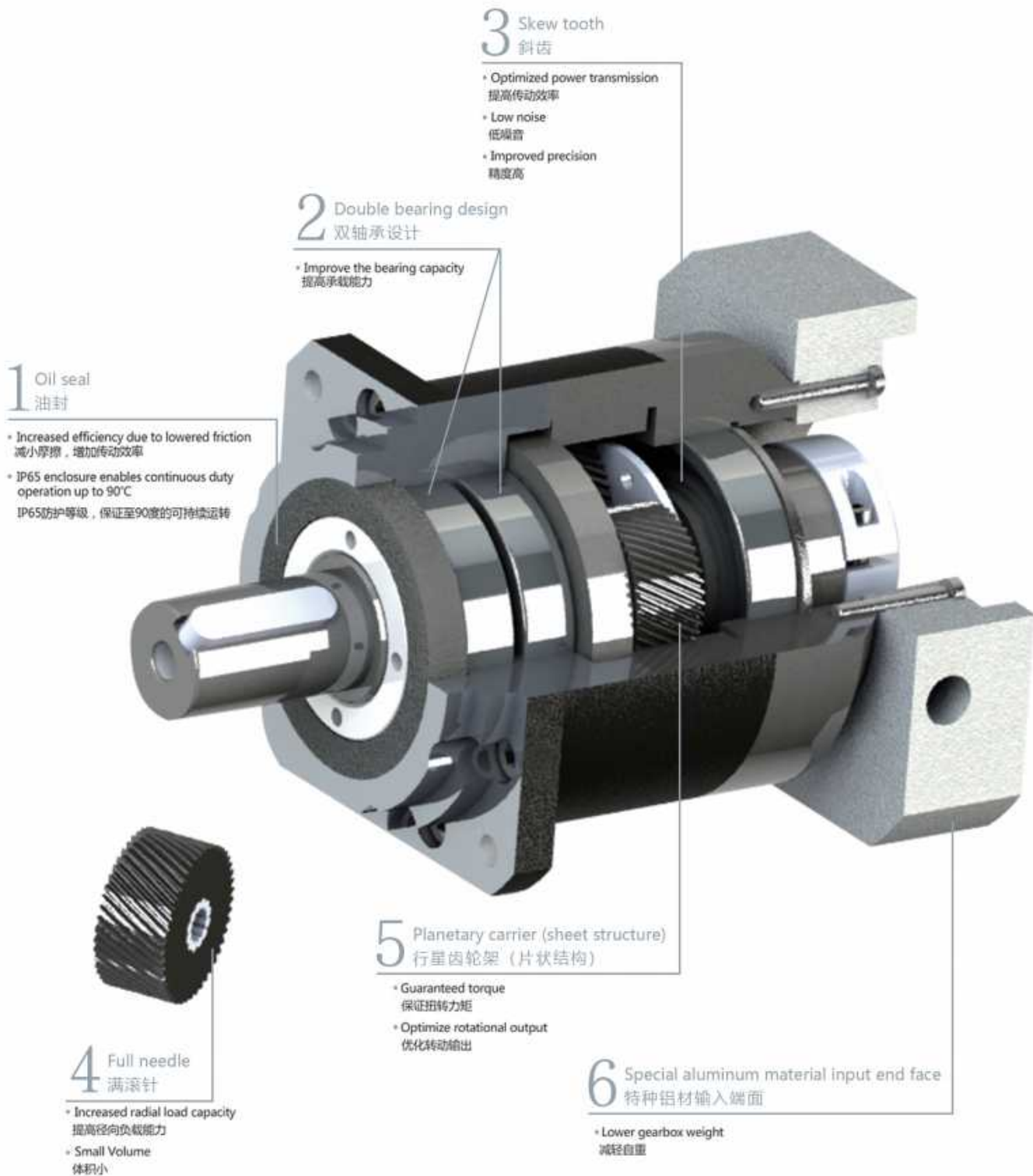


**MVS SERIES**



此经济款专用于较低技术要求应用。

Economic series dedicated to low challenging applications.



**1** Oil seal  
油封

- Increased efficiency due to lowered friction  
减小摩擦，增加传动效率
- IP65 enclosure enables continuous duty operation up to 90°C  
IP65防护等级，保证至90度的可持续运转

**2** Double bearing design  
双轴承设计

- Improve the bearing capacity  
提高承载能力

**3** Skew tooth  
斜齿

- Optimized power transmission  
提高传动效率
- Low noise  
低噪音
- Improved precision  
精度高



**4** Full needle  
满滚针

- Increased radial load capacity  
提高径向负载能力
- Small Volume  
体积小

**5** Planetary carrier (sheet structure)  
行星齿轮架 (片状结构)

- Guaranteed torque  
保证扭转力矩
- Optimize rotational output  
优化转动输出

**6** Special aluminum material input end face  
特种铝材输入端面

- Lower gearbox weight  
减轻自重

**造型数据:**

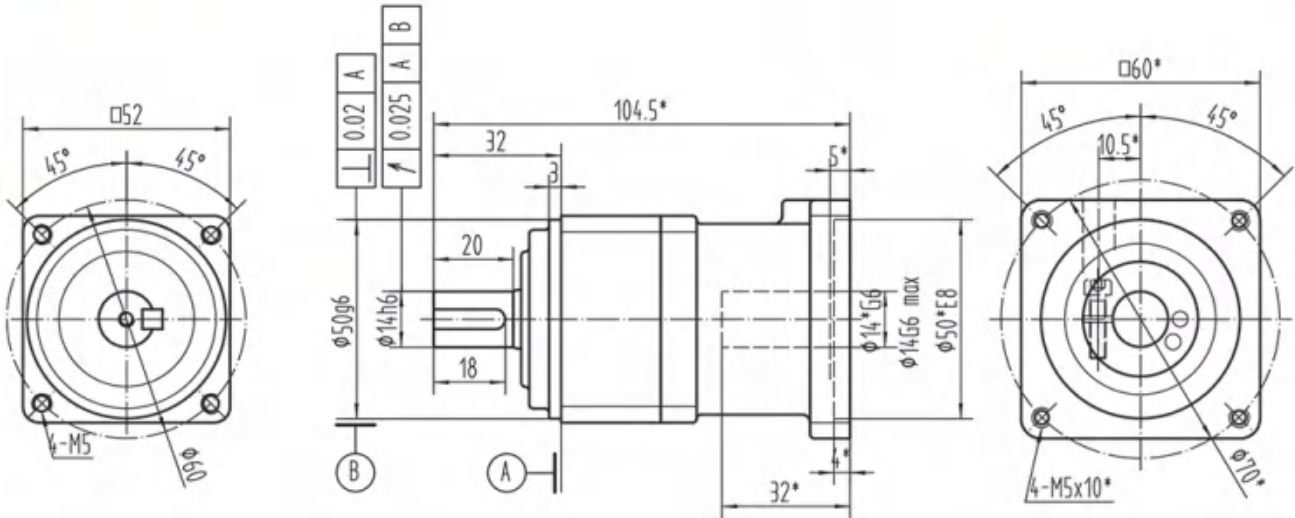
**Selection data:**

扭矩 ( Nm )	5-330
速比	3-100
背隙 ( arcmin )	≤12
最大工作温度 ( °C )	90
噪音 ( dB )	73-80

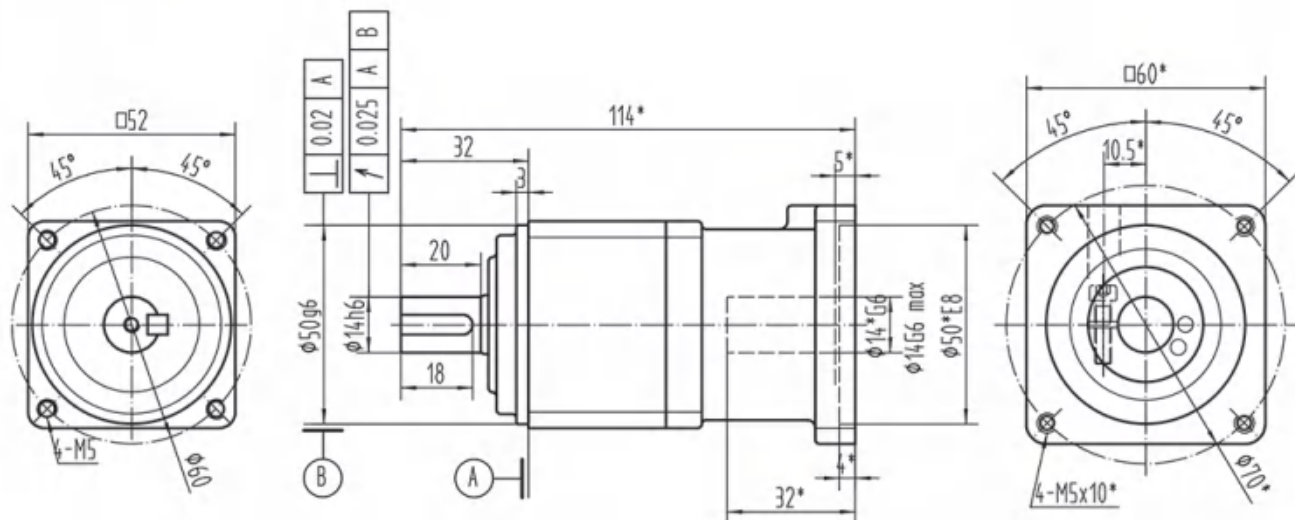
Nominal output torque ( Nm )	5-330
Reduction ratio	3-100
Backlash ( arcmin )	≤12
Max.working temperature ( °C )	90
Noise ( dB )	73-80

## Drawing / Size

MVS-060-L1



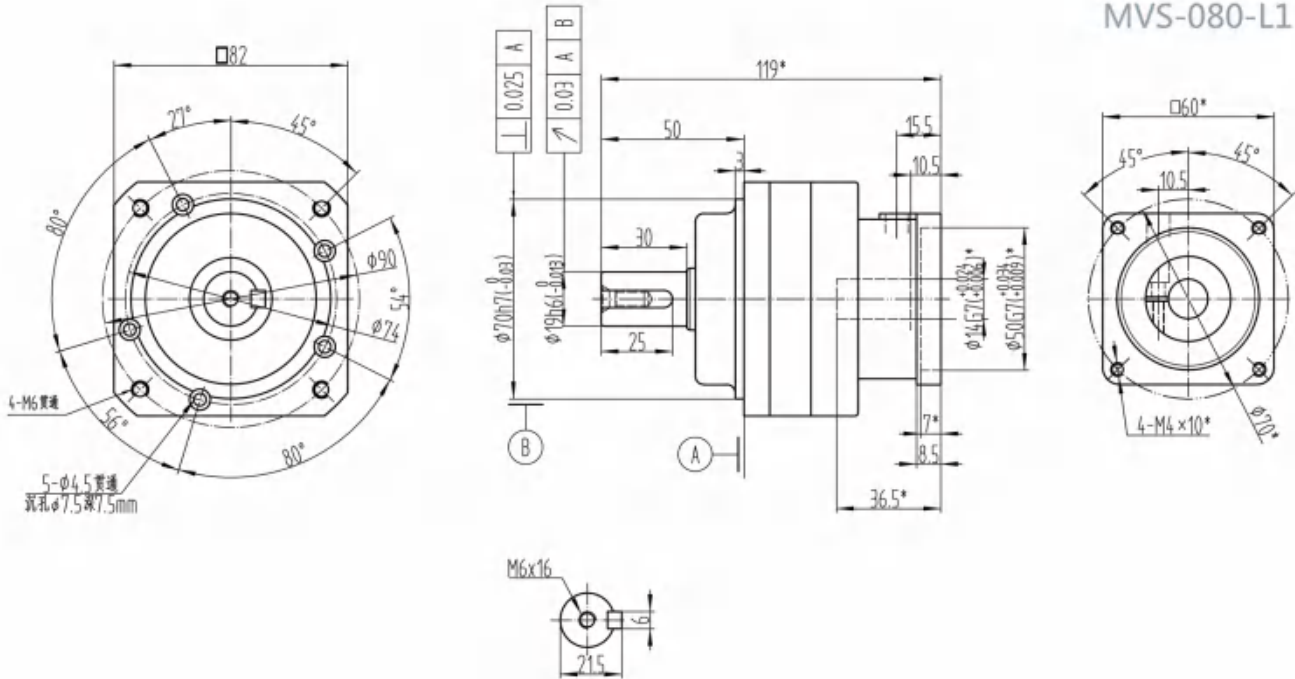
MVS-060-L2



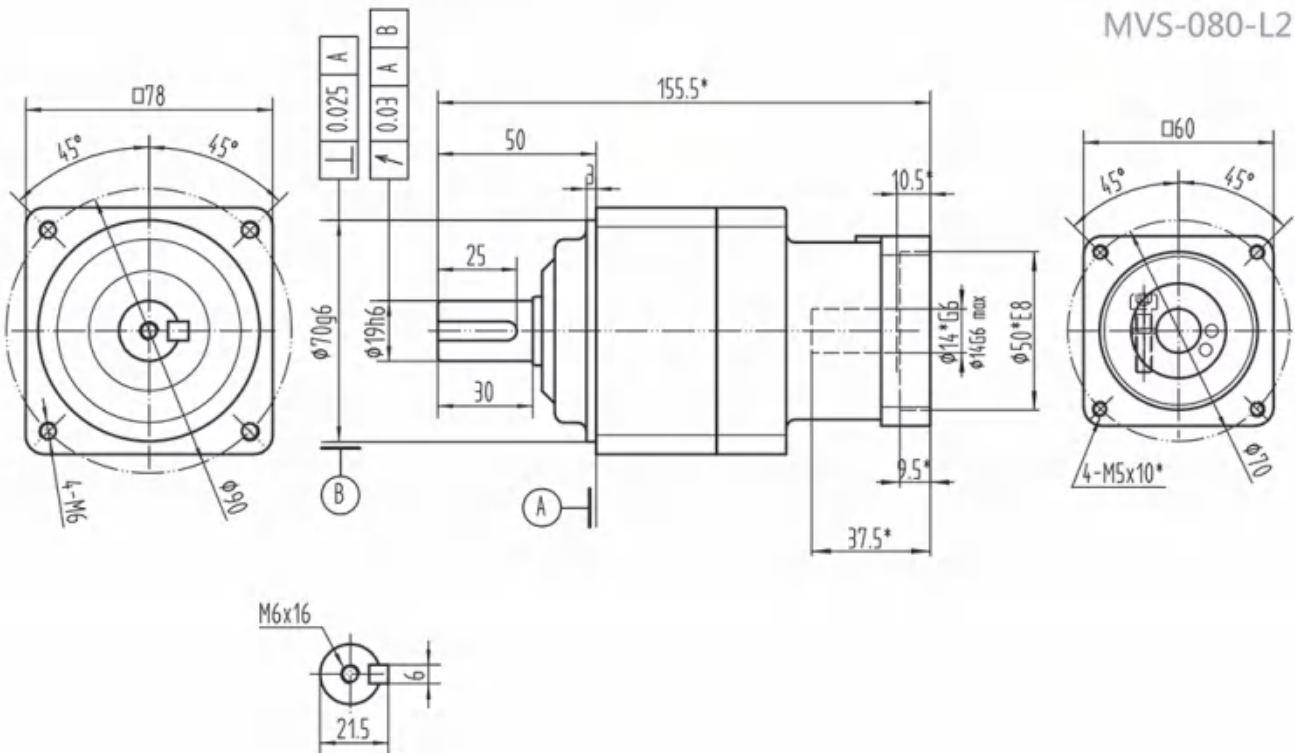
\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

Drawing / Size

MVS-080-L1



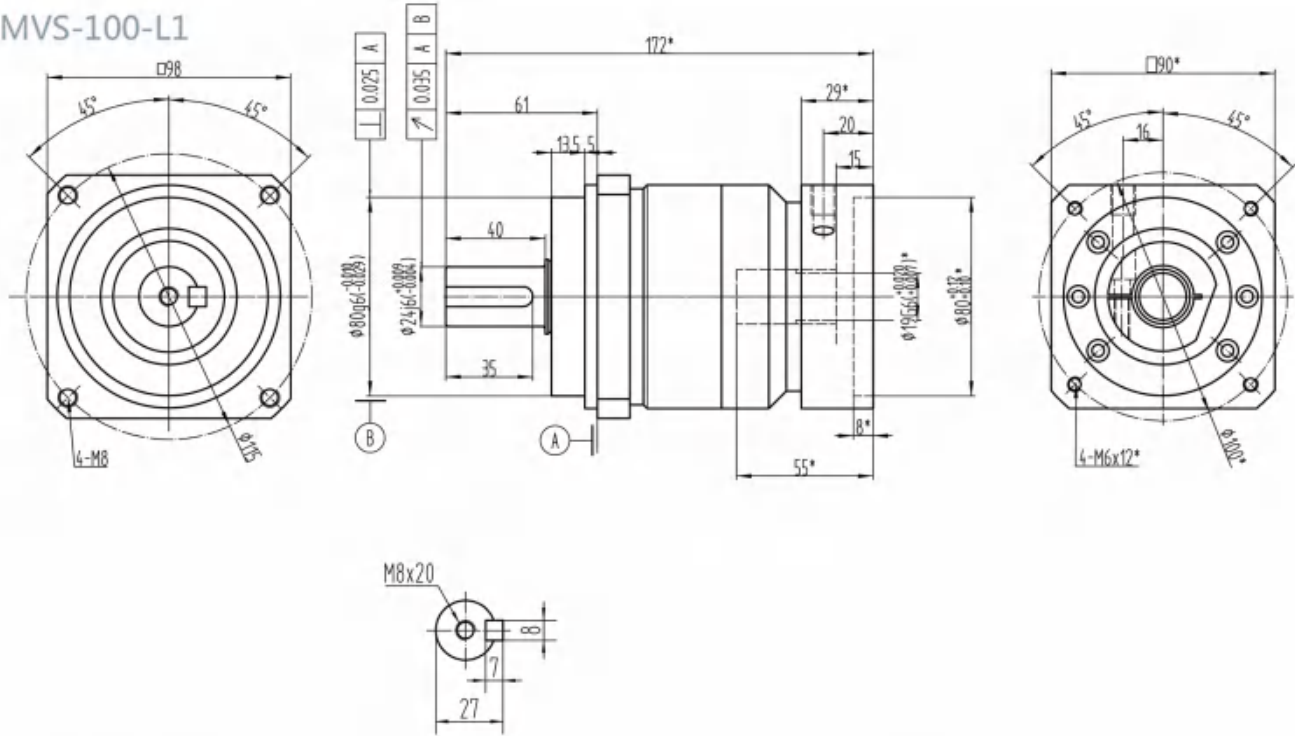
MVS-080-L2



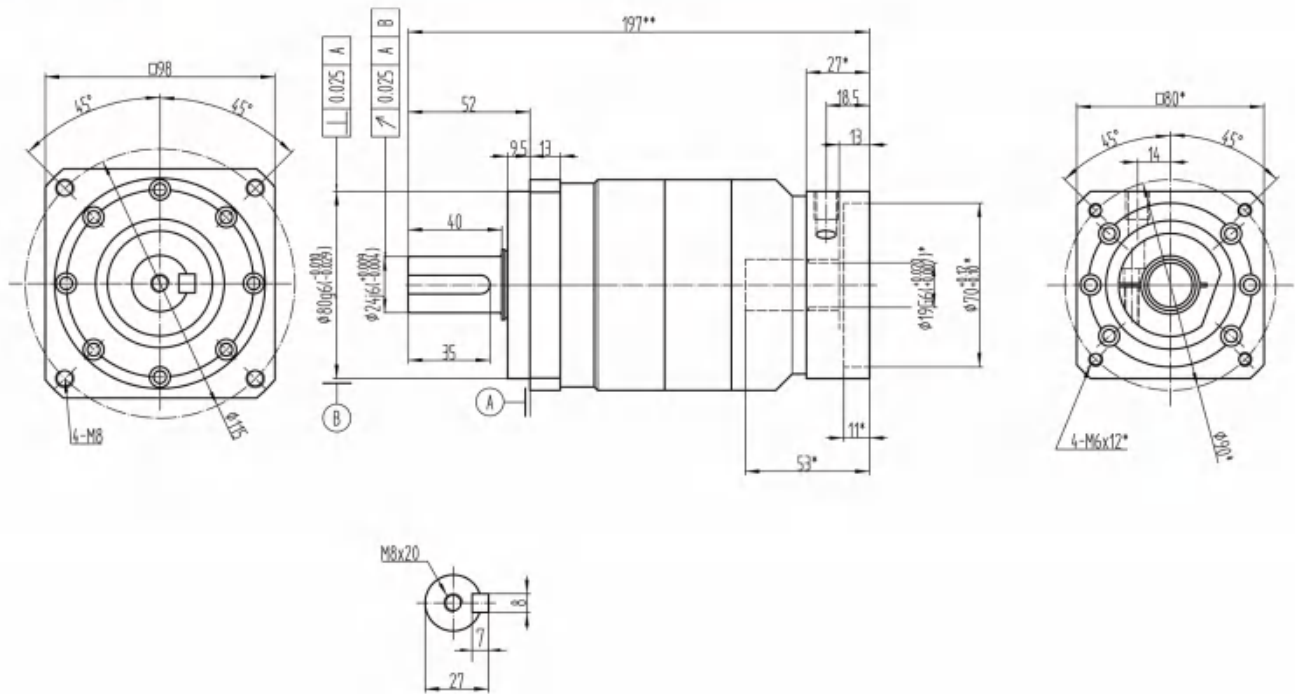
\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸: 代表可根据客户需求定制产品, 如有需要, 请联系我们!

## Drawing / Size

MVS-100-L1



MVS-100-L2

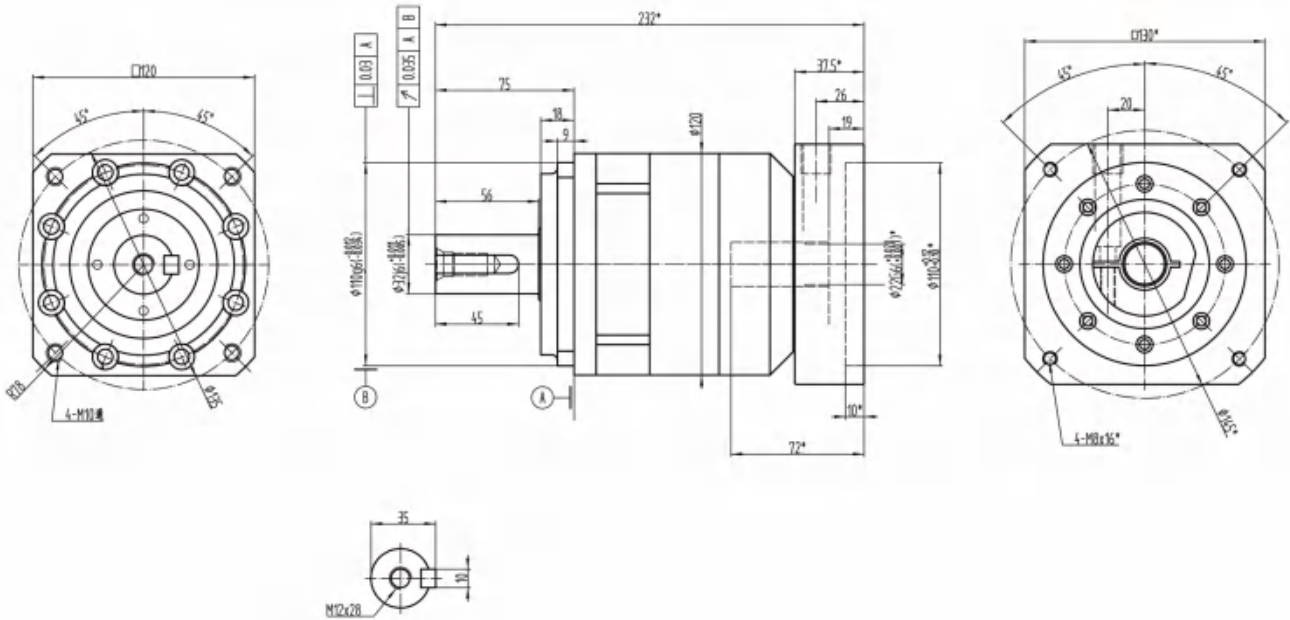


\* Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

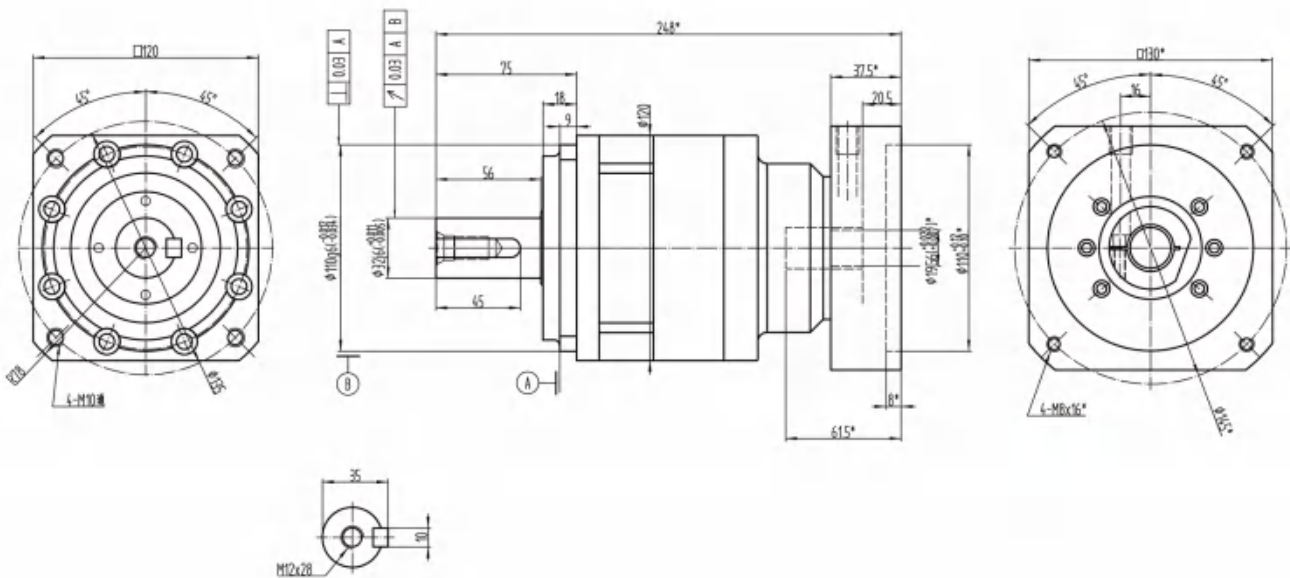


Drawing / Size

MVS-125-L1



MVS-125-L2



\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

MVS

# Performance table

MVS-060																	
Symb.	i	T <sub>2N</sub>	T <sub>2Max</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>i</sub>	C <sub>r</sub>	F <sub>200Max</sub>	F <sub>2Max</sub>	J <sub>i</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	Nm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C				
I STAGE	3	5.2	26	4000	8000	P3≤ Stand 标准	0.58	230	200	0.04	≥95	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤73
	5	5.7	26				0.58										
	7	5.7	26				0.58										
	9	5.2	26				0.52										
	10	5.2	26				0.52										
II STAGE	12	5.2	26				0.58										
	15	5.2	26				0.58										
	20	5.2	26				0.58										
	25	5.7	26				0.58										
	35	5.7	26				0.58										
	45	5.7	26	0.58													
	50	5.7	26	0.58													
	70	5.7	26	0.58													
	81	5.7	26	0.58													
	100	5.7	26	0.58													

MVS-080																	
Symb.	i	T <sub>2N</sub>	T <sub>2Max</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>i</sub>	C <sub>r</sub>	F <sub>200Max</sub>	F <sub>2Max</sub>	J <sub>i</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	Nm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C				
I STAGE	3	40	190	3400	6000	P3≤ Stand 标准	6.1	1600	1200	0.54	≥95	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤73
	5	40	190				6.1										
	7	35	190				5.5										
	9	40	190				6.1										
	10	40	190				6.1										
II STAGE	12	40	190				6.1										
	15	40	190				6.1										
	20	40	190				6.1										
	25	40	190				6.1										
	35	35	190				5.5										
	45	35	190	5.5													
	50	40	190	6.1													
	70	40	190	6.1													
	81	40	190	6.1													
	100	40	190	6.1													

MVS

## Performance table

MVS-100																	
Symb.	i	T <sub>2N</sub>	T <sub>2Max</sub>	n <sub>N</sub>	n <sub>1Max</sub>	J <sub>i</sub>	C <sub>It</sub>	F <sub>200Max</sub>	F <sub>250Max</sub>	J <sub>i</sub>	η	t <sub>h</sub>	T	Lub	PC	MP	dB
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	Nm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C				
I STAGE	3	100	480	2600	4800	P3≤ Stand 标准	16.5	2000	1000	1.8	≥95	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤75
	5	100	480														
	7	100	480														
	9	90	480														
	10	90	480														
II STAGE	12	100	480														
	15	100	480														
	20	100	480														
	25	100	480														
	35	100	480														
	45	100	480														
	50	100	480														
	70	100	480														
	81	100	480														
	100	100	480														

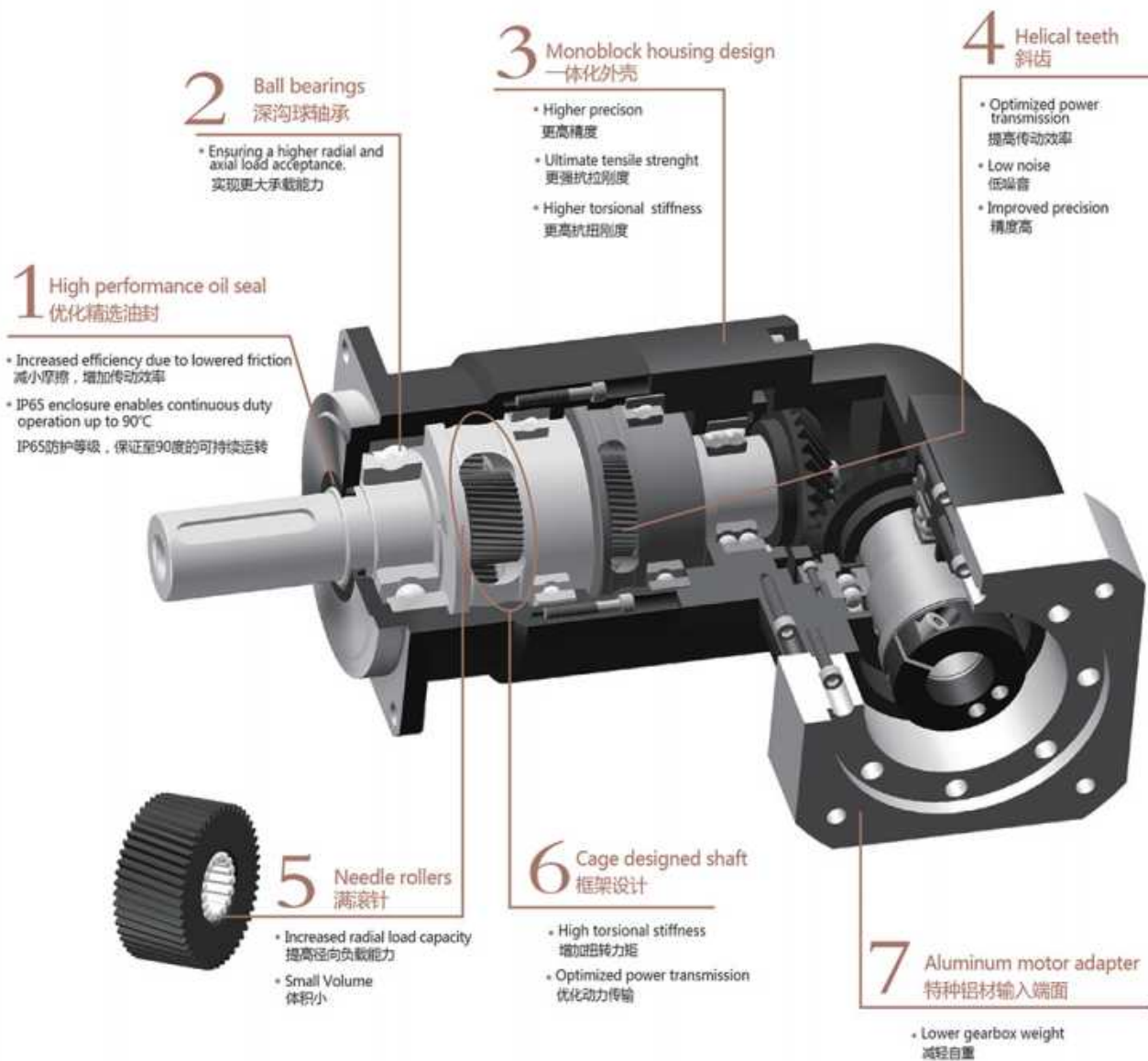
MVS-125																	
Symb.	i	T <sub>2N</sub>	T <sub>2Max</sub>	n <sub>N</sub>	n <sub>1Max</sub>	J <sub>i</sub>	C <sub>It</sub>	F <sub>200Max</sub>	F <sub>250Max</sub>	J <sub>i</sub>	η	t <sub>h</sub>	T	Lub	PC	MP	dB
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	Nm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C				
I STAGE	3	208	624	2000	4000	P3≤ Stand 标准	25	6700	3000	3.25	≥95	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤80
	4	290	870														
	5	330	990														
	7	300	900														
	10	230	690														
II STAGE	15	208	624														
	16	220	660														
	20	290	870														
	25	330	990														
	30	310	930														
	35	300	900														
	40	260	780														
	50	330	990														
	70	300	900														
	100	230	690														

**MVBR SERIES**



此款应用高端直角解决方案，保持原有MVB系列的设计与性能。

A high-performance right-angle solution for servo applications that keeps MVB's design and characteristics.



### 造型数据:

### Selection data:

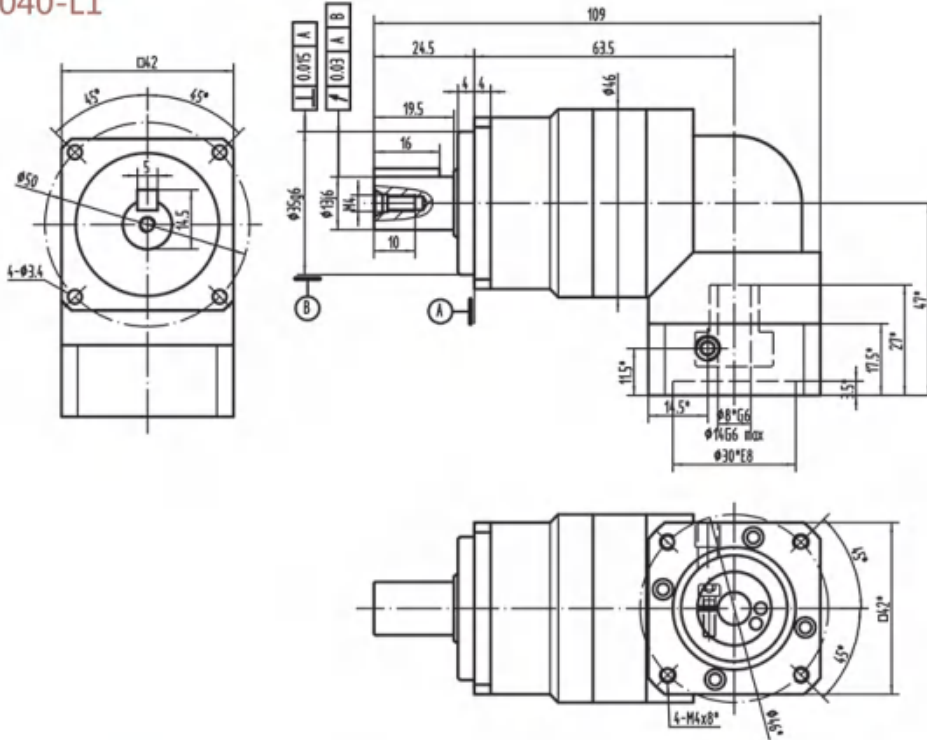
扭矩 ( Nm )	14-600
速比	3-100
背隙 ( arcmin )	≤8
最大工作温度 ( °C )	90
噪音 ( dB )	63-74

Nominal output torque ( Nm )	14-600
Reduction ratio	3-100
Backlash ( arcmin )	≤8
Max.working temperature ( °C )	90
Noise ( dB )	63-74

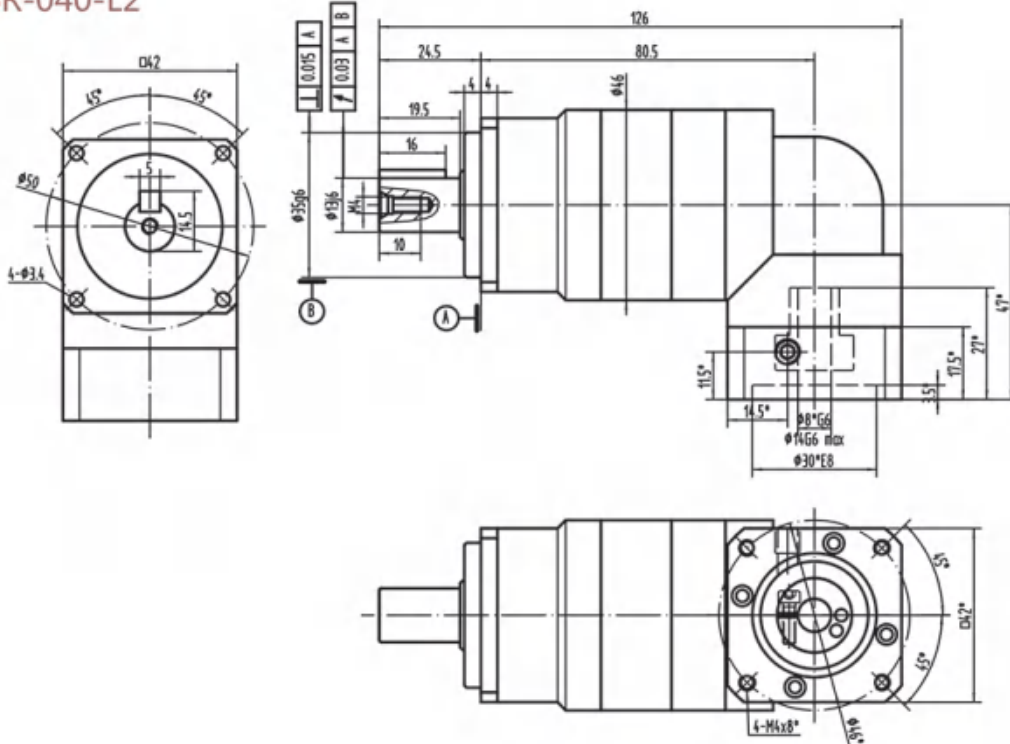


## Drawing / Size

### MVBR-040-L1



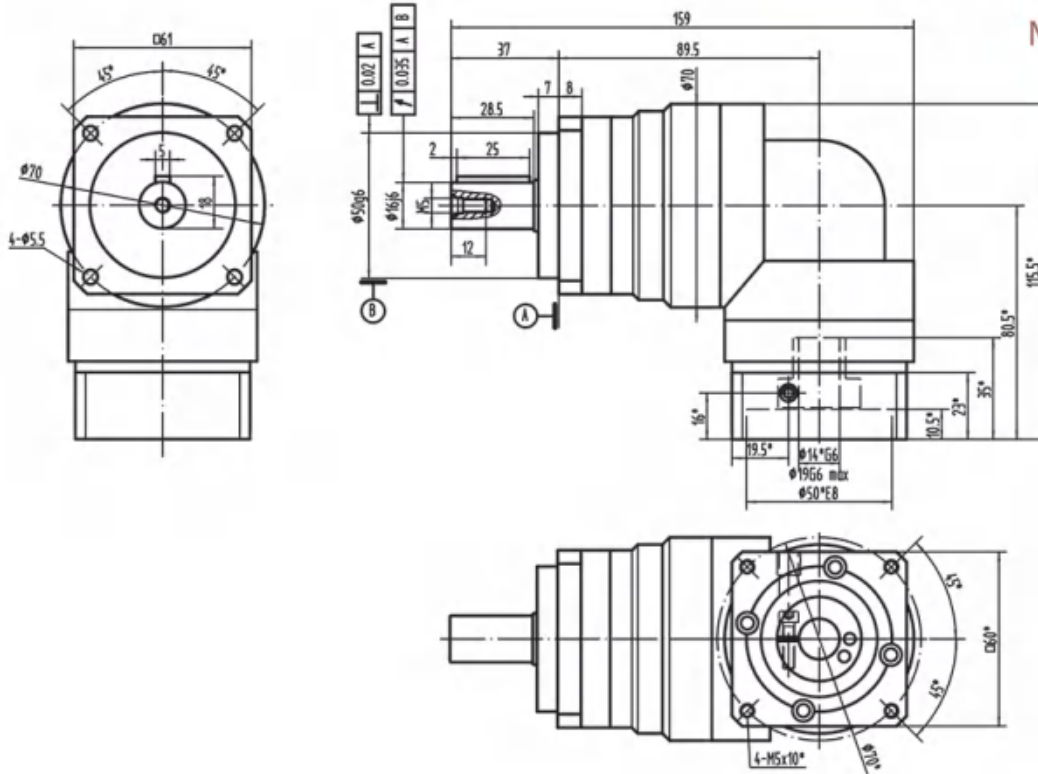
### MVBR-040-L2



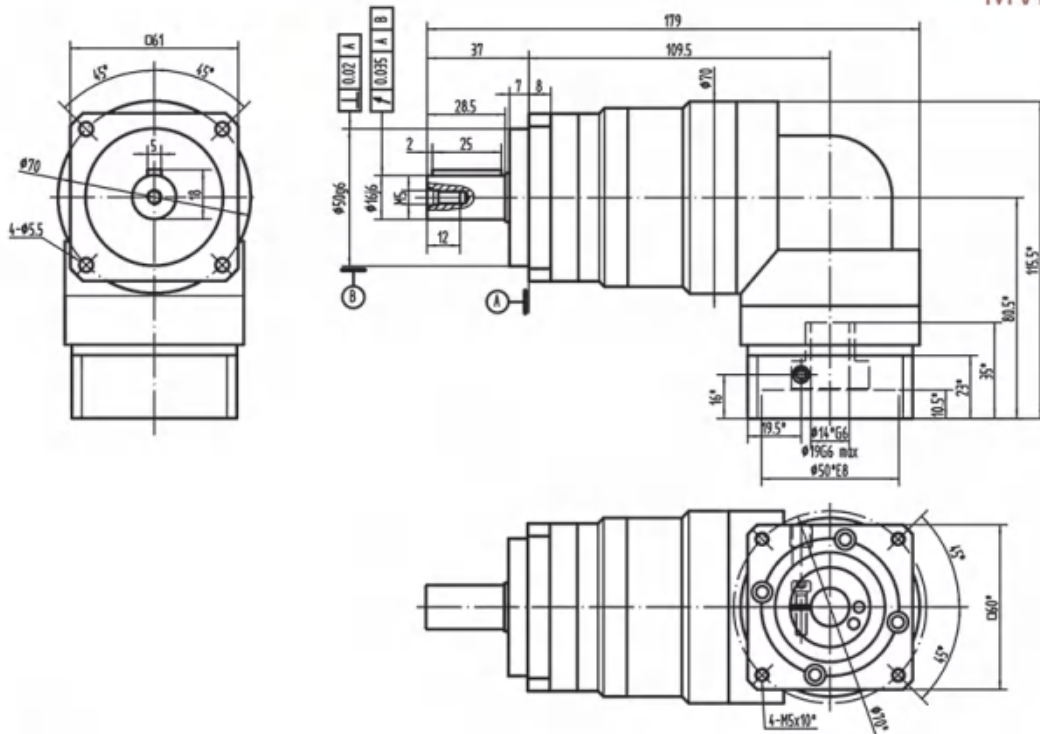
\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

Drawing / Size

MVBR-060-L1



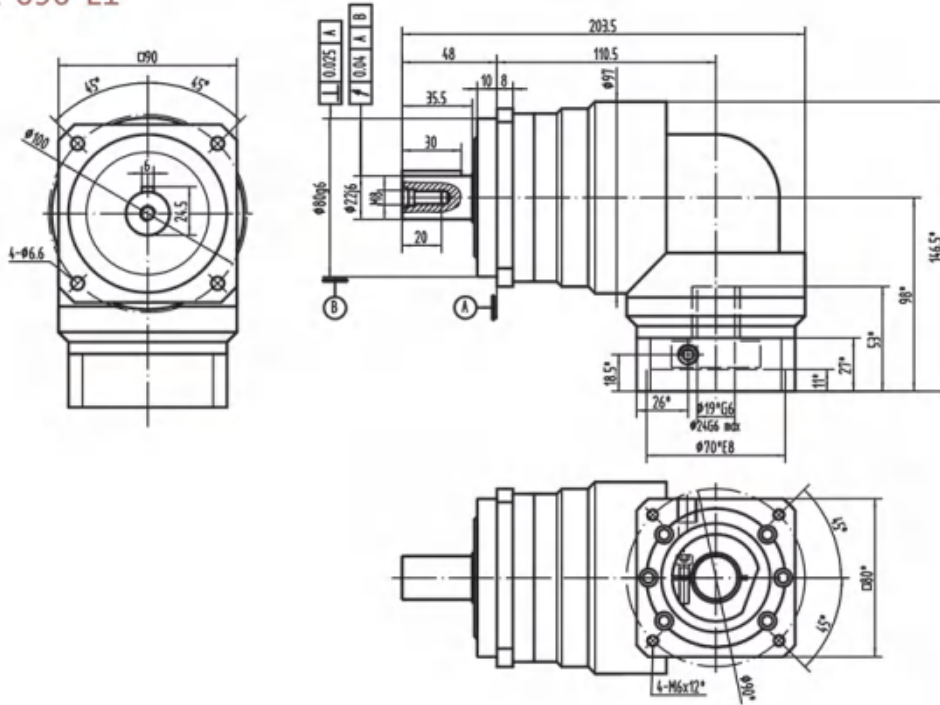
MVBR-060-L2



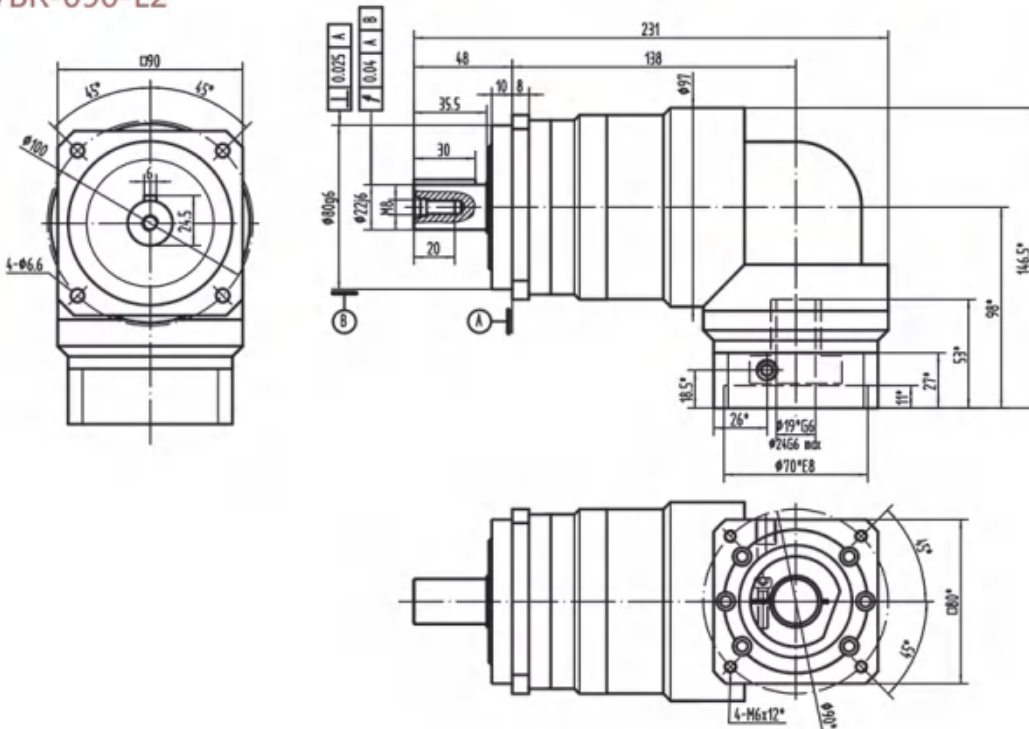
\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

# Drawing / Size

## MVBR-090-L1

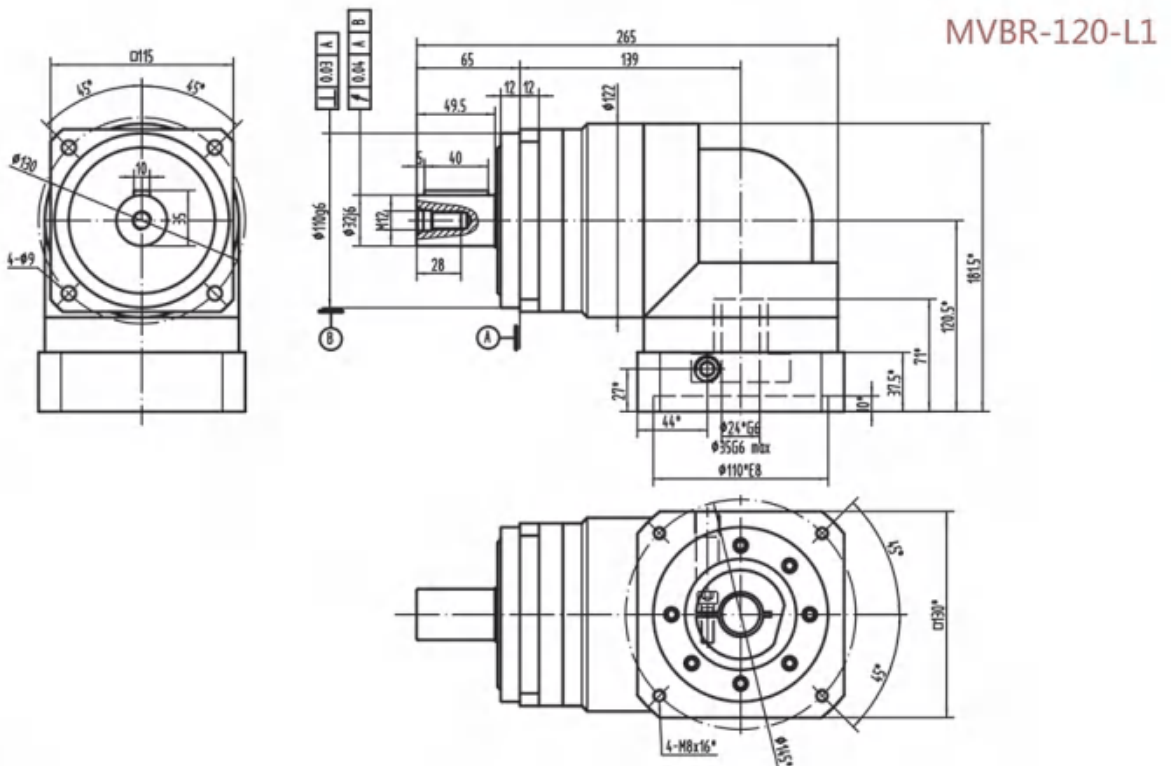
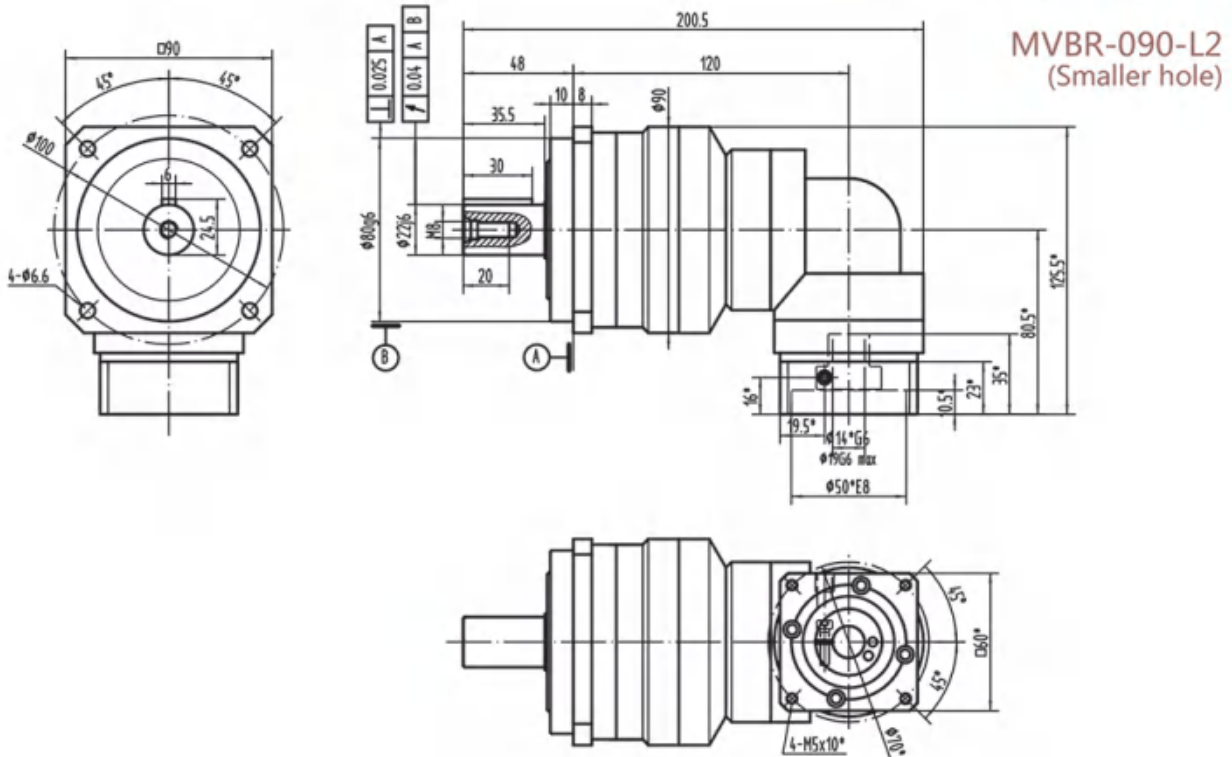


## MVBR-090-L2



\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

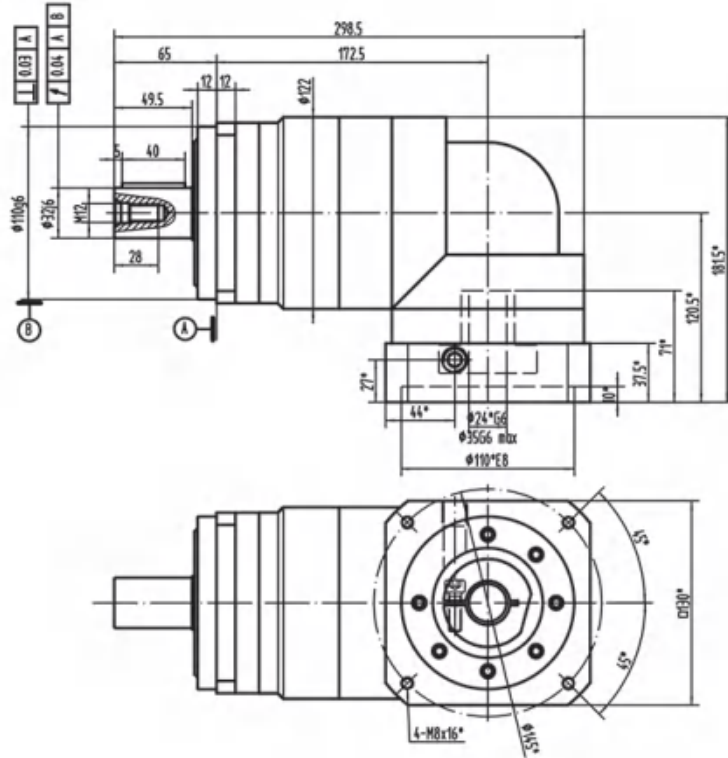
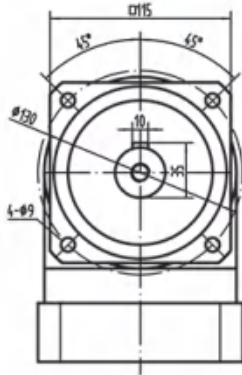
Drawing / Size



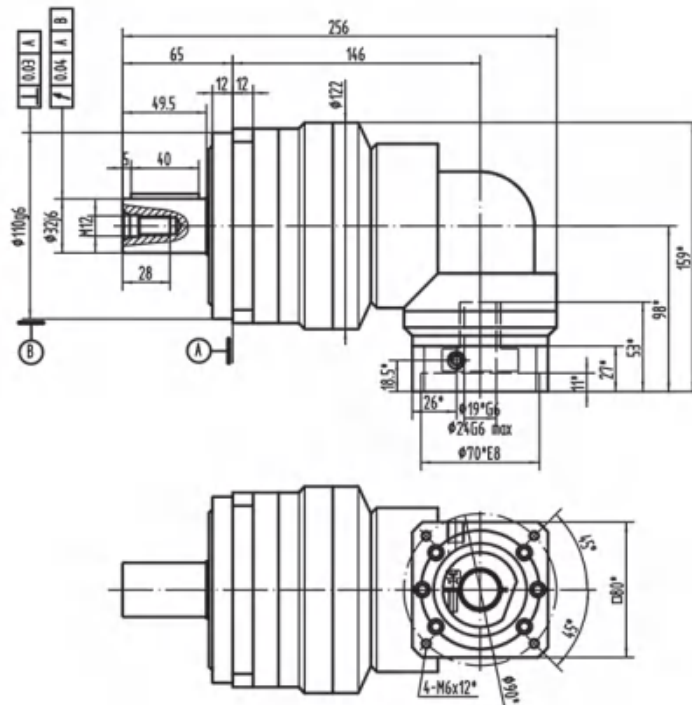
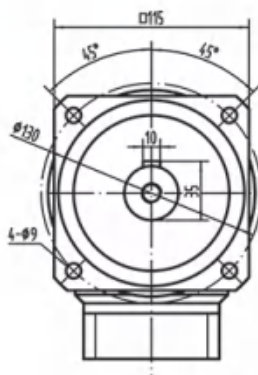
\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸: 代表可根据客户需求定制产品, 如有需要, 请联系我们!

# Drawing / Size

MVBR-120-L2



MVBR-120-L2  
(Smaller hole)



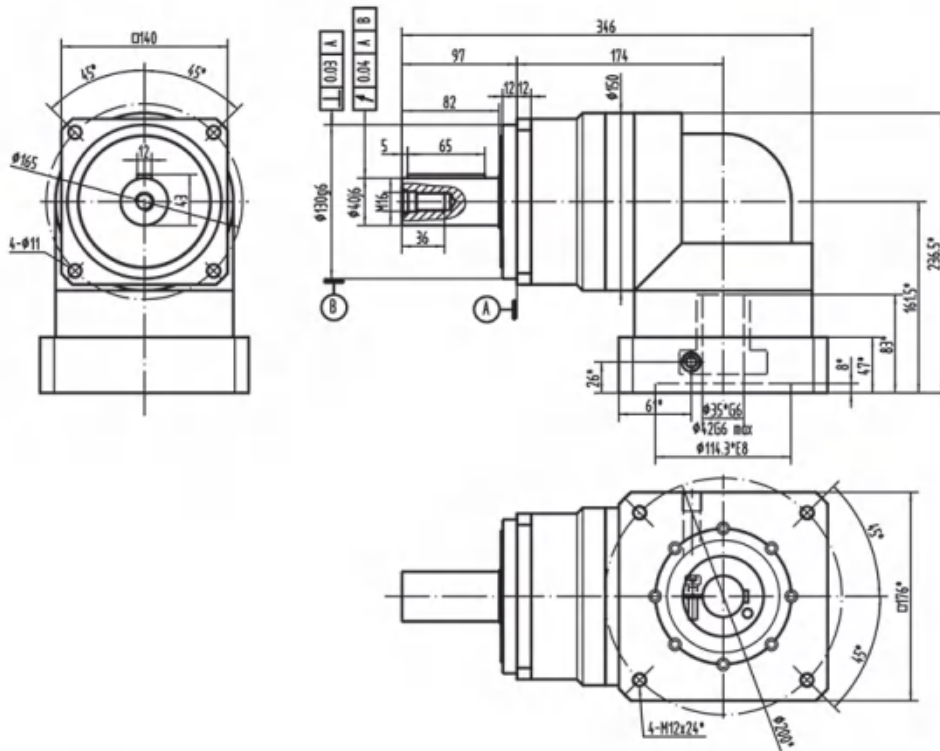
\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

MVBR

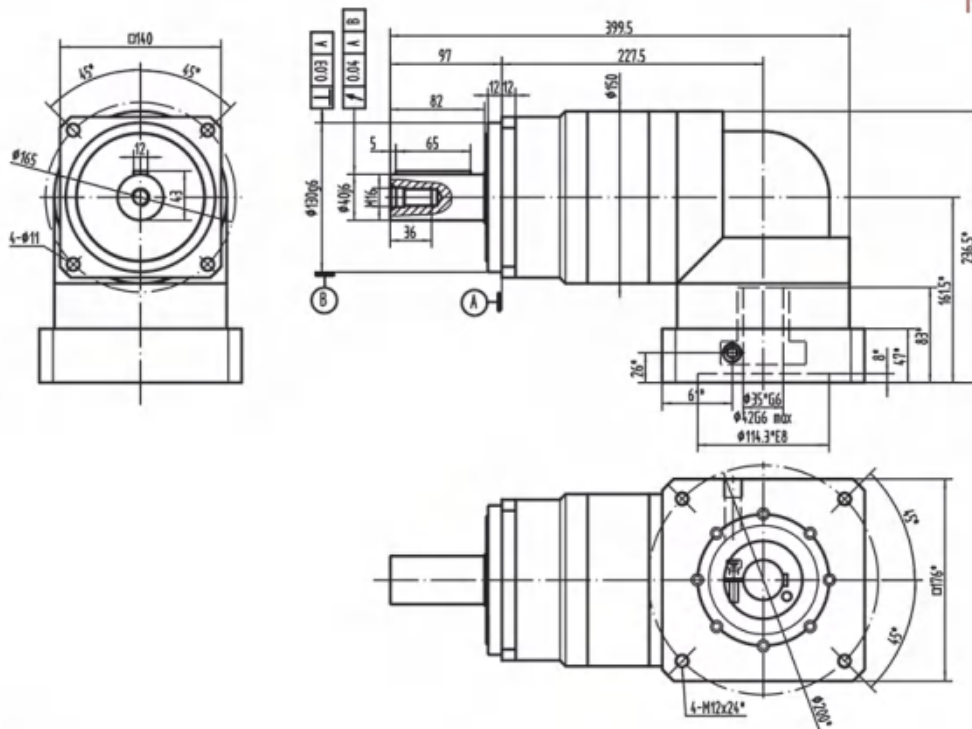


Drawing / Size

MVBR-140-L1



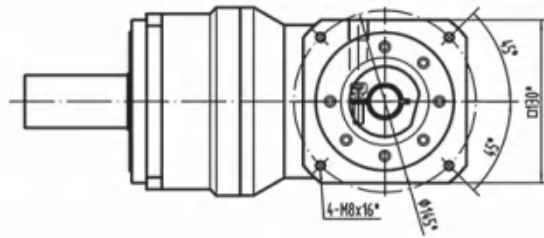
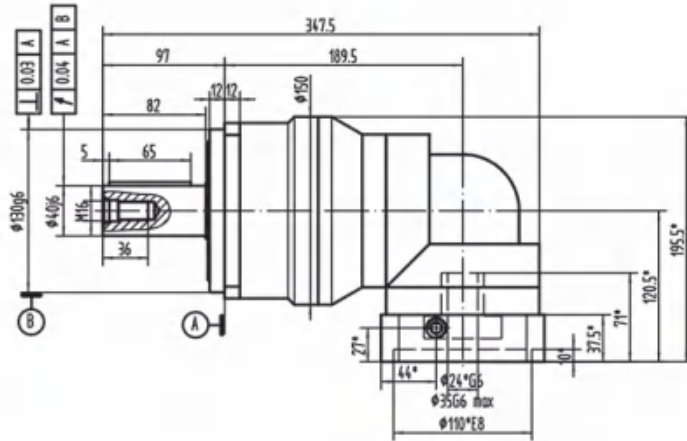
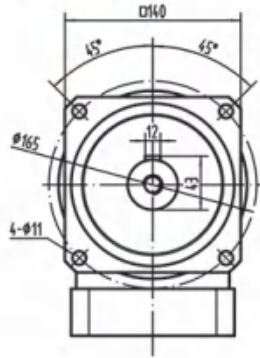
MVBR-140-L2



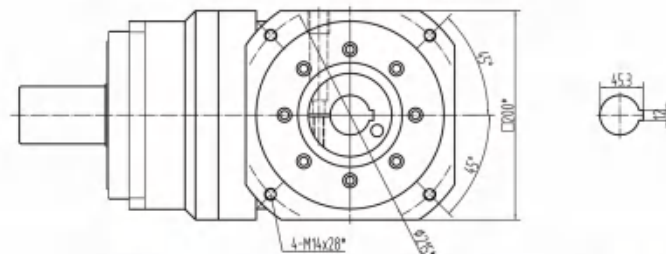
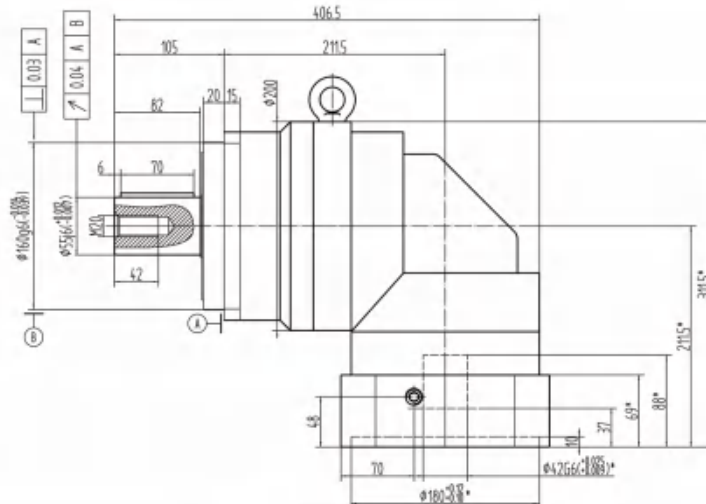
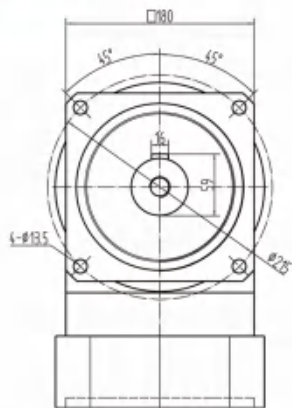
\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸: 代表可根据客户需求定制产品, 如有需要, 请联系我们!

## Drawing / Size

### MVBR-140-L2 (Smaller hole)



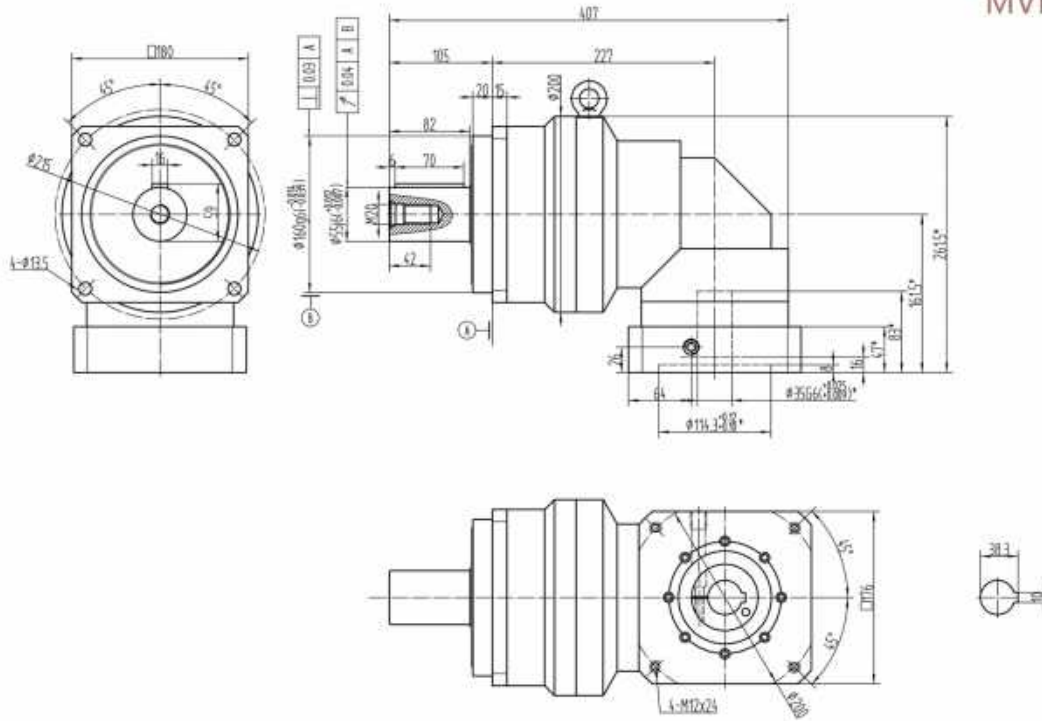
### MVBR-180-L1



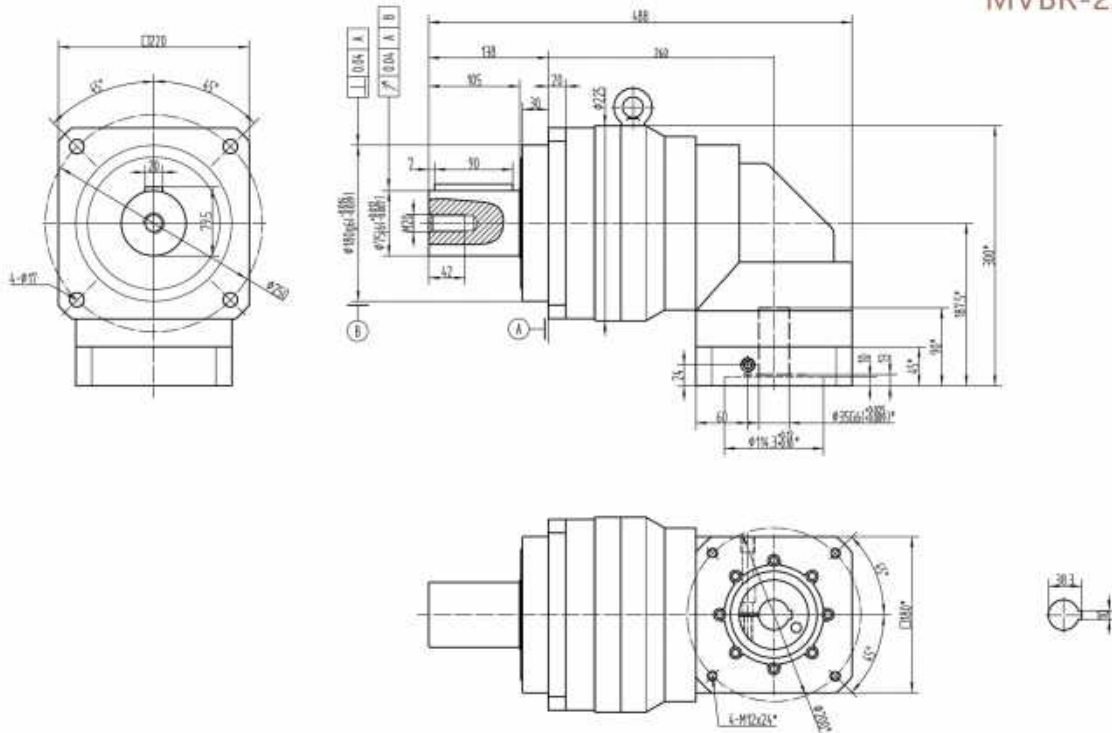
\* Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸: 代表可根据客户需求定制产品, 如有需要, 请联系我们!

Drawing / Size

MVBR-180-L2



MVBR-220-L2



\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

MVBR

# Performance table

MVBR-040																	
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1H</sub>	n <sub>1Max</sub>	j <sub>1</sub>	C <sub>21</sub>	F <sub>2RMax</sub>	F <sub>2AMax</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	Nm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C				dB
I STAGE	3	14	2×T <sub>2N</sub>	4000	8000	≤3	3	700	610	0.03	≥95	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤63
	4	14					3										
	5	20					3										
	6	20					3										
	7	20					2.2										
	8	20					3										
	9	14					3										
10	14	2.2															
II STAGE	15	14				≤5	3				≥90						
	20	14					3										
	35	20	3														
	40	20	3														
	50	20	3														
	80	20	3														
	100	14	2.2														

MVBR-060																	
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1H</sub>	n <sub>1Max</sub>	j <sub>1</sub>	C <sub>21</sub>	F <sub>2RMax</sub>	F <sub>2AMax</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	Nm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C				dB
I STAGE	3	22	2×T <sub>2N</sub>	3000	6000	≤8	7	1200	1050	0.16	≥90	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤66
	4	30					7			0.14							
	5	45					7			0.13							
	6	45					7			0.13							
	7	45					7			0.13							
	8	45					7			0.13							
	9	30					7			0.13							
	10	30					7			0.13							
	II STAGE	15					30			≤7							
20		30				7											
35		45	7														
40		45	7														
50		45	7														
80		45	7														
100		30	7														

## Performance table

MVBR-090																	
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	j <sub>i</sub>	C <sub>2t</sub>	F <sub>2StMax</sub>	F <sub>2DMax</sub>	J <sub>i</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	N <sub>rev</sub> /arcmin	N	N	kgcm <sup>2</sup>	%	h	°C				
I STAGE	3	65	2×T <sub>2N</sub>	3000	6000	≤8	14	2400	2200	0.61	≥90	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤68
	4	85					14			0.48							
	5	90					14			0.47							
	6	90					14			0.45							
	7	90					14			0.45							
	8	90					14			0.45							
	9	65					14			0.42							
	10	65					14			0.40							
II STAGE	15	65					14			0.45							
	20	85					14			0.45							
	35	90	14	0.45													
	40	90	14	0.45													
	50	90	14	0.40													
	80	90	14	0.40													
	100	65	14	0.40													

MVBR-120																	
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	j <sub>i</sub>	C <sub>2t</sub>	F <sub>2StMax</sub>	F <sub>2DMax</sub>	J <sub>i</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	N <sub>rev</sub> /arcmin	N	N	kgcm <sup>2</sup>	%	h	°C				
I STAGE	3	150	2×T <sub>2N</sub>	3000	6000	≤8	25	4200	3800	3.25	≥90	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤72
	4	200					25			2.74							
	5	260					25			2.71							
	6	300					25			2.71							
	7	300					25			2.62							
	8	300					25			2.60							
	9	200					25			2.59							
	10	200					25			2.57							
II STAGE	15	200					25			0.45							
	20	300					25			0.45							
	35	300	25	0.45													
	40	300	25	0.45													
	50	300	25	0.40													
	80	300	25	0.40													
	100	200	25	0.40													

MVBR



# Performance table

MVBR-140																	
Symb.	i	T <sub>2N</sub>	T <sub>2Net</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	j <sub>1</sub>	C <sub>2t</sub>	F <sub>2RMMax</sub>	F <sub>2MMMax</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	Nm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C				
I STAGE	3	270	2×T <sub>2N</sub>	2000	4000	≤8	50	8500	7800	9.21	≥90	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤74
	4	350								50							
	5	420								50							
	6	520								50							
	7	600								50							
	8	600								50							
	9	400								50							
	10	400								50							
II STAGE	15	400	50	2.63													
	20	600	50	2.63													
	35	600	50	2.43													
	40	600	50	2.43													
	50	600	50	2.39													
	80	600	50	2.39													
	100	400	50	2.39													

MVBR-180																	
Symb.	i	T <sub>2N</sub>	T <sub>2Net</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	j <sub>1</sub>	C <sub>2t</sub>	F <sub>2RMMax</sub>	F <sub>2MMMax</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	Nm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C				
I STAGE	3	500	2×T <sub>2N</sub>	2000	4000	≤8	145	14500	13400	28.98	≥90	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤78
	4	900								23.67							
	5	900								23.29							
	6	900								22.29							
	7	900								22.48							
	8	900								22.48							
	9	550								22.40							
	10	550								22.51							
II STAGE	15	880	7.3														
	20	1250	7.3														
	35	1300	7.1														
	40	1250	6.92														
	50	1300	6.92														
	80	1300	6.72														
	100	880	6.72														

## Performance table

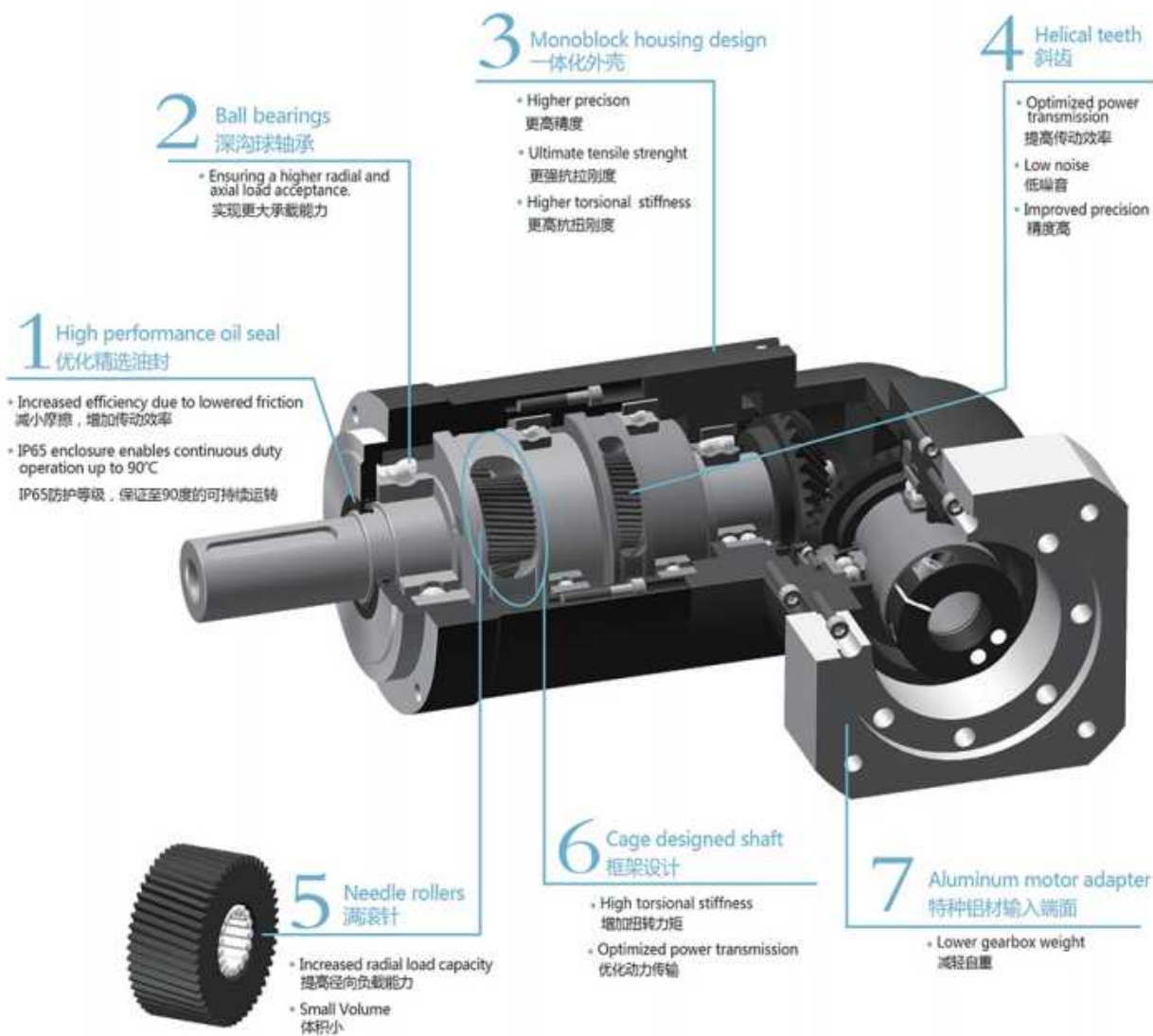
MVBR-220																	
Symb.	i	T <sub>2N</sub>	T <sub>2Max</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	j <sub>1</sub>	C <sub>21</sub>	F <sub>21Max</sub>	F <sub>22Max</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	Min/arcmin	N	N	kg/cm <sup>2</sup>	%	h	°C				
I STAGE	15	1200	2×T <sub>2N</sub>	1500	3000	≤8	225	20500	18800	22.79	≥90	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤81
	20	1700								23.79							
	35	1800								22.59							
	40	1800								21.83							
	50	1800								21.83							
	80	1800								21.70							
	100	1200								21.60							

**MVER SERIES**



此款应用高端直角解决方案，保持原有MVE系列的设计与性能。

A high-performance right-angle solution for servo applications that keeps MVE's design and characteristics.



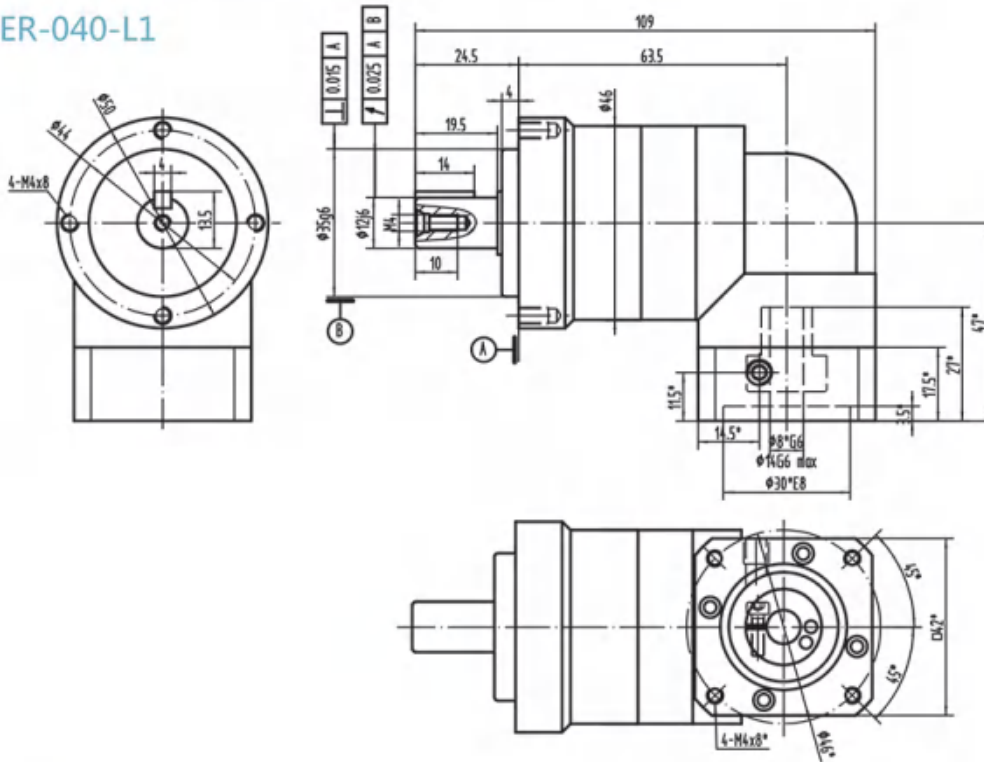
**造型数据:**  
Selection data:

扭矩 ( Nm )	14-600
速比	3-100
背隙 ( arcmin )	≤8
最大工作温度 ( °C )	90
噪音 ( dB )	63-74

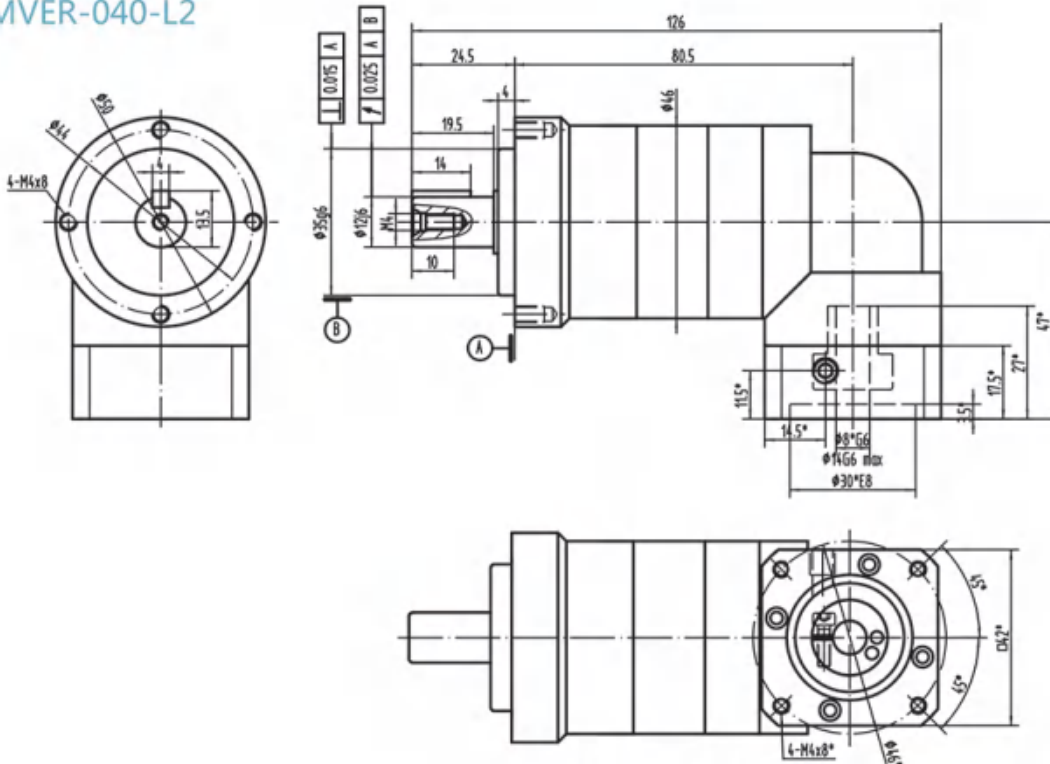
Nominal output torque ( Nm )	14-600
Reduction ratio	3-100
Backlash ( arcmin )	≤8
Max.working temperature ( °C )	90
Noise ( dB )	63-74

# Drawing / Size

## MVER-040-L1



## MVER-040-L2

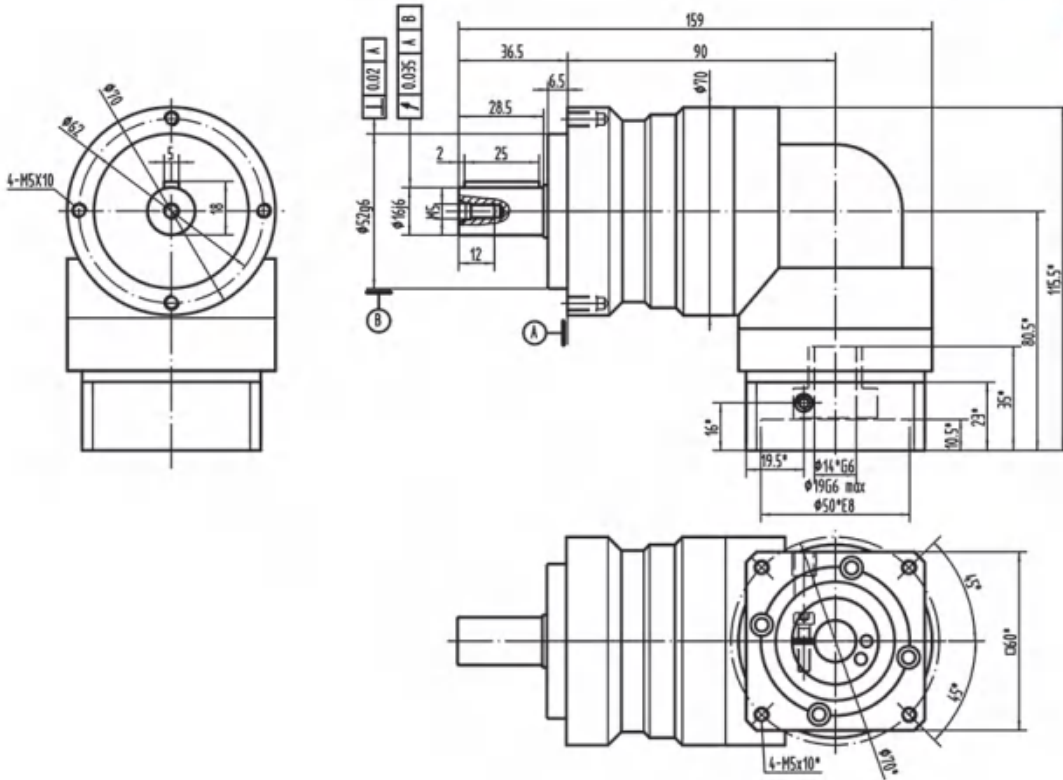


\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

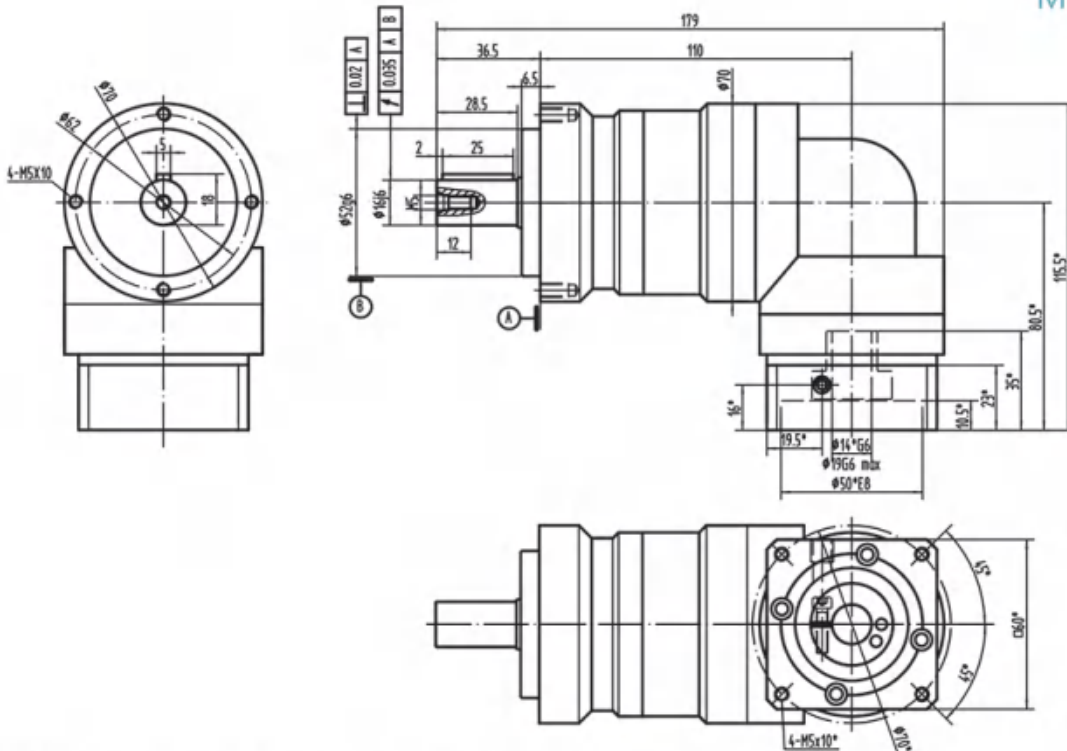


Drawing / Size

MVER-060-L1



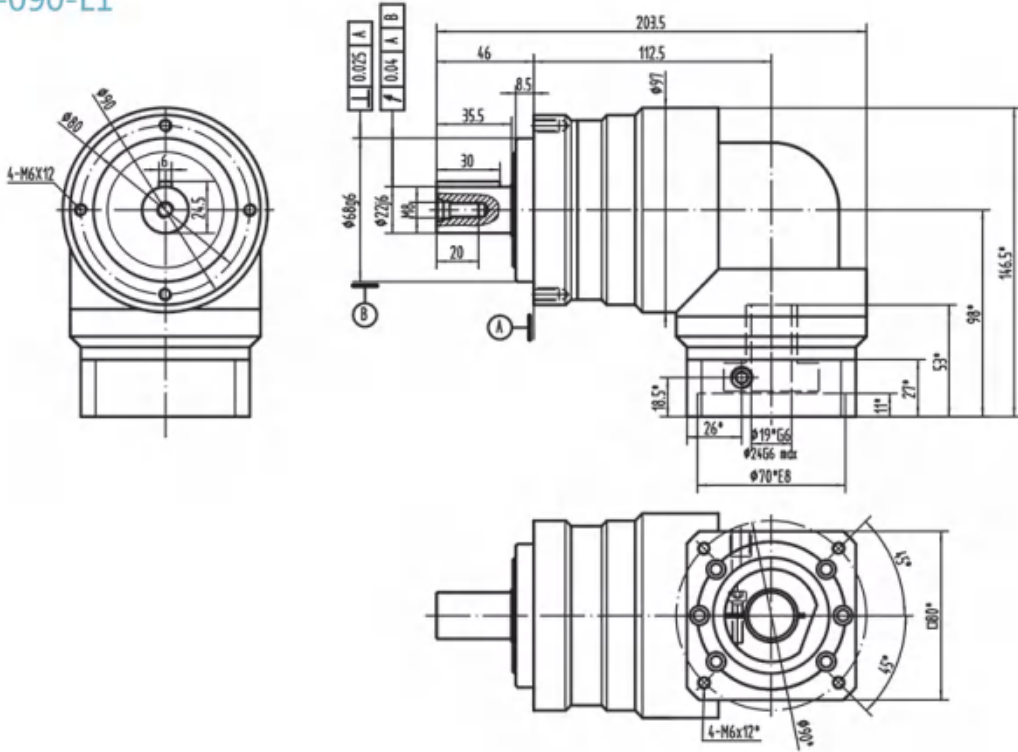
MVER-060-L2



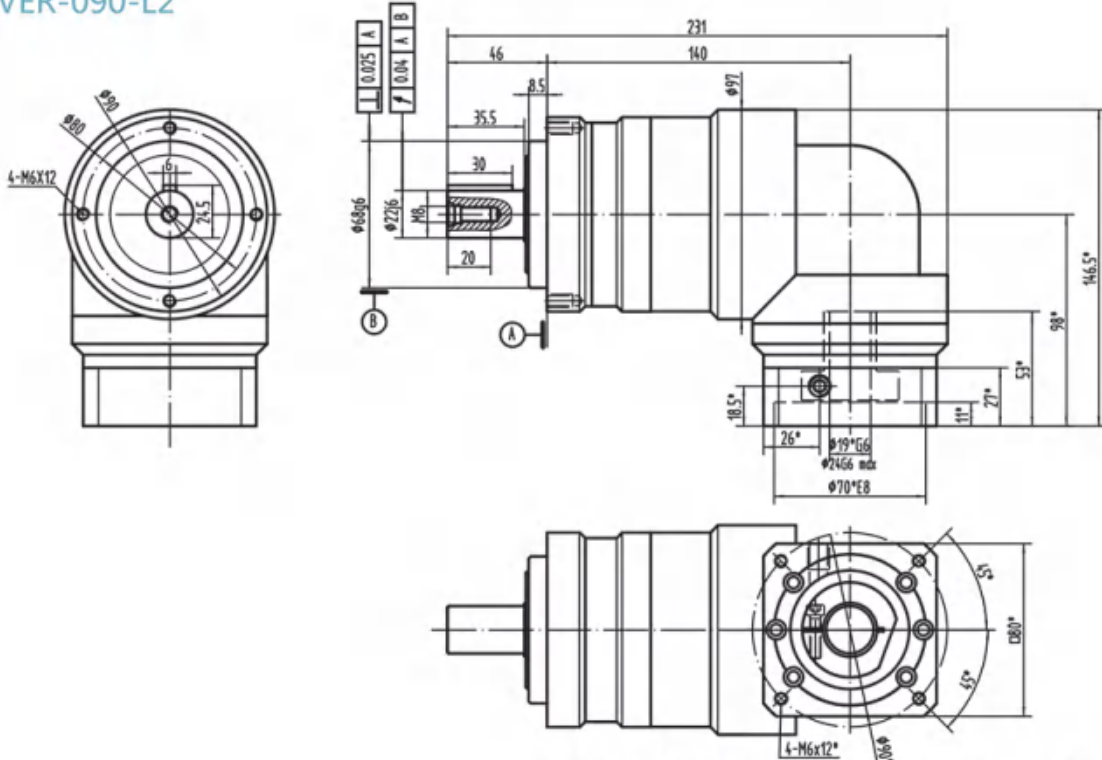
\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

# Drawing / Size

## MVER-090-L1



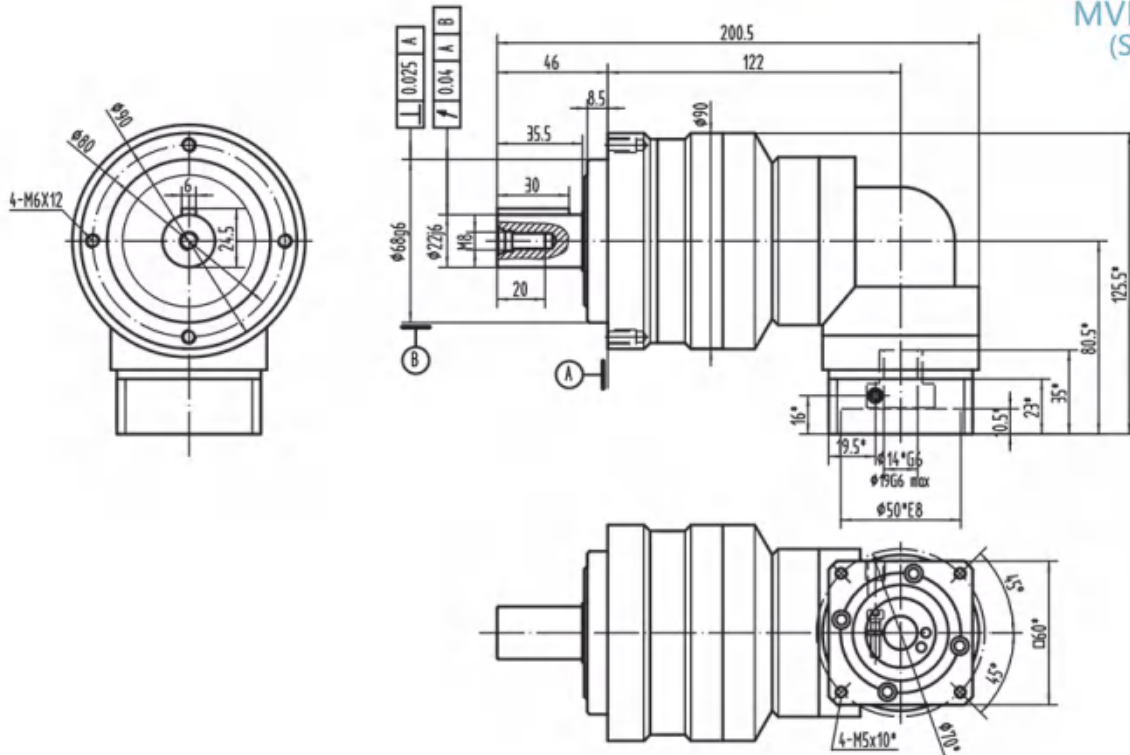
## MVER-090-L2



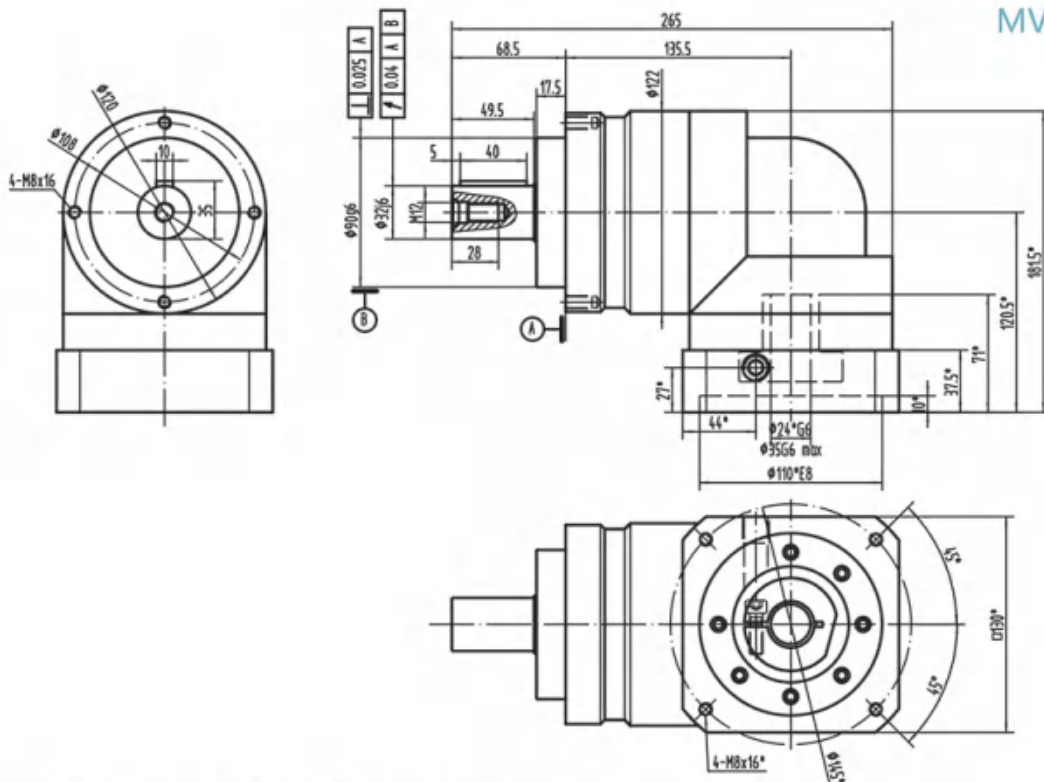
\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

Drawing / Size

MVER-090-L2  
(Smaller hole)



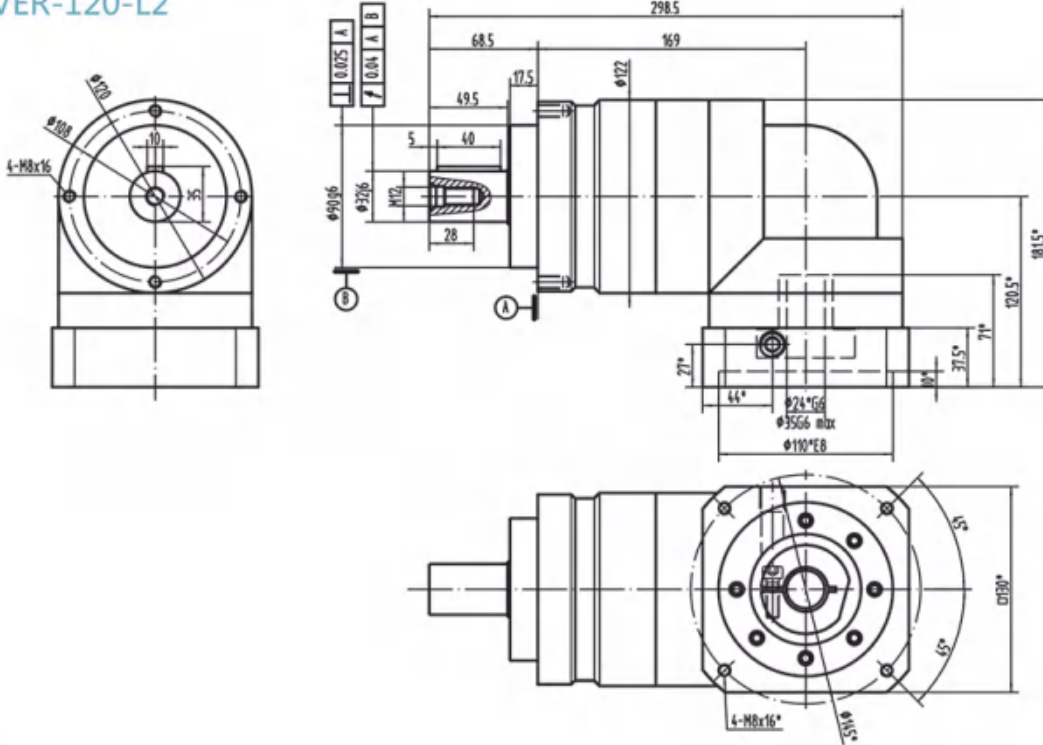
MVER-120-L1



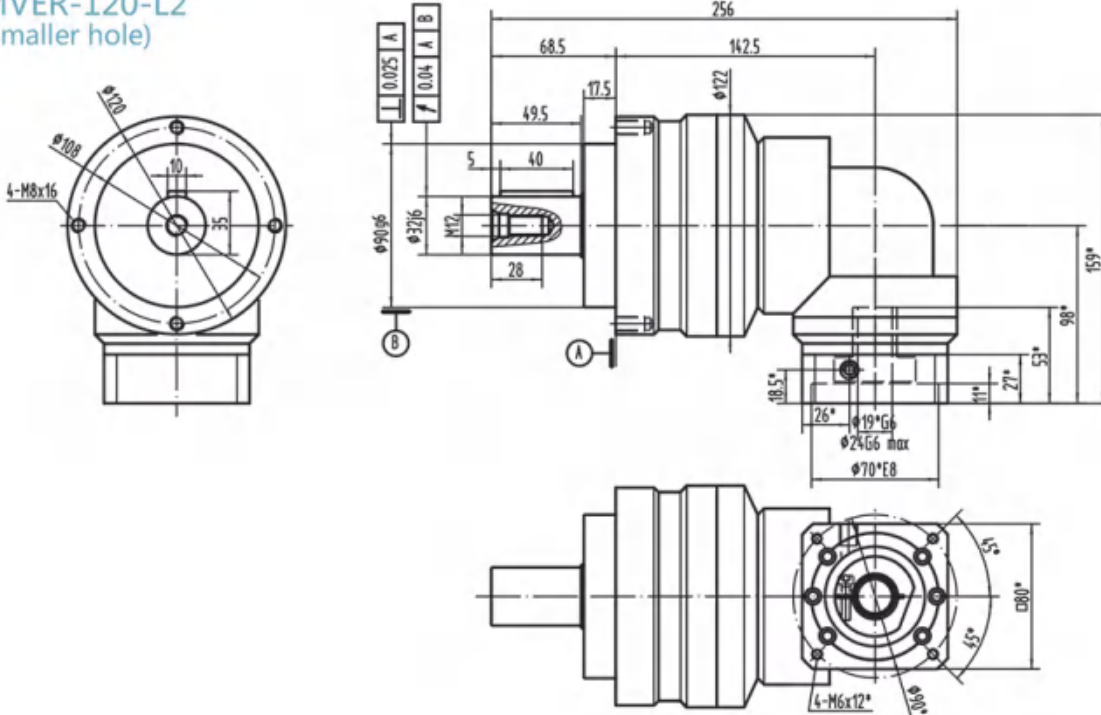
\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

# Drawing / Size

## MVER-120-L2



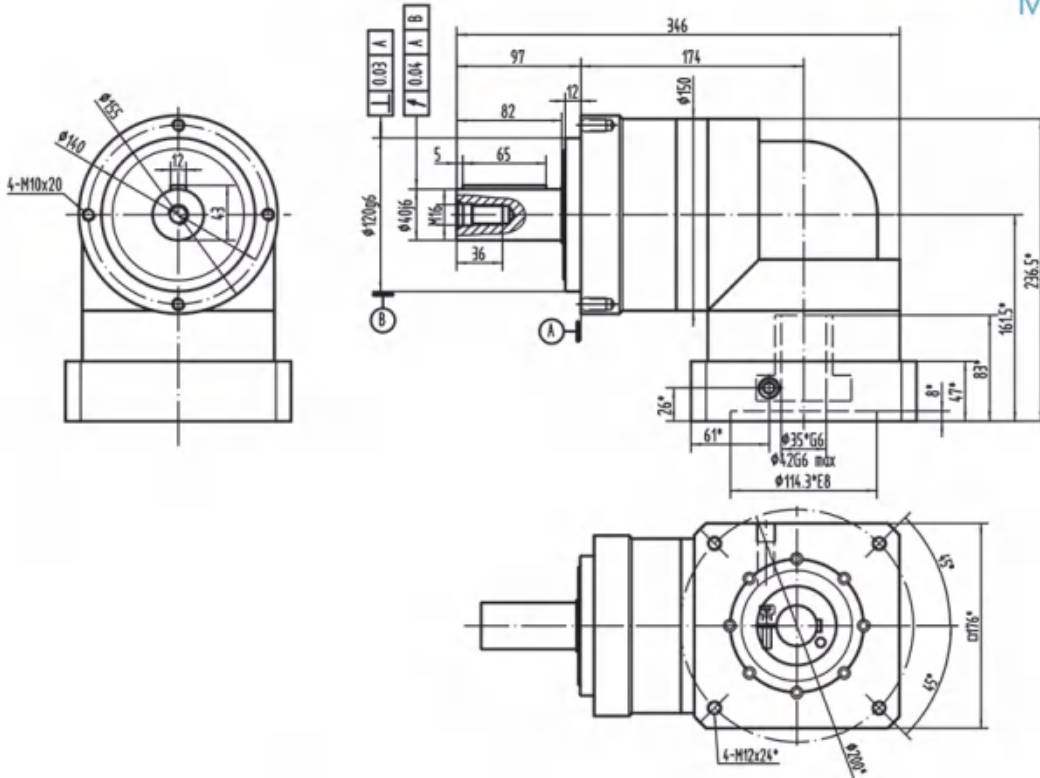
## MVER-120-L2 (Smaller hole)



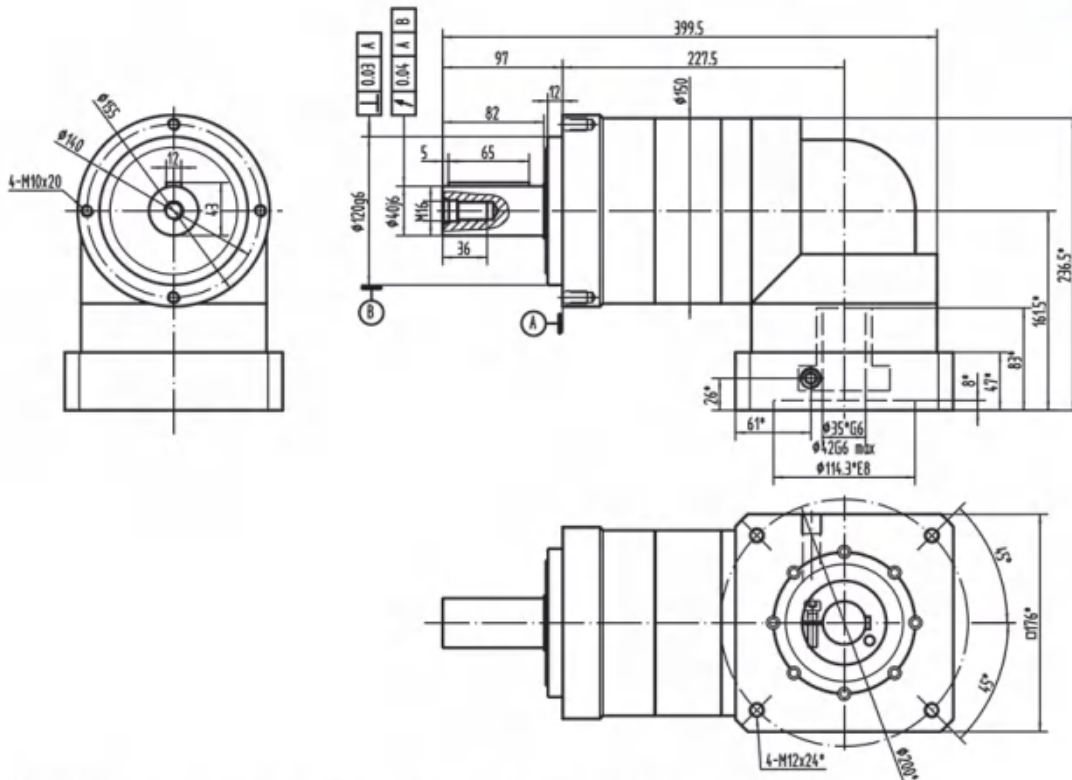
\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

Drawing / Size

MVER-155-L1



MVER-155-L2

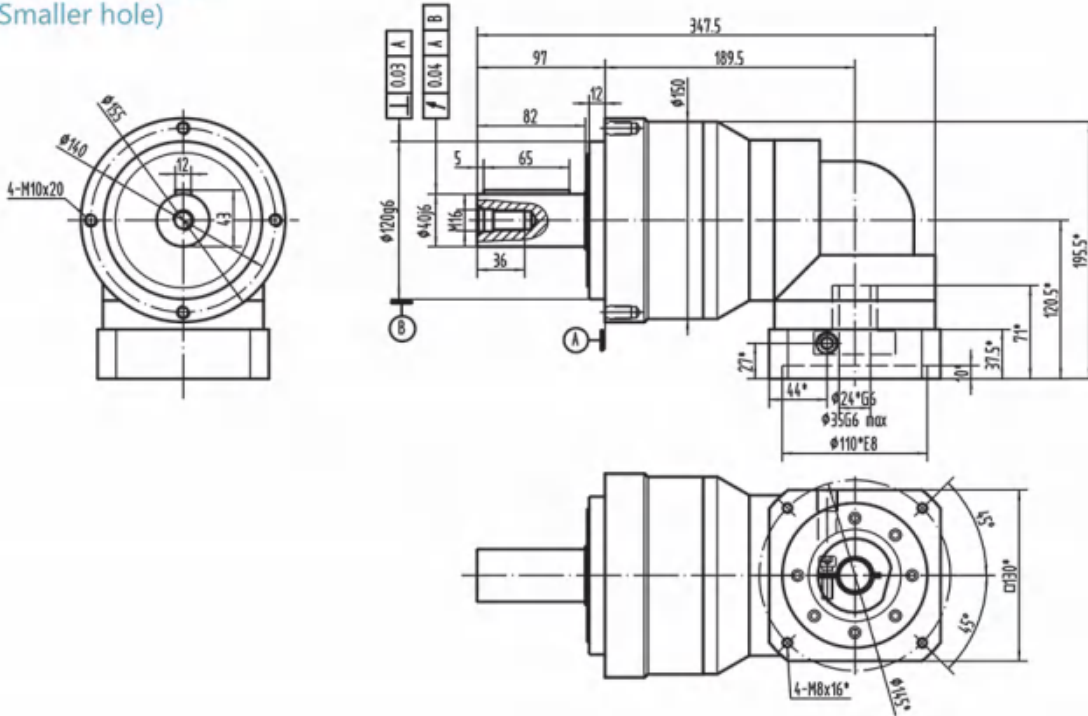


\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

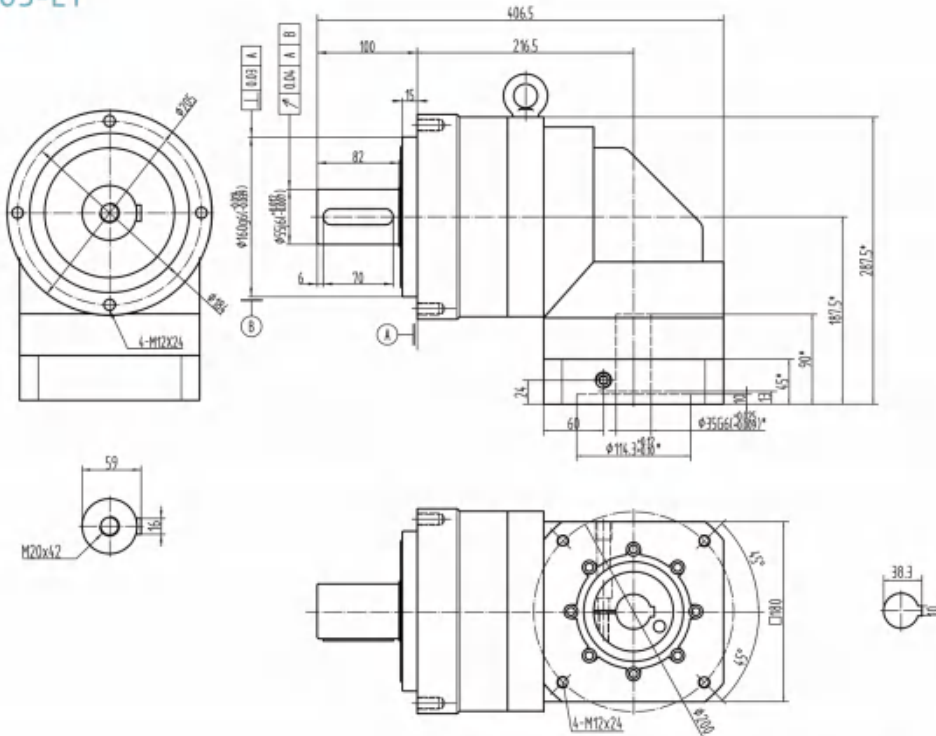


## Drawing / Size

### MVER-155-L2 (Smaller hole)



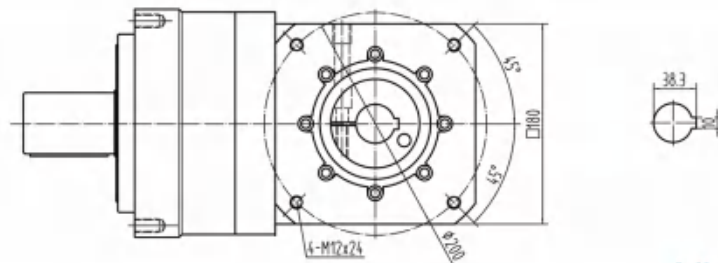
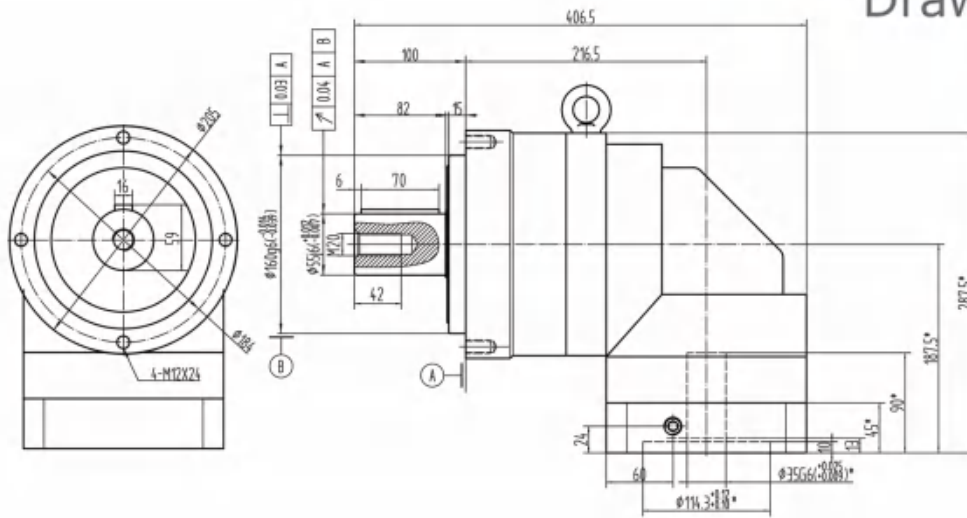
### MVER-205-L1



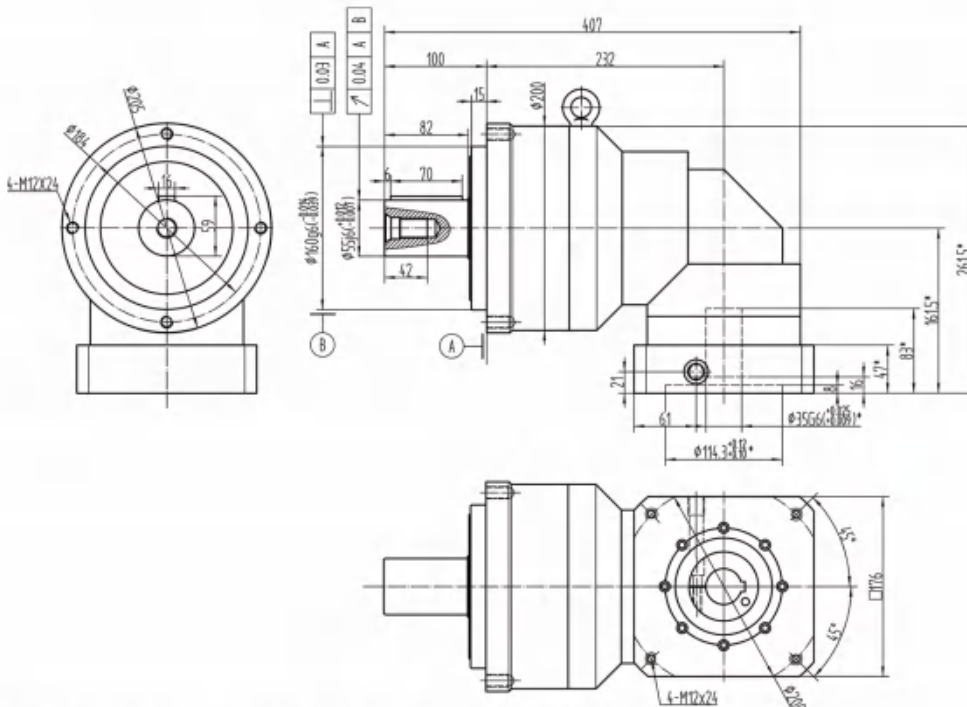
\* Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

# Drawing / Size

MVER-205-L2



MVER-235-L2



\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

# Performance table

MVER-040																																
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	j <sub>1</sub>	C <sub>21</sub>	F <sub>20Max</sub>	F <sub>30Max</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB															
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	Nm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C																			
I STAGE	3	14	2×T <sub>2N</sub>	4000	8000	≤3	3	700	610	0.03	≥95	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤63															
	4	14					3																									
	5	20					3																									
	6	20					3																									
	7	20					2.2																									
	8	20					3																									
	9	14					3																									
	10	14					2.2																									
	II STAGE	15					14											2×T <sub>2N</sub>	4000	8000	≤5	3	700	610	0.03	≥90	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤63
		20					14															3										
35		20	3																													
40		20	3																													
50		20	3																													
80		20	3																													
100		14	2.2																													

MVER-060																																
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	j <sub>1</sub>	C <sub>21</sub>	F <sub>20Max</sub>	F <sub>30Max</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB															
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	Nm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C																			
I STAGE	3	22	2×T <sub>2N</sub>	3000	6000	≤8	7	1200	1050	0.16	≥90	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤66															
	4	30					7																									
	5	45					7																									
	6	45					7																									
	7	45					7																									
	8	45					7																									
	9	30					7																									
	10	30					7																									
	II STAGE	15					30											2×T <sub>2N</sub>	3000	6000	≤8	7	1200	1050	0.13	≥90	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤66
		20					30															7										
35		45	7																													
40		45	7																													
50		45	7																													
80		45	7																													
100		30	7																													

MVER

## Performance table

MVER-090																		
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	j <sub>i</sub>	C <sub>2i</sub>	F <sub>2NMax</sub>	F <sub>2Max</sub>	J <sub>i</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB	
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	Nm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C					
I STAGE	3	65	2×T <sub>2N</sub>	3000	6000	≤8	14	2400	2200	0.61	≥90	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤68	
	4	85					14			0.48								
	5	90					14			0.47								
	6	90					14			0.47								
	7	90					14			0.45								
	8	90					14			0.45								
	9	65					14			0.42								
	10	65					14			0.40								
	II STAGE	15					65			14								0.45
		20					85			14								0.45
35		90	14	0.45														
40		90	14	0.45														
50		90	14	0.45														
80		90	14	0.40														
100		65	14	0.40														

MVER-120																		
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	j <sub>i</sub>	C <sub>2i</sub>	F <sub>2NMax</sub>	F <sub>2Max</sub>	J <sub>i</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB	
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	Nm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C					
I STAGE	3	150	2×T <sub>2N</sub>	3000	6000	≤8	25	4200	3800	3.25	≥90	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤72	
	4	200					25			2.74								
	5	260					25			2.71								
	6	300					25			2.71								
	7	300					25			2.62								
	8	300					25			2.60								
	9	200					25			2.59								
	10	200					25			2.57								
	II STAGE	15					200			25								0.45
		20					300			25								0.45
35		300	25	0.45														
40		300	25	0.45														
50		300	25	0.40														
80		300	25	0.40														
100		200	25	0.40														

MVER

## Performance table

MVER-155																		
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>1</sub>	C <sub>21</sub>	F <sub>2RMMax</sub>	F <sub>2AMMax</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB	
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	Nm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C					
I STAGE	3	270	2×T <sub>2N</sub>	2000	4000	≤8	50	8500	7800	9.21	≥90	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤74	
	4	350								7.54								
	5	420								7.42								
	6	520								7.42								
	7	600								7.14								
	8	600								7.14								
	9	400								7.08								
	10	400								7.03								
	II STAGE	15								400								2.63
		20								520								2.63
35		600	2.43															
40		600	2.43															
50		600	2.39															
80		600	2.39															
100		400	2.39															

MVER-205																		
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>1</sub>	C <sub>21</sub>	F <sub>2RMMax</sub>	F <sub>2AMMax</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB	
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	Nm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C					
I STAGE	3	500	2×T <sub>2N</sub>	2000	4000	≤8	145	14500	13400	28.98	≥90	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤78	
	4	900								23.67								
	5	900								23.29								
	6	900								22.29								
	7	900								22.48								
	8	900								22.48								
	9	550								22.40								
	10	550								22.51								
	II STAGE	15								880								7.3
		20								1250								7.3
35		1300	7.1															
40		1250	6.92															
50		1300	6.92															
80		1300	6.72															
100		880	6.72															



## Performance table

MVER-235																	
Symb.	i	T <sub>2N</sub>	T <sub>2N01</sub>	n <sub>2N</sub>	n <sub>2NMax</sub>	j <sub>r</sub>	C <sub>2r</sub>	F <sub>2r01Max</sub>	F <sub>2rAMax</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	Nm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C				dB
I STAGE	15	1200	2×T <sub>2N</sub>	1500	3000	≤8	225	20500	18800	22.79	≥90	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤81
	20	1700								23.79							
	35	1800								22.59							
	40	1800								21.83							
	50	1800								21.83							
	80	1800								21.70							
	100	1200								21.60							

**MVDR SERIES**



此款应用高端直角解决方案，保持原有MVD系列的设计与性能。

A high-performance right-angle solution for servo applications that keeps MVD's design and characteristics.



### 造型数据:

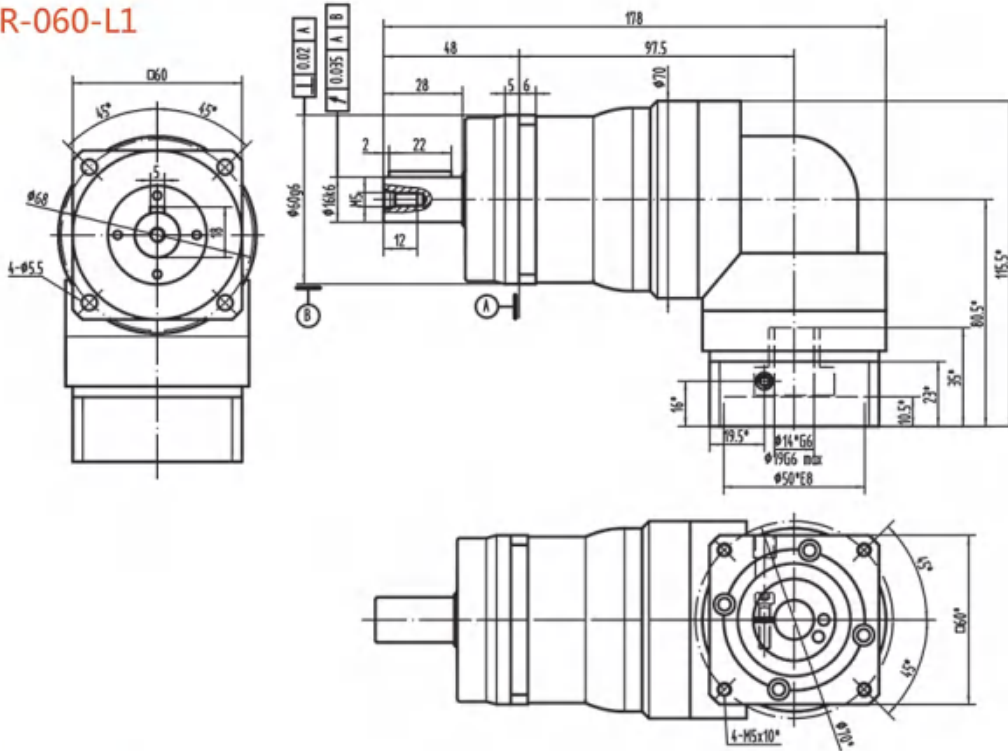
### Selection data:

扭矩 ( Nm )	22-600
速比	3-100
背隙 ( arcmin )	≤8
最大工作温度 ( °C )	90
噪音 ( dB )	66-74

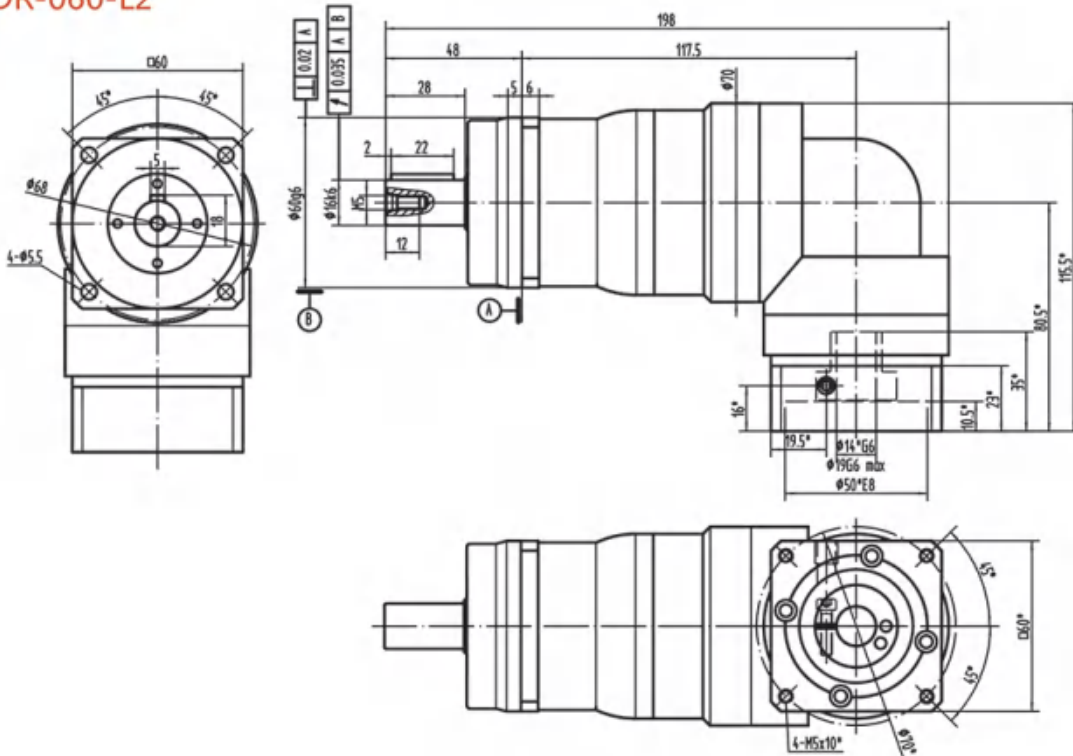
Nominal output torque ( Nm )	22-600
Reduction ratio	3-100
Backlash ( arcmin )	≤8
Max.working temperature ( °C )	90
Noise ( dB )	66-74

## Drawing / Size

### MVDR-060-L1



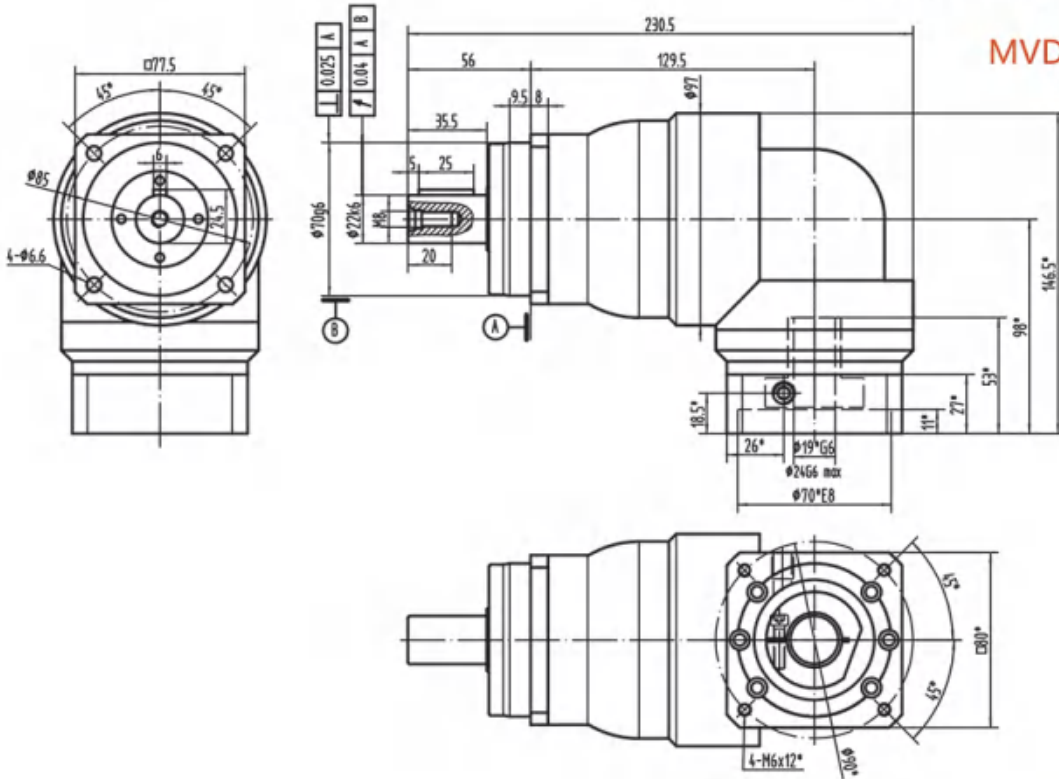
### MVDR-060-L2



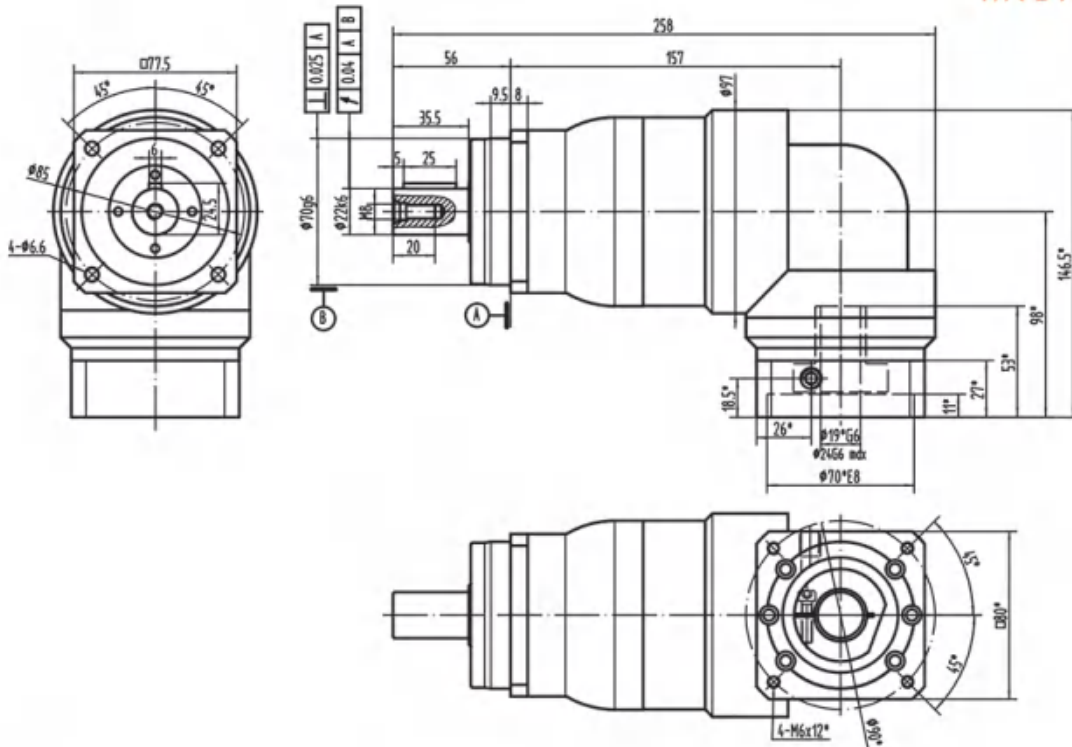
\* Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

Drawing / Size

MVDR-075-L1



MVDR-075-L2



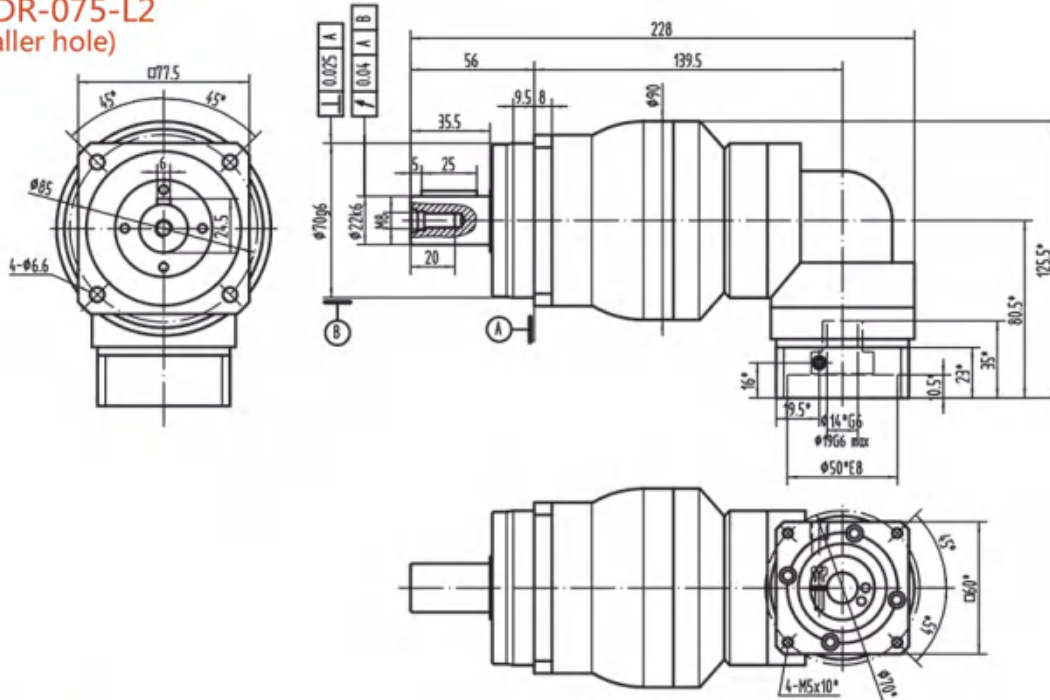
MVDR

\*Dimensions based on servo-motor, please contact us for custom made order.  
注有\*尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

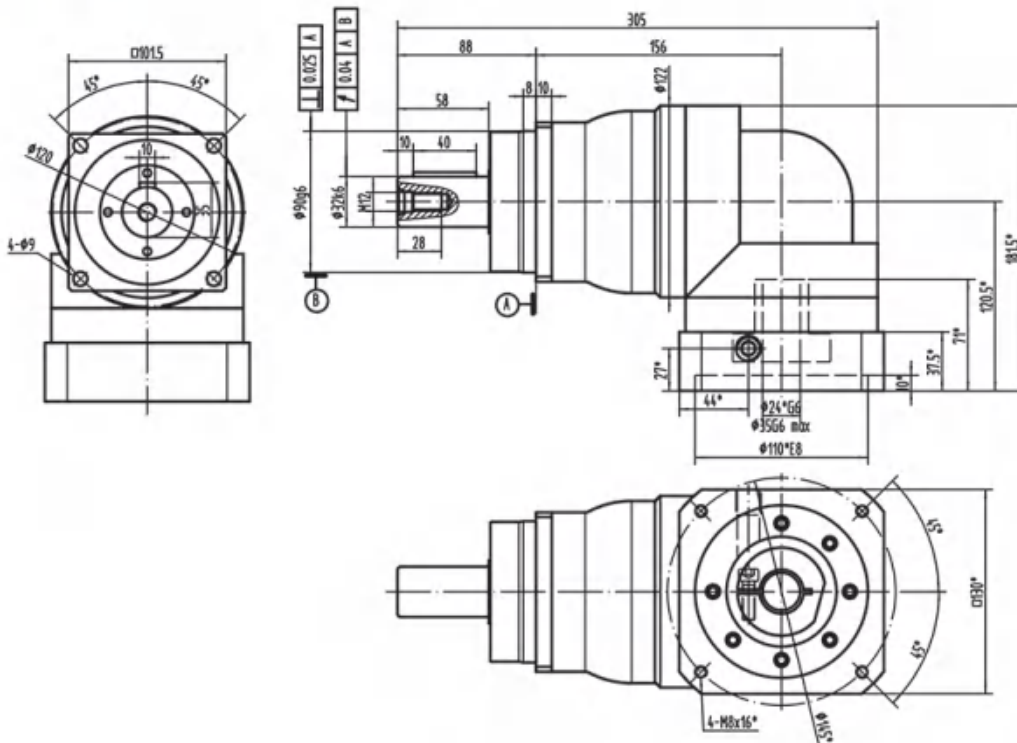


## Drawing / Size

### MVDR-075-L2 (Smaller hole)

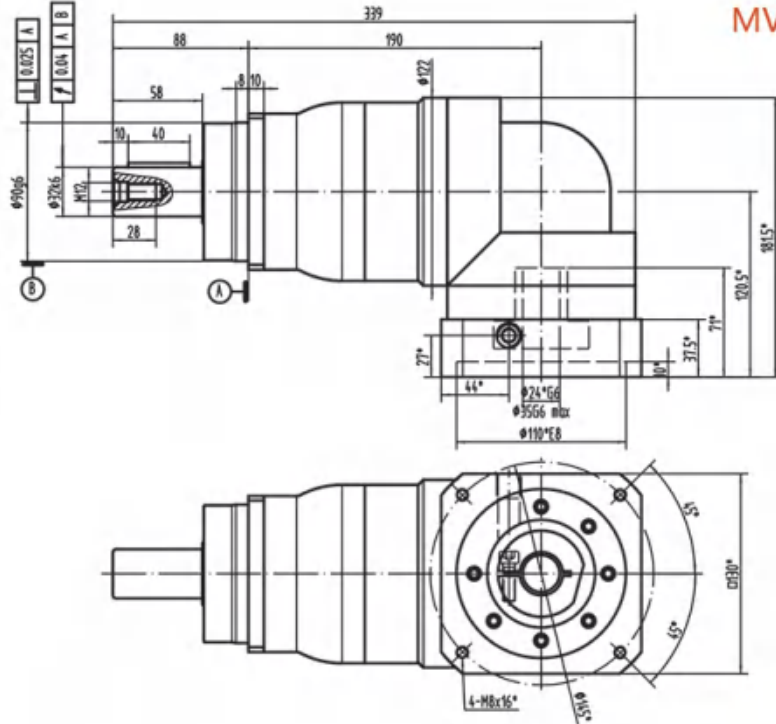
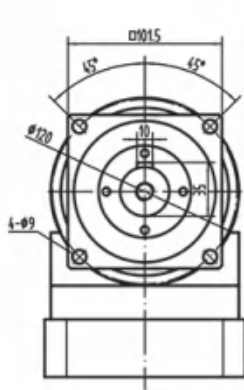


### MVDR-100-L1

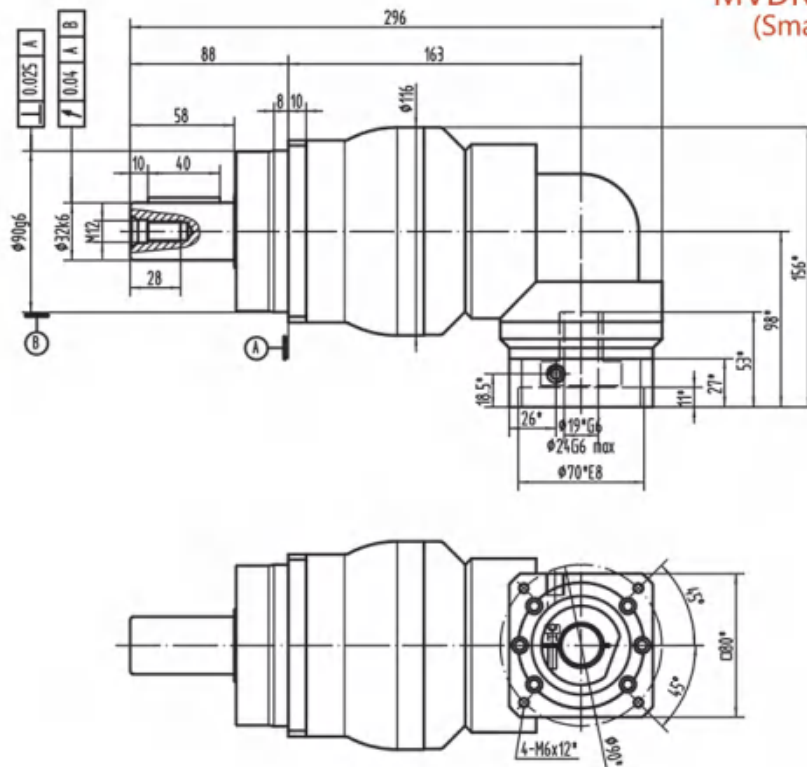
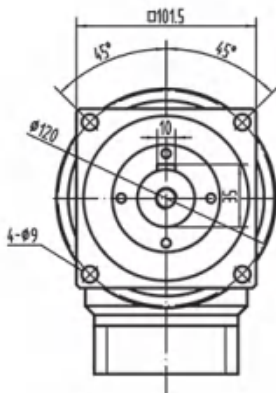


\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

Drawing / Size



MVDR-100-L2

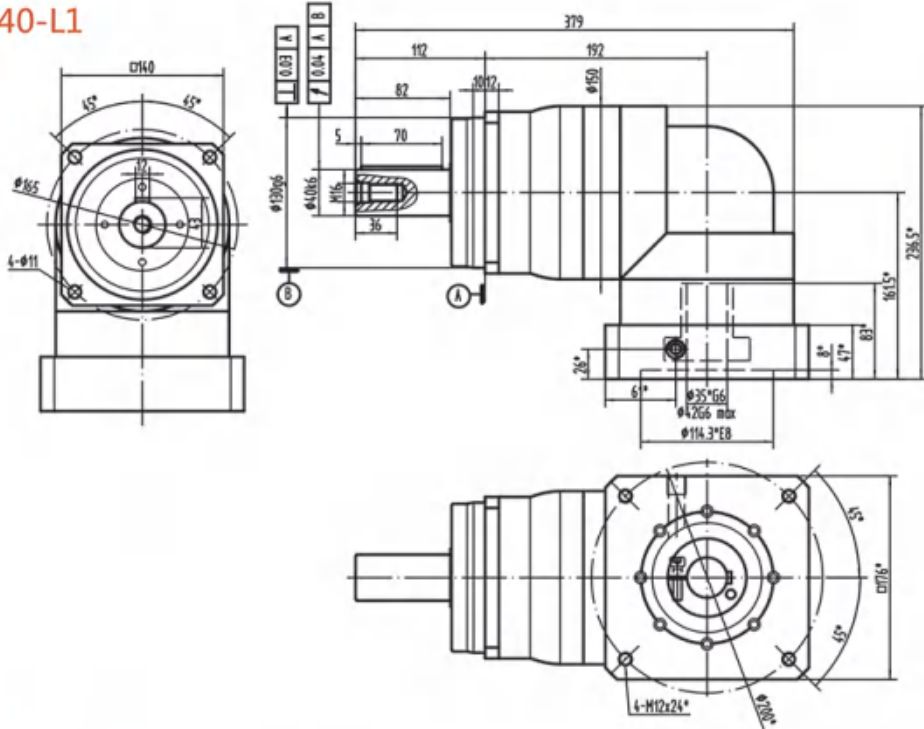


MVDR-100-L2  
(Smaller hole)

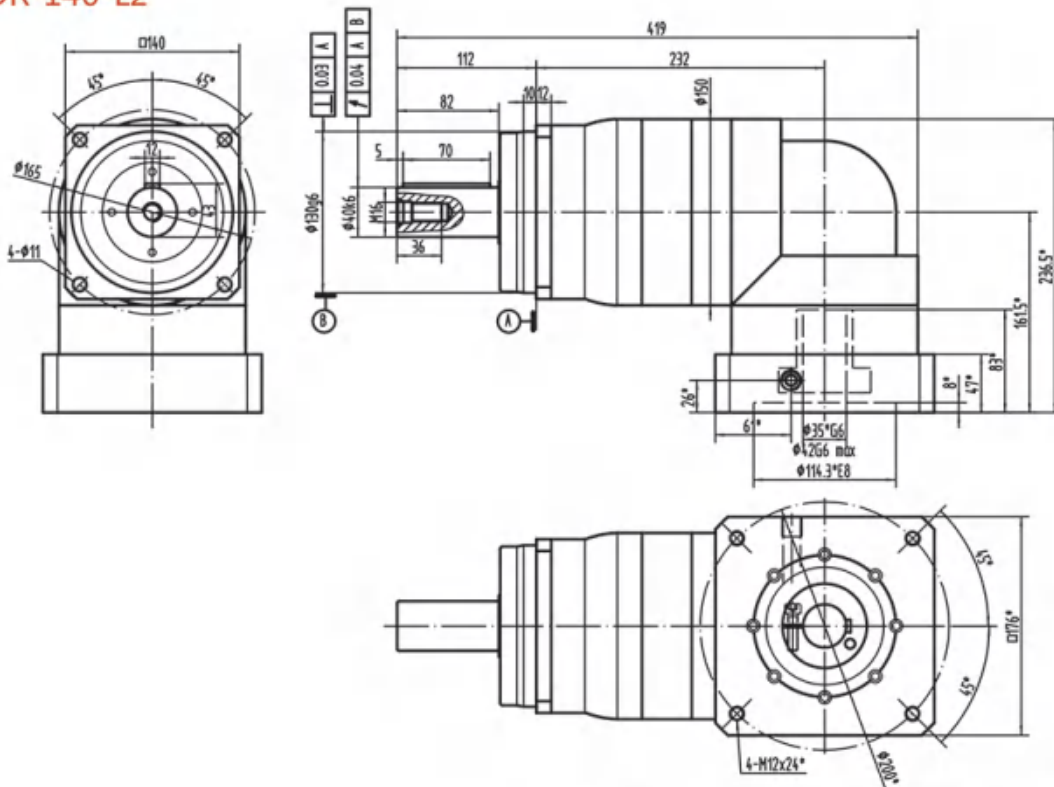
\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

## Drawing / Size

### MVDR-140-L1

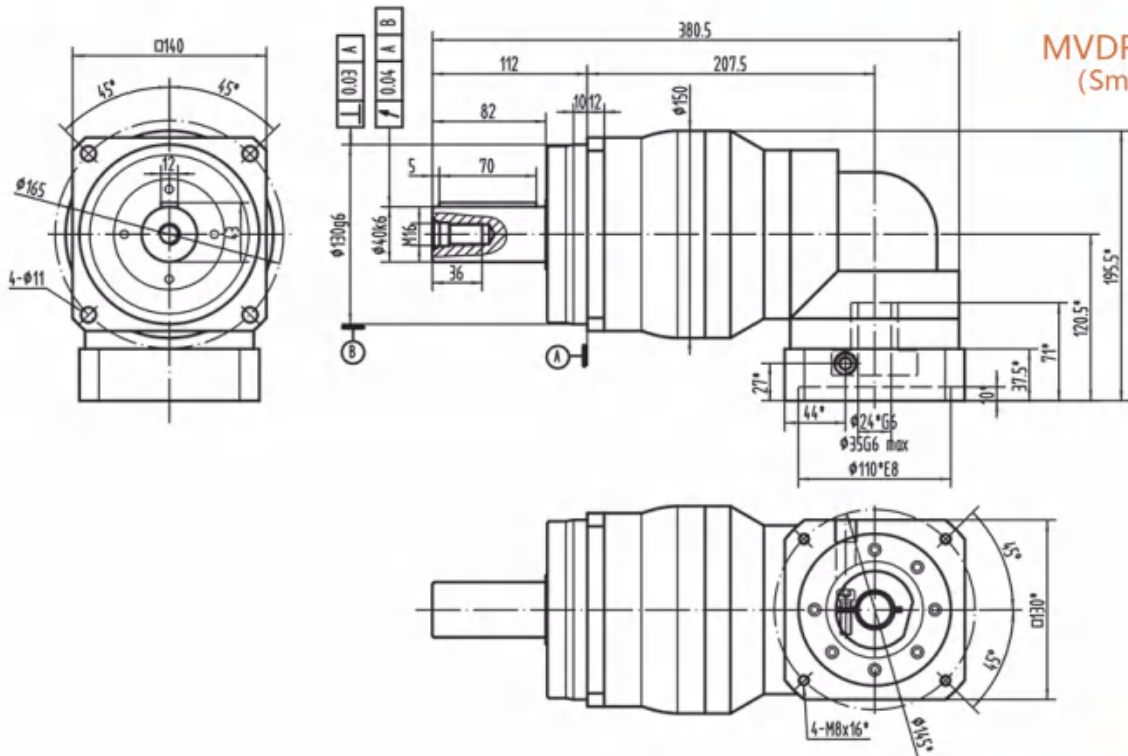


### MVDR-140-L2

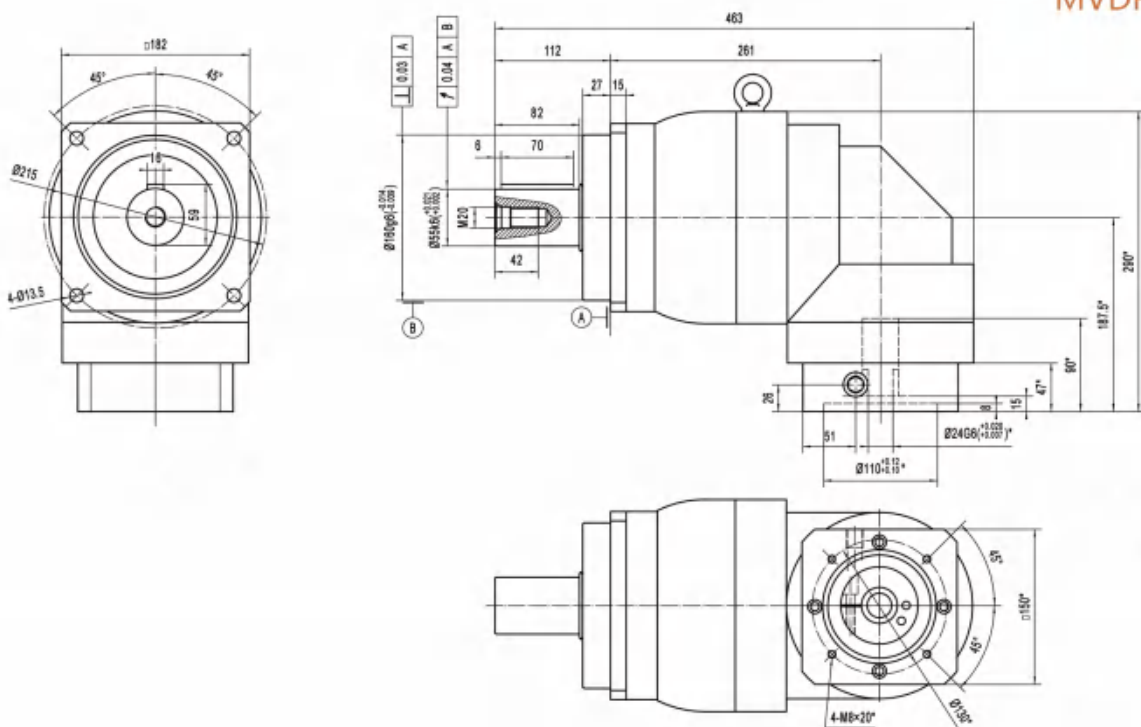


\* Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

# Drawing / Size



**MVDR-140-L2**  
(Smaller hole)

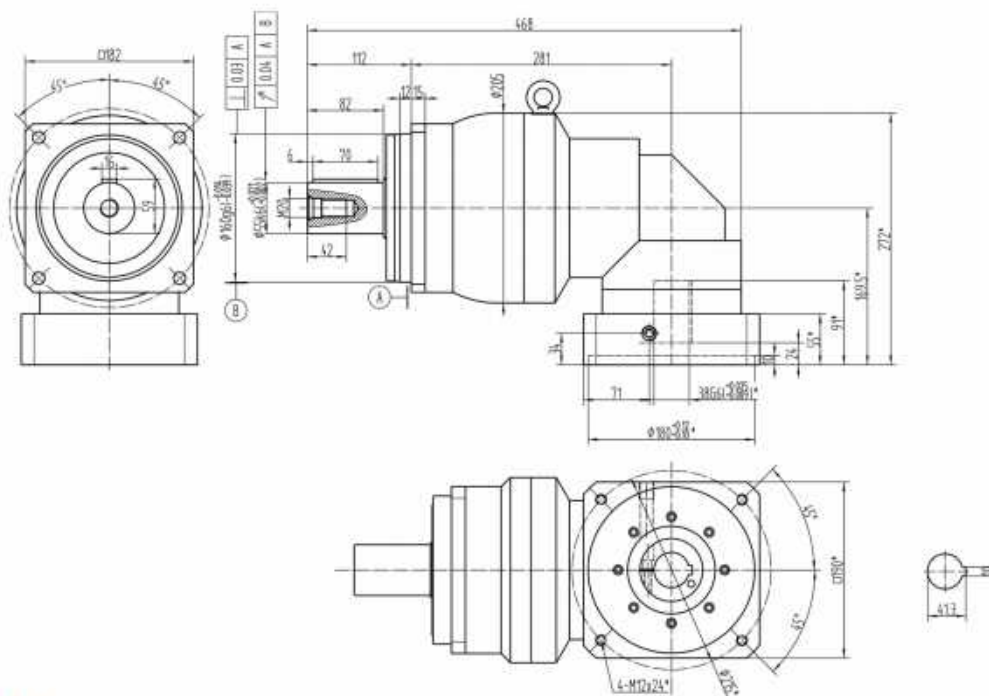


**MVDR-180-L1**

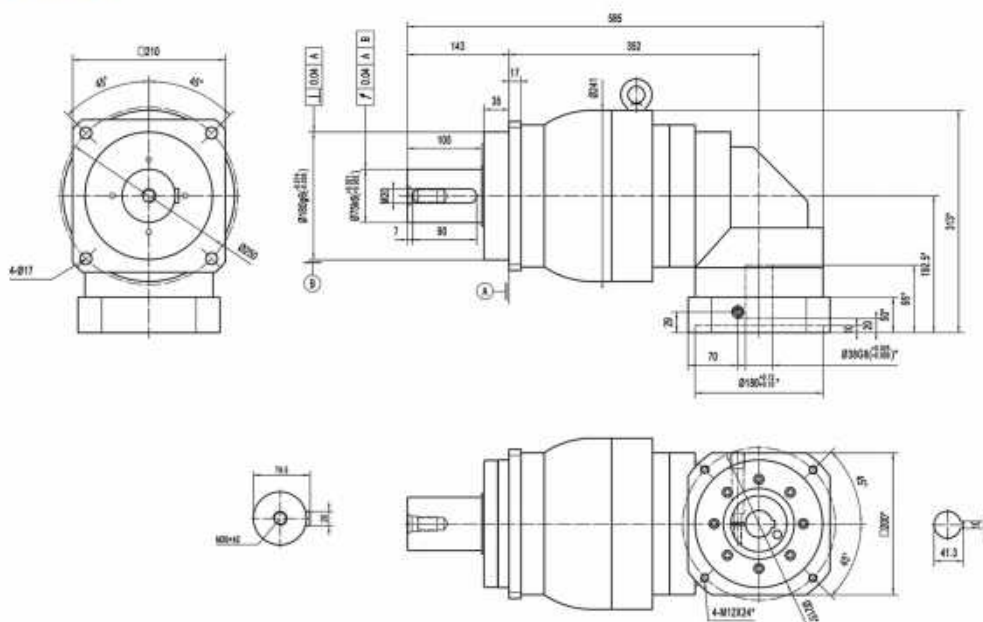
\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

## Drawing / Size

### MVDR-180-L2



### MVDR-210-L2



\* Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！



## Performance table

MVDR-060																	
Symb.	i	T <sub>2N</sub>	T <sub>2hot</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>1</sub>	C <sub>21</sub>	F <sub>2PMax</sub>	F <sub>2MMax</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	mm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C				
I STAGE	3	22	2×T <sub>2N</sub>	3000	6000	≤8	7	3000	2700	0.16	≥90	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤66
	4	30								0.14							
	5	45								0.13							
	6	45								0.13							
	7	45								0.13							
	8	45								0.13							
	9	30								0.13							
	10	30								0.13							
II STAGE	15	30								0.13							
	20	30								0.13							
	35	45	0.13														
	40	45	0.13														
	50	45	0.13														
	80	45	0.13														
	100	30	0.13														

MVDR-075																	
Symb.	i	T <sub>2N</sub>	T <sub>2hot</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>1</sub>	C <sub>21</sub>	F <sub>2PMax</sub>	F <sub>2MMax</sub>	J <sub>1</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	mm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C				
I STAGE	3	65	2×T <sub>2N</sub>	3000	6000	≤8	14	4200	3900	0.61	≥90	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤68
	4	85								0.48							
	5	90								0.47							
	6	90								0.47							
	7	90								0.45							
	8	90								0.45							
	9	65								0.42							
	10	65								0.40							
II STAGE	15	65								0.45							
	20	85								0.45							
	35	90	0.45														
	40	90	0.45														
	50	90	0.45														
	80	90	0.40														
	100	65	0.40														

## Performance table

MVDR-100																		
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	j <sub>i</sub>	C <sub>2i</sub>	F <sub>2Max</sub>	F <sub>2Max</sub>	J <sub>i</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB	
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	Nm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C					
I STAGE	3	150	2×T <sub>2N</sub>	3000	6000	≤8	25	6800	6200	3.25	≥90	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤72	
	4	200					25			2.74								
	5	260					25			2.71								
	6	300					25			2.71								
	7	300					25			2.62								
	8	300					25			2.60								
	9	200					25			2.59								
	10	200					25			2.57								
	II STAGE	15					200			25								0.45
		20					300			25								0.45
35		300	25	0.45														
40		300	25	0.45														
50		300	25	0.40														
80		300	25	0.40														
100		200	25	0.40														

MVDR-140																		
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	j <sub>i</sub>	C <sub>2i</sub>	F <sub>2Max</sub>	F <sub>2Max</sub>	J <sub>i</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB	
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	Nm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C					
I STAGE	3	270	2×T <sub>2N</sub>	2000	4000	≤8	50	11000	9800	9.21	≥90	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤74	
	4	350					50			7.54								
	5	420					50			7.42								
	6	520					50			7.42								
	7	600					50			7.14								
	8	600					50			7.14								
	9	400					50			7.08								
	10	400					50			7.03								
	II STAGE	15					400			50								2.63
		20					520			50								2.63
35		600	50	2.43														
40		600	50	2.43														
50		600	50	2.39														
80		600	50	2.39														
100		400	50	2.39														

## Performance table

MVDR-180																	
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1H</sub>	n <sub>1Max</sub>	J <sub>t</sub>	C <sub>Zt</sub>	F <sub>ZtMax</sub>	F <sub>ZtMax</sub>	J <sub>t</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	Nm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C				
I STAGE	3	1000	2xT <sub>2N</sub>	1500	3500	<8	175	18500	15500	54.20	>90	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	<75
	4	1500								39.44							
	5	1700								33.38							
	6	1700								33.02							
	7	1700								27.49							
	8	1700								27.00							
	9	1100								26.37							
II STAGE	10	1100								47.00							
	15	1200								34.5							
	20	1700								31.5							
	25	1800	30.8														
	50	1800	28.3														
	100	1200	26.37														

MVDR-210																	
Symb.	i	T <sub>2N</sub>	T <sub>2Not</sub>	n <sub>1H</sub>	n <sub>1Max</sub>	J <sub>t</sub>	C <sub>Zt</sub>	F <sub>ZtMax</sub>	F <sub>ZtMax</sub>	J <sub>t</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	Nm/arcmin	N	N	kgcm <sup>2</sup>	%	h	°C				
I STAGE	15	2300	2xT <sub>2N</sub>	1200	3000	<8	400	23000	20500	34.5	>90	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	<79
	20	2300								31.5							
	25	2400								20.8							
	50	2400								28.3							
	80	2400								28.1							
	100	1800								28							

**MAFR SERIES**



此款应用高端直角解决方案，保持原有MAF系列的设计与性能。

A high-performance right-angle solution for servo applications that keeps MAF's design and characteristics.



### 造型数据:

### Selection data:

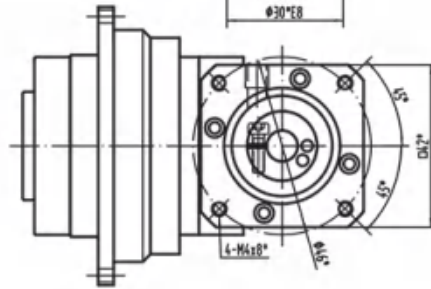
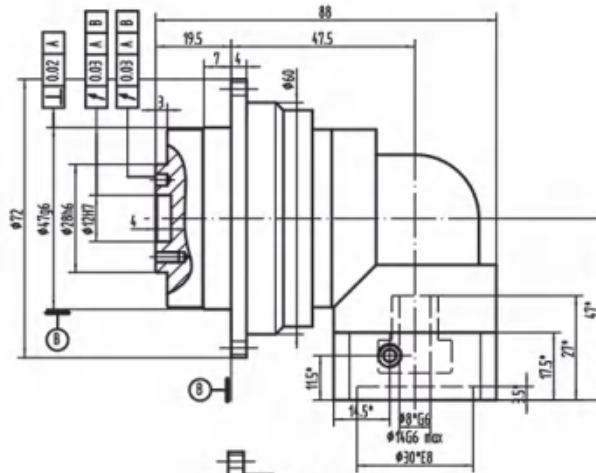
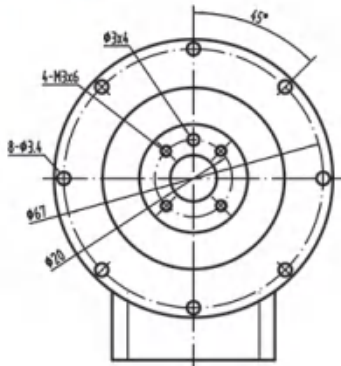
扭矩 ( Nm )	14-600
速比	4-100
背隙 ( arcmin )	≤8
最大工作温度 ( °C )	90
噪音 ( dB )	63-71

Nominal output torque ( Nm )	14-600
Reduction ratio	3-100
Backlash ( arcmin )	≤8
Max.working temperature ( °C )	90
Noise ( dB )	63-71

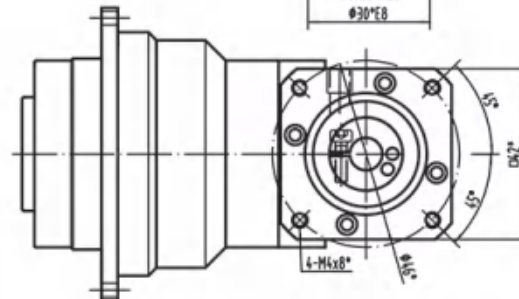
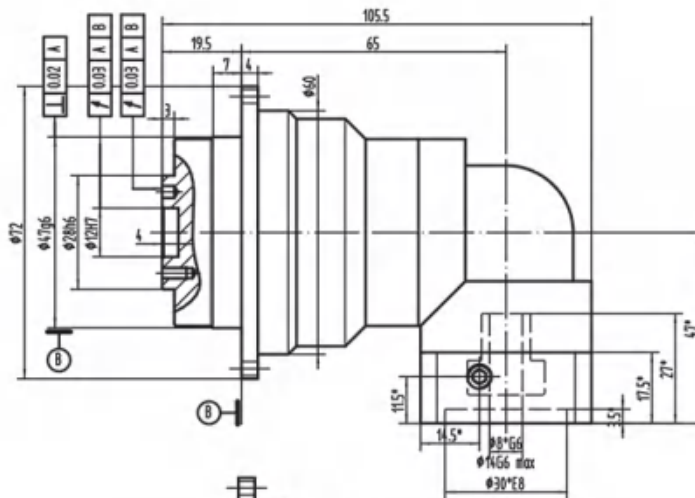
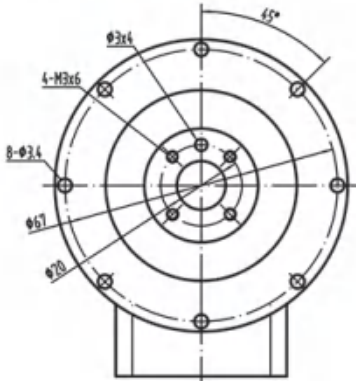


# Drawing / Size

MAFR-047-L1



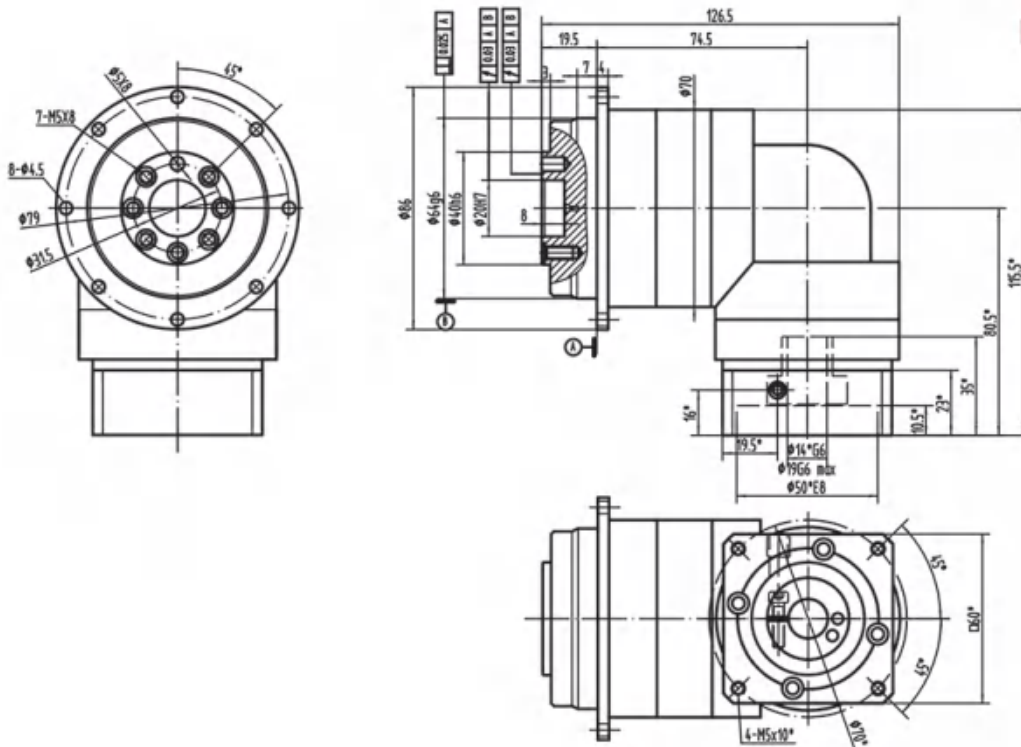
MAFR-047-L2



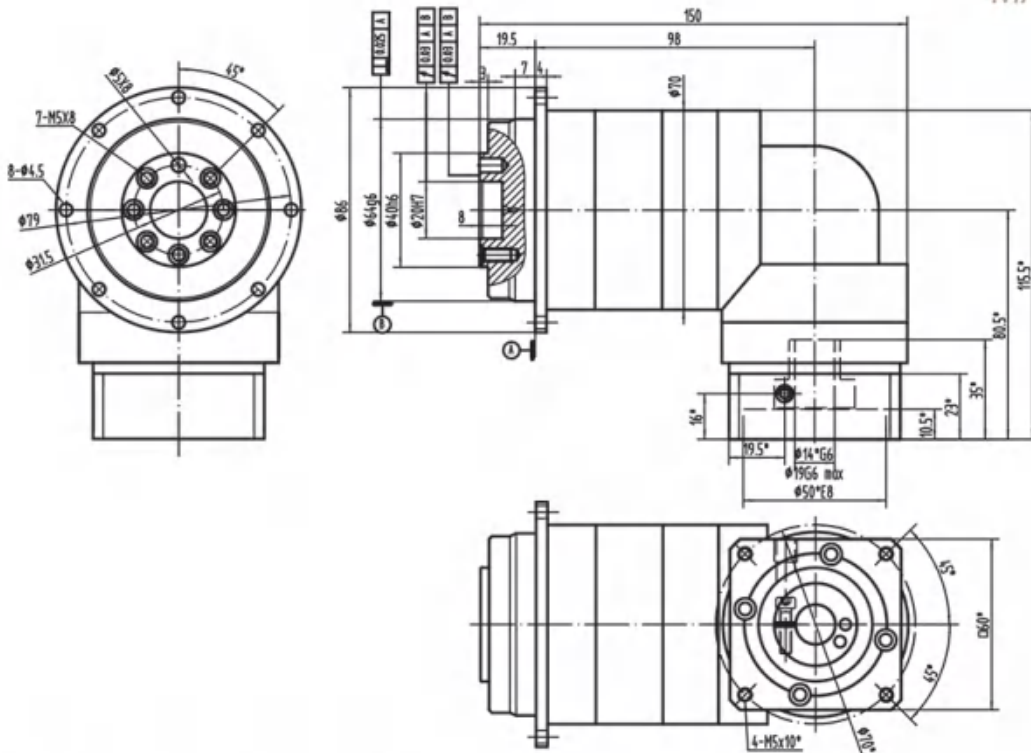
\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

Drawing / Size

MAFR-064-L1



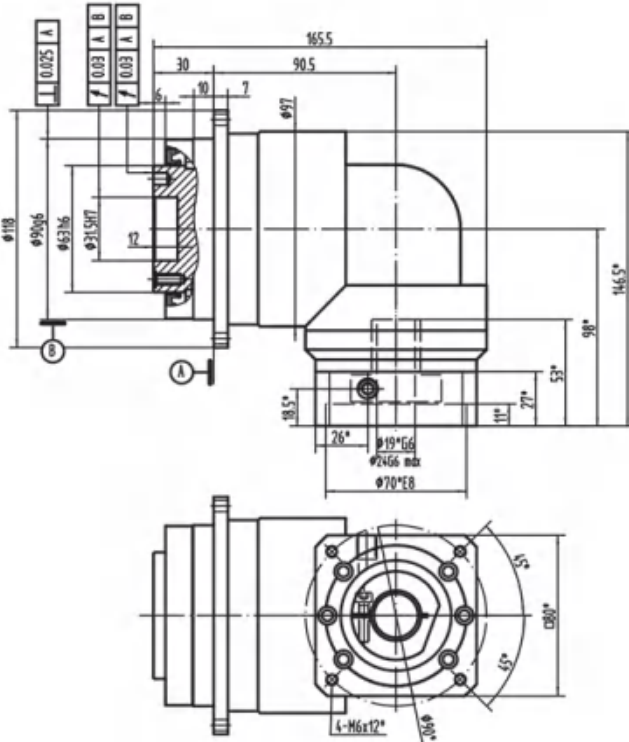
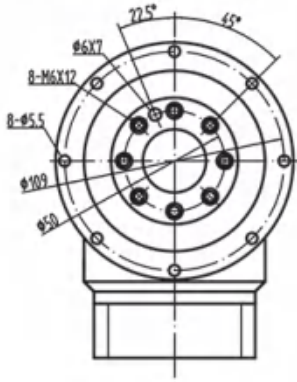
MAFR-064-L2



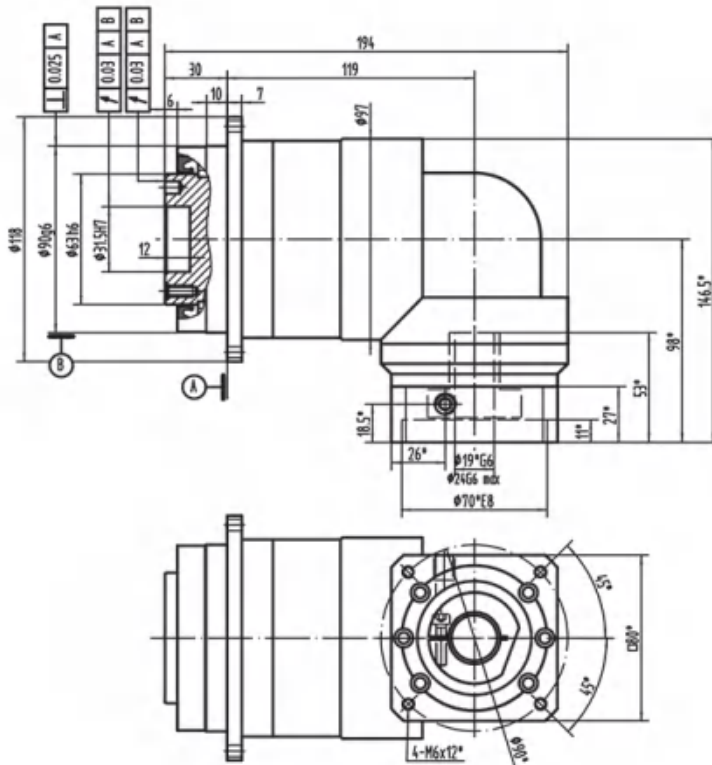
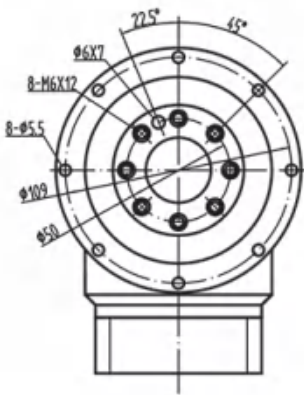
\*Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

Drawing / Size

MAFR-090-L1

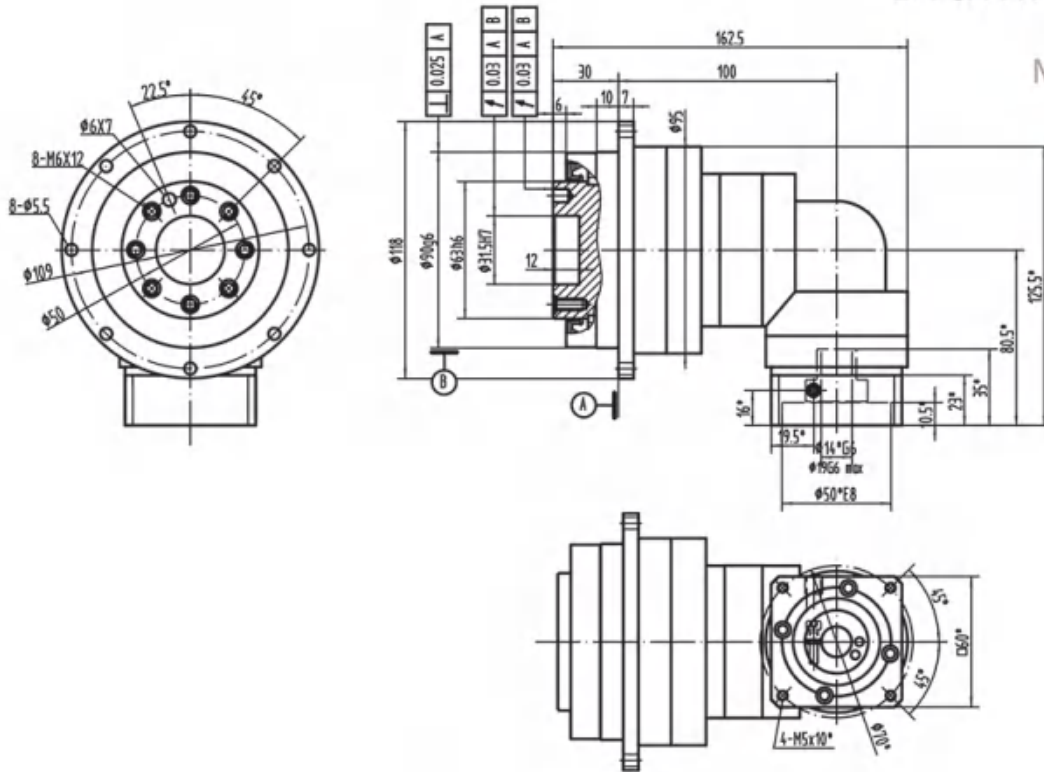


MAFR-090-L2

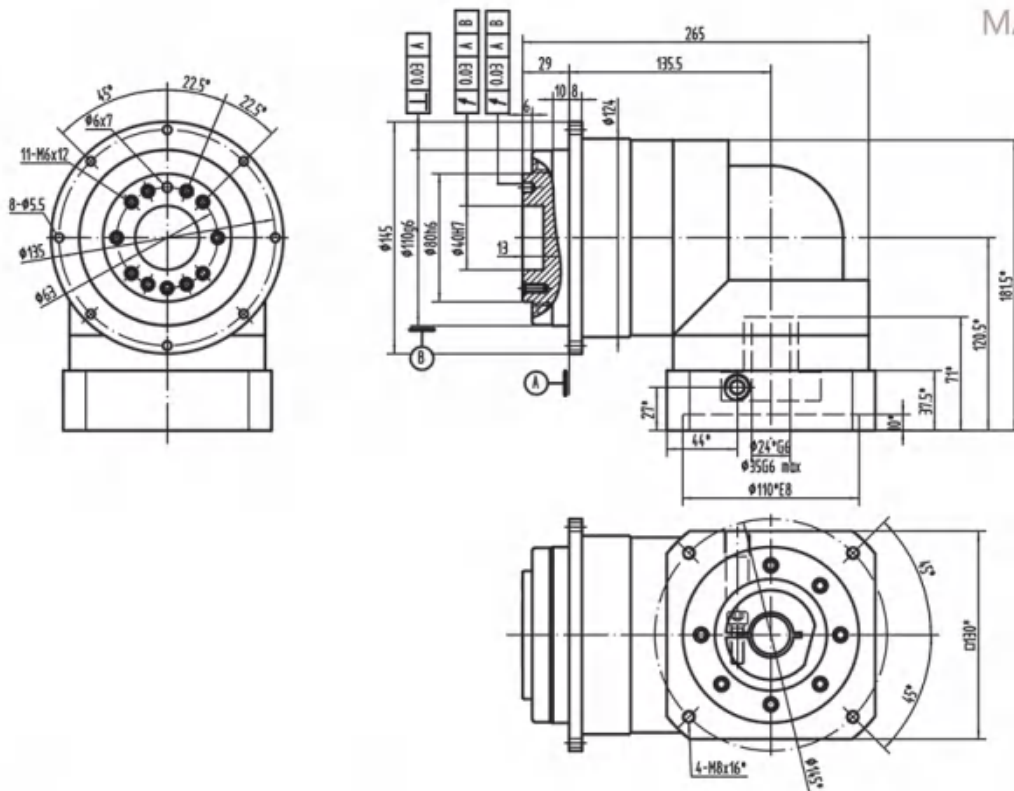


\* Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

Drawing / Size



MAFR-090-L2  
(Smaller hole)



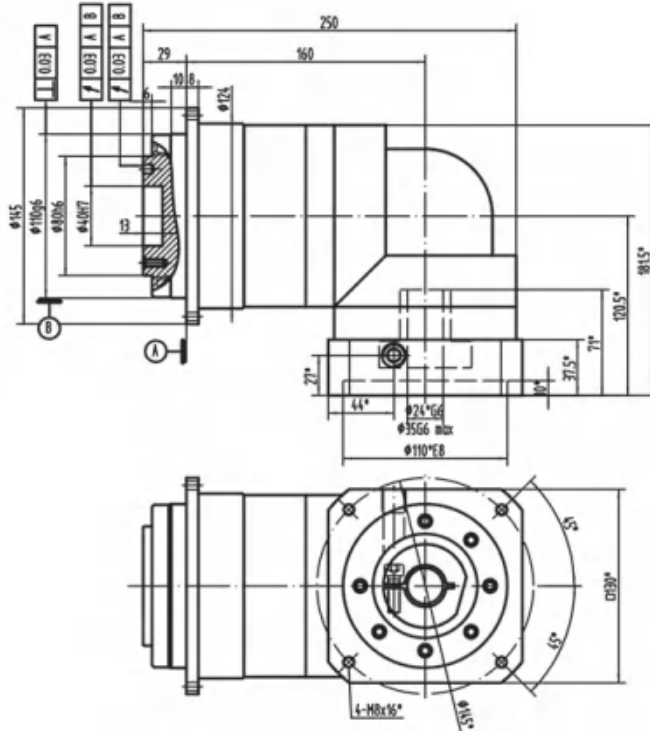
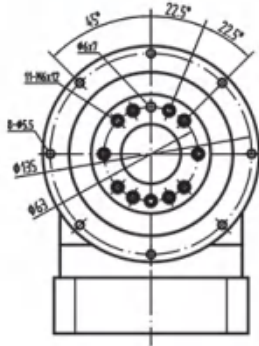
MAFR-110-L1

\*Dimensions based on servo-motor, please contact us for custom made order.  
注有\*尺寸:代表可根据客户需求定制产品,如有需要,请联系我们!

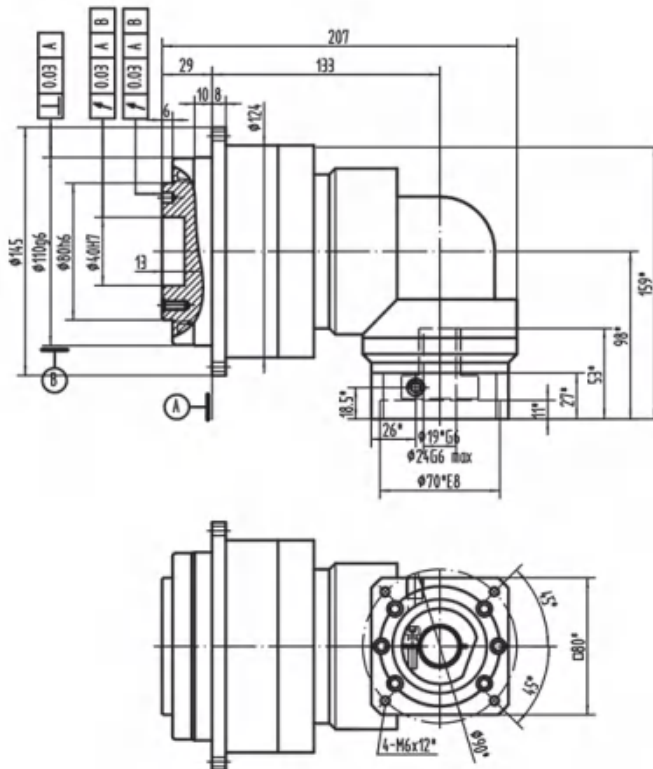
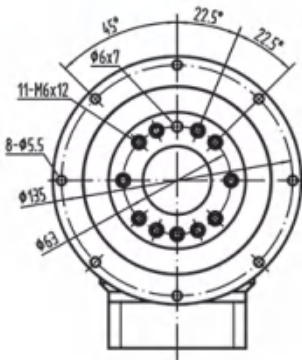


Drawing / Size

MAFR-110-L2



MAFR-110-L2  
(Smaller hole)

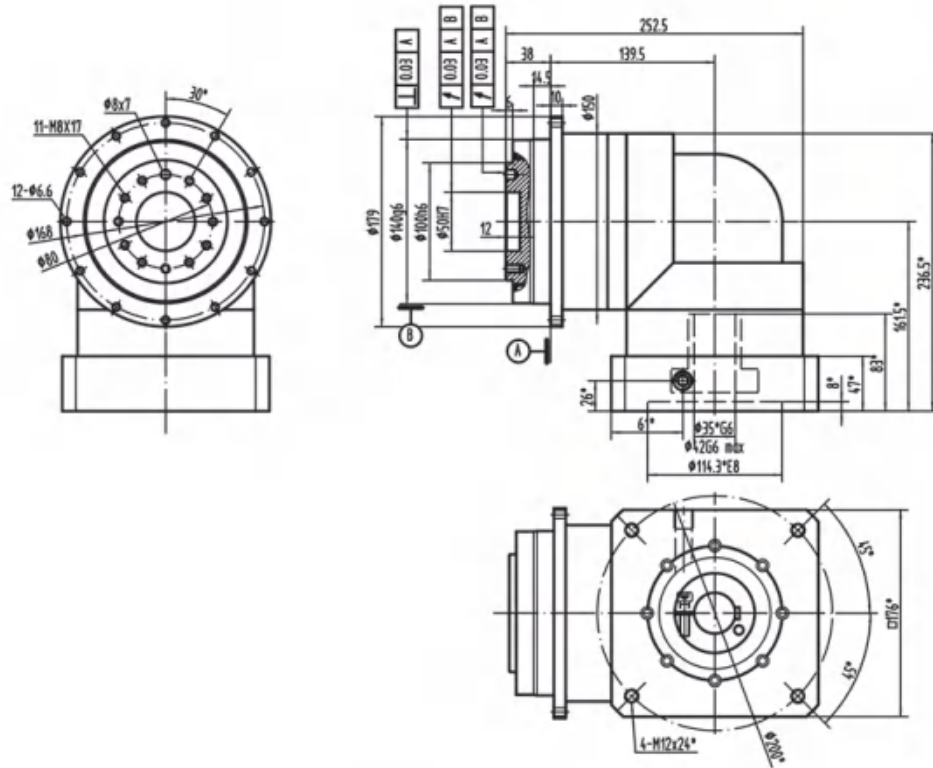


\* Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

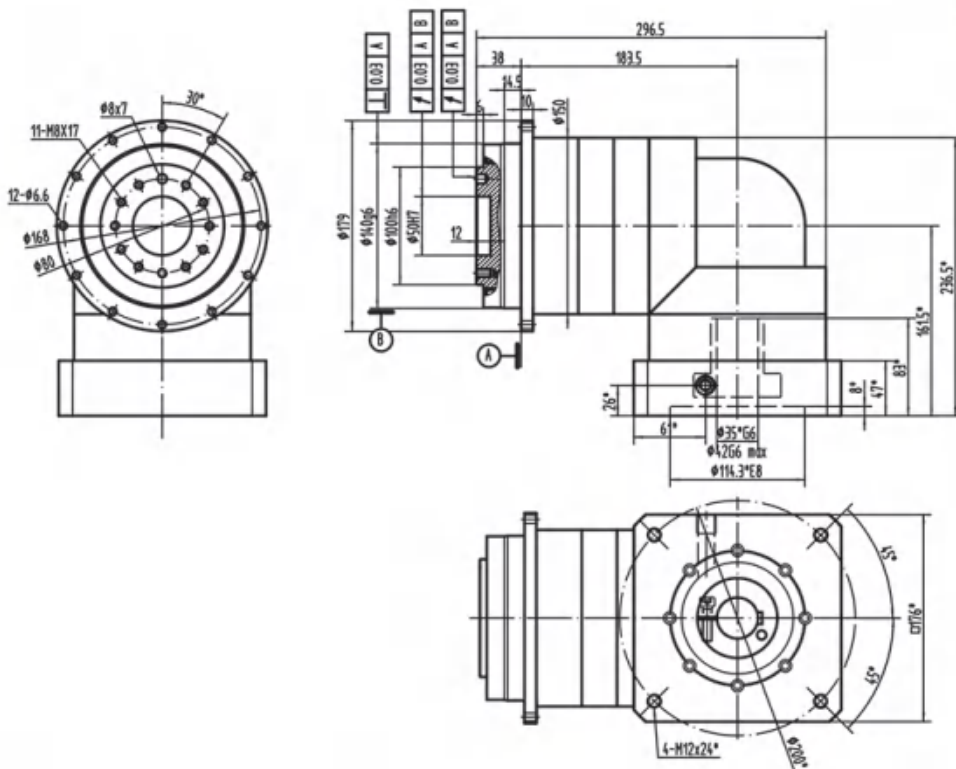


# Drawing / Size

MAFR-140-L1



MAFR-140-L2

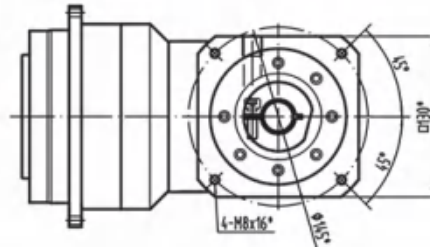
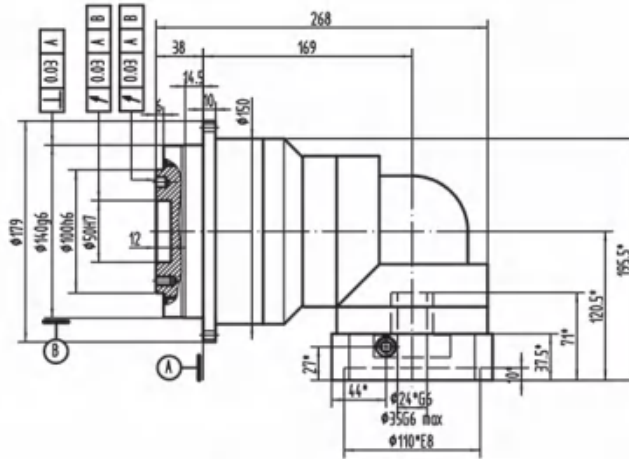
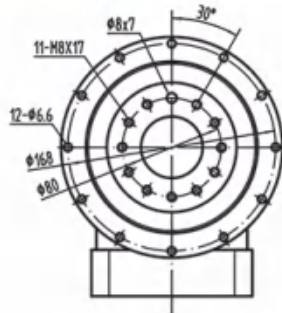


MAFR

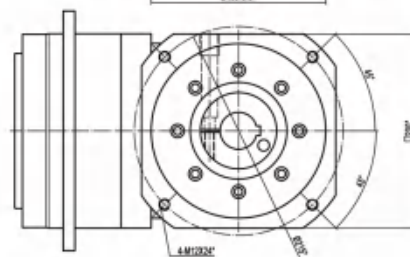
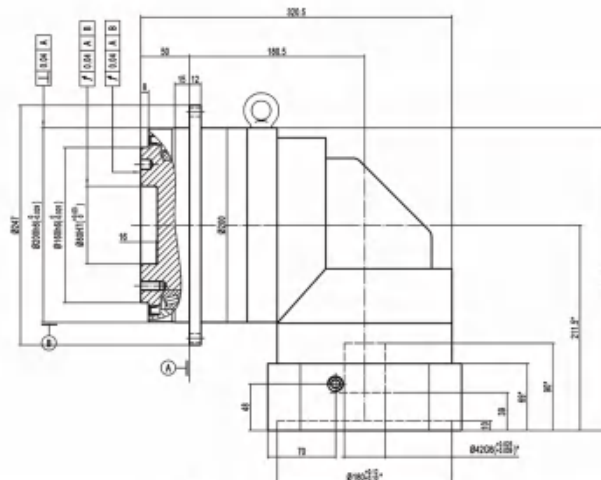
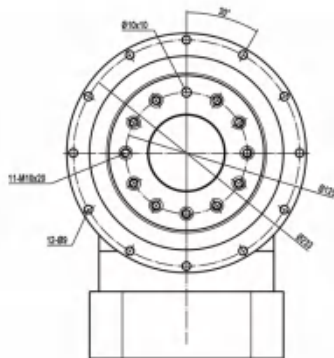
\*Dimensions based on servo-motor, please contact us for custom made order.  
注有\*尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

# Drawing / Size

MAFR-140-L2  
(Smaller hole)



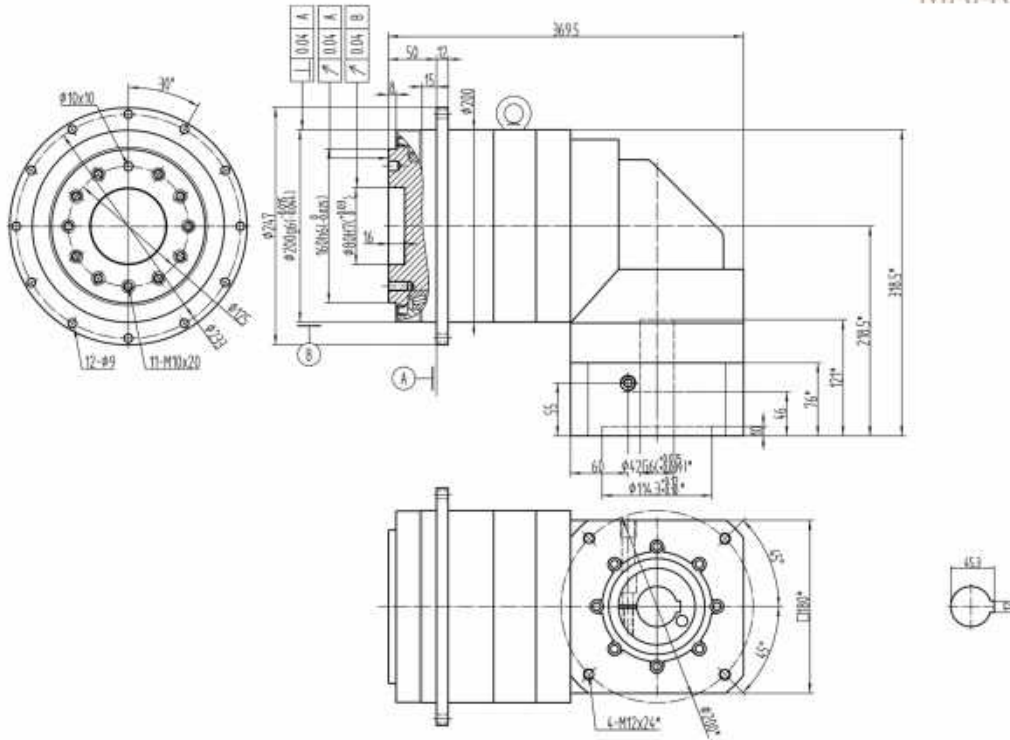
MAFR-200-L1



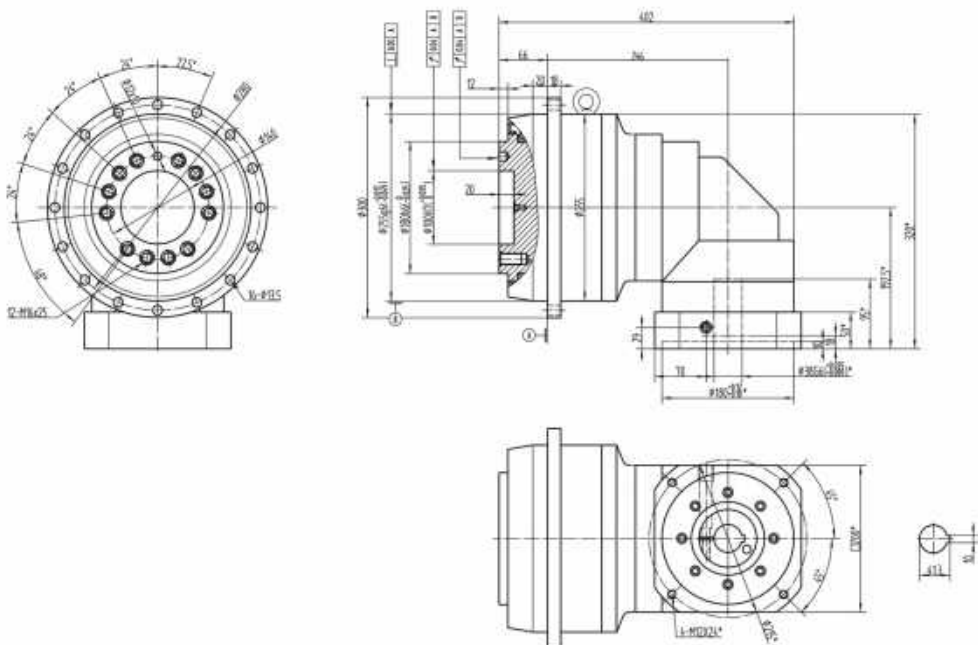
\* Dimensions based on servo-motor, please contact us for custom made order.  
注有 \* 尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

Drawing / Size

MAFR-200-L2



MAFR-255-L2



\*Dimensions based on servo-motor, please contact us for custom made order.  
注有\*尺寸：代表可根据客户需求定制产品，如有需要，请联系我们！

# Performance table

MAFR-047																	
Symb.	i	T <sub>2N</sub>	T <sub>2Max</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>1</sub>	C <sub>st</sub>	F <sub>2RMax</sub>	F <sub>2MMax</sub>	J <sub>2</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	newtonm	N	N	kg/cm <sup>2</sup>	%	h	°C				
I STAGE	4	14	2×T <sub>2N</sub>	3500	7000	≤3	5	800	500	3	≥95	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤63
	5	20								3							
	6	20								3							
	7	20								2.2							
	8	20								3							
	9	14								3							
	10	14								2.2							
II STAGE	20	14	2×T <sub>2N</sub>	3500	7000	≤5	5	800	500	3	≥90	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤63
	25	20								3							
	50	20								3							
	80	20								3							
	100	14								2.2							

MAFR-064																	
Symb.	i	T <sub>2N</sub>	T <sub>2Max</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>1</sub>	C <sub>st</sub>	F <sub>2RMax</sub>	F <sub>2MMax</sub>	J <sub>2</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	newtonm	N	N	kg/cm <sup>2</sup>	%	h	°C				
I STAGE	4	30	2×T <sub>2N</sub>	3300	6000	≤8	13	1300	650	0.13	≥90	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤62
	5	40								0.13							
	6	45								0.13							
	7	45								0.13							
	8	45								0.03							
	9	30								0.03							
	10	30								0.03							
II STAGE	20	30	2×T <sub>2N</sub>	3300	6000	≤8	13	1300	650	0.03	≥90	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤62
	25	45								0.03							
	50	45								0.03							
	80	45								0.03							
	100	30								0.03							

## Performance table

MAFR-D90																	
Symb.	i	T <sub>2N</sub>	T <sub>2Hot</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	j <sub>t</sub>	C <sub>t</sub>	F <sub>DRMax</sub>	F <sub>DRMin</sub>	J <sub>s</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB
Unit		Nm	Nm	rpm	rpm	arcmin	mm/mm	N	N	kg/cm <sup>2</sup>	%	h	°C				
I STAGE	4	85	2×T <sub>2N</sub>	2600	6000	≤8	31	3000	1580	0.51	≥90	>20000	-15-45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤63
	5	90								0.47							
	6	90								0.47							
	7	90								0.45							
	8	90								0.45							
	9	65								0.44							
	10	65								0.44							
II STAGE	20	85	0.13														
	25	85	0.13														
	50	85	0.13														
	80	90	0.44														
	100	65	0.13														

MAFR-110																	
Symb.	i	T <sub>2N</sub>	T <sub>2Hot</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	j <sub>t</sub>	C <sub>t</sub>	F <sub>DRMax</sub>	F <sub>DRMin</sub>	J <sub>s</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	dB
Unit		Nm	Nm	rpm	rpm	arcmin	mm/mm	N	N	kg/cm <sup>2</sup>	%	h	°C				
I STAGE	4	200	2×T <sub>2N</sub>	2300	6000	≤8	82	7500	3900	2.87	≥90	>20000	-15-45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤68
	5	260								2.71							
	6	330								2.71							
	7	300								2.62							
	8	330								2.61							
	9	200								2.58							
	10	200								2.57							
II STAGE	20	200	0.47														
	25	300	0.47														
	50	300	0.44														
	80	330	0.44														
	100	200	0.44														



## Performance table

MAFR-140																	
Symb.	i	T <sub>2N</sub>	T <sub>2Mot</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>t</sub>	C <sub>27</sub>	F <sub>27Max</sub>	F <sub>2Max</sub>	J <sub>t</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	rev/100mm	N	N	kg/cm <sup>2</sup>	%	h	°C				dB
I STAGE	4	350	2×T <sub>2N</sub>	2000	5000	≤8	151	12000	8000	7.54	≥90	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤71
	5	500								7.42							
	6	520								7.42							
	7	600								7.14							
	8	600								7.13							
	9	420								7.08							
	10	400								7.03							
II STAGE	20	400	2.71	≥90													
	25	500	2.71														
	50	500	2.57														
	80	600	2.57														
	100	400	2.57														

MAFR-200																	
Symb.	i	T <sub>2N</sub>	T <sub>2Mot</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	J <sub>t</sub>	C <sub>27</sub>	F <sub>27Max</sub>	F <sub>2Max</sub>	J <sub>t</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	rev/100mm	N	N	kg/cm <sup>2</sup>	%	h	°C				dB
I STAGE	4	900	2×T <sub>2N</sub>	2000	4000	≤8	450	18520	15400	23.4	≥90	>20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤78
	5	900								23.4							
	6	900								23.4							
	7	900								23.4							
	8	900								21.8							
	9	550								21.8							
	10	550								21.8							
II STAGE	20	1250	21.8	≥90													
	25	1300	21.8														
	50	1300	21.8														
	80	1300	21.8														
	100	880	21.8														

## Performance table

MAFR-255																	
Symb.	i	T <sub>2N</sub>	T <sub>2N05</sub>	n <sub>1N</sub>	n <sub>1Max</sub>	j <sub>i</sub>	C <sub>r</sub>	F <sub>200Max</sub>	F <sub>2000Max</sub>	J <sub>i</sub>	η	L <sub>h</sub>	T	Lub	PC	MP	
Unit		N <sub>m</sub>	N <sub>m</sub>	rpm	rpm	arcmin	rev/mm	N	N	kg/cm <sup>2</sup>	%	h	°C				dB
I STAGE	20	2300	2×T <sub>2N</sub>	2000	3000	≤8	1023	27000	23900	64	≥90	> 20000	-15~45	Life Lubrication 终身润滑	IP65	Any 任何方向	≤81
	25	2400								65							
	50	2400								66							
	80	2400								67							
	100	1800								68							

# NOTES

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