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Note: This product content has been issued through strictly. All products require to be used according to the actual situation. If there is any question, please contact our customer service staff.

生产基地: 浙江杭州
Production base: Hangzhou, Zhejiang

YND 尤尼德传动
YND TRANSMISSION

蜗轮减速机
无级变速器选型手册



WORM GEAR REDUCER
SCREW JACK
STEPLESS SPEED VARIATOR

蜗轮减速机
丝杆升降机
行星锥盘无级变速器



尤尼德(杭州)机械有限公司
YND (Hangzhou) Machinery Co., Ltd.



企业简介 Company

尤尼德(杭州)机械有限公司是一家集产品研发、技术服务、生产经营为一体的专业传动科技型企业。致力于提供更有竞争力的传动解决方案和服务,为客户创造更大的价值!

公司主要产品有R、S、K、F四大系列硬齿面减速机, RV/WP系列蜗轮蜗杆减速机, UD/MB系列无级减速机, P系列精密行星减速机, H/B系列大功率减速机, C/G系列齿轮马达及SWL系列丝杆升降机等。产品广泛应用于环保设备、筑路机械、仓储物流, 食品机械、印刷包装、汽车检测、立体车库、石油化工、冶金、陶瓷、玻璃、印染纺织、木工机械等传动设备的各个行业。

围绕“品质至上、服务为先”的战略方针,认真贯彻执行国际质量认证体系,核心产品自主研发并获得多项“国家知识产权局”授予的专利称号,部分产品已列入省技术创新计划项目之中。公司与多家科研机构建立战略合作,并列入“杭州师范大学”教学科研实习基地。年取得了企业自营进出口权,产品远销欧美、东南亚等国家和地区。

“尤尼德”自创立至今始终遵循“诚信、专业、高效、共赢”的科学的的管理和服务理念,真诚期待与您共同携手,开拓美好科技未来。

YND (Hangzhou) Machinery Co., Ltd. is a professional transmission technology enterprise integrating product research and development, technical services, production and operation. Committed to providing more competitive transmission solutions and services, to create greater value for customers!

The company's main products are R, S, K, F series geared motor, RV/WP series worm reducer, UD/MB series stepless reducer, P series precision planetary reducer, H/B series high-power reducer, C/G series gear motor and SWL series screw elevator. Products are widely used in environmental protection equipment, road building machinery, storage and logistics, food machinery, printing and packaging, automotive testing, three-dimensional garage, petrochemical, metallurgy, ceramics, glass, printing and dyeing textile, woodworking machinery and other transmission equipment industries.

Around the strategic policy of "quality first, service first", we earnestly implement the international quality certification system. The core products are independently developed and awarded many patent titles by the State Intellectual Property Office. Some of the products have been listed in the provincial technical innovation program. The company has established strategic cooperation with several scientific research institutions and has been listed as the teaching and scientific research practice base of Hangzhou Normal University. In, the company gained the right of self import and export, and its products were exported to Europe and America, Southeast Asia and other countries and regions.

Since its inception, YND has always followed the scientific management and service concept of "integrity, professionalism, efficiency and win-win" and sincerely looks forward to working with you to open up a bright future of science and technology.

产品介绍
Product introduction

R、S、K、F系列斜齿轮减速电机 R,S,K,F series helical gear motors



R系列斜齿轮减速电机
R series helical geared motor



S系列斜齿轮-蜗轮蜗杆减速电机
S series helical-worm geared motor



K系列斜齿轮-伞齿轮减速电机
K series helical-bevel geared motor



F系列平行轴-斜齿轮减速电机
F series parallel shaft-helical geared motor

通用减速机系列 General reducer series	
安装方式: 座角, 法兰, 扭力臂。 Mounting arrangements: foot, flange, torque arm.	
功率 Power(KW)	0.12-200
速比 Ratio	1.3-33000
最大输出扭矩 Output torque(KN.M)	top to 50

HB系列重载齿轮箱 HB series heavy duty gearboxes



H系列斜齿轮减速机
H series helical gearbox



R系列斜齿轮-平行轴减速机
R series parallel-helical gearbox

通用减速机系列 General reducer series	
模块化设计, 安装方式多样, 可配置进止器单向传动, 以及串联辅助传动。 Highly standard modular designed. No strict limitation to the mounting arrangement. Can be configured to one-way transmission by backstop. Available to install with auxiliary drive.	
功率 Power(KW)	4-6000
速比 Ratio	1.25-450
最大输出扭矩 Output torque(KN.M)	top to 950

诚: 推心置腹, 言而有信; 精诚所至, 始终如一;
志: 志不立, 天下无可成之事; 有志者, 事竟成;
恒: 锲而不舍, 金石可镂; 欲稍得成, 从恒下手;
专: 凡为一事, 事皆贵专; 以专而精, 以纷而散;
实: 实事求是, 精益求精, 差之毫厘, 失之千里;
勤: 刻苦求进, 勤学善思; 懒惰误己, 勤奋兴财;

Sincerity: Put your heart in your mouth, believe in your words, and be honest and consistent.

Ambition: Nothing can be done without ambition; if there is a will, there will be competition.

Eternal: Perseverance, stone can be carved; want to get a little bit, from constant hands.

Profession: Everything is for the sake of one thing; it is specialized and refined, and scattered in different ways.

Pragmatism: Seeking truth from facts, strives for perfection, and makes a difference.

Industrious: Diligently seeking progress, diligent learning and good thinking; laziness and wrong self, diligence and prosperity.

产品介绍
Product introduction

重载行星减速机 Heavy duty planetary reducers



N系列行星减速机
N series planetary reducer



P系列行星减速机
P series planetary reducer

通用减速机系列 General reducer series	
单位承载能力很高。 Very high unit capacity.	
功率 Power(KW)	0.37-12000
速比 Ratio	25-4000
最大输出扭矩 Output torque(KN.M)	top to 2600

橡塑行业专用减速机 Special reducers for rubber and plastic industry



单螺杆挤出机减速机
Special reducer for single screw extruder



压延机专用减速机
Special reducer for calendaring machine



双螺杆挤出机减速机
Special reducer for twin screws extruder



密炼机专用减速机
Special reducer for internal mixer

专用减速机系列 Special reducer series	
常用于橡塑行业炼胶、挤出、压延设备。 Commonly used in rubber mixer, extruder, calendaring machine of rubber and plastic industry.	
功率 Power(KW)	55-2500
速比 Ratio	8-35
最大输出扭矩 Output torque(KN.M)	top to 300

蜗轮蜗杆减速机 Worm gear motors



RV系列蜗轮减速机
RV series worm gear motor



VF系列蜗轮减速机
VF series worm gear motor



WP系列蜗轮减速机
WP series worm gear motor



UD系列无级变速器
UD series variable speed machine



T系列螺旋锥齿轮减速机
T series spiral bevel gear reducer



SWL系列蜗轮丝杆升降机
SWL series worm gear screw reducer

通用减速机系列 General reducer series	
铝合金壳体的蜗轮传动减速机。 结构紧凑，多方位安装，免维护。 Aluminum alloy shell, compact structure, multiple installation, maintenance free.	
功率 Power(KW)	0.06-15
速比 Ratio	7.5-100
最大输出扭矩 Output torque(N.M)	top to 1760

摆线针轮减速机 Cycloidal pinwheel reducers



BWD系列摆线减速机
BWD series cycloidal pinwheel reducer



BLD系列摆线减速机
BLD series cycloidal pinwheel reducer



卧式微型摆线减速机
Horizontal micro cycloidal pinwheel reducer



立式微型摆线减速机
Vertical micro cycloidal pinwheel reducer

通用减速机系列 General reducer series	
结构紧凑，通过摆线针轮传递动力。 Compact structure, Cycloidal pinwheel transmission.	
功率 Power(KW)	0.12-90
速比 Ratio	7-650000
最大输出扭矩 Output torque(KN.M)	top to 30

圆柱齿轮减速机 Cylindrical gear reducers



ZDY系列圆柱齿轮减速机
ZDY series cylindrical gear reducer



ZFY系列圆柱齿轮减速机
ZFY series cylindrical gear reducer



ZDY系列圆柱齿轮减速机
ZDY series cylindrical gear reducer



ZLY系列圆柱齿轮减速机
ZLY series cylindrical gear reducer

通用减速机系列 General reducer series	
按行业标准生产，并可配置逆止器单向传动以及串联辅助传动。 Can be configured to one-way transmission by backstop. Available to install with auxiliary drive.	
功率 Power(KW)	1.1-6000
速比 Ratio	1.25-500
最大输出扭矩 Output torque(KN.M)	top to 520

产品介绍
Product introduction

三项异步电机 Three-phase asynchronous motors



YE2系列高效电机
YE2 series high efficiency motor



YEX3系列防爆电机
YEX3 series premium efficiency flameproof motor



YEJ系列制动电机
YEJ series braking motor



YVF2系列变频电机
YVF2 series variable frequency motor

通用电动机系列 General motor series	
常规工业动力。 Conventional industrial power.	
功率 Power(KW)	0.12-315
机座号 Stand No.	63-355
电源频率(Hz) Power frequency	50/60

微小型减速电机 Micro and small gear motors



CH系列齿轮电机
CH series gear motor



CV系列减速电机
CV series gear motor



直流减速电机
Direct current gear motor



精密行星减速机
High precision planetary reducer

通用减速机系列 General reducer series	
重量轻、噪音低、效率高、寿命长等。 Light weight, low noise, high efficiency, long life etc.	
功率 Power(KW)	0.006-7.5
速比 Ratio	2-200
最大输出扭矩 Output torque(N.M)	top to 7400

双轴桨叶式混合机专用减速机 Special reducer for twin shafts paddle mixer



双轴桨叶式混合机专用减速机
Special reducer for twin shafts paddle mixer



双轴桨叶式混合机
Twin shafts paddle mixer

专用减速机系列 Special reducer series	
该款减速机专为双轴桨叶式混合机设计，减速机与混合机直接连接，最大限度的节省了安装空间和生产成本，使设备运行更加平稳、高效。 The reducer is designed for twin shafts paddle mixer, connect with the mixer directly, saving the installation space and production cost at maximum degree, so the equipment runs more smoothly and efficiently.	
功率 Power(KW)	15-90
速比 Ratio	33-50
最大输出扭矩 Output torque(KN.M)	70

焊接滚轮架专用减速机 Special reducer for welding rotator



焊接滚轮架专用减速机
Special reducer for welding rotator



焊接滚轮架
Welding rotator

专用减速机系列 Special reducer series	
适用于自调式双轴滚轮架、移动式焊接滚轮架等特种自动焊接的滚轮架驱动。 The reducers apply to belt adjustable rotator, self-aligning rotator, lead screw adjustable rotator, and fit up rotator, etc.	
功率 Power(KW)	0.18-22
速比 Ratio	300-3400
最大输出扭矩 Output torque(KN.M)	180

NMRV系列蜗轮蜗杆减速机 NMRV series worm gear speed reducer

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UD(L) 系列行星锥盘无级变速器 UD(L) series planet cone-disk stepless speed variator

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Combination of planet cone-disk stepless speed variator and cycloid pin wheel speed reducer /P73-75
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VF系列蜗轮减速机 VF series worm gear speed reducer

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WP系列蜗轮蜗杆减速机 WP series worm gear speed reducer

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SWL系列蜗轮丝杆升降机 SWL series worm gear screw jack

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JW系列丝杆升降机 JW series screw jack

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**NMRV系列蜗轮蜗杆减速机
NMRV series worm gear speed reducer**

1. 产品图片
Products of pictures



2. 产品结构图 Products structure view



3. 产品概述 Product summary

单级蜗杆减速机

- 采用优质铝合金压铸箱体，外形轻巧美观，结构紧凑，体积小，重量轻，节省安装空间，不易锈蚀。
- 散热性能好，安全可靠，效率高。
- 承载能力高，传动平稳，振动小，噪音低。
- 具有动力输入及转矩输出的多种联接结构，满足多种联接需要；箱体外形设计及底脚孔位置布局适应多种安装方式，通用性强。
- 中小型箱体为全封闭结构，密封性强，箱体内部滑油不直接接触空气，不需更换，便于维护保养。

双级蜗杆减速机

- 由单级蜗杆减速机组合而成，具有单级蜗杆减速机的一切优点，和获得大的传动比。
- 常用双级组合机型为：25/30、25/40、30/40、30/50、30/63、40/75、40/90、50/110、63/130、63/150，用户若有特殊要求时，可根据实际需要选择25、30、40、50、63、75、90、110、130、150作为组合单元另行组合。

Single Step Worm Gear Reducer

- Made of Aluminum alloy die-casting box, good looking in appearance, compact in structure, rust proofing on surface and small volume to save mounting space.
- Good radiating characteristic leads safe and high efficiency for using.
- The strong capacity of loading and overload ensure stable transmission, make less vibration and noise.
- Varities of connecting structure for power input and torque output meet different requirements; the design of box outline and the set of foot hole is apt to with high many kinds of mounting.
- Besides big cases, no gap structure of box means a maintenance-free that is hermetically sealed. It prevents the lubricant from easily losing and going bad, and exchanging.

Double Step Worm Gear Reducer

- It is combined by two single step reducers and has all the virtues of them. And you can get bigger ratio with it.
- The models of 25/30, 25/40, 30/40, 30/50, 30/63, 40/75, 40/90, 50/110, 63/130, 63/150, are in common use. You can choose 25, 30, 40, 50, 63, 75, 90, 110, 130, 150 as combination units to combine according to the fact of your special needs.

4. 选型方法 Model selections

为正确选择NMRV蜗杆减速机，敬请用户首先了解以下几点：

- 负荷条件
- 使用转速范围或速比（与双级组合可获得更低输出转速）
- 工作运转情况及环境（温度、湿度、海拔等）
- 安装空间

确定工作情况系数K1及工作情况修正系数K2

- 根据表1，决定机械负荷种类A、B、C。
- 根据运转时间（小时/天）和启动频率（次数/小时）从图1中获得工作情况系数K1。
- 根据表2，查取工作情况修正系数K2。

Please understand the following at first in order to select the model of NMRV worm-gear speed reducer properly:

- Load condition.
- Speed scope or ratio in application.
- Working condition and environment.
- Installation space.

Define working si condition coefficient K1 and revise coefficient K2.

- Ensure machinery load types A, B, C according to table 1
- Get the working condition coefficient K1 from diagram 1 according to turning time (hour/day) and start frequency (times/hour)
- Inspect working condition and select coefficient K2 from table 2.

机械负荷种类选定(表1)

Table 1 machinery load classification selection

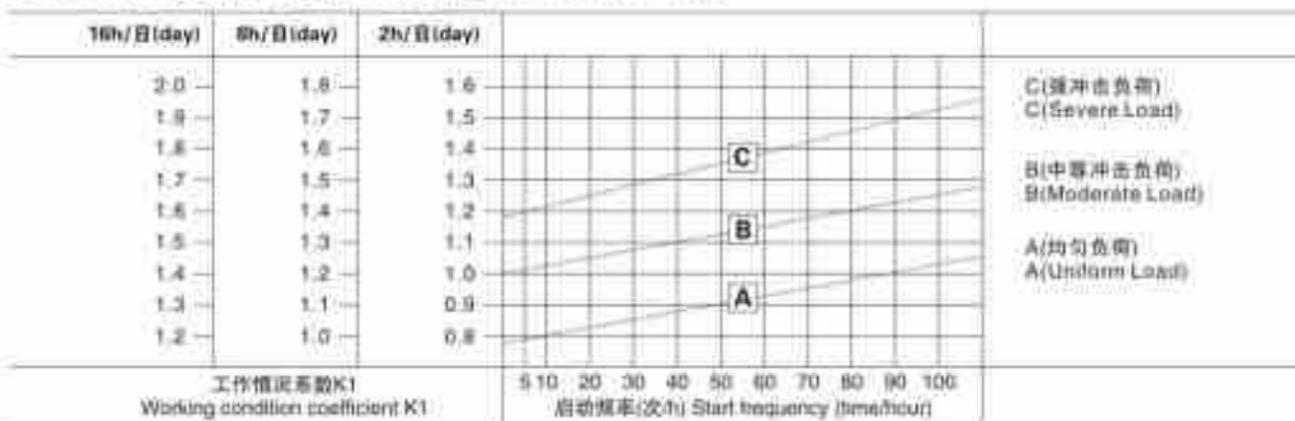
使用情景 Using Situation	示例 Example	负荷种类 Load Type
无冲击均匀负荷 (Uniform Load)	传送带(匀速输送) Convey Band (uniform Conveying)	A(均匀负荷) A (uniform Load)
中等冲击负荷 Moderate Load	传送带(变速输送) Speed Changed Conveying	B(中等冲击负荷) B (moderate Load)
强烈冲击负荷 Severe Load	压缩机、粉碎机等 Compressor, Pulverizer, etc.	C(强烈冲击负荷) C (severe Load)

工作情况修正系数k2选定(表2)

Table 2 working condition coefficient k2

环境温度 Ambient Temperature	工作情况修正系数k2 Working Condition Coefficient K2
-10℃~30℃	1
30℃~40℃	1.1~1.2

工作情况系数k1选定(图1) Diagram 1 working condition coefficient k1



选定减速机

- 用户首先确定工作机输入机械负载T(转矩), 以T乘以工作情况系数K1, 再乘以工作情况修正系数K2, 即获得减速机应有的输出转矩值, 以此为依据, 并结合速比或输出转速值, 选定所需减速机规格。
- 用户也可以根据已知的输入功率, 结合速比或输出转速值, 计算输出转矩, 选定减速机。

选型示例

例1. 通用传送带 (均匀负载)

转矩: 19N.m, 运转时间: 8小时/天,
转速: 约55r/min, 启动频率: 10次/小时,
减速机: 1/25, 环境温度: 室内25℃, 电机直联

1. 根据表1, 选定负载种类
1. 负载种类: 无冲击均匀负载, 选A;
2. 根据图1, 在A线上取频率10次/小时的交点, 求出运转时间8小时/天的系数K1=1;
3. 根据表2, 查得系数K2=1;
4. 则转矩值为 $19 \times K1 \times K2 = 19 \times 1 \times 1 = 19 \text{ N.m}$, 可选择最接近19 N.m的减速机。
选定结果: NMRV30-1/25
输入功率0.18kW, 输出转速55r/min, 输出转矩21 N.m

例2. 输送机 (中等冲击负载)

转矩: 70N.m, 运转时间: 16小时/天,
转速: 约21r/min, 启动频率: 100次/小时,
减速机: 1/60, 环境温度: 室内35℃, 电机直联

1. 根据表1, 选定负载种类
1. 负载种类: 轻度冲击负载, 选B;
2. 根据图1, 在B线上取频率100次/小时的交点, 求出运转时间16小时/天的系数K1=1.65;
3. 根据表2, 查得系数K2=1.15;
4. 则转矩值为 $70 \times K1 \times K2 = 70 \times 1.65 \times 1.15 = 133 \text{ N.m}$, 可选择最接近133 N.m的减速机。
选定结果: NMRV63-1/60
输入功率0.55kW, 输出转速23r/min, 输出转矩140N.m

Reducer Selected

- At first it is better to make sure the value input machinery load T(torque) and then you can get the output torque through M multiply with work situation coefficient K1 and work situation revise coefficient K2. The required model can be gained by the above and connecting ratio or output speed.
- You can also select the reducer as followings: calculate output torque according to known input power and then select the reducer in accordance with output torque rotate speed.

Examples for Model Chosen

Ex1. Common convey band (uniform load)

Torque: 19 N.m, Turning time: 8 hours/day,
Speed: About 55r/min, Start frequency: 10 times/hours,
Ratio: 1/25, Environment temperature: indoor 25℃, Connect with motor directly

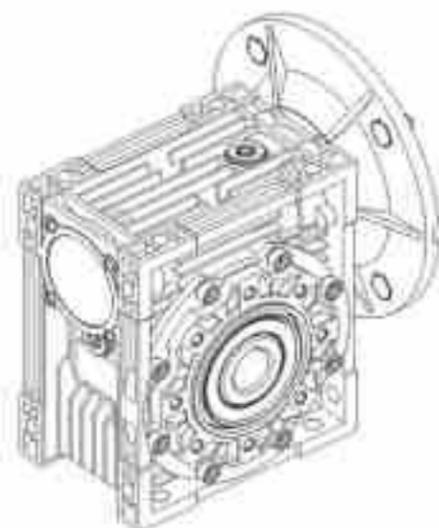
1. As per table 1: Select load classification. Load classification: Uniform load, choose A.
2. As per the cross point of 10 times / hour frequency on line A in diagram 1, get coefficient K1 value is 1 that turning time is 8 hours/day.
3. Get the coefficient K2 according to table 2.
4. So the torque value is 19 N.m.
Choose model: NMRV30-1/25
Input power is 0.18KW, output speed is 55r/min, output torque is 21N.m

Ex2. Convey band (moderate load)

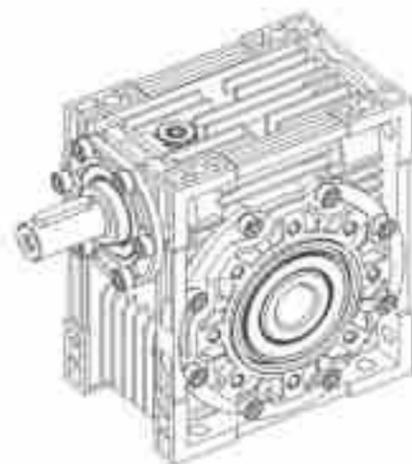
Torque: 70N.m, Turning time: 16 hours/day,
Speed: 21r/min, Start frequency: 100times/hours,
Ratio: 1/60, Environment temperature: indoor 35℃, Connect with motor directly

1. As per load classification 1, moderate load, choose B.
2. As per the cross point of 100 times / hour frequency on line B in diagram 1, get coefficient K1 value is 1.65 that turning time is 16 hours /day.
3. Get the coefficient K2 1.15 according to table 2.
4. So the torque value is 70N.m. You can select the model that torque value most close to 133N.m.
Choose Model: NMRV63-1/60
Input power is 0.55KW, output speed is 23r/min, output torque is 140N.m

5. NMRV单级蜗杆减速机
NMRV single step worm gear reducer



NMRV



NRV

型号说明 Model notes

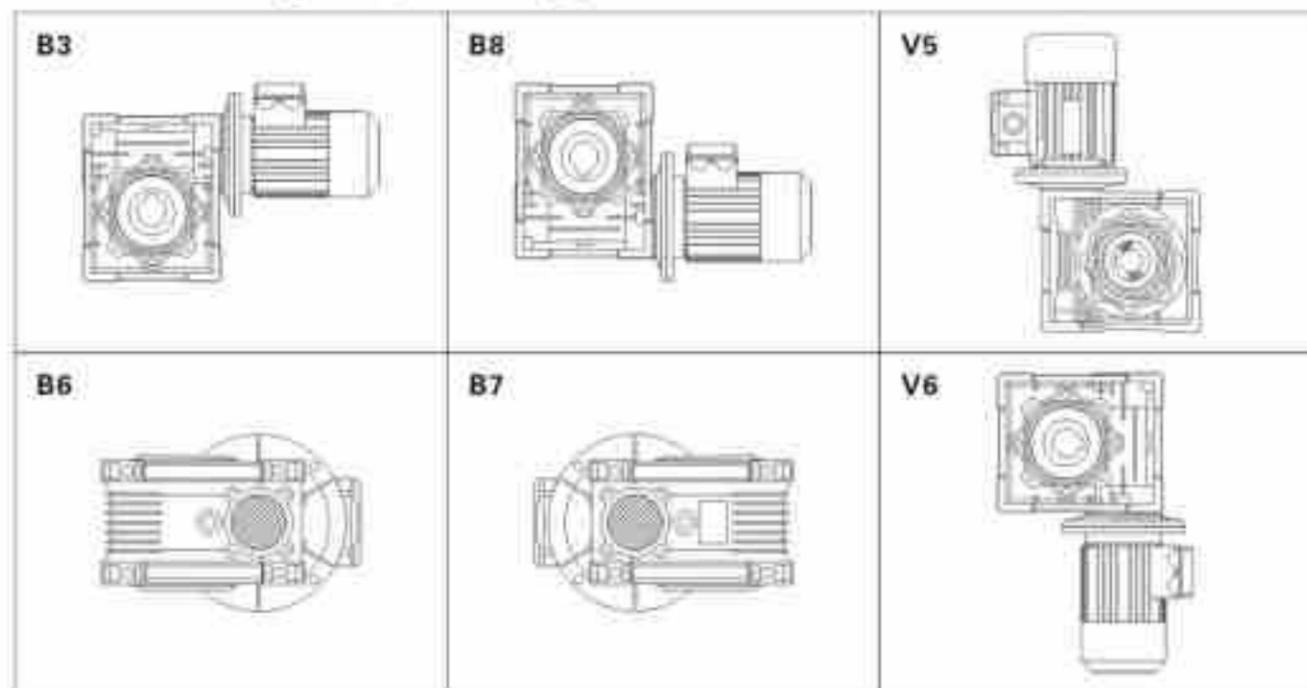
NMRV-075-60-VS-F1(FA)-AS-80B5-0.55kW-B3			
NMRV	蜗轮减速机 Worm gear speed reducer		
NRV	蜗轮减速机 (配接输入轴) Worm gear speed reducer (Matching input shaft)		
075	蜗轮减速机中心距 Center distance		
60	减速比 Reduction ratio		
VS	双向输入轴 Double input shaft	F1(FA)	输出法兰位置及型号 Output flange
AS	单向输出轴 Single output shaft	AB	双向输出轴 Double output shaft
PAM	电机联接 Fitted for motor coupling	80B5	电机机座号和安装结构形式 Motor mounting facility
0.55kW	电机功率 Electric motor power	B3	安装方位 Mounting position

注: 1. 用户需要电机时, 请注明“带电机”字样, 并说明所需电机的基本参数。
2. 附件为通用产品, 减速机附件除外, 未含在减速机上, 用户可根据实际需要自行装配。
Note: 1. If you need motor, please note "with motor" and the model, power & price of the motor.
2. Accessories are un-assembled. You may assemble them according to your need.

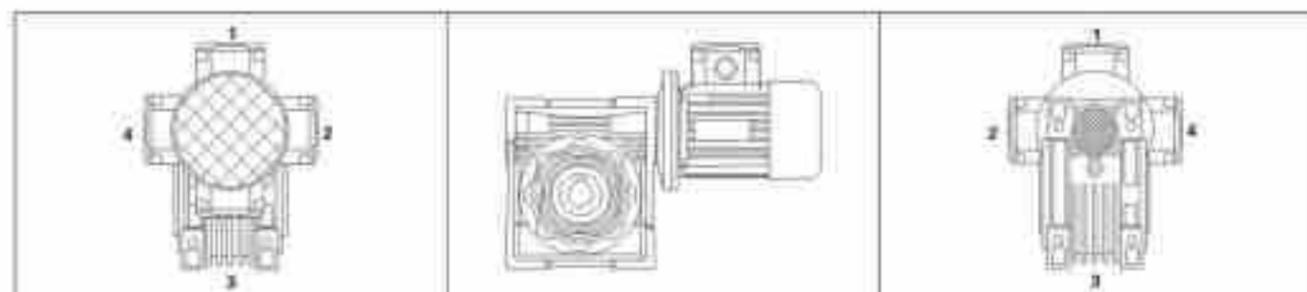
国内型号对照 Comparative table of model

本企业 Our enterprise	NMRV025	NMRV030	NMRV040	NMRV050	NMRV063	NMRV075	NMRV090	NMRV110	NMRV130	NMRV150
		NRV030	NRV040	NRV050	NRV063	NRV075	NRV090	NRV110	NRV130	NRV150
国内企业 Domestic	NMRV025	NMRV030	NMRV040	NMRV050	NMRV063	NMRV075	NMRV090	NMRV110	NMRV130	NMRV150
		NRV030	NRV040	NRV050	NRV063	NRV075	NRV090	NRV110	NRV130	NRV150
	WJ25	WJ30	WJ40	WJ50	WJ63	WJ75	WJ90	WJ110	WJ130	WJ150
	FCNDK25	FCNDK30	FCNDK40	FCNDK50	FCNDK63	FCNDK75	FCNDK90	FCNDK110	FCNDK130	FCNDK150
		FCNK30	FCNK40	FCNK50	FCNK63	FCNK75	FCNK90	FCNK110	FCNK130	FCNK150
	JRSTD025	JRSTD030	JRSTD040	JRSTD050	JRSTD063	JRSTD075	JRSTD090	JRSTD110	JRSTD130	JRSTD150
		JRST030	JRST040	JRST050	JRST063	JRST075	JRST090	JRST110	JRST130	JRST150

单级安装型式 Single step mounting positions



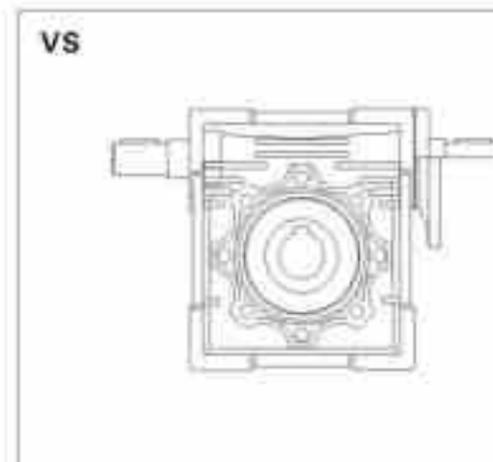
电机接线盒方位 Position of terminal box



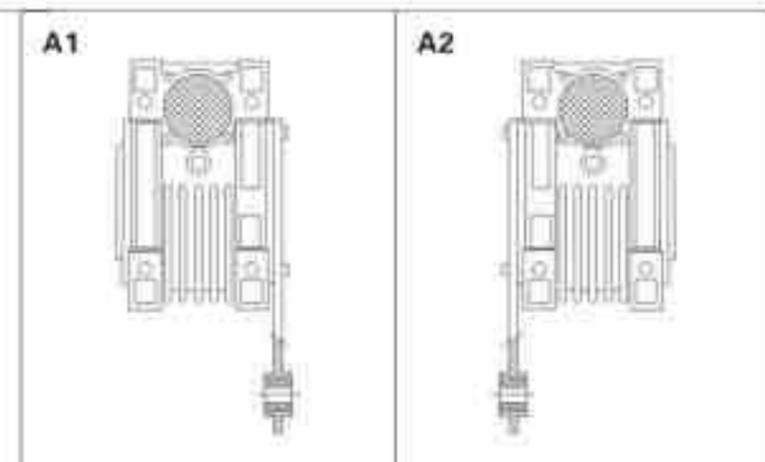
输出轴配置 Position of output shaft



蜗杆双输入
Extension input of worm shaft



扭力轴配置
Position of torque arm



输出法兰 Output flange F-FL



机型号 Model	输出转速 N ₂ (r/min)	输出转矩 M ₂ (N.m)	传动比 i	输出轴 径向力 F _r	使用系数 f _s	
0.37kw						
NMRV40	70	39	20	1.82	1.0	
	56	47	25	1.86	0.8	
	46.7	53	30	2.05	0.8	
NMRV50	140	21	10	1.96	3.3	
	93.3	31	15	2.27	2.4	
	70	40	20	2.5	1.8	
	56	48	25	2.69	1.5	
	46.7	55	30	2.86	1.5	
	35	68	40	3.15	1.1	
	28	80	50	3.39	0.9	
NMRV63	23.3	89	60	3.61	0.8	
	35	70	40	4.12	2.1	
	28	83	50	4.44	1.6	
	23.3	94	60	4.71	1.4	
NMRV75	17.5	115	80	5.19	1.1	
	14	129	100	5.59	0.9	
	0.55kw					
	NMRV50	186.7	25	7.5	1.8	2.9
		140	32	10	1.88	2.2
		93.3	46	15	2.27	1.6
		70	59	20	2.5	1.2
56		71	25	2.89	1.0	
46.7		81	30	2.86	1.0	
35		80	40	3.13	0.9	
NMRV63	70	60	20	3.27	2.2	
	56	73	25	3.52	1.8	
	46.7	80	30	3.74	1.9	
	35	105	40	4.12	1.4	
NMRV75	28	124	50	4.44	1.1	
	23.3	140	60	4.71	0.9	
	35	108	40	4.89	2.0	
	28	129	50	5.24	1.6	
NMRV90	23.3	148	60	5.56	1.4	
	17.5	180	80	6.13	1.1	
	14	205	100	6.60	0.9	
	17.5	189	80	6.78	1.5	
NMRV110	14	221	100	7.30	1.2	
	0.75kw					
	NMRV50	186.7	34	7.5	1.80	2.1
		140	44	10	1.98	1.6
		93.3	62	15	2.27	1.2
		70	81	20	2.50	0.9
	NMRV63	93.3	63	15	2.97	2.2
70		83	20	3.27	1.8	
56		100	25	3.52	1.3	
46.7		114	30	3.74	1.4	
NMRV75	35	143	40	4.12	1.0	
	56	102	25	4.16	2.0	
	46.7	117	30	4.42	2.0	
	35	147	40	4.86	1.5	
NMRV90	28	177	50	5.24	1.2	
	23.3	200	60	5.56	1.0	
	28	184	50	5.79	1.8	
23.3	212	60	6.16	1.5		

机型号 Model	输出转速 N ₂ (r/min)	输出转矩 M ₂ (N.m)	传动比 i	输出轴 径向力 F _r	使用系数 f _s
0.75kw					
NMRV90	17.5	258	80	6.78	1.1
	14	302	100	7.30	0.9
1.1kw					
NMRV63	186.7	49	7.5	2.35	2.6
	140	65	10	2.59	2.0
	93.3	93	15	2.97	1.5
	70	122	20	3.27	1.1
	56	146	25	3.52	0.9
	46.7	167	30	3.74	1.0
	35	165	40	3.59	0.9
NMRV75	83.3	95	15	3.50	2.1
	70	123	20	3.86	1.7
	56	150	25	4.16	1.3
	46.7	171	30	4.42	1.3
	35	216	40	4.86	1.0
	28	204	50	4.60	0.9
	23.3	223	60	4.69	0.8
NMRV90	35	225	40	5.38	1.6
	28	270	50	5.79	1.3
	23.3	311	60	6.16	1.0
	17.5	328	80	6.17	0.9
NMRV110	28	261	50	7.32	2.3
	23.3	324	60	7.78	1.9
	17.5	402	80	8.57	1.3
	14	473	100	9.23	1.0
1.5kw					
NMRV63	186.7	67	7.5	2.35	1.9
	140	89	10	2.59	1.5
	93.3	127	15	2.97	1.1
	70	166	20	3.27	0.8
NMRV75	140	90	10	3.05	2.2
	93.3	130	15	3.50	1.5
	70	168	20	3.86	1.3
	56	205	25	4.16	1.0
NMRV90	46.7	233	30	4.42	1.0
	70	171	20	4.27	2.1
	56	210	25	4.60	1.6
	46.7	239	30	4.89	1.7
NMRV110	35	307	40	5.38	1.2
	28	368	50	5.79	0.9
	23.3	424	60	6.16	0.8
	17.5	479	80	6.17	0.9
NMRV130	35	319	40	6.80	2.2
	28	384	50	7.32	1.7
	23.3	442	60	7.78	1.4
	17.5	548	80	8.57	0.9
2.2kw					
NMRV75	186.7	100	7.5	2.78	1.8
	140	132	10	3.06	1.5
	93.3	191	15	3.50	1.0
	70	240	20	3.38	0.9
NMRV90	46.7	269	30	3.89	0.8
	186.7	101	7.5	3.06	2.0
	140	134	10	3.39	2.3
	93.3	194	15	3.88	1.9

机型号 Model	输出转速 N ₂ (r/min)	输出转矩 M ₂ (N.m)	传动比 i	输出轴 径向力 F _r	使用系数 f _s	
2.2kw						
NMRV90	70	252	20	4.27	1.4	
	56	308	25	4.60	1.1	
	46.7	351	30	4.89	1.2	
	35	433	40	4.90	1.0	
	28	393	50	5.28	0.9	
	NMRV110	70	258	20	5.39	2.5
		56	315	25	5.81	2.2
46.7		358	30	6.18	2.0	
35		488	40	6.8	1.5	
NMRV130	28	583	50	7.32	1.2	
	23.3	648	60	7.78	1.0	
	35	488	40	8.89	2.2	
	28	583	50	9.58	1.7	
NMRV150	23.3	648	60	10.18	1.4	
	17.5	816	80	11.21	1.0	
	14	869	100	10.62	0.8	
	28	570	50	13.10	2.5	
NMRV170	23.3	657	60	13.92	1.6	
	17.5	816	80	15.92	1.4	
	14	960	100	16.50	1.0	
	3kw					
NMRV75	186.7	136	7.5	2.78	1.4	
	140	180	10	3.06	1.1	
	93.3	261	15	3.50	0.8	
NMRV90	186.7	138	7.5	3.08	2.1	
	140	182	10	3.39	1.7	
	93.3	264	15	3.89	1.4	
	70	344	20	4.27	1.0	
NMRV110	56	400	25	4.60	0.8	
	46.7	479	30	4.89	0.9	
	93.3	264	15	4.80	2.5	
	70	348	20	5.39	1.6	
NMRV130	56	400	25	5.81	1.6	
	46.7	486	30	6.18	1.5	
	35	638	40	6.80	1.1	
	28	767	50	7.32	0.9	
NMRV150	56	429	25	7.60	2.2	
	46.7	491	30	8.08	2.1	
	35	638	40	8.89	1.6	
	28	767	50	9.58	1.3	
NMRV170	23.3	884	60	10.18	1.0	
	17.5	1113	80	11.21	0.8	
	14	1310	100	16.50	0.8	
	NMRV190	28	777	50	13.10	1.8
23.3		896	60	13.92	1.4	
17.5		1113	80	15.92	1.0	
14		1310	100	16.50	0.8	
4kw						
NMRV75	186.7	182	7.5	2.44	1.4	
	140	243	10	3.39	1.3	
NMRV90	186.7	184	7.5	3.08	1.6	
	140	243	10	3.39	1.3	
	93.3	352	15	3.88	1.0	
NMRV110	70	458	20	4.27	0.8	
	140	242	10	4.28	2.5	
	93.3	352	15	4.90	1.9	
NMRV130	70	464	20	5.39	1.4	

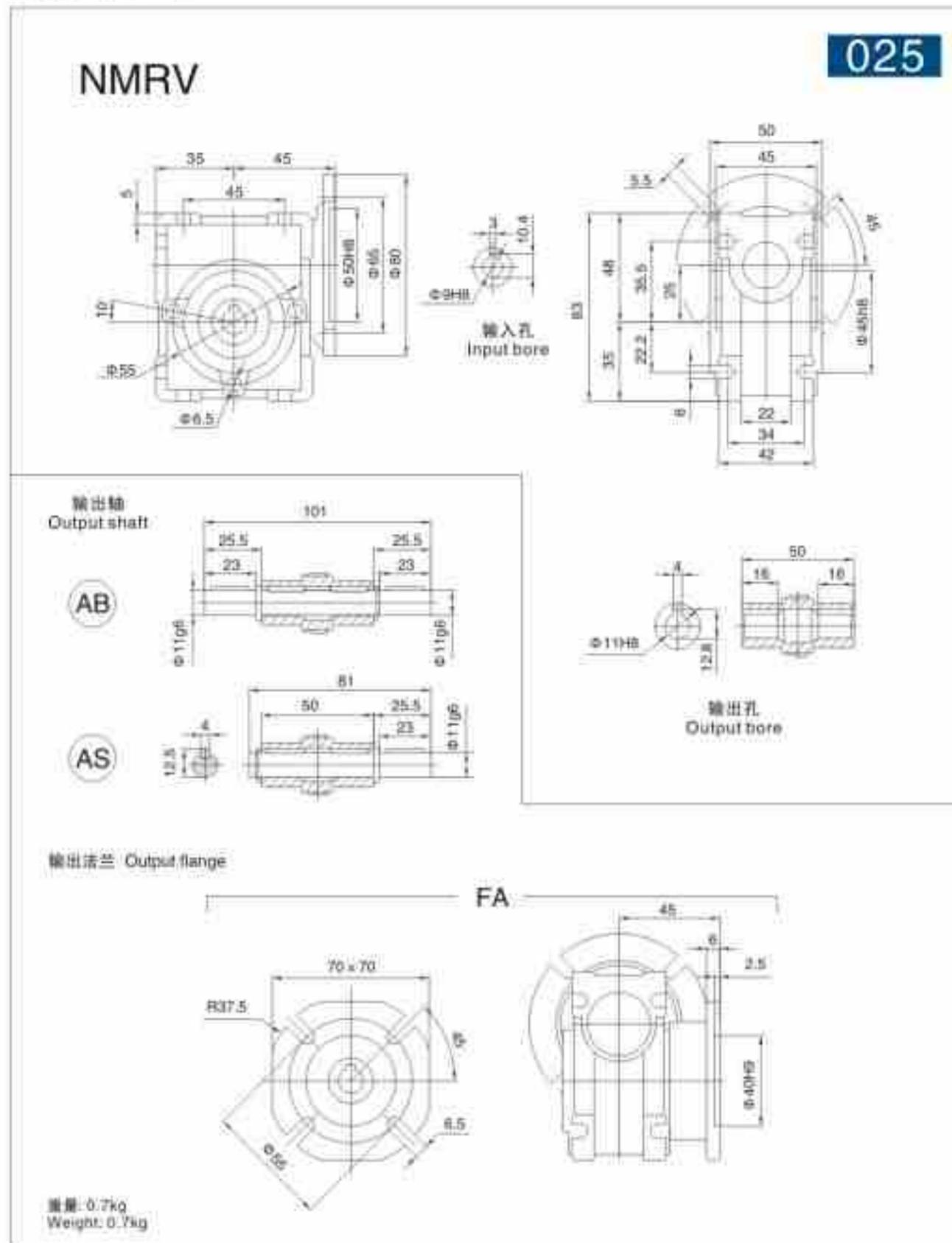
机型号 Model	输出转速 N ₂ (r/min)	输出转矩 M ₂ (N.m)	传动比 i	输出轴 径向力 F _r	使用系数 f _s	
4kw						
NMRV110	56	573	25	5.81	1.2	
	46.7	647	30	6.18	1.1	
NMRV130	56	573	25	7.60	1.6	
	46.7	658	30	8.08	1.6	
	35	851	40	8.89	1.2	
	28	1023	50	9.58	1.0	
NMRV150	23.3	1179	60	10.18	0.8	
	28	1036	50	13.10	1.4	
	23.3	1196	60	13.92	1.1	
NMRV170	17.5	1484	80	15.32	0.8	
	5.5kw					
	NMRV110	186.7	253	7.5	3.89	2.2
140		334	10	4.28	1.8	
93.3		484	15	4.90	1.4	
70		638	20	5.39	0.8	
NMRV130	56	711	25	5.15	1.0	
	140	333	10	5.60	2.5	
	93.3	490	15	6.41	1.9	
	70	645	20	7.06	1.4	
NMRV150	56	788	25	7.60	1.2	
	46.7	900	30	8.08	1.2	
	35	1171	40	8.89	0.9	
	28	1103	50	8.51	0.8	
NMRV170	70	645	20	9.65	2.0	
	56	788	25	10.46	1.5	
	46.7	934	30	11.05	1.3	
	35	1171	40	12.16	1.0	
NMRV190	28	1428	50	13.10	1.0	
	23.3	1643	60	13.92	0.8	
	7.5kw					
	NMRV110	186.7	345	7.5	3.89	1.6
140		455	10	4.28	1.3	
93.3		680	15	4.90	1.0	
70		894	20	5.39	0.8	
NMRV130	186.7	349	7.5	5.09	2.1	
	140	455	10	5.6	1.8	
	93.3	688	15	6.41	1.4	
	70	860	20	7.06	1.0	
NMRV150	56	1074	25	7.6	0.9	
	46.7	1226	30	8.06	0.8	
	35	1586	40	8.89	0.7	
	28	1428	50	13.10	1.0	
NMRV170	23.3	1643	60	13.92	0.8	
	11kw					
	NMRV110	186.7	512	7.5	6.96	2.3
		140	675	10	7.66	1.8
93.3		990	15	8.77	1.3	
70		1291	20	9.65	1.0	
NMRV130	56	1576	25	10.4	0.8	
	15kw					
	NMRV110	186.7	698	7.5	6.96	1.7
140		921	10	7.66	1.3	
93.3		1351	15	8.77	0.9	
70		1790	20	9.65	0.7	

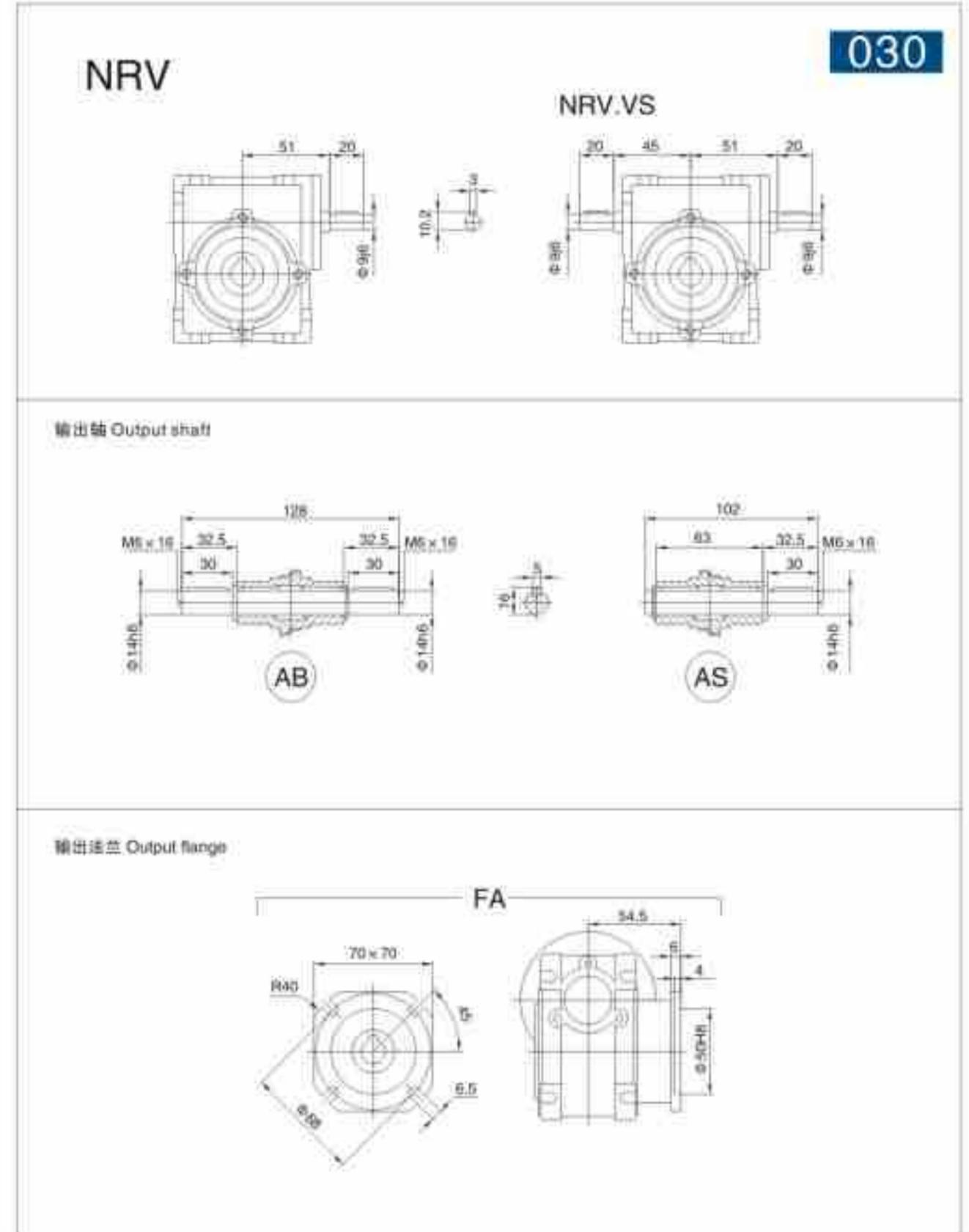
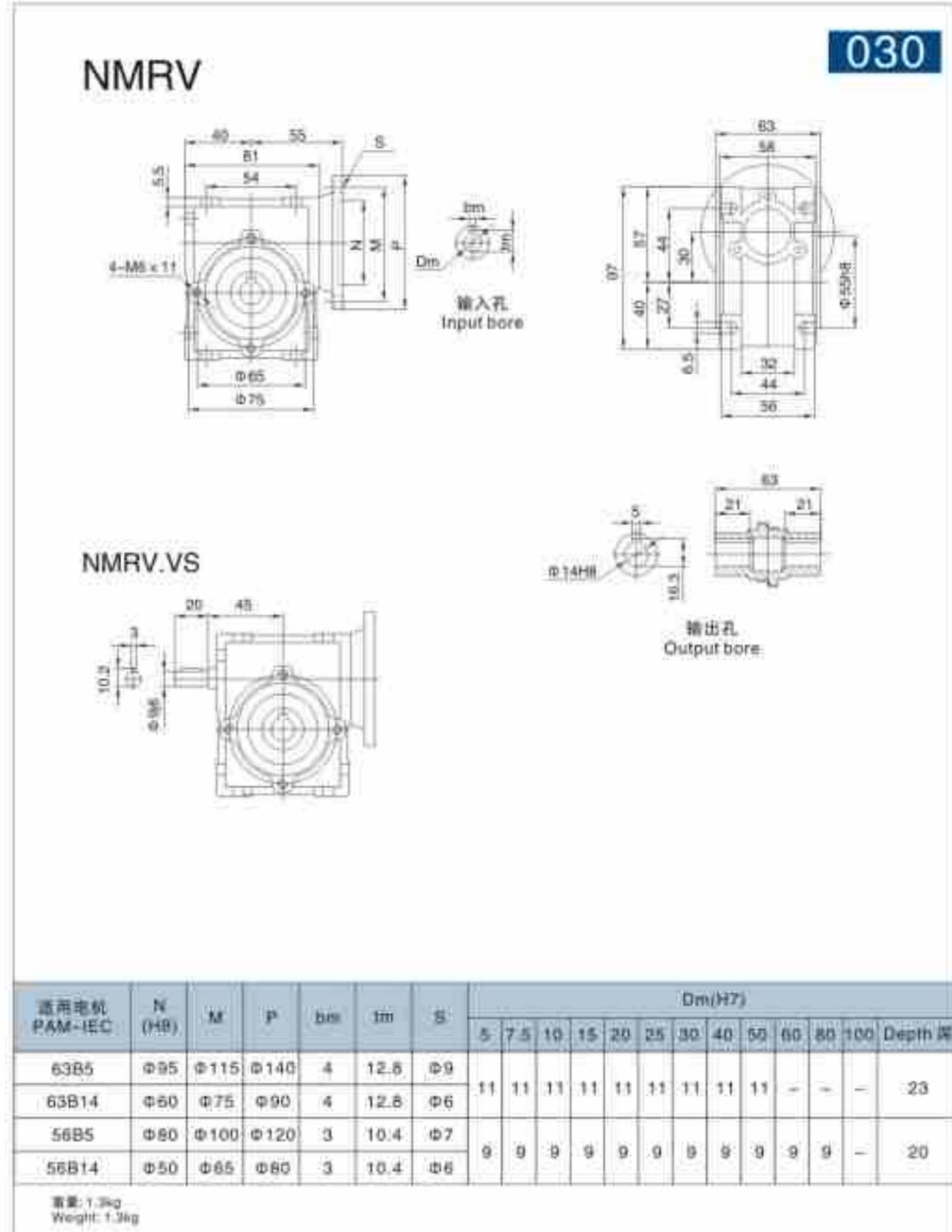
NRV单级 (轴伸输入, 输入转速1400r/min) / (配4极电机)
NRV Single step reducer (shaft extend input, input speed is 1400r/min)

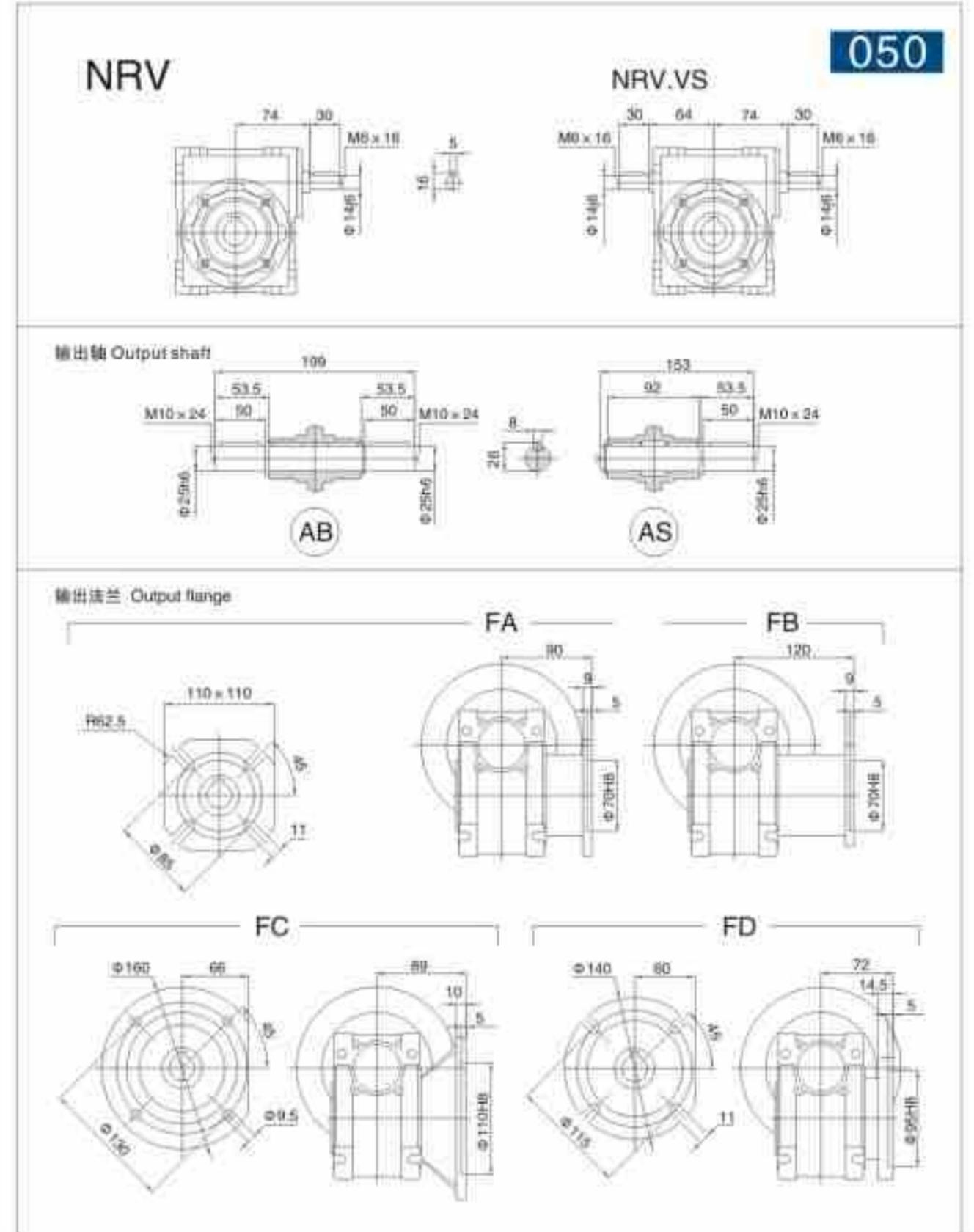
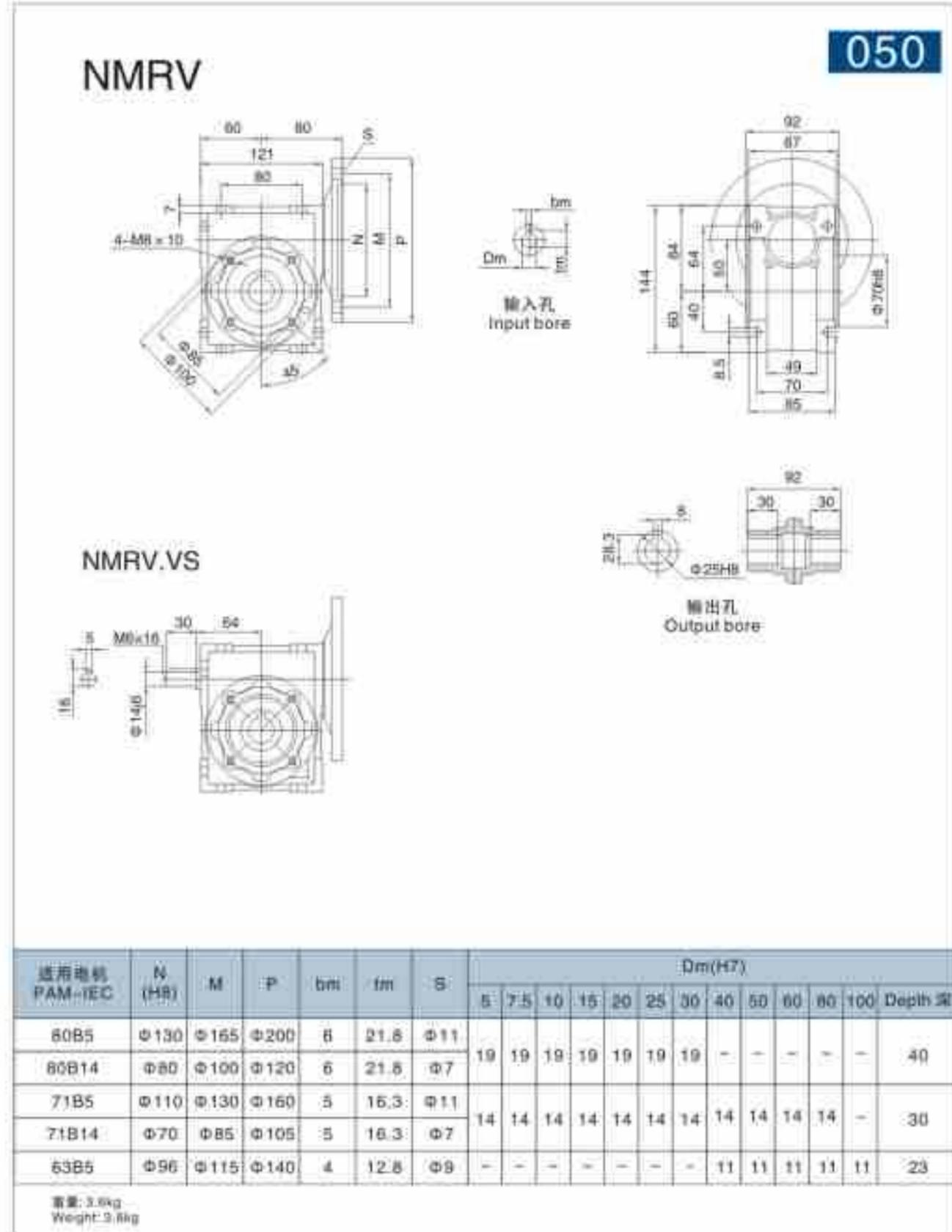
机型号 Model	输入轴 功率 kW	输出转速 No (r/min)	输出转矩 Mo (N.m)	传动比 i	输出轴 径向力 kN	输入轴 径向力 kN
NRV30	0.4	186.7	18	7.5	0.68	0.15
	0.3	140	18	10	0.75	0.16
	0.2	93.3	18	15	0.88	0.16
	0.2	70	18	20	0.94	0.19
	0.2	56	21	25	1.02	0.21
	0.2	46.7	20	30	1.08	0.21
	0.1	35	18	40	1.19	0.21
	0.1	28	17	50	1.28	0.21
	0.1	23.3	16	60	1.36	0.21
	0.1	17.5	13	80	1.50	0.21
NRV40	0.9	186.7	40	7.5	1.31	0.29
	0.7	140	40	10	1.44	0.33
	0.5	93.3	40	15	1.65	0.33
	0.4	70	39	20	1.82	0.35
	0.3	56	38	25	1.96	0.35
	0.3	46.7	45	30	2.08	0.35
	0.2	35	41	40	2.29	0.35
	0.2	28	39	50	2.47	0.35
	0.2	23.3	36	60	2.63	0.35
	0.1	17.5	33	80	2.89	0.35
NRV50	1.6	186.7	71	7.5	1.80	0.4
	1.2	140	72	10	1.98	0.49
	0.9	93.3	74	15	2.27	0.49
	0.7	70	73	20	2.50	0.49
	0.5	56	70	28	2.69	0.49
	0.6	46.7	84	30	2.88	0.49
	0.4	35	78	40	3.15	0.49
	0.3	28	73	50	3.39	0.49
	0.3	23.3	68	60	3.61	0.49
	0.2	17.5	65	80	3.97	0.49
NRV63	2.8	186.7	128	7.5	2.35	0.5
	2.2	140	130	10	2.59	0.57
	1.6	93.3	140	15	2.97	0.61
	1.2	70	136	20	3.27	0.66
	1.0	56	130	25	3.52	0.70
	1.1	46.7	160	30	3.74	0.70
	0.8	35	145	40	4.12	0.70
	0.6	28	135	50	4.44	0.70
	0.5	23.3	130	60	4.71	0.70
	0.4	17.5	122	80	5.19	0.70
NRV75	4.1	186.7	185	7.5	2.78	0.70
	3.2	140	195	10	3.08	0.83
	2.3	93.3	200	15	3.50	0.85
	1.9	70	210	20	3.86	0.88
	1.5	56	200	25	4.18	0.88

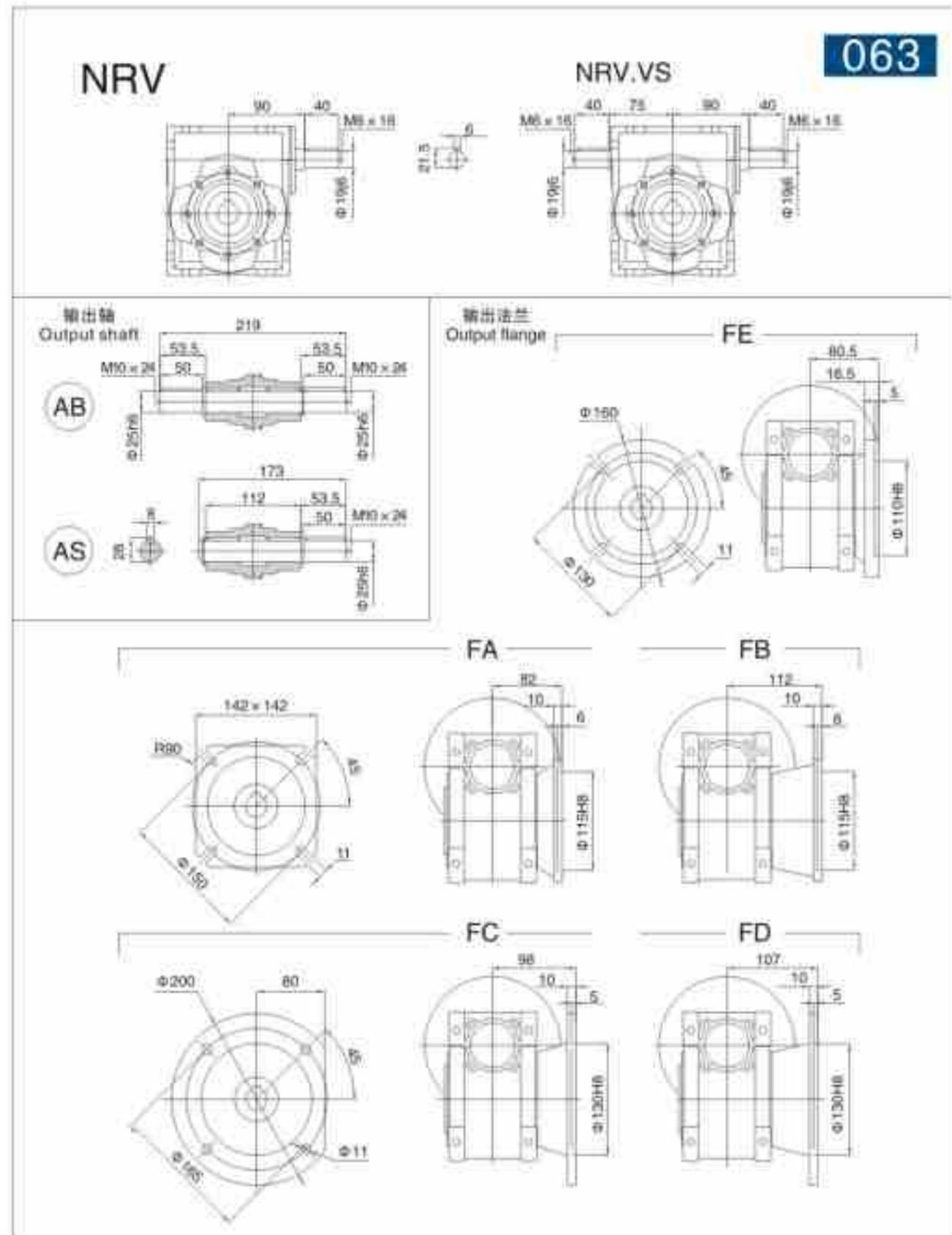
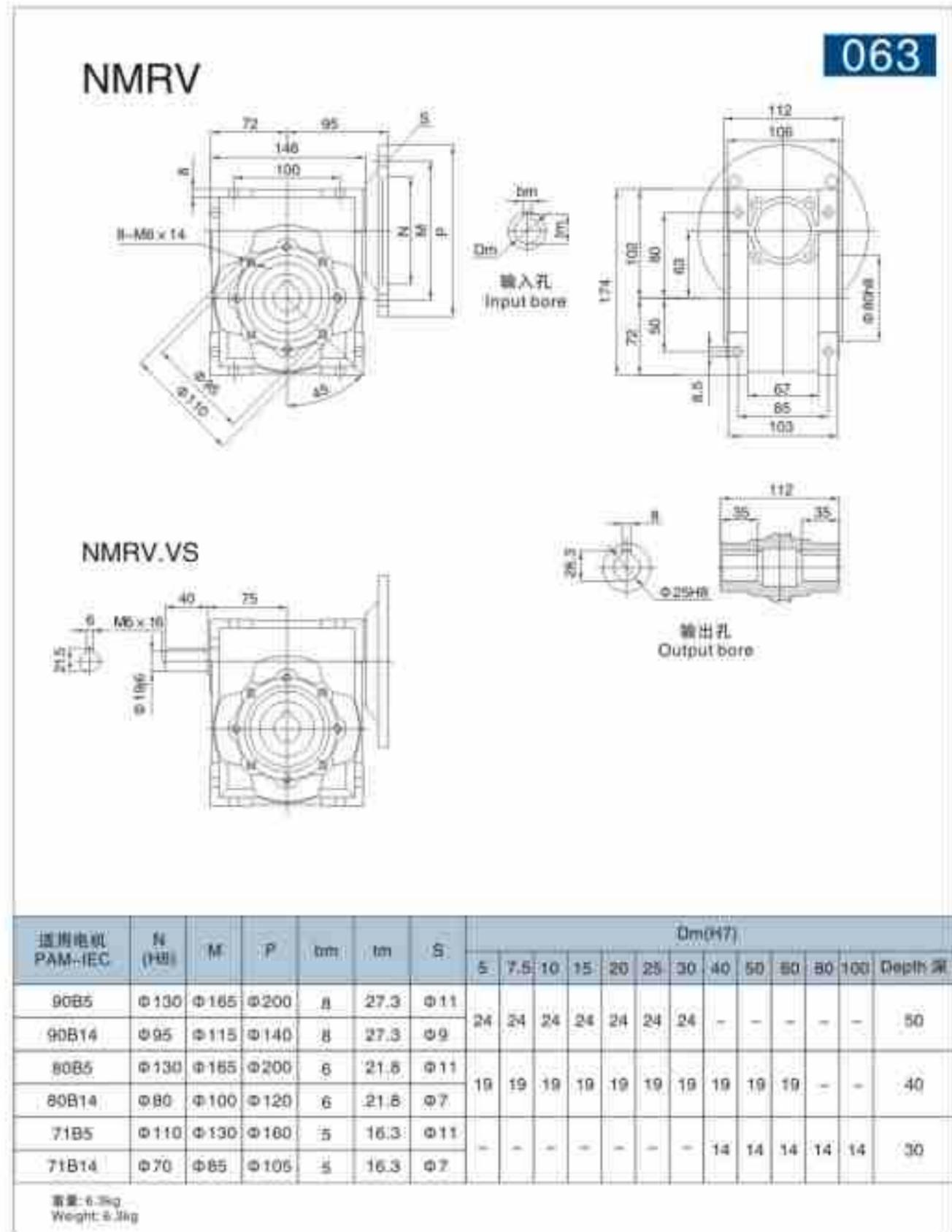
机型号 Model	输入轴 功率 kW	输出转速 No (r/min)	输出转矩 Mo (N.m)	传动比 i	输出轴 径向力 kN	输入轴 径向力 kN
NRV75	1.1	35	220	40	4.86	0.98
	0.9	28	210	50	5.24	0.98
	0.8	23.3	200	60	5.58	0.98
	0.6	17.5	190	80	6.13	0.98
	0.5	14	180	100	6.60	0.98
NRV90	6.3	186.7	290	7.5	3.08	0.90
	5.1	140	310	10	3.39	1.08
	4.1	93.3	360	15	3.88	1.25
	2.4	56	340	25	4.60	1.27
	2.8	46.7	410	30	4.89	1.27
NRV110	1.8	35	360	40	5.38	1.27
	1.4	28	340	50	5.78	1.27
	1.1	23.3	320	60	6.16	1.27
	0.8	17.5	285	80	6.78	1.27
	0.7	14	270	100	7.30	1.27
NRV130	12	186.7	552	7.5	3.89	1.30
	9.8	140	598	10	4.28	1.46
	7.5	93.3	656	15	4.90	1.60
	5.8	70	644	20	5.38	1.70
	4.7	56	679	25	5.81	1.70
	4.5	46.7	725	30	6.18	1.70
	3.3	35	702	40	6.80	1.70
	2.9	28	660	50	7.32	1.70
	2.1	23.3	616	60	7.78	1.70
	1.4	17.5	515	80	8.57	1.70
NRV150	1.1	14	483	100	8.23	1.70
	18.1	186.7	750	7.5	5.08	1.50
	13.5	140	820	10	5.60	1.64
	10.3	93.3	920	15	6.41	2.07
	7.8	70	910	20	7.06	2.10
	6.5	56	930	25	7.60	2.10
	6.4	46.7	1040	30	8.08	2.10
	4.9	35	1050	40	8.89	2.10
	3.8	28	980	50	9.58	2.10
	3.1	23.3	900	60	10.18	2.10
NRV160	2.2	17.5	840	80	11.21	2.10
	1.7	14	740	100	12.07	2.10
	25.6	186.7	1200	7.5	6.96	1.95
	20.2	140	1240	10	7.66	2.28
	13.8	93.3	1290	15	8.77	2.28
	11.1	70	1300	20	9.65	2.67
	8.4	56	1200	25	10.40	2.80
	7.1	46.7	1000	30	11.05	2.80
	7.3	35	1550	40	12.16	2.80
	5.4	28	1400	50	13.10	2.80

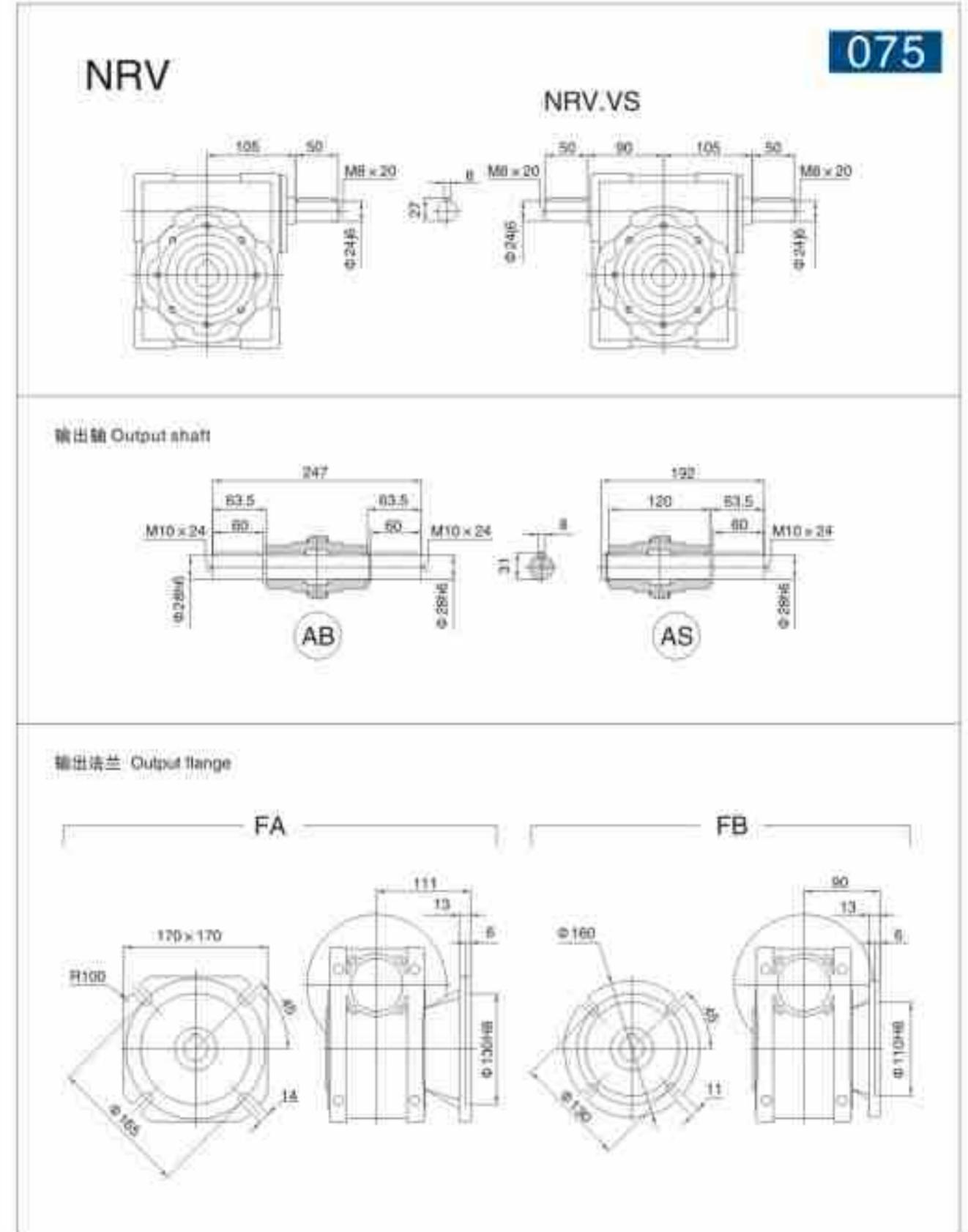
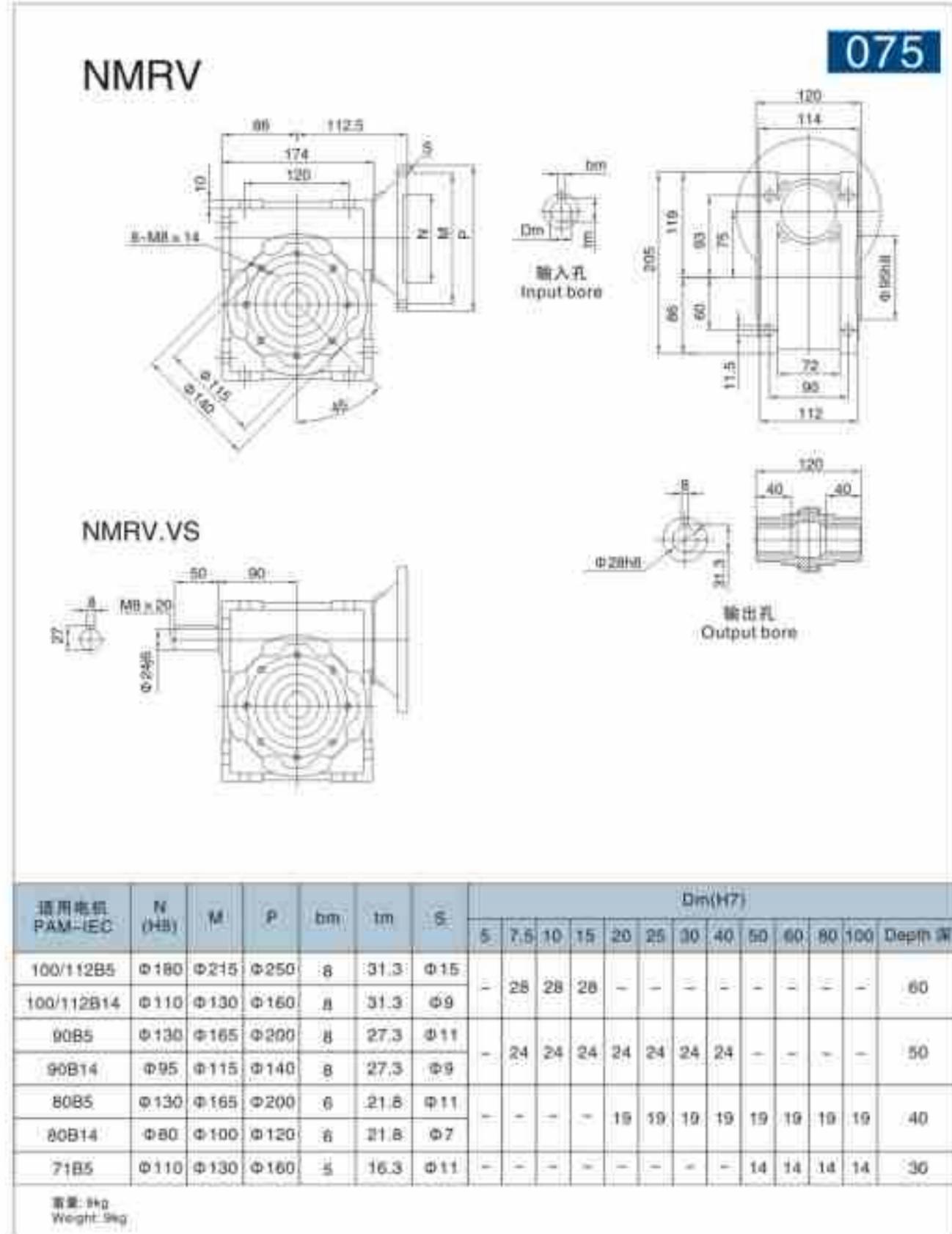
减速机外型尺寸 Dimension





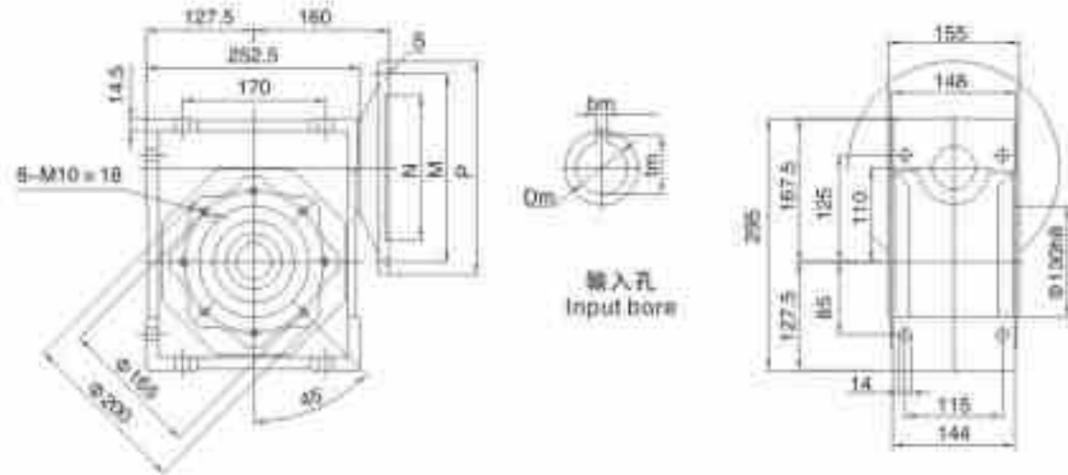






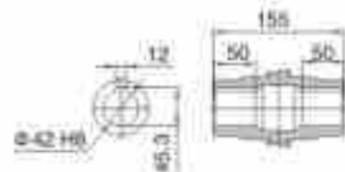
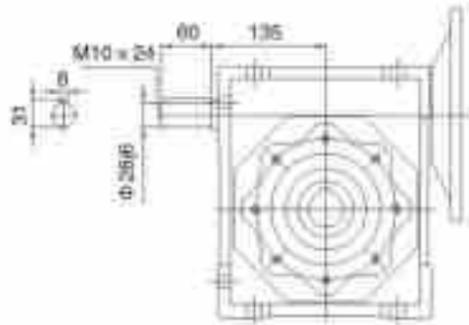
NMRV

110



输入孔
Input bore

NMRV.VS



输出孔
Output bore

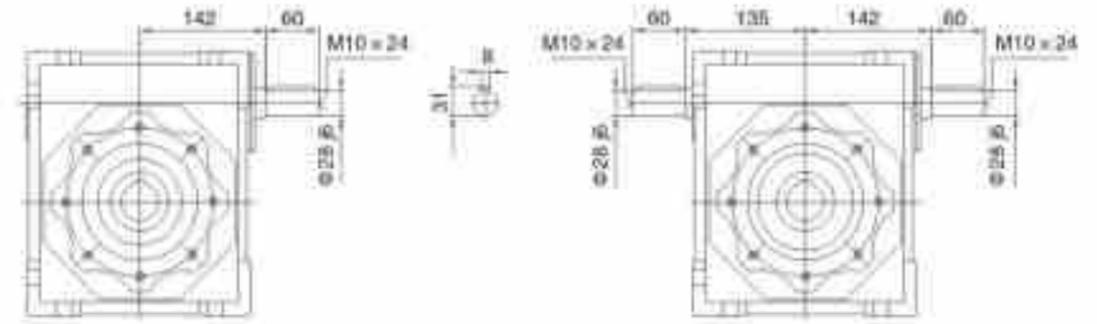
适用电机 PAM-IEC	N (H8)	M	P	bm	tm	S	Dm(H7)														
							5	7.5	10	15	20	25	30	40	50	60	80	100	Depth 深		
132B5	Φ230	Φ265	Φ300	10	41.3	Φ15	-	38*	38*	38*	38*	-	-	-	-	-	-	-	-	-	80
100/112B5	Φ180	Φ215	Φ250	8	31.3	Φ15	-	28	28	28	28	28	28	28	28	28	28	-	-	-	60
90B5	Φ130	Φ165	Φ200	8	27.3	Φ11	-	-	-	-	-	24	24	24	24	24	24	24	24	24	50
60B5	Φ130	Φ165	Φ200	8	21.8	Φ11	-	-	-	-	-	-	-	-	-	-	-	-	19	19	40

重量: 40kg
Weight: 40kg

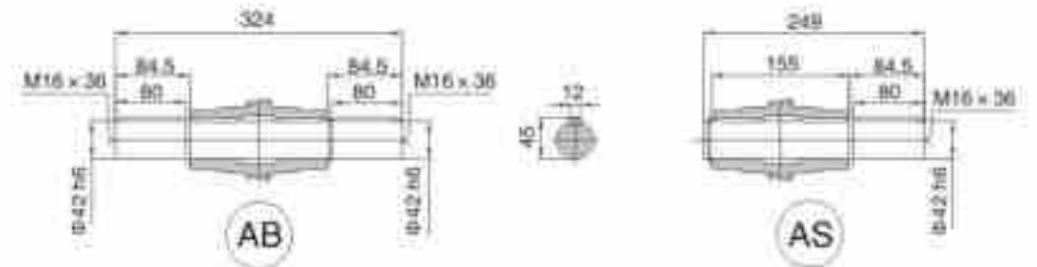
注: 键由DAIFUSI提供。
Note: (*)Low profile key supplied by DAIFUSI.

NRV

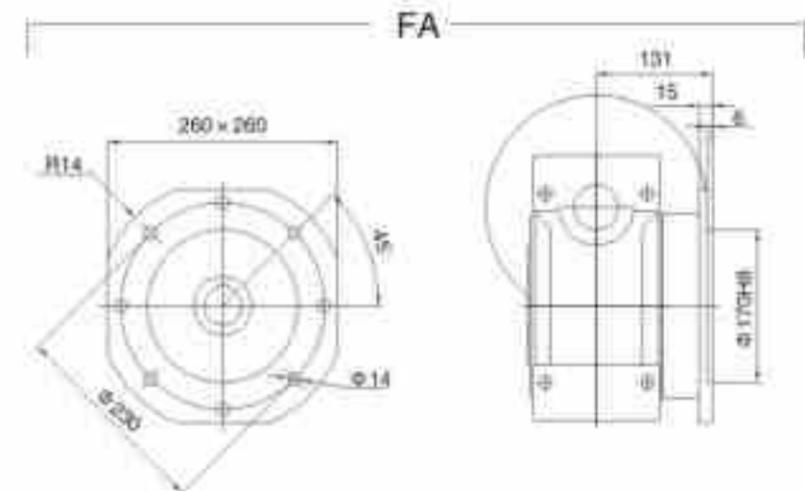
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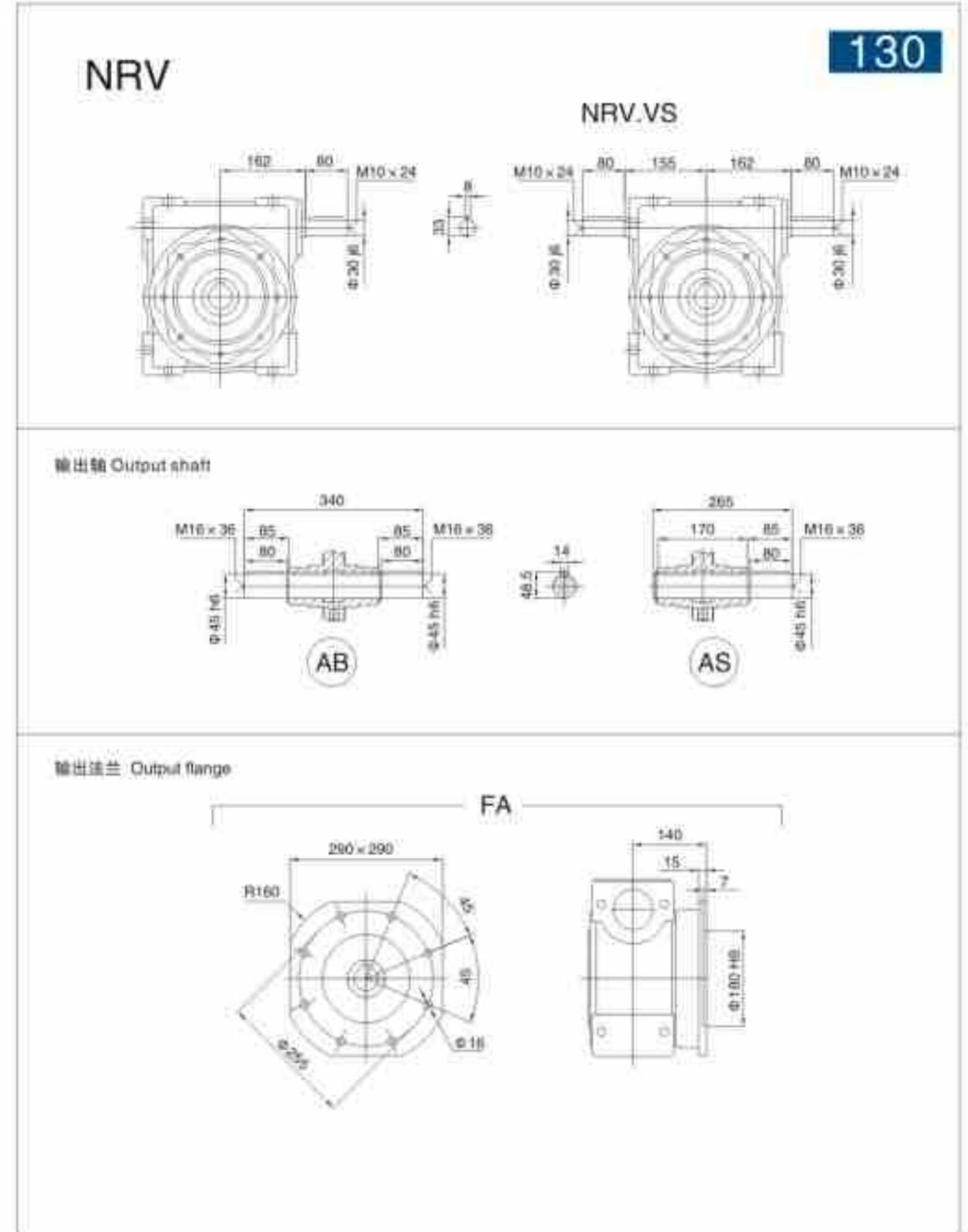
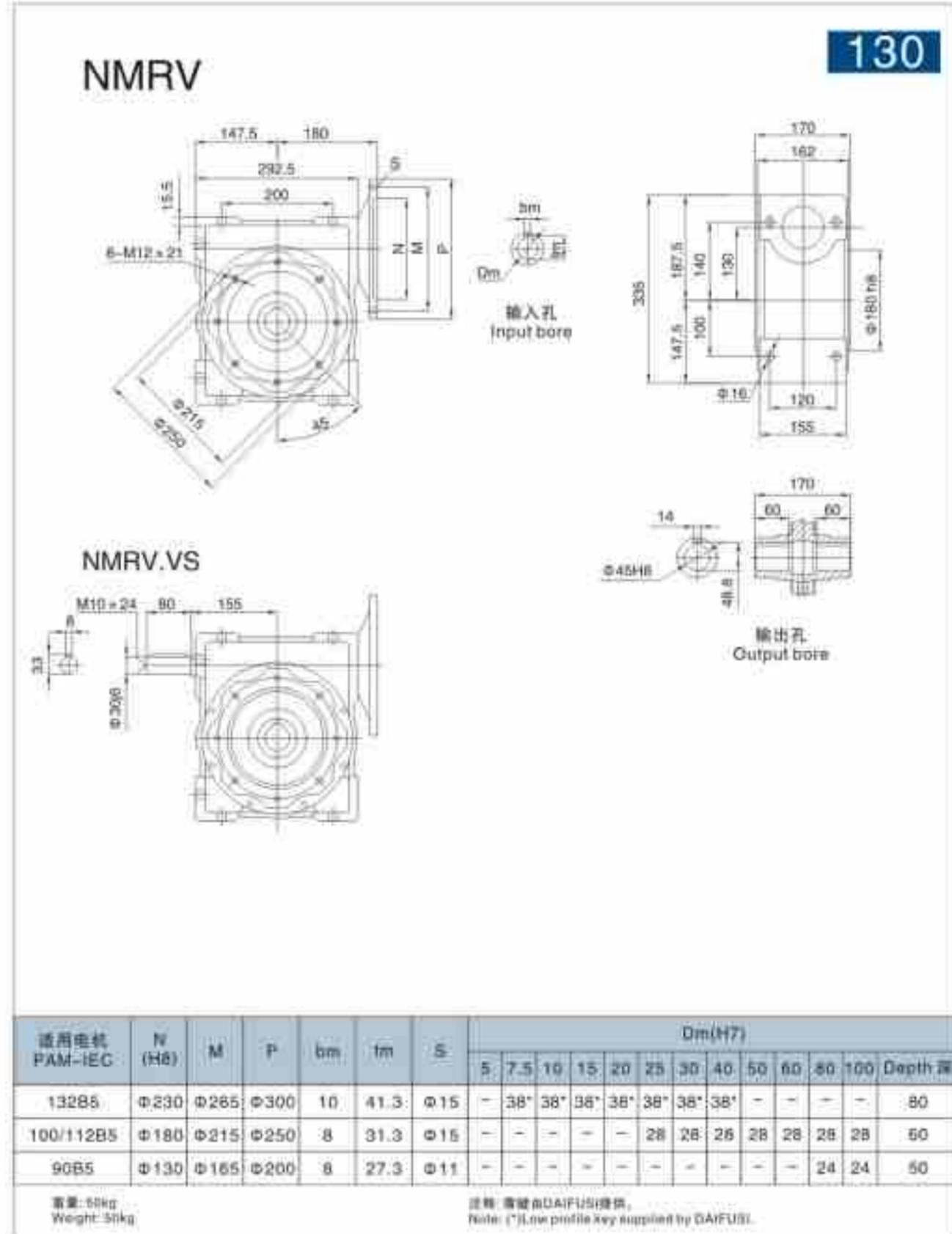


输出轴 Output shaft



输出法兰 Output flange





NMRV
150

NMRV.VS

输入孔 Input bore

输出孔 Output bore

适用电机 PAM-IEC	N (H8)	M	P	bm	tm	S	Dm(H7)												
							5	7.5	10	15	20	25	30	40	50	60	80	100	Depth深
160B8	Φ250	Φ300	Φ350	12	45.3	Φ15	-	42*	42*	42*	42*	42*	42*	42*	-	-	-	-	110
132B5	Φ230	Φ265	Φ300	10	41.3	Φ15	-	-	-	-	-	38	38	38	38	-	-	-	80
100/112B5	Φ180	Φ215	Φ250	8	31.3	Φ15	-	-	-	-	-	-	-	28	28	28	28	-	60

重量: 84kg
Weight: 84kg

注: 键由DAIFUSI提供。
Note: (*)Low profile key supplied by DAIFUSI.

NRV
150

输出轴 Output shaft

(AB)

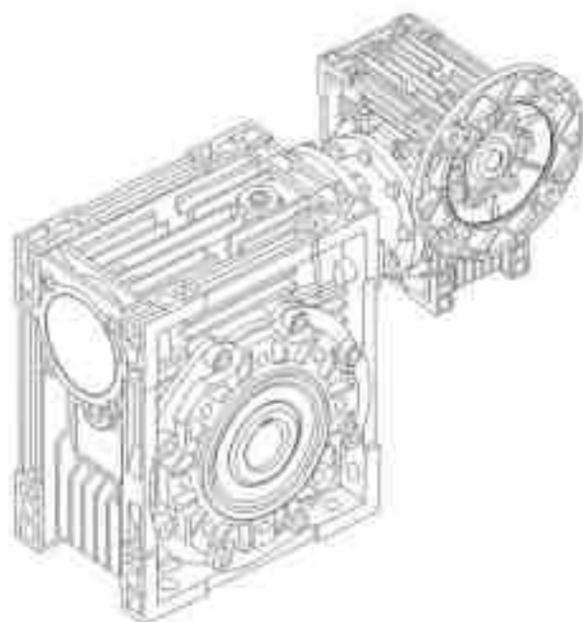
输出轴 Output shaft

(AS)

输出法兰 Output flange

(FA)

6. NMRV双级蜗杆减速机
NMRV double step worm gear reducer



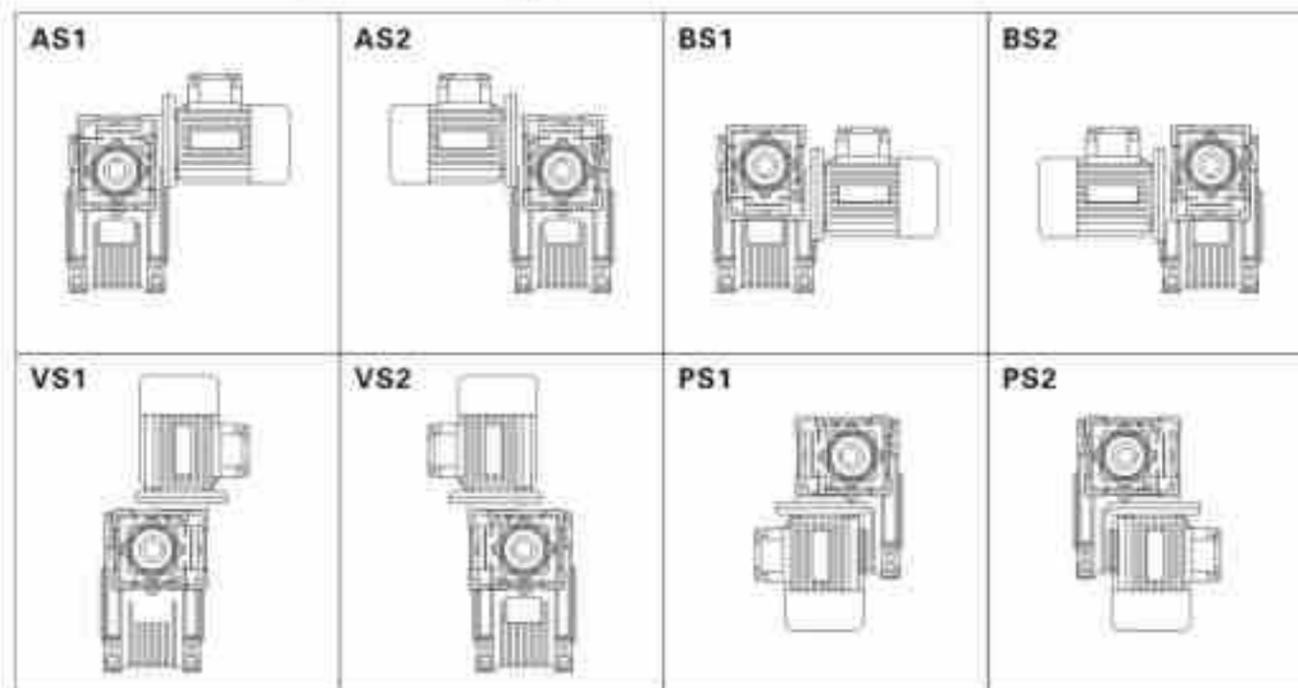
NMRV-NMRV

型号说明 Model notes

NMRV-063/130-600-VS-F1(FA)-AS-80B5-0.75kW-AS1			
NMRV-NMRV	蜗轮减速机 Worm gear speed reducer		
NRV-NMRV	蜗轮减速机 (配接输入轴) Worm gear speed reducer (Matching input shaft)		
063/130	蜗轮减速机中心距 Center distance		
600	减速比 Reduction ratio		
VS	双向输入轴 Double input shaft	F1(FA)	输出法兰位置及型号 Output flange
AS	单向输出轴 Single output shaft	AB	双向输出轴 Double output shaft
PAM	电机联接 Fitted for motor coupling	80B5	电机机座号和安装结构形式 Motor mounting facility
0.75kW	电机功率 Electric motor power	AS1	安装方位 Mounting position

注：1. 用户需要电机时，请注明“带电机”字样，并注到所带电机的基本参数。
2. 蜗轮及蜗轴为用户定制减速机时请另加零件，本减速机制造成减速机上，用户可单独购买蜗轮自行装配。
Note: 1. If you need motor, please note "with motor" and the model, power & poles of the motor.
2. Accessories are unassembled. You may assemble them according to your need.

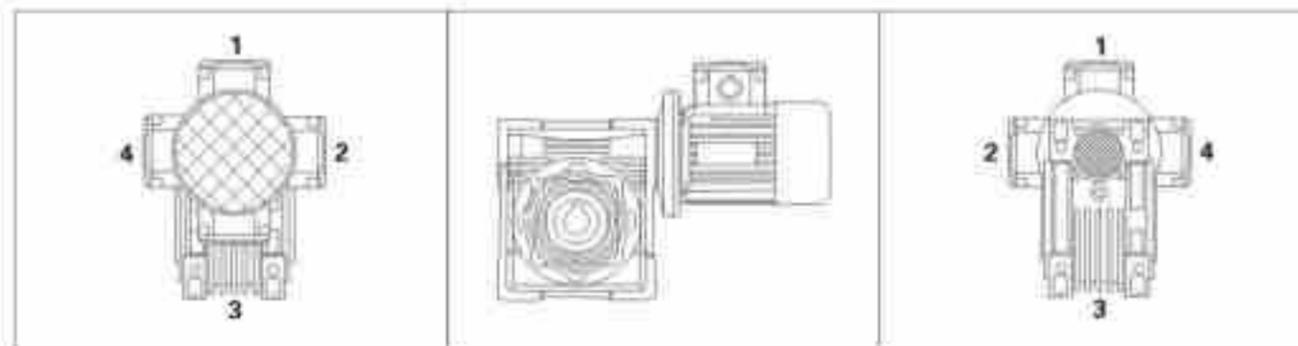
NMRV-NMRV安装方式 Mounting positions



输出法兰 Output flange F-FL



电机接线盒方位 Position of terminal box



选型参数 Parameter selections

双级减速机 (法兰输入, 输入转速1400r/min) / (配4极电机)
Double step reducer(flange input, input speed is 1400r/min)/(matched with 4 poles motor)

组合机型 Model	输出转速 N(r/min)	输出转矩 M(N.m)	总传动比 i	高速级传动比 i1	低速级传动比 i2	输出轴径向力 kN	使用系数 f.s.	
0.06kw								
25/30	14	25	100	10	10	1.62	1.3	
	9.3	32	150	10	15	1.83	0.9	
	7.0	41	200	10	20	1.83	0.7	
	5.6	44	250	10	25	1.83	0.8	
25/40	4.7	59	300	10	30	3.49	1.2	
	3.5	71	400	10	40	3.49	0.9	
	2.8	82	500	20	25	3.49	0.7	
	2.3	101	600	20	30	3.49	0.6	
	1.9	118	750	25	30	3.49	0.5	
	1.6	143	900	30	30	3.49	0.5	
	1.2	171	1200	30	40	3.49	0.4	
	0.9	197	1500	50	30	3.49	0.3	
30/40	0.8	217	1800	60	30	3.49	0.3	
	0.6	268	2400	60	40	3.49	0.2	
	0.5	324	3000	60	50	3.49	0.2	
	0.4	394	4000	50	80	3.49	0.1	
	0.3	456	5000	50	100	3.49	0.1	
	30/50	4.7	57	300	10	30	3.49	1.3
		3.5	70	400	10	40	3.49	0.9
		2.8	86	500	20	25	3.49	0.6
		2.3	104	600	20	30	3.49	0.7
		1.9	121	750	25	30	3.49	0.6
		1.6	138	900	30	30	3.49	0.5
		1.2	166	1200	30	40	3.49	0.4
		0.9	196	1500	50	30	3.49	0.4
	30/63	0.8	218	1800	60	30	3.49	0.3
		0.58	261	2400	60	40	3.49	0.2
		0.4	300	3200	80	40	3.49	0.2
0.4		279	4000	50	80	3.49	0.1	
0.28		338	5000	50	100	3.49	0.1	
40/75		1.6	141	900	30	30	4.84	1.0
		1.2	169	1200	30	40	4.84	0.7
		0.93	199	1500	50	30	4.84	0.7
		0.78	222	1800	60	30	4.84	0.7
		0.6	268	2400	60	40	4.84	0.5
		0.5	307	3000	60	50	4.84	0.4
		0.35	288	4000	50	80	4.84	0.3
	0.29	311	4800	60	80	4.84	0.3	
40/90	0.9	203	1500	30	50	6.27	1.1	
	0.78	225	1800	30	60	6.27	0.9	
	0.58	278	2400	60	40	6.27	0.8	
	0.47	319	3000	60	50	6.27	0.7	
	0.35	366	4000	50	80	6.27	0.6	
	0.28	360	5000	50	100	6.27	0.4	

组合机型 Model	输出转速 N(r/min)	输出转矩 M(N.m)	总传动比 i	高速级传动比 i1	低速级传动比 i2	输出轴径向力 kN	使用系数 f.s.	
0.08kw								
40/75	0.6	330	2400	60	40	7.38	1.1	
	0.47	377	3000	60	50	7.38	0.8	
	0.35	355	4000	50	80	7.38	0.7	
	0.28	419	5000	50	100	7.38	0.5	
40/90	0.5	405	3000	60	50	8.18	1.4	
	0.35	365	4000	50	80	8.18	1.3	
	0.28	431	5000	50	100	8.18	1.0	
	0.09kw							
25/30	14	37	100	10	10	1.83	0.8	
	9.3	49	150	10	15	1.83	0.6	
	7.0	62	200	10	20	1.83	0.5	
	5.6	66	250	10	25	1.83	0.5	
	4.7	75	300	10	30	1.83	0.4	
	3.5	107	400	10	40	1.83	0.3	
	2.8	115	500	20	25	1.83	0.2	
	2.3	135	600	20	30	1.83	0.2	
30/40	1.9	151	750	25	30	1.83	0.2	
	1.6	178	900	30	30	1.83	0.2	
	1.2	212	1200	30	40	1.83	0.1	
	0.9	247	1500	50	30	1.83	0.1	
	0.78	304	1800	60	30	1.83	0.1	
	0.58	340	2400	60	40	1.83	0.1	
	0.47	405	3000	60	50	1.83	0.1	
	30/50	4.7	87	300	10	30	3.49	0.8
		3.5	105	400	10	40	4.84	1.2
		2.8	123	500	10	50	4.84	1.0
		2.3	159	600	20	30	4.84	0.9
	30/63	1.9	185	750	25	30	4.84	0.8
1.6		212	900	30	30	4.84	0.7	
1.2		263	1200	30	40	6.27	1.0	
0.93		305	1500	50	30	6.27	0.7	
40/75	0.9	359	1500	60	30	7.38	1.1	
	0.78	404	1800	60	30	7.38	1.0	
	0.58	496	2400	60	40	7.38	0.7	
	0.12kw							
30/50	4.7	118	300	10	30	4.84	1.2	
	3.5	142	400	10	40	4.84	0.9	
	2.8	164	500	10	50	4.84	0.7	
	30/63	2.8	171	600	15	40	6.27	1.3
2.3		208	800	15	40	6.27	1.1	
1.9		241	750	15	50	6.27	0.9	

组合机型 Model	输出转速 N(r/min)	输出转矩 M(N.m)	总传动比 i	高速级传动比 i1	低速级传动比 i2	输出轴径向力 kN	使用系数 f.s.	
0.12kw								
40/75	1.6	324	900	30	30	7.38	1.2	
	1.2	399	1200	30	40	7.38	0.9	
40/90	0.78	546	1800	30	60	8.18	0.9	
	0.58	695	2400	60	40	8.18	0.9	
50/110	0.5	883	3000	60	50	10.32	1.2	
	0.35	784	4000	50	80	10.32	1.0	
	0.28	928	5000	50	100	10.32	0.8	
0.18kw								
30/63	3.5	221	400	10	40	6.27	1.0	
	2.8	257	500	10	50	6.27	0.8	
40/75	2.3	362	600	20	30	7.38	1.1	
	1.9	435	750	25	30	7.38	0.9	
	1.6	487	900	30	30	7.38	0.8	
40/90	1.2	629	1200	30	40	8.18	1.0	
	0.93	735	1500	50	30	8.18	0.8	
50/110	0.8	860	1800	60	30	10.32	1.5	
	0.58	1113	2400	60	40	10.32	1.1	
0.25kw								
30/63	3.5	159	400	10	40	6.27	1.4	
	2.8	185	500	10	50	6.27	1.2	
40/75	3.5	306	400	10	40	7.38	1.1	
	2.8	384	500	10	50	7.38	0.8	
	2.3	511	600	15	40	8.18	1.2	
40/90	1.9	598	750	15	50	8.18	0.9	
	1.6	667	900	15	60	8.18	0.8	
	1.2	943	1200	30	40	10.32	1.3	
	0.93	1064	1500	50	30	10.32	1.2	
50/110	0.78	1195	1800	60	30	10.32	1.1	
	0.6	1624	2400	60	40	13.5	1.0	
	0.47	1925	3000	60	50	13.5	0.8	
63/130	0.35	2046	4000	50	80	13.5	0.6	
	0.28	2430	5000	50	100	13.5	0.5	
	63/150	0.8	1199	1800	60	30	18	1.8
		0.6	1199	1800	60	30	18	1.8
0.6		1446	2400	60	40	18	1.8	
0.5		1713	3000	60	50	18	1.4	
40/75	4.7	405	300	10	30	7.38	1.0	
	3.5	498	400	10	40	7.38	0.7	
	40/90	4.7	401	300	7.5	40	8.18	1.5
3.5		523	400	10	40	8.18	1.2	
2.8		611	500	10	50	8.18	0.9	
2.3		757	600	15	40	8.18	0.8	
50/110	1.9	949	750	25	30	10.32	1.3	
	1.6	1079	900	30	30	10.32	1.2	
	1.2	1396	1200	30	40	10.32	0.8	
63/130	0.9	1674	1500	50	30	13.5	1.1	

组合机型 Model	输出转速 N(r/min)	输出转矩 M(N.m)	总传动比 i	高速级传动比 i1	低速级传动比 i2	输出轴径向力 kN	使用系数 f.s.
0.37kw							
63/130	0.78	1887	1800	60	30	13.5	0.9
63/150	0.78	1774	1800	60	30	18	1.2
	0.6	2141	2400	60	40	18	1.2
	0.5	2535	3000	60	50	18	0.9
0.55kw							
50/110	4.7	638	300	10	30	10.32	2.0
	3.5	826	400	10	40	10.32	1.4
	2.8	984	500	10	50	10.32	1.1
	2.3	1181	600	15	40	10.32	1.0
	1.9	1411	750	25	30	10.32	0.8
63/130	2.8	995	500	10	50	13.5	1.6
	1.9	1471	750	25	30	13.5	1.2
	1.2	2132	1200	30	40	13.5	0.8
63/150	0.78	2637	1800	60	30	18	0.8
	0.6	3182	2400	60	40	18	0.8
0.75kw							
50/110	4.7	671	300	10	30	10.32	1.5
	0.5	1126	400	10	40	10.32	1.1
63/130	2.8	1357	500	10	50	13.5	1.1
	2.3	1631	600	15	40	13.5	1.0
	1.9	2005	750	25	30	13.5	0.8
	1.6	2283	900	30	30	13.5	0.8
63/150	2.8	1290	500	10	50	18	1.8
	2.3	1629	600	15	40	18	1.7
	1.9	1783	750	25	30	18	1.3
	1.6	2215	900	30	30	18	0.9
	1.2	2680	1200	30	40	18	1.0
1.1kw							
63/130	4.7	1312	300	10	30	13.5	1.3
	3.5	1671	400	10	40	13.5	1.0
	2.8	1991	500	10	50	13.5	0.8
63/150	0.3	752	150	10	15	18	3.1
	7.0	956	200	10	20	18	2.4
	5.6	1175	250	10	25	18	1.7
	4.7	1384	300	10	30	18	1.7
	3.5	1619	400	10	40	18	1.6
	2.8	1993	500	10	50	18	1.2
	2.3	2242	600	15	40	18	1.2
	1.9	2616	750	25	30	18	0.9
1.5kw							
63/130	4.7	1288	300	10	30	13.5	1.0
	3.5	2279	400	10	40	13.5	0.7
63/150	0.3	1026	150	10	15	18	2.3
	7	1317	200	10	20	18	1.8
	5.6	1602	250	10	25	18	1.3
	4.7	1860	300	10	30	18	1.3
	3.5	2208	400	10	40	18	1.2
	2.8	2582	500	10	50	18	0.9
	2.3	3057	600	15	40	18	0.9

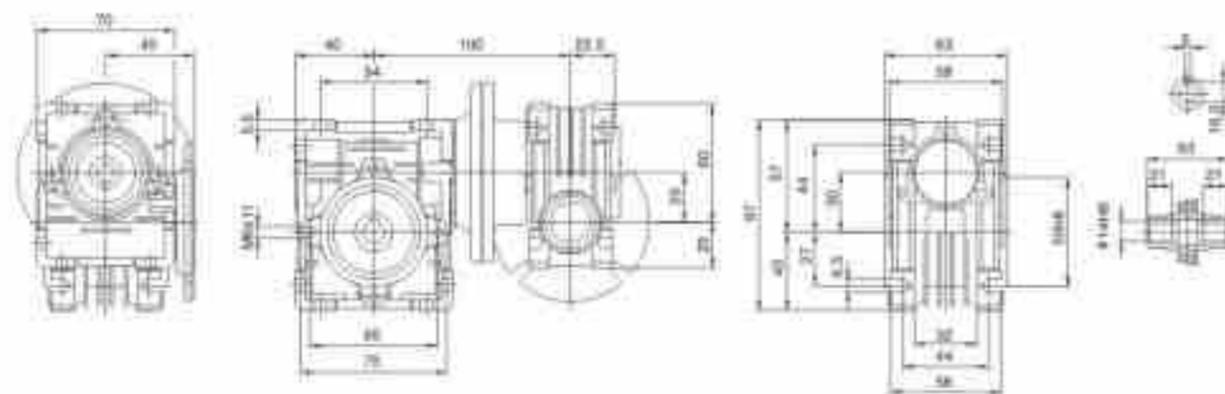
双级减速机 (轴伸输入, 输入转速1400r/min) / (配4极电机)
Double step reducer (shaft extend input, input speed is 1400r/min)

机座代号 Model	输入轴 功率 kW	输出转速 No (r/min)	输出转矩 Mo (N.m)	传动比 i	输出轴 径向力 kN	输入轴 径向力 kN
30/40	0.1	4.7	73	300	3.49	0.21
	0.1	3.5	65	400	3.49	0.21
	0.08	2.8	61	500	3.49	0.21
	0.06	2.3	73	600	3.49	0.21
	0.04	1.9	73	760	3.49	0.21
	0.03	0.8	73	900	3.49	0.21
	0.02	1.2	65	1200	3.49	0.21
	0.02	0.9	73	1500	3.49	0.21
	0.02	0.8	73	1800	3.49	0.21
	0.01	0.58	65	2400	3.49	0.21
	0.01	0.4	65	3200	3.49	0.21
	0.01	0.35	33	4000	3.49	0.21
0.01	0.28	39	5000	3.49	0.21	
30/50	0.15	4.7	145	300	4.84	0.21
	0.1	3.5	124	400	4.84	0.21
	0.1	2.8	120	500	4.84	0.21
	0.1	2.3	145	600	4.84	0.21
	0.1	1.9	145	750	4.84	0.21
	0.1	1.6	145	900	4.84	0.21
	0.08	1.2	124	1200	4.84	0.21
	0.06	0.93	145	1500	4.84	0.21
	0.04	0.78	145	1800	4.84	0.21
	0.03	0.8	124	2400	4.84	0.21
	0.02	0.5	120	3000	4.84	0.21
	0.02	0.35	82	4000	4.84	0.21
0.02	0.29	82	4800	4.84	0.21	
30/63	0.24	4.7	230	300	6.27	0.21
	0.2	3.5	230	400	6.27	0.21
	0.2	2.8	216	500	6.27	0.21
	0.15	2.3	230	600	6.27	0.21
	0.11	1.9	216	750	6.27	0.21
	0.1	1.6	198	900	6.27	0.21
	0.1	1.2	230	1200	6.27	0.21
	0.1	0.93	216	1500	6.27	0.21
	0.1	0.78	198	1800	6.27	0.21
	0.1	0.58	230	2400	6.27	0.21
	0.08	0.47	216	3000	6.27	0.21
	0.06	0.35	172	4000	6.27	0.21
0.04	0.28	150	5000	6.27	0.21	
40/75	0.4	4.7	390	300	7.38	0.35
	0.3	3.5	360	400	7.38	0.35
	0.21	2.8	320	500	7.38	0.35
	0.2	2.3	390	600	7.38	0.35
	0.2	1.9	390	750	7.38	0.35
	0.14	1.6	390	900	7.38	0.35
	0.11	1.2	360	1200	7.38	0.35
	0.1	0.93	390	1500	7.38	0.35
	0.1	0.78	390	1800	7.38	0.35
	0.1	0.58	360	2400	7.38	0.35
	0.1	0.47	300	3000	7.38	0.35
	0.08	0.35	250	4000	7.38	0.35
0.06	0.28	230	5000	7.38	0.35	

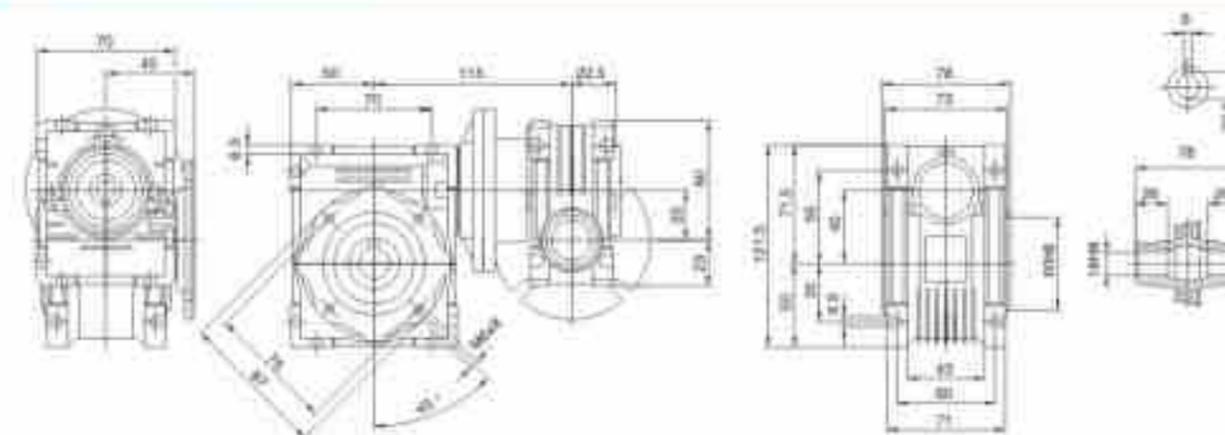
机座代号 Model	输入轴 功率 kW	输出转速 No (r/min)	输出转矩 Mo (N.m)	传动比 i	输出轴 径向力 kN	输入轴 径向力 kN	
40/90	0.6	4.7	610	300	8.18	0.35	
	0.43	3.5	610	400	8.18	0.35	
	0.34	2.8	560	500	8.18	0.35	
	0.3	2.3	610	600	8.18	0.35	
	0.23	1.9	560	750	8.18	0.35	
	0.2	1.6	505	900	8.18	0.35	
	0.2	1.2	610	1200	8.18	0.35	
	0.14	0.93	560	1500	8.18	0.35	
	0.11	0.78	505	1800	8.18	0.35	
	0.11	0.58	610	2400	8.18	0.35	
	0.1	0.47	560	3000	8.18	0.35	
	0.1	0.35	460	4000	8.18	0.35	
0.1	0.28	410	5000	8.18	0.35		
50/110	1.1	4.7	1265	300	10.32	0.49	
	0.8	3.5	1185	400	10.32	0.49	
	0.61	2.8	1100	500	10.32	0.49	
	0.6	2.3	1185	600	10.32	0.49	
	0.5	1.9	1265	750	10.32	0.49	
	0.43	1.6	1265	900	10.32	0.49	
	0.31	1.2	1186	1200	10.32	0.49	
	0.3	0.93	1265	1500	10.32	0.49	
	0.3	0.78	1265	1800	10.32	0.49	
	0.2	0.58	1185	2400	10.32	0.49	
	0.15	0.47	1100	3000	10.32	0.49	
	0.13	0.35	819	4000	10.32	0.49	
0.1	0.28	748	5000	10.32	0.49		
63/130	0.8	2.3	1850	600	13.5	0.7	
	0.7	1.9	1760	750	13.5	0.7	
	0.6	1.6	1760	900	13.5	0.7	
	0.4	1.2	1850	1200	13.5	0.7	
	0.4	0.93	1760	1500	13.5	0.7	
	0.4	0.78	1760	1800	13.5	0.7	
	0.3	0.58	1650	2400	13.5	0.7	
	0.2	0.47	1550	3000	13.5	0.7	
	0.1	0.35	1220	4000	13.5	0.7	
	0.1	0.28	1100	5000	13.5	0.7	
	63/150	3.4	9.3	2340	150	18	0.7
		2.7	7.9	2340	200	18	0.7
1.9		6.6	2050	250	18	0.7	
1.9		4.7	2340	300	18	0.7	
1.8		3.5	2670	400	18	0.7	
1.4		2.8	2330	500	18	0.7	
1.3		2.3	2670	600	18	0.7	
1.0		1.9	2330	750	18	0.7	
0.7		1.6	2100	900	18	0.7	
0.7		1.2	2670	1200	18	0.7	
0.4		0.8	2100	1800	18	0.7	
0.5		0.8	2670	2400	18	0.7	
0.3	0.5	2330	3000	18	0.7		
0.2	0.4	1880	4000	18	0.7		
0.2	0.3	1650	5000	18	0.7		

NMRV-NMRV外形尺寸 Dimension

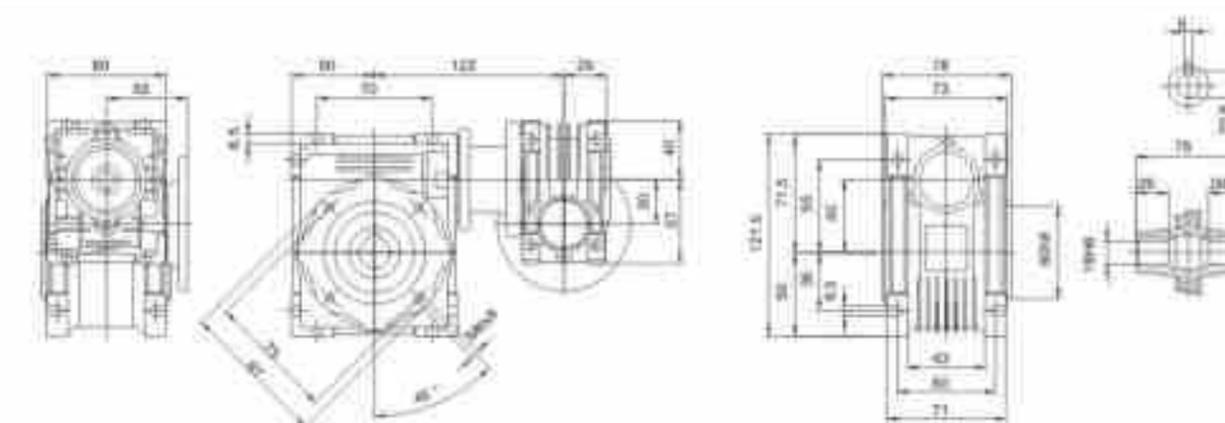
NMRV025-NMRV030



NMRV025-NMRV040

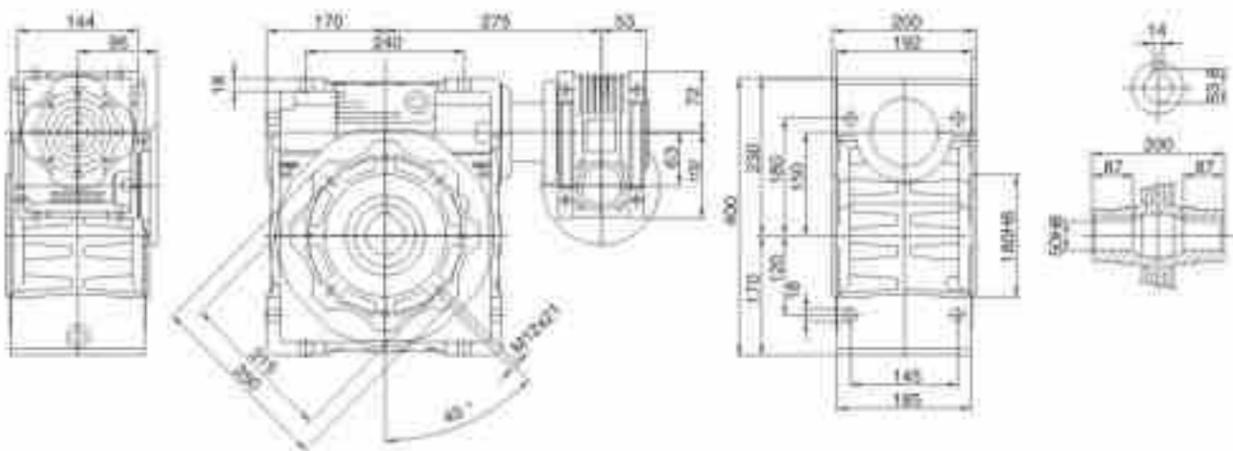


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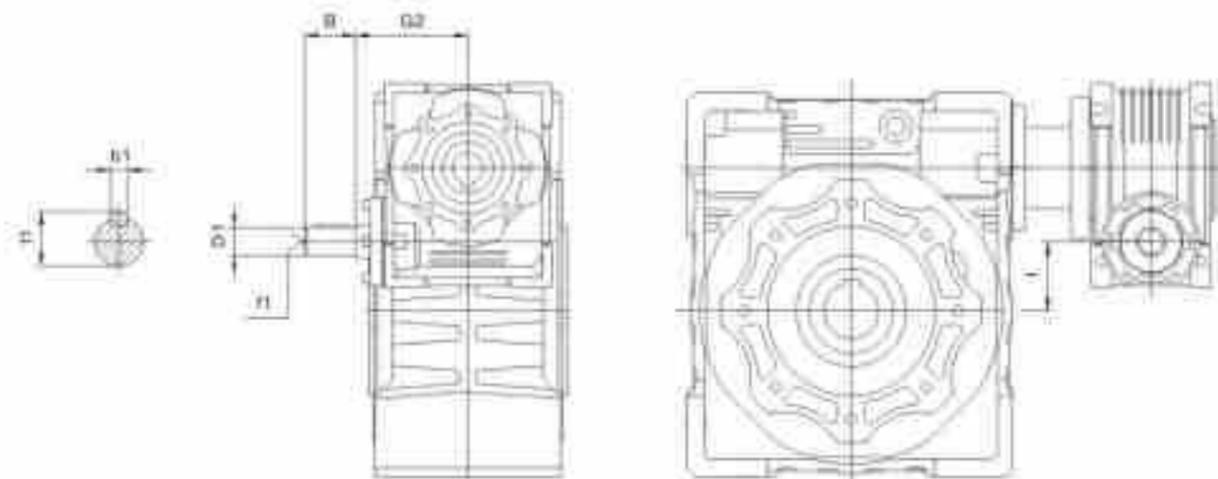


NMRV-NMRV外形尺寸 Dimension

NMRV063-NMRV150



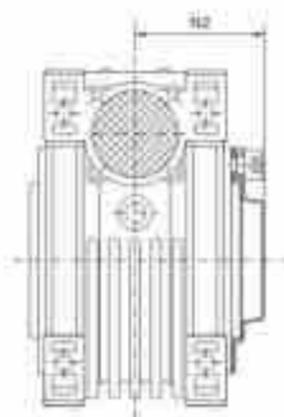
NRV-NMRV外形尺寸 Dimensions



NRV-NMRV	025-030	025-040	038-040	030-050	030-063	040-075	040-090	050-110	063-130	063-150
B	20	20	20	20	20	23	23	30	40	40
D1	9 j6	11 j6	11 j6	14 j6	19 j6	19 j6				
G2	42	42	51	51	51	60	60	74	90	90
l	5	15	10	20	33	35	50	60	67	87
b1	3	3	3	3	3	4	4	5	6	6
fl	-	-	-	-	-	-	-	M6	M6	M6
tl	10.2	10.2	10.2	10.2	10.2	12.5	12.5	16	21.5	21.5

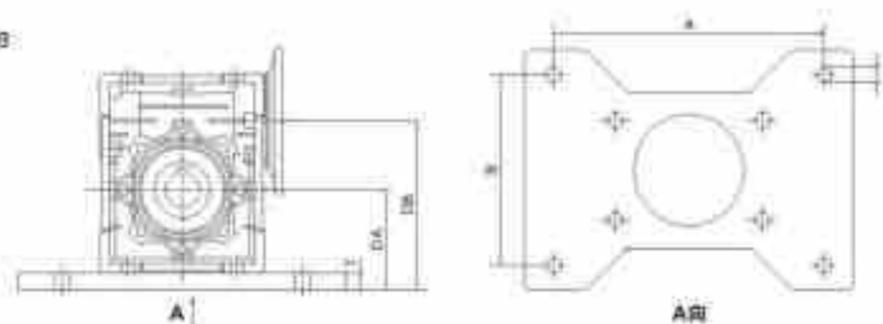
7. 附件
Accessories

防护罩 Protective cover



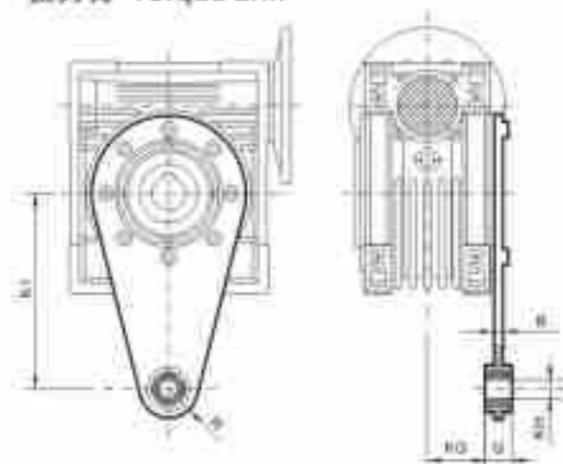
030	42
040	50
050	58
063	69
075	74
090	86
110	94
130	102
150	112

基座 Base plate



	030	040-A	040-B	050	063-A	063-B	075	090
A	111	111	146	162	170	203	214	241
B	84	84	114	119	124	133	149	155
C	8.5	6.5	10.5	12.5	12.5	12.5	12.5	12.5
DA	57	67	70	76	89	93	101.5	117.5
DB	87	107	110	128	152	156	176.5	207.5
T	17	17	20	16	17	21	15.5	14.5

扭力臂 Torque arm



	K1	R	KG	G	KH	B
025	70	15	17.5	14	8	4
030	85	15	24	14	8	4
040	100	18	31.5	14	10	4
050	100	18	38.5	14	10	4
063	150	18	49	14	10	6
075	200	20	47.5	25	20	6
090	200	30	57.5	25	20	6
105	250	35	62	30	25	6
110	250	35	62	30	25	6
130	250	35	69	30	25	6
150	250	35	84	30	25	6

8. 使用说明 Operating instructions

1. 单级蜗杆减速机

- 1.1 减速机型号25-90采用优质铝合金压铸箱体,外形轻巧美观,结构紧凑,体积小,重量轻,节省安装空间,不易锈蚀。
- 1.2 减速机型号110-150采用灰铸铁压铸箱体,外型美观坚固,可多方位安装使用。
- 1.3 散热性能好,安全可靠,效率高。
- 1.4 承载能力高,传动平稳,振动小,噪音低。
- 1.5 具有动力输入及转矩输出的多种联接结构,满足多种联接需要;箱体外形设计及底脚孔设置布局适应多种安装方式,通用性强。

2. 双级蜗杆减速机

- 2.1 由单级蜗杆减速机组合而成,具有单级蜗杆减速机的一切优点,并获得大的传动比。
- 2.2 常用双级组合机型为:25/30、25/40、30/40、30/50、30/63、40/75、40/90、50/110、63/130、63/150,用户若有特殊要求时,可根据实际需要选择25、30、40、50、63、75、90、110、130、150作为组合单元另行组合。

3. 安装注意事项

- 3.1 减速机须安装在平整坚固的底座上,底脚螺栓必须紧固、防震。
- 3.2 原动机—减速机—工作机的各联接轴伸,安装后必须互相准确对准轴线。
- 3.3 减速机输入轴及输出轴轴伸外径尺寸公差按h6制作,与之相匹配的联轴节、皮带轮、链轮等传动件内孔需按公差配合尺寸配置,避免装配过紧损坏轴承,装配过松影响正常的动力传递。
- 3.4 链轮、齿轮等传动件装上轴伸时,应尽量靠近轴承,以减少轴伸弯曲应力。
- 3.5 减速机装配电机时,应在蜗杆头部内孔孔壁及键槽处涂抹黄油,避免装配过紧,防止轴孔日久生锈。
- 3.6 使用各类电机直联型减速机时,若电机重量偏大,应设支撑装置。

4. 使用注意事项

- 4.1 使用前应注意检查减速机型式结构、中心距规格、传动比、输入轴连接方式、输出轴结构、输入轴输出轴指向和回转方向等是否符合使用要求,蜗杆输入转速不宜超过1500r/min。
- 4.2 开机时应逐步增加负载,不能满载启动。
- 4.3 规格25-90减速机仅设加油孔,出厂时减速机内已加好ISO Vg320合成润滑油,用户无需再加油,机器连续运转约500小时后,应该更换润滑油,以后换油周期为6000小时。
- 4.4 型号110-150减速机设有加油孔、溢油孔和油标,减速机内已加ISO VG460W矿物油,用户在使用前应该拉掉通气器上橡胶环,首次运行400小时后换注新油,以后每隔约4000小时换油一次。
- 4.5 减速机允许最高油温为95℃,超过时应停机检查。
- 4.6 若减速机在使用前已放置时间超过4-6个月,而油封又未浸入润滑油中,推荐更换油封。
- 4.7 若减速机使用环境温度超出或低于表中规定使用环境温度5℃以上,请与我公司人员联系。

1. Single step worm gear reducer

- 1.1 The reducer which is 25-90 made of Aluminum alloy die-casting box, good looking in appearance, compact in structure rust proofing on Surface and small volume to save mounting space.
- 1.2 The reducer model 110-150 is made of cast iron which casted with Aluminum mould, it's good looking and solid, and can be used through the setting of multi-azimuth.
- 1.3 Good radiating characteristic leads safe and high efficiency for using.
- 1.4 The strong capacity of loading and overload ensure stable transmission, make less vibration and noise.
- 1.5 Varies of connecting structure for power input and torque output meet different requirements; the design of box outline and the set of foot hole is apt to with high many kinds of mounting.

2. Double step worm gear reducer

- 2.1 It is combined by two single step reducers and has all the virtues of them. And you can get bigger ratio with it.
- 2.2 The models of 25/30、25/40、30/40、30/50、30/63、40/75、40/90、50/110、63/130、63/150, are in common use. You can choose 25、30、40、50、63、75、90、110、130、150 as combination units to combine according to the fact of your special needs.

3. Notes of installation

- 3.1 The base-plate must be plane and stoutness, and the base-bolts must be screwed down and shockproof.
- 3.2 The connecting shafts of prime mover, reducer and operation device must be coaxial after installation.
- 3.3 The diameter tolerance zone of input and output shaft is h6, the holes of fittings(such as couplings, belt-pulley, sprocket wheel and so on) must properly mate the shaft, which prevents bearing from breakage because of over-tight mate or avoid effecting normal power transmission because of over-loose mate.
- 3.4 Drivers such as sprocket wheel and gear must be fitted close to bearing in order to reduce bending stress of hanging shaft.
- 3.5 While assembling motor to the reducer, it is necessary to add butters to the worm shaft input hole and keyway, so as to avoid tightly assembling and rusting when it is used for a long time.
- 3.6 Supporting unit is required when reducers directly match with motors whose weight is bigger than normal types motor is a little bigger than normal.

4. Operating notes

- 4.1 Before using, please check carefully whether the reducer mode, distance size, ratio, input connecting method, output shaft structure, input and output shaft direction and revolving direction are right according to requirement. It is better for the input speed of worm shaft not more than 1500r/min.
- 4.2 The load should be added step by step when using the machine. Never running it with full load.
- 4.3 The reducer which model is among 25-90 has the oil add hole only. It has been full of synthetic lubrication oil ISO VG 320. User doesn't need to think about oil adding, after about 500 hours continual running, please change lubrication oil. Then change the oil once per 600 hours.
- 4.4 The reducer model of 110-150 has oil add hole, oil out hole and oil gauge. Mineral lubrication oil ISO VG 460 has been filled in enough, before using, user must ull out the rubber ring of vent plug. After the first 400 hours running, clean the inter box and change new oil in it. Then change the oil once per 4000 hours.
- 4.5 The permitted temperature of the oil in reducer is 95℃. If up to this value, it must be stopped and checked.
- 4.6 We propose to change oil seal when the reducer has been stored over four to six months and the oil seal has n't been immersed in lubrication oil before using.
- 4.7 When the ambient temperature is 5℃ upper or lower than the normal level stated in the table, please contact with us.

9. 油品润滑
Lubricant

润滑油选用表 Lubrication oil chosen table

减速机规格 Reducer size	25-90	110-150	
润滑油类型 Type of lubrication oil	合成润滑油 Complex lubrication oil	矿物润滑油 Mineral lubrication oil	
环境温度℃ Ambient temperature	-25 ~ +50	-5 ~ +40	-15 ~ +25
ISO VG	ISO VG 320	ISO VG 460	ISO VG 220
AGIP	TELIUM VSF320	BLASIA 460	BLASIA 220
SHELL	TIVELA OIL Sc320	OMALA OIL 460	OMALA OIL 220
ESSO	S220	SPARTAN EP460	SPARTAN EP220
MOBIL	GLYGOYLE 30	MOBIL GEAR 634	MOBIL GEAR 630
CASTROL	ALPHASYN PG320	ALPHA MAX 460	ALPHA MAX 220
BP	ENERGOL SG-XP320	ENERGOL GR-XP460	ENERGOL GR-XP220

润滑油注油量 (L) Adding capacity of lubrication oil

规格 Type	025	030	040	050	063	075	090	110	130	150
B3	0.02	0.04	0.08	0.15	0.3	0.55	1	3	4.5	7
B6 B7								2.2	3.3	5.1
B8								2.5	3.5	5.4
V5								3	4.5	7
V6								2.2	3.3	6.1

10. 故障分析
Malfunctions analysis

故障情况 Fault Description	故障原因 Reasons	解决办法 Solutions
过热 Overheating	原动力、减速机、工作机连接不当 Improper connection among prime mover, reducer and the operation device	调整至适当位置，使三者相联轴轴同轴 Adjust to proper position
	超负荷运转 Overloading	适当调整负荷 Adjust to proper load
	油封过度磨损 Over friction of oil seals	在油封唇口处滴润滑油 Drop lubricant at oil seal
	▫ 润滑油过多或过少 ▫ Lubricant oil overmuch or shortage	按注油方式或调整油量 Adjust to proper oil quantity as lubricant capacity table
振动 Vibration	原动力、减速机、工作机固定不良 Prime mover, reducer and the operation device mount badly	查出不良固定部件，正确安装 Find out the bad piece, tighten it
	蜗轮副齿面磨损或损伤 Tooth surface of worm gear sets worn-out or damaged	更换蜗轮副（需时请与本公司配合） Replace worm gear sets (we will cooperate with you when necessary)
	轴承磨损 Bearing worn-out	更换轴承 Replace Bearing
	螺栓松动 Bolt loose	紧固螺栓 Tighten Screw
噪音 Noise	原动力与减速机连接不当 Improper connection among prime mover, reducer and the operation device	原动机重新调整连接 Adjust to proper position
	轴承损坏或间隙过大 Bearing damaged or too large clearance	更换轴承 Replace Bearing
	蜗轮副啮合不良 Worm gear sets mesh badly	修整齿面或更换蜗轮副（请与本公司联系） Mend tooth surface or replace worm gear sets (please contact to us)
	▫ 润滑油不足 ▫ Lubricant oil shortage	按注油方式或补充润滑油 Fill in adequate oil as lubricant capacity table
漏油 Oil leakage	油封唇口磨损 Oil seal lip worn-out	更换油封 Replace oil seal
	油封唇轴颈磨损 Shaft of oil seal also worn-out	更换输入轴或输出轴蜗轮副 Replace input or output shaft with worm gear
	放油螺塞未拧紧 Oil screw plug loose	拧紧或加密封胶，拧紧螺塞 Tighten oil screw plug
	油标破损 Oil gauge damaged	更换油标 Replace oil gauge
蜗轮副齿面磨损过快 Tooth surface of worm gear sets abrade extra-quickly	超负荷运转 Overload	调整至适当负荷 Adjust to proper loading
	▫ 润滑油不符合要求 ▫ Lubricant oil not according with requirement	更换合适的润滑油 Replace proper lubricant oil
	▫ 润滑油不足 ▫ Lubricant oil shortage	按油标指示添加润滑油 Fill adequate oil as indication
	未按指定时间换油，润滑油劣化 Not replacing lubricant oil in time according to requirement, oil deteriorates	按指定要求适时更换润滑油 Replacing oil in time according to requirement
	运转温度过高 Overheating while running	1. 按“过热”故障处理 2. 采取合适措施，降低周围环境温度 1. Deal with it as "Overheating" 2. Adopting proper measures to make environment temperatue fall

注：1. 为排除因使用不当所致。
2. 如果发生其他故障无法解决时，请及时与我们联系，以便提供售后服务。
Note: 1. To avoid faults due to improper use.
2. If other faults not listed above occur, please contact with us at any moment. Our company will supply through consultation and service.

UD(L) 系列行星锥盘无级变速器
UD(L) series planet cone-disk stepless speed variator

1. 产品图片
Products pictures



2. 产品概述
Product summary

UD(L) 系列行星锥盘无级变速器简介
Brief introduction of UD(L) series planet cone-disk stepless speed variator

UD(L)系列行星锥盘无级变速器融合了国内外先进的技术和工艺,用材高级、加工精良、壳体采用优质铝合金压铸成形。本机具有造型美观、重量轻、体积小、传动效率高、散热快、噪音低、安装灵活、使用方便、寿命长等优点。

UD(L)系列行星锥盘无级变速器可与各种减速器组合,实现无级变速。变速范围大,调速精度高,可在运动中进行。本机可广泛应用于食品、陶瓷、包装、化工、制药以及各种需要调速的自动线、输送带、装配流水线上实现大或调速动力传动及控制。

UD(L) series planet cone-disk stepless speed variator merges domestic and overseas advanced technique and craftsmanship. It chooses high-grade material and of superior processing. It's made of high-quality aluminium alloy diecast into forming. It has merits such as beautiful appearance, small volume, light weight, high transmission efficiency, quick heat dissipation, low noise, flexible installation, convenient use, long life etc.

UD(L) series planet cone-disk stepless speed variator may be combined with various speed reducers to fulfill stepless speed variation, large speed-change scope, high speed-regulative precision, it may be carried out during operation.

It is widely applicable in foodstuffs, ceramics, packing, chemicals, pharmacy and various automatic production lines, conveyor lines, assembly lines which need speed-regulation to fullation power drive & control.

型号及标记 Mood & mark



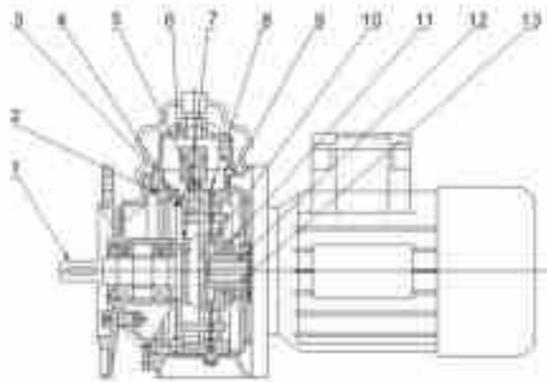
结构与原理 Structure & Principle

行星锥盘无级变速器,其主要传动元件有内行星轴10、13,行星轮8,外行星轴5、9和加压装置、调整轴2等组成,如下图所示。电机轴即为输入轴,带动内行星轴旋转时,内行星轴在碟形弹簧11作用下两面夹紧行星轮以摩擦力驱动行星轮,行星轮在作自转的同时又绕内行星轴公转,其公转运动由行星轮轴通过行星架传递给输出轴。

调速时,转动操作手轮会使活动外行星轴5产生摆动,通过加压装置使行星轮向内(变快)或向外(变慢)移动,以改变行星轮与内行星轴的接触半径,即改变行星轮的自转与公转速度,这样改变的公转运动传递给输出轴即为无级变速输出。

The main drive components of planet cone-disk stepless speed variator consist of innerplanetary orbit 10,13, planetary wheel 8,outer planetary orbit 5,9and compression device regulating orbit 2.As table1.Electric motor shaft is input shaft. While driving inner pia-netary orbit to rotate, the inner planetary orbit lightly clamps planet wheel on both sides under actions of butterfly spring 11 to actuate planet wheel by frictional force. In the m-entime of planet wheel's rotation, it makes revolution round inner planetary orbit. It's revolution motion is transmitted by planet wheel shaft to output shaft through planet su-pport.

While adjusting its speed, rotate operating handwheel to make movable outer planetary orbit 5 swing, make planet wheel inward(quicker) or outward (slower) moving through compr-ession device in order to change thecontact radius between planet wheel and inner planet-ary orbit. That is change planet wheel's rotation & revolution speed. The revolution speed. The revolution motion changed in this way transmitting to output shaft becomes stepless speed variation output.

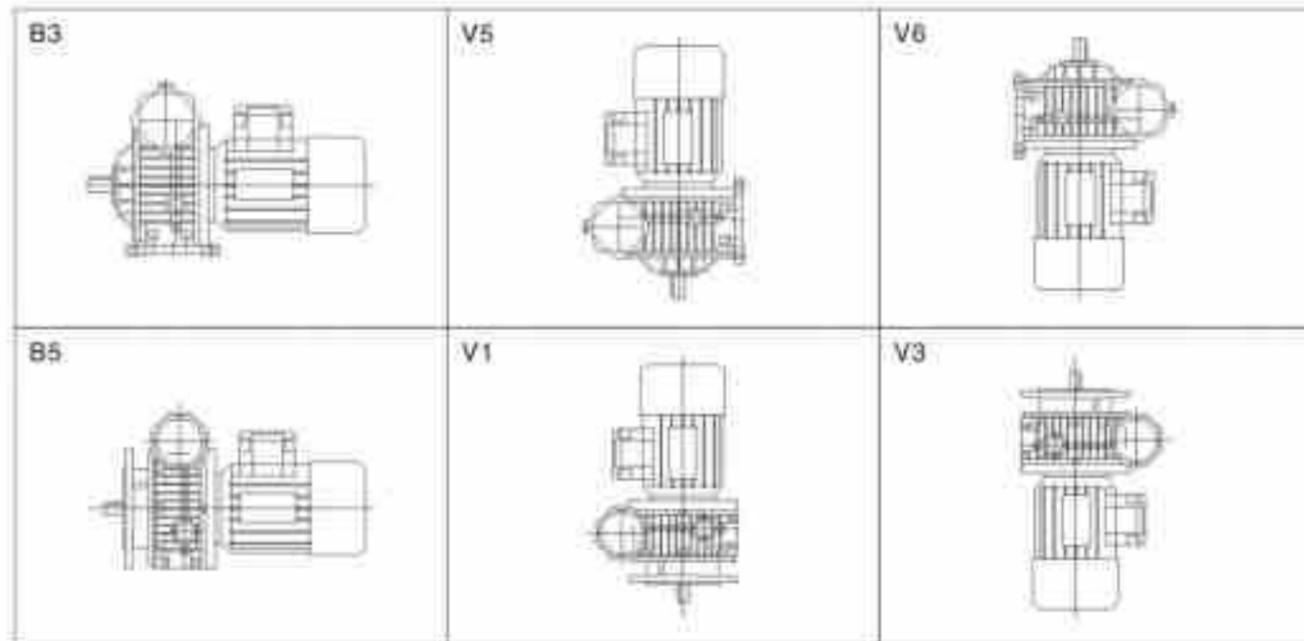


1. 输出轴 Output shaft
2. 调整轴 Regulating orbit
3. 钢球环 Ball ring
4. 滑块 Slide block
5. 活动外行星架 Moving outer planetary orbit
6. 操作室 Operating box
7. 行星架 Planet support
8. 行星轮 Planet wheel
9. 固定外行星架 Fixed outer planetary orbit
10. 活动内行星架 Moving inner planetary orbit
11. 碟形弹簧 Butterfly spring
12. 电机轴 Electric motor shaft
13. 固定内行星架 Fixed inner planetary orbit

UD性能参数 Performance parameter

功率 Power	型号 Model	i	ω_2 /r/min	M2 N·M
0.12 kw	UDL0.12	1.6-8.2	850-170	1-2
0.18 kw	UDL0.18	1.6-8.2	850-170	1.5-3
0.25 kw	UDL0.25	1.4-7	1000-200	2-4
0.37 kw	UDL0.37	1.4-7	1000-200	3-6
0.55 kw	UDL0.55	1.4-7	1000-200	4-8
0.75 kw	UDL0.75	1.4-7	1000-200	6-12
1.0 kw	UD1.1	1.4-7	1000-200	9-18
1.5 kw	UD1.5	1.4-7	1000-200	12-24
2.2 kw	UD2.2	1.4-7	1000-200	16-36
3.0 kw	UD3.0	1.4-7	1000-200	24-48
4.0 kw	UD4.0	1.4-7	1000-200	32-64
5.5 kw	UD5.5	1.4-7	1000-200	44-88
7.5 kw	UD7.5	1.4-7	1000-200	60-120
11 kw	UD11	1.4-7	1000-200	88-176

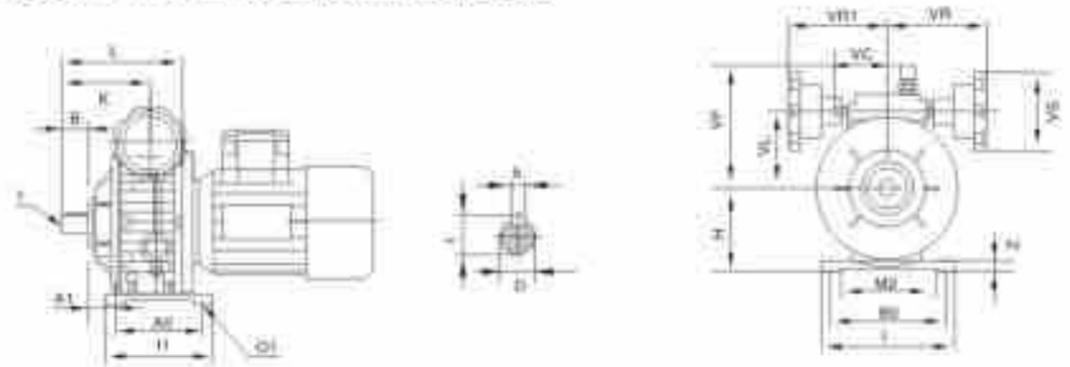
安装方位图 Installation position diagram



3. 安装尺寸
Installation size

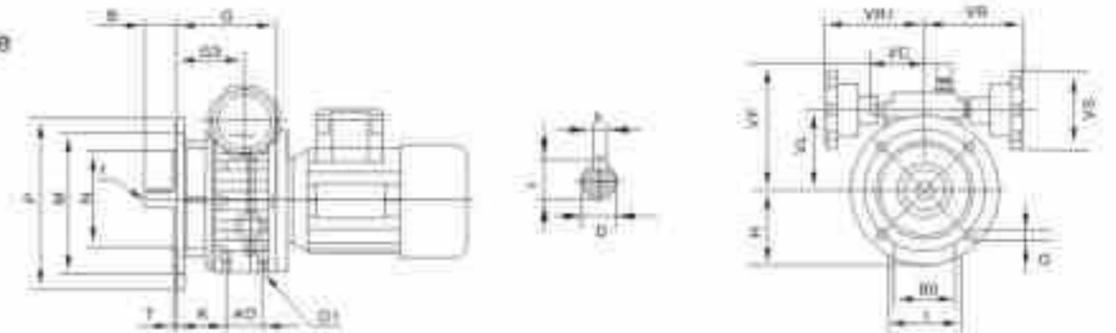
UD(L)外型及安装尺寸 Outline & installation sizes

B3 型
B3 Type



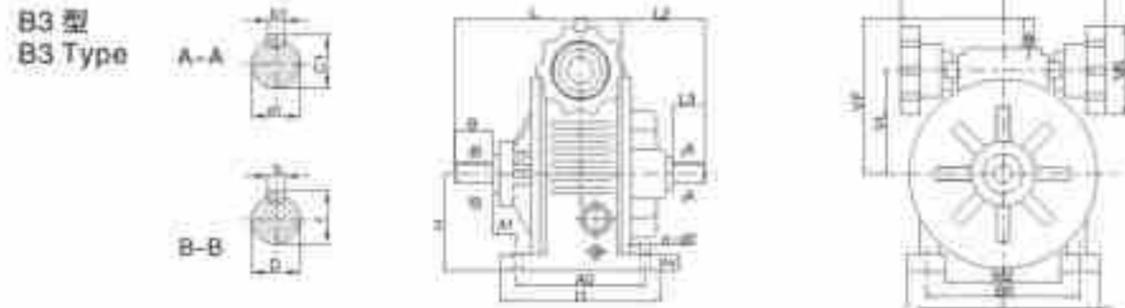
	A0	A1	D(D1)	B0	B	H	I	T	K	L	M2	D1	VF	VL	VR	VR1	VS	Z	g	f	i
UDL0.12	105	17.5	11	110	23	80	145	120	87.5	135.5	71	8	111	78	110	110	75	10	4	-	12.5
UDL0.18	104	26	14	120	30	93	148	128	104	104	35	8	123	90	110	110	75	10	5	M8	18
UDL0.25	125	26	18	160	40	115	190	160	125.5	179	135	11	140	107	120	120	90	15	6	M8	21.5
UDL0.37	140	35	24	180	50	125	230	170	154	219	130	13	144	127	135	135	90	18	8	M8	27
UDL0.55	230	25	28	245	60	150	300	270	191	298	190	14	188	131	166	166	110	25	9	M8	32
UDL0.75	290	30	38	315	70	200	365	280	210	365	245	18	238	182	194	188	110	30	10	M10	38
UD1.1	350	30	50	390	110	224	455	420	305	455	285	20	301	254	266	-	250	45	14	M12	53.5

B5 型
B5 Type



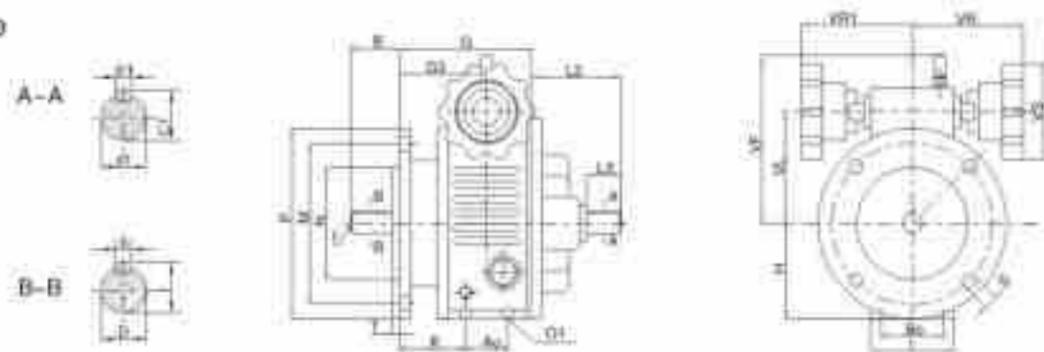
	A0	D(D1)	B0	B	G	G1	H	I	M	N	O	D1	P	T	K	VF	VL	VR	VR1	VS	Z	g	f	i
UDL0.12	50	11	60	23	112.5	64.5	78	72	115	95	9	87	140	15	46	111	78	110	110	75	4	-	12.5	
UDL0.18	40	14	77	30	110	30	83	90	130	110	9	89	160	3.5	53	123	90	110	110	75	5	M8	18	
UDL0.25	58	18	84	40	139	110	100	88	165	130	11	89	200	3.5	80	140	107	120	120	90	6	M8	21.5	
UDL0.37	-	24	-	50	167	125	114	230	155	130	13	-	200	3.5	-	144	127	135	135	90	8	M8	27	
UDL0.55	-	28	-	60	207	190	138	270	215	180	15	-	290	4	-	188	131	166	166	110	8	M8	32	
UDL0.75	-	38	-	70	244	131	200	-	265	230	15	-	300	5	-	238	182	194	-	110	10	M10	38	
UD1.1	-	50	-	110	368	258	244	-	350	300	19	-	400	5	-	301	254	266	-	250	14	M12	53.5	

UD(L) 外型及安装尺寸
UD(L) outline & installation sizes



机座号 Frame size	型号 Model	中心高 The center height	安装尺寸 Installation size			轴伸规格尺寸 Connecting size for shaft extension												外形尺寸 Appearance size							
			A	A1	J	输出轴 Output shaft	输入轴 Input shaft	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
UDL02	UDL0.12 UDL0.18	80	103	17.5	11	110	21	4-4.9	11	12.5	4	23	11	12.5	4	23	24	140	120	135.5	111	78	190	110	75
UDL04	UDL0.25 UDL0.37	90	104	20	11	120	26	4-4.9	14	16	5	30	14	16	5	36	29	140	125	140	123	89	110	110	75
UDL07	UDL0.55 UDL0.75	110	125	28	13	160	32	4-4.11	18	21.5	6	40	19	21.5	6	46	35	130	130	178	140	107	124	128	80
UD15	UD1.1 UD1.5	125	140	45	18	180	50	4-4.13	24	27	8	50	24	27	8	48	41	230	170	218	144	127	138	135	90
UD40	UD3.5 UD4.5	150	230	25	25	240	50	4-4.14	28	31	8	60	24	27	8	50	58	300	270	298	188	151	160	168	110
UD75	UD5.5 UD7.5	200	250	32	31	315	60	4-4.18	38	41	10	70	30	35	10	60	68	355	290	360	238	182	194	194	110
UD150	UD11 UD15	224	260	50	45	330	70	4-4.20	42	45	12	80	40	45	12	80	72	405	405	420	405	301	214	226	230

B5 型
B5 Type

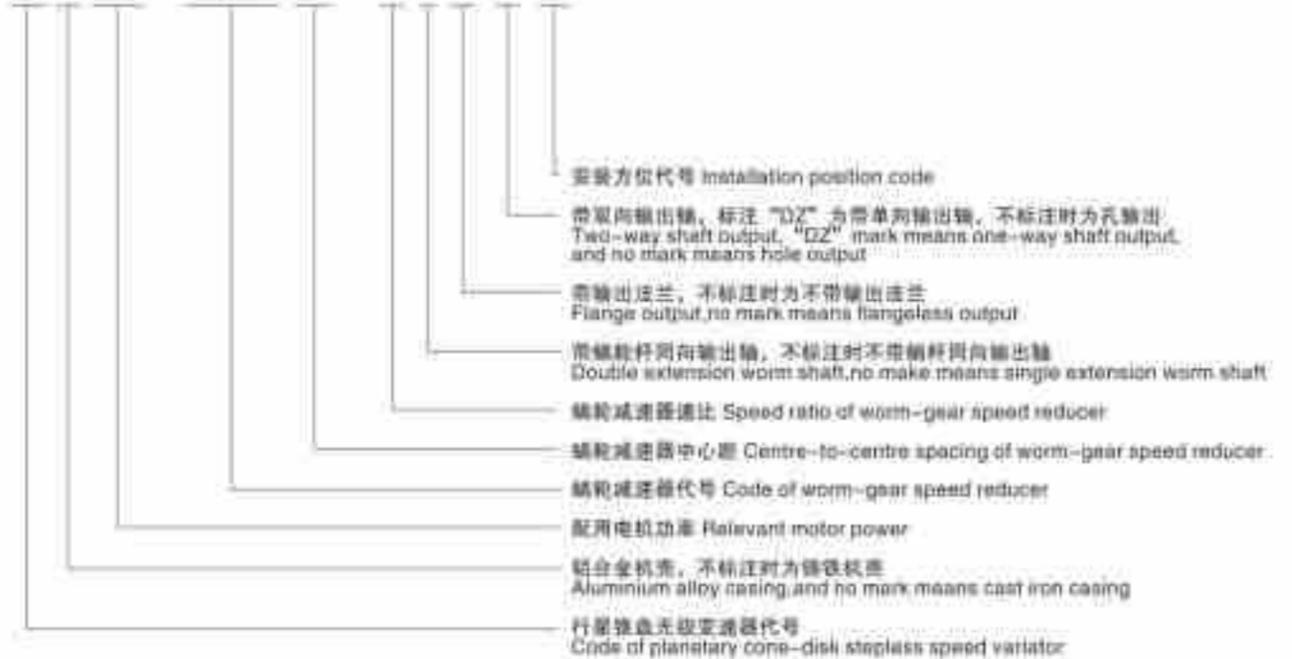


机座号 Frame size	型号 Model	H	H1	h1	h2	DP	x	f	DP	h	h	F	t	DP	h	h	L2	L3	i	HP	HP	HP	VD	VD	VD	VD		
UDL02	UDL0.12 UDL0.18	70	11	4	12.5	11	4	12.5	94.5	50	46	115	95	140	3.5	4.7	23	112	74	23	111	110	110	75	90	22	9	
UDL04	UDL0.25 UDL0.37	80	14	5	16	14	5	16	92	40	55	130	110	100	3.5	4.9	30	110	79	30	145	123	110	110	75	77	9	
UDL07	UDL0.55 UDL0.75	100	19	6	21.5	18	6	21.5	110	50	80	185	130	200	3.5	4.9	40	130	110	40	145	140	120	120	90	94	11	
UD15	UD1.1 UD1.5	115	24	8	27	24	8	27	125	-	-	160	130	200	3.5	-	40	167	91	40	145	144	135	130	90	-	230	13
UD40	UD3.5 UD4.5	135	24	8	27	28	8	28	130	-	-	215	190	250	4	-	50	207	119	50	145	144	138	138	110	-	270	15
UD75	UD5.5 UD7.5	200	30	10	38	38	10	38	131	-	-	265	230	300	5	-	60	244	139	60	170	154	154	110	-	-	15	
UD150	UD11 UD15	224	42	12	45	42	12	45	208	-	-	330	250	350	5	-	82	268	202	82	172	201	208	226	230	-	-	19

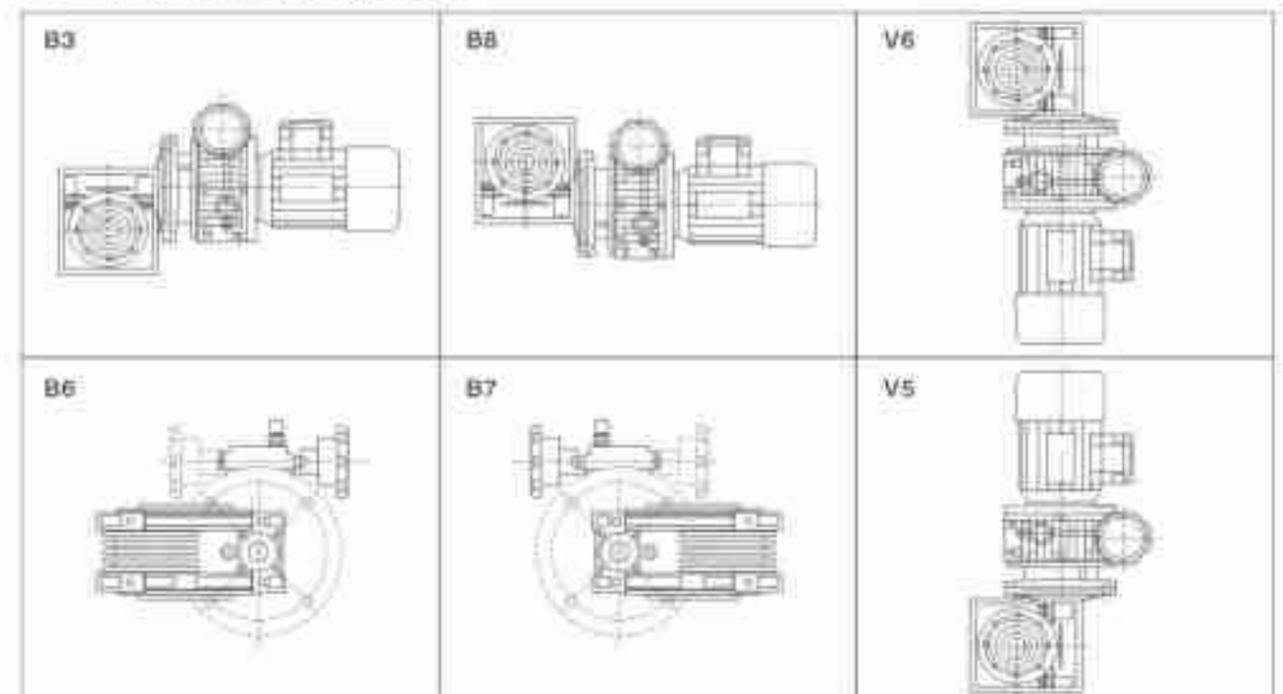
4. 行星锥盘无级变速器与NMRV蜗轮减速器组合
Combination of planet cone-disk stepless speed variator and NMRV worm-gear speed reducer

型号及标记 Mood & mark

UD L 0.75 - NMRV 063 - 40 E F1 SZ B3



安装方位图 Installation position

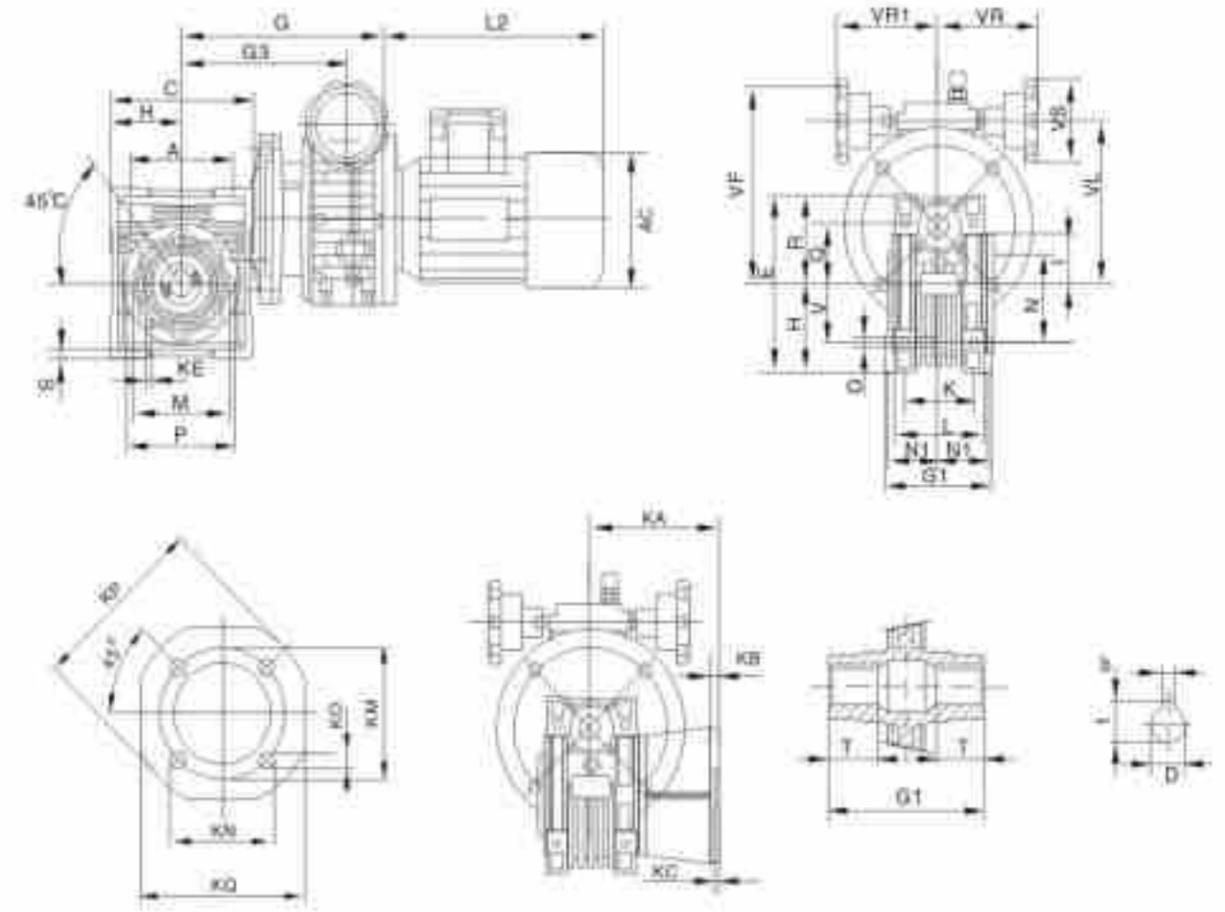


性能参数
performance parameter

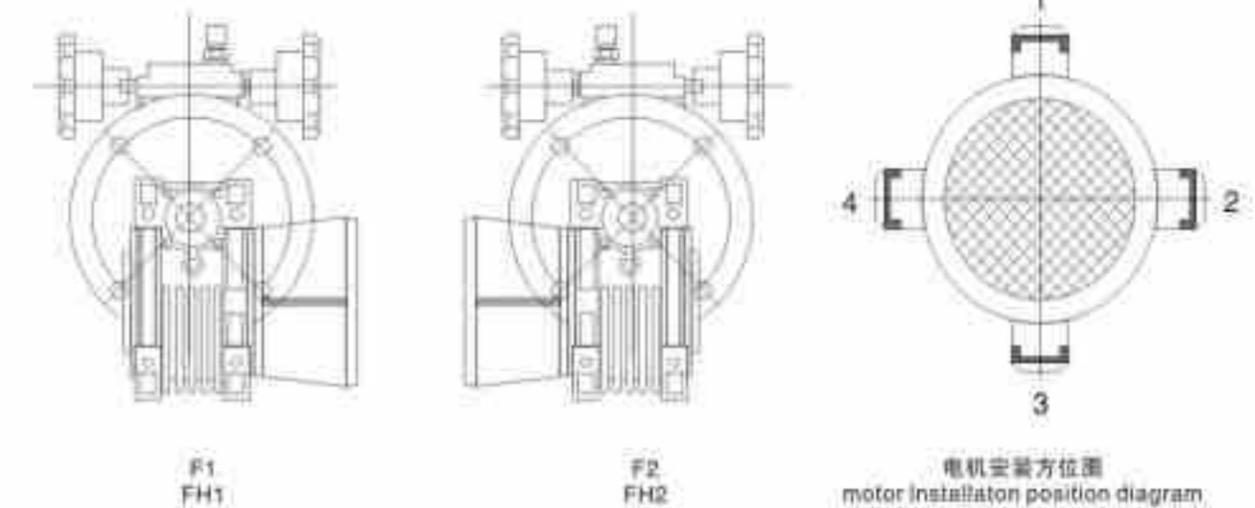
	型号 Model	i	n2 rpm	M2		
0.12K 4P n1=1400r/min	UDL0.12 -NMRV040	7.5	113-23	6-12		
		10	85-17	6-17		
		15	57-11	12-24		
		20	43-8.5	15-31		
		25	34-7	18-36		
		30	28-5.5	20-41		
		40	21-4.5	25-51		
	UDL0.12 -NMRV050	80	11-2	39-78		
		100	8.5-1.5	44-88		
		0.18K 4P n1=1400r/min	UDL0.18 -NMRV040	7.5	113-23	9-18
				10	85-17	12-23
				15	57-11	17-32
				20	43-8.5	22-40
				25	34-7	27-47
30	28-5.5			30-51		
40	21-4.5			37-82		
UDL0.18 -NMRV050	80		14-3	50-80		
	100		11-2	59-82		
	0.25K 4P n1=1400r/min		UDL0.25 -NMRV050	7.5	133-26.7	12-21
				10	100-20	17-34
				15	66.7-13.3	24-48
				20	50-10	31-63
				25	40-8	36-73
30		33.3-6.7		41-82		
40		25-5		51-102		
UDL0.25 -NMRV063		80	12.5-2.5	64-169		
		100	10-2	93-187		
		0.37K 4P n1=1400r/min	UDL0.37 -NMRV050	7.5	133-26.7	19-36
				10	100-20	25-47
				15	66.7-13.3	36-65
				20	50-10	46-82
				25	40-8	55-97
30	33.3-6.7			61-107		
40	25-5			76-124		
UDL0.37 -NMRV063	80		16.7-3.3	104-173		
	100		12.5-2.5	125-172		
	UDL0.37 -NMRV090		80	12.5-2.5	125-172	
			100	10-2	139-150	

	型号 Model	i	n2 rpm	M2 吨 M		
0.55K 4P n1=1400r/min	UDL0.55 -NMRV063	7.5	133-26.7	26-49		
		10	100-20	34-63		
		15	66.7-13.3	48-86		
		20	50-10	62-112		
		25	40-8	75-133		
	UDL0.55 -NMRV075	30	33.3-6.7	91-140		
		40	25-5	105-179		
		60	20-4	123-207		
		0.75K 4P n1=1400r/min	UDL0.75 -NMRV063	60	16.7-3.3	146-242
				80	12.5-2.5	175-260
100	10-2			215-350		
UDL0.75 -NMRV090	7.5			133-26.7	39-73	
	10			100-20	51-94	
	15		66.7-13.3	72-133		
	20		50-10	92-166		
	25		40-8	112-199		
1.1KW 4P n1=1400r/min	UDL1.1 -NMRV063		30	33.3-6.7	126-219	
			40	25-5	156-252	
		60	20-4	185-310		
		UDL1.1 -NMRV075	60	16.7-3.3	219-300	
			80	12.5-2.5	265-428	
	100		10-2	323-410		
	1.5KW 4P n1=1400r/min		UD1.5 -NMRV050	7.5	133-26.7	59-111
				10	100-20	77-144
		15		66.7-13.3	110-203	
		20		50-10	142-258	
25		40-8		172-308		
UD1.5 -NMRV110		30	33.3-6.7	195-340		
		40	25-5	245-350		
		60	20-4	304-517		
		1.5KW 4P n1=1400r/min	UD1.5 -NMRV090	60	16.7-3.3	368-625
				80	12.5-2.5	455-751
100	10-2			522-710		
UD1.5 -NMRV130	7.5			133-26.7	79-148	
	10			100-20	102-192	
	15		66.7-13.3	147-270		
	20		50-10	190-344		
	25		40-8	229-350		
2.2KW 4P n1=1400r/min	UD2.2 -NMRV090		30	33.3-6.7	260-390	
			40	25-5	341-589	
		60	20-4	408-560		
		UD2.2 -NMRV110	60	16.7-3.3	490-833	
			80	12.5-2.5	614-999	
	100		10-2	696-1100		
	2.2KW 4P n1=1400r/min		UD2.2 -NMRV130	7.5	133-26.7	120-226
				10	100-20	157-294
		15		66.7-13.3	226-418	
		20		50-10	298-549	
25		40-8		384-664		
UD3.0 -NMRV110		30	33.3-6.7	413-717		
		40	25-5	533-931		
		60	20-4	648-1097		
		3.0KW 4P n1=1400r/min	UD3.0 -NMRV130	60	16.7-3.3	746-1246
				7.5	133-26.7	160-302
10	100-20			210-392		
15	66.7-13.3			304-558		
20	50-10			398-732		
UD4.0 -NMRV110	25		40-8	485-865		
	30		33.3-6.7	547-956		
	40		25-5	711-1020		
	60		20-4	854-1483		
	4.0KW 4P n1=1400r/min		UD4.0 -NMRV130	7.5	133-26.7	213-402
10		100-20		279-523		
15		66.7-13.3		405-744		
20		50-10		530-975		
25		40-8		653-1190		
UD4.0 -NMRV150		30	33.3-6.7	749-1298		
		40	25-5	900-1850		

外型及安装尺寸 Outline & installation sizes



输出法兰位置图 Position diagram for output flange



外型及安装尺寸 Outline & installation sizes

型号 Model	安装尺寸 Installation Size														输出尺寸 Output Size			
	A	E	KC	IE	KM	X(R)A	KD	M	N(H)	NI	O	Q	S	V	E	D(xZ)	T	T
UDL0.12-NMRV040	70	60	4	M040 (H4)	67	60	10(H4)	75	60	36.5	6.5	55	6.5	35	6	19	21.8	26
UDL0.16-NMRV040	60	70	5	M040 (H4)	90	70	11(H4)	85	70	43.5	8.5	64	7	40	8	25	26.3	30
UDL0.12-NMRV050																		
UDL0.16-NMRV050																		
UDL0.25-NMRV050	100	85	6	M050 (H5)	150	115	11(H4)	95	80	53	8.5	80	8	50	8	25	26.3	36
UDL0.37-NMRV050																		
UDL0.25-NMRV063																		
UDL0.37-NMRV063	120	90	6	M063 (H6)	165	130	14(H4)	115	85	57	11	93	10	60	8	28	31.3	40
UDL0.55-NMRV063																		
UDL0.75-NMRV063																		
UDL0.55-NMRV075	140	100	6	M075 (H6)	175	152	14(H4)	130	110	67	13	102	115	70	10	35	38.3	45
UDL0.75-NMRV075																		
UD1.1-NMRV075																		
UD1.5-NMRV075	170	115	6	M100 (H6)	230	170	14(H4)	165	130	74	14	125	14	85	12	42	45.3	50
UDL0.55-NMRV090																		
UD1.1-NMRV090																		
UD1.5-NMRV090	200	120	6	M120 (H6)	255	180	16(H4)	215	180	81	16	140	15	100	14	45	48.8	60
UD1.1-NMRV110																		
UD1.5-NMRV110																		
UD2.2-NMRV110	200	120	6	M120 (H6)	255	180	16(H4)	215	180	81	16	140	15	100	14	45	48.8	60
UD3.0-NMRV110																		
UD4.0-NMRV110																		
UD1.5-NMRV130	200	120	6	M120 (H6)	255	180	16(H4)	215	180	81	16	140	15	100	14	45	48.8	60
UD2.2-NMRV130																		
UD3.0-NMRV130																		
UD4.0-NMRV130	200	120	6	M120 (H6)	255	180	16(H4)	215	180	81	16	140	15	100	14	45	48.8	60
UD2.2-NMRV130																		
UD3.0-NMRV130																		

型号 Model	外型尺寸 Outline Size																		
	C	E	G	G1	G2	H	I	KA F	KB FH	KBH	KPI	KQ	L	P	R1	VL	V2	VR	VR1
UDL0.12-NMRV040	100	122	163	78	135	50	40	67	97	7	110	95	71	67	71.5	118	75	110	110
UDL0.16-NMRV040																			
UDL0.12-NMRV050																			
UDL0.16-NMRV050	120	144	193	92	145	60	50	90	120	9	125	110	5	100	84	128	75	110	110
UDL0.25-NMRV050																			
UDL0.37-NMRV050																			
UDL0.25-NMRV063	144	174	205	112	169	72	63	82	112	10	180	142	103	110	102	153	75	120	120
UDL0.37-NMRV063																			
UDL0.55-NMRV063																			
UDL0.75-NMRV063	172	205	252	120	198	86	75	111	-	13	200	170	112	140	119	162	90	120	120
UDL0.55-NMRV075																			
UD1.1-NMRV075																			
UD1.5-NMRV075	206	238	288	140	215	103	89	111	-	13	210	200	130	160	135	198	90	145	145
UDL0.55-NMRV090																			
UD1.1-NMRV090																			
UD1.5-NMRV090	253	295	368	155	292	138	110	131	-	15	280	260	144	200	168	261	110	180	180
UD1.1-NMRV110																			
UD1.5-NMRV110																			
UD2.2-NMRV110	293	335	382	170	289	148	130	140	-	15	320	290	158	250	188	257	90	145	145
UD2.2-NMRV130																			
UD3.0-NMRV130																			
UD4.0-NMRV130	293	335	388	170	312	148	130	140	-	15	320	290	158	250	188	281	110	180	180
UD2.2-NMRV130																			
UD3.0-NMRV130																			

5. 行星锥盘无级变速器与WJ蜗轮减速机组合
Combination of planet cone-disk stepless speed variator and WJ worm-gear speed reducer

型号及标记 Mood & mark

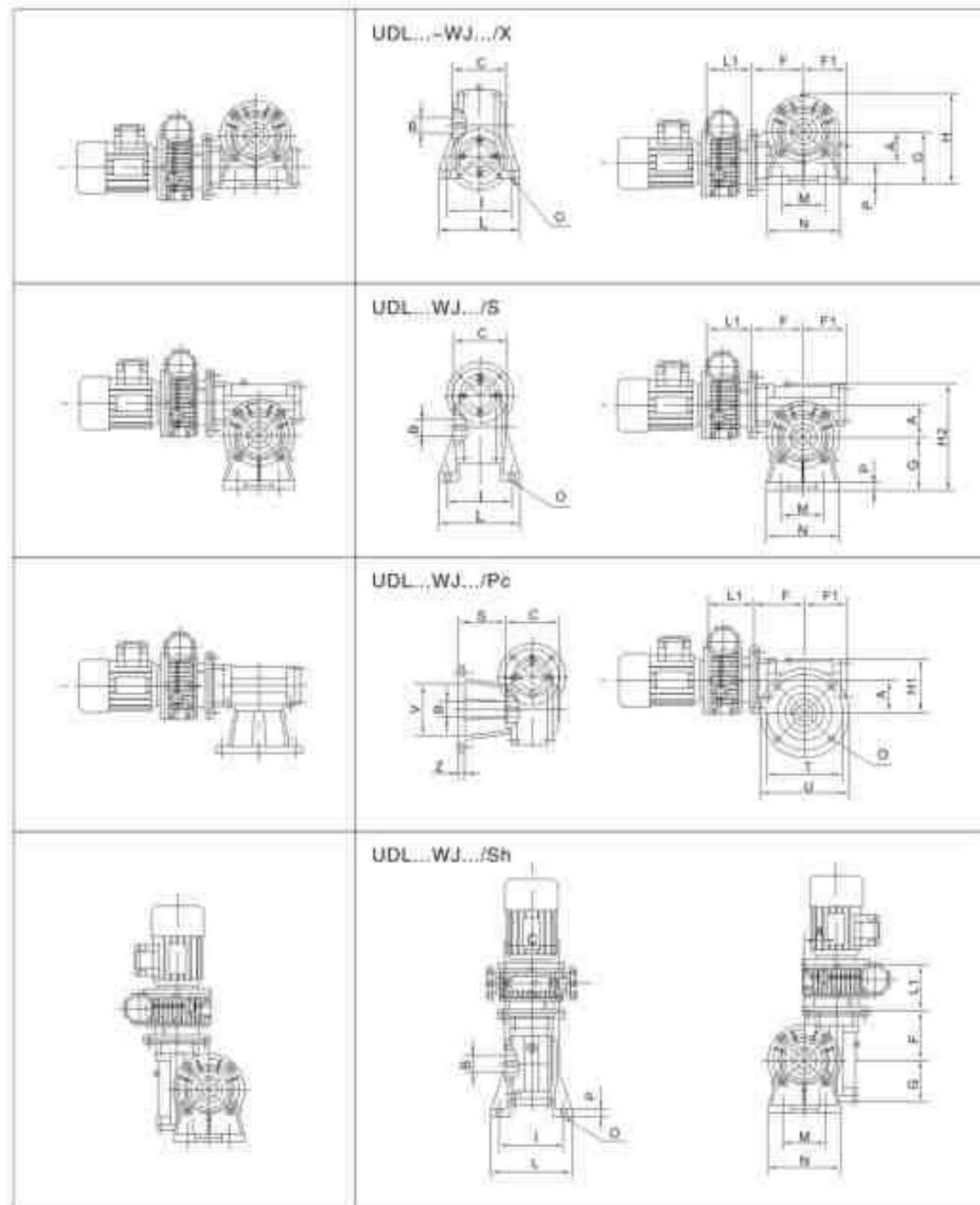
UD 0.37 WJ50 / PC - 40 - 20#



无级变速器代号	A	BIH7	C	F	F1	G	H	H1	H2	H3	I	L	L1	M	N	O	O1
UD0.25-WJ50/**	50	25	82	68	64	82	138	80	182	56	98	124	110	64	110	4-Φ9	4-6M6
UD0.37-WJ50/**																	
UD0.37-WJ63/**	60	25	120	90	86	100	176	98	199	76	115	140	110	95	140	4-Φ10.5	4-6M8
UD0.55-WJ63/**																	
UD0.75-WJ63/**	60	25	120	90	86	100	176	98	199	76	115	140	130	95	140	4-Φ10.5	4-6M8
UD1.1-WJ90/**																	
UD1.5-WJ90/**	90	35	140	121	116	142	248	138	290	108	146	182	167	140	200	4-Φ12.5	4-6M10

无级变速器代号	P	R	S	T	U	V(HR)	W	Z
UD0.25-WJ50/**	10	-	42	105	125	70	-	10
UD0.37-WJ50/**								
UD0.37-WJ63/**	12	3.5	57	150	180	115	-	11
UD0.55-WJ63/**	12	3.5	57	150	180	115	80	11
UD0.75-WJ63/**								
UD1.1-WJ90/**	14	4	80	180	210	152	110	15
UD1.5-WJ90/**								

外型及安装尺寸 Outline & installation sizes



性能参数 Performance parameter

型号 Model	配用电机 Equipped motor		蜗轮减速机 Worm gear reducer	输出转速 Output speed r/min	输出扭矩 Output torque N.m
	型号 Model	功率 Power(kw)			
UD0.25-WJ50/...7.5	Y2-7114/B5	0.25	0.75	133-27	10-29
UD0.37-WJ50/...7.5	Y2-7124/B5	0.37			15-34
UD0.25-WJ50/...15	Y2-7114/B5	0.25	15	67-13	16-31
UD0.37-WJ50/...15	Y2-7124/B5	0.37			27-47
UD0.25-WJ50/...20	Y2-7114/B5	0.25	20	50-10	24-41
UD0.37-WJ50/...20	Y2-7124/B5	0.37			36-61
UD0.25-WJ50/...30	Y2-7114/B5	0.25	30	33-7	32-53
UD0.37-WJ50/...30	Y2-7124/B5	0.37			48-68
UD0.25-WJ50/...40	Y2-7114/B5	0.25	40	25-5	36-57
UD0.37-WJ50/...40	Y2-7124/B5	0.37			55-62
UD0.55-WJ63/...7.5	Y2-8014/B5	0.55	7.5	133-27	25-66
UD0.75-WJ63/...7.5	Y2-8024/B5	0.75			34-90
UD0.55-WJ63/...15	Y2-8014/B5	0.55	15	67-13	44-76
UD0.75-WJ63/...15	Y2-8024/B5	0.75			60-104
UD0.55-WJ63/...20	Y2-8014/B5	0.55	20	50-10	57-99
UD0.75-WJ63/...20	Y2-8024/B5	0.75			78-135
UD0.55-WJ63/...30	Y2-8014/B5	0.55	30	33-7	67-151
UD0.75-WJ63/...30	Y2-8024/B5	0.75			119-206
UD0.55-WJ63/...40	Y2-8014/B5	0.55	40	25-5	86-99
UD0.75-WJ63/...40	Y2-8024/B5	0.75			117-135
UD0.37-WJ63/...50	Y2-7124/B5	0.37	50	20-4	80-123
UD0.55-WJ63/...50	Y2-8014/B5	0.55			107-124
UD1.1-WJ90/...7.5	Y2-7114/B5	1.1	7.5	133-27	58-106
UD1.5-WJ90/...7.5	Y2-7114/B5	1.5			78-141
UD1.1-WJ90/...15	Y2-90S-4/B5	1.1	15	67-13	176-295
UD1.5-WJ90/...15	Y2-90L-4/B5	1.5			235-394
UD1.1-WJ90/...20	Y2-90S-4/B5	1.1	20	50-10	124-207
UD1.5-WJ90/...20	Y2-90L-4/B5	1.5			165-277
UD1.1-WJ90/...25	Y2-90S-4/B5	1.1	25	40-8	146-248
UD1.5-WJ90/...25	Y2-90L-4/B5	1.5			195-330
UD1.1-WJ90/...40	Y2-90S-4/B5	1.1	40	25-5	216-330
UD1.5-WJ90/...40	Y2-90L-4/B5	1.5			285-440
UD1.1-WJ90/...50	Y2-90S-4/B5	1.1	50	20-4	270-412
UD1.5-WJ90/...50	Y2-90L-4/B5	1.5			360-550

安装方位图 Installation position diagram



6. 行星锥盘无级变速器与齿轮减速器组合
Combination of planet cone-disk stepless speed variation and gear speed reducer

型号及标记 Mood & mark

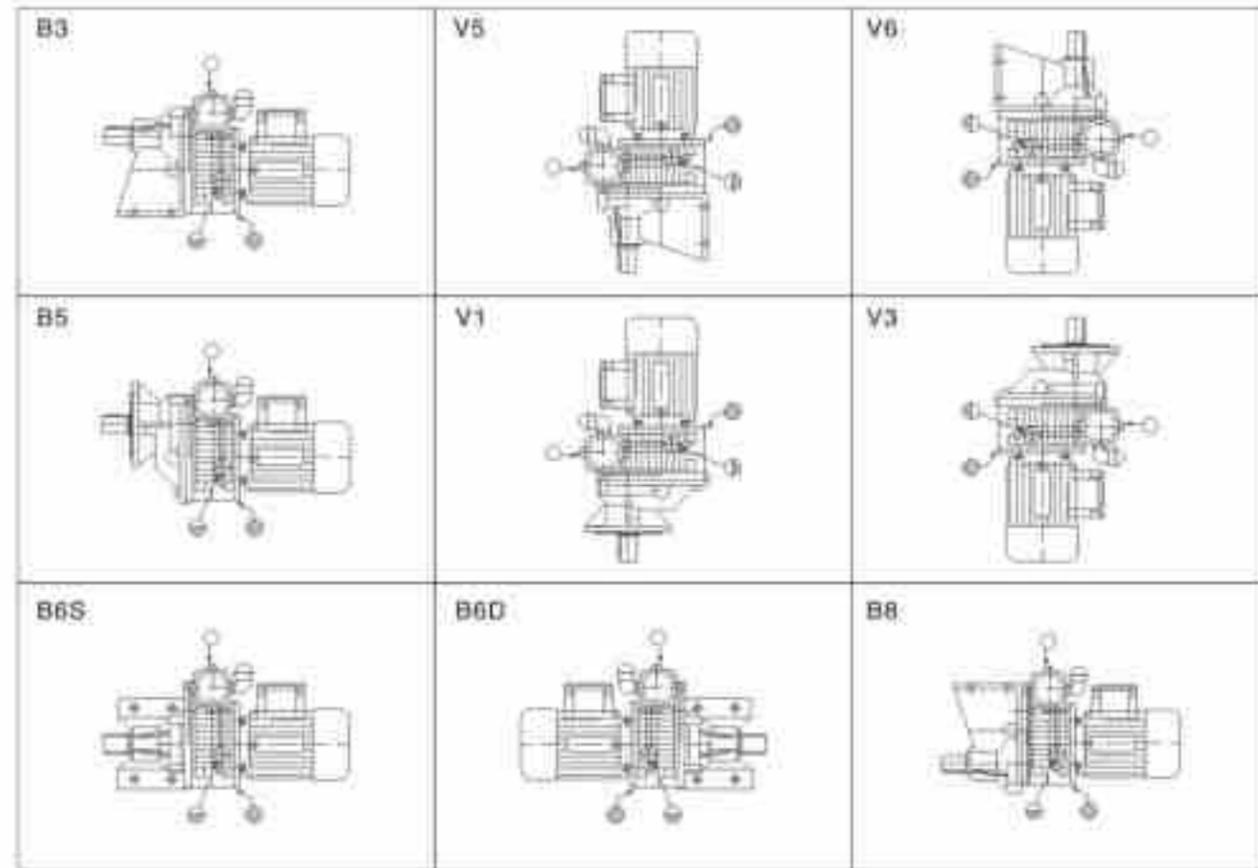
UD(L) 0.75 - 2 C 5 B3

- 地脚式安装 (法兰安装用B5表示)
Installation with foot screws (flange installation is indicated by B5)
- 齿轮减速器速比
Speed ratio of gear speed reducer
- 齿轮减速器代号
Code of gear speed reducer
- 二级齿轮减速, 不标注时为一级齿轮减速
Second gear speed reducer, no mark means first gear speed reducer
- 配用电动机功率
Relevant motor power
- 行星锥盘无级变速器代号
Code of planetary cone-disk stepless variator

性能参数 Performance parameter

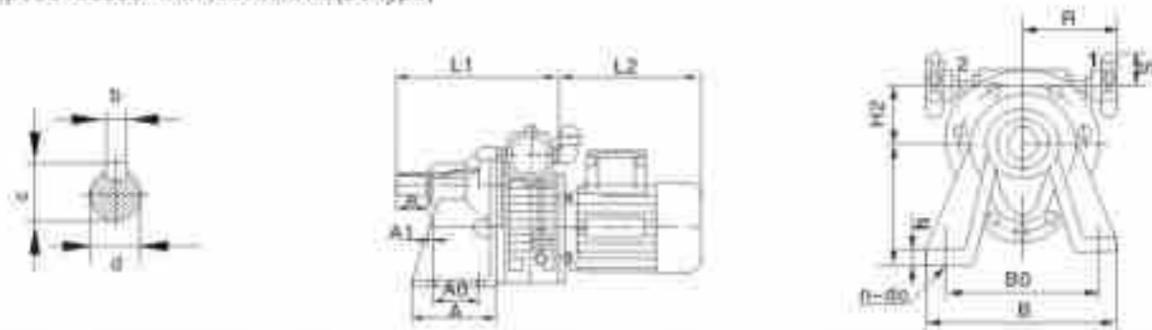
		型号Model	i	n2 rpm	M2 N.M			型号Model	i	n2 rpm	M2 N.M
0.25KW 4P n1=1400r/min	UDL0.25-C	1.5	655-134	2.8-6.6		UD1.5-2C	5	125-25	86.5-173		
		2.5	400-80	4.75-9.5	12		80-17	130-260			
		3.3	300-60	6.2-12.4	15		80-13	192-384			
	UDL0.25-2C	5	200-40	9.5-19	25	40-8	270-540				
		8	125-25	14.5-29	1.5	655-134	25.5-51				
		12	80-17	21.5-43	2.5	400-80	42.5-85				
0.37KW 4P n1=1400r/min	UDL0.37-C	15	65-13	28.8-57.6	3.3	300-60	56.5-113				
		25	40-8	45-90	5	200-40	85.5-171				
		40	25-5	72-144	8	125-25	130-260				
	UDL0.37-2C	1.5	655-134	4.5-9.0	12	80-17	195-390				
		2.5	400-80	7.1-14.2	15	80-13	260-520				
		3.3	300-60	9.5-19	25	40-8	405-810				
0.55KW 4P n1=1400r/min	UDL0.55-C	5	200-40	14.5-29.0	1.5	655-134	34-68				
		8	125-25	21.5-43.0	2.5	400-80	57-114				
		12	80-17	32.5-65.0	3.3	300-60	75-150				
	UDL0.55-2C	15	65-13	67.5-135	5	200-40	114-228				
		25	40-8	100-200	8	125-25	172-344				
		40	25-5	150-300	12	80-17	260-520				
0.75KW 4P n1=1400r/min	UDL0.75-C	1.5	655-134	7-14	1.5	655-134	62.5-125				
		2.5	400-80	11.8-23.6	2.5	400-80	104.5-209				
		3.3	300-60	15.5-31	3.3	300-60	130.5-261				
	UDL0.75-2C	5	200-40	23.5-47	5	200-40	209-418				
		8	125-25	35-70	8	125-25	325-649				
		12	80-17	54-108	12	80-17	474-948				
1.1KW 4P n1=1400r/min	UD1.1-C	15	65-13	88.5-177	1.5	655-134	85-170				
		25	40-8	130-260	2.5	400-80	124-248				
		40	25-5	200-400	3.3	300-60	186-373				
	UD1.1-2C	1.5	655-134	10.5-21	5	200-40	280-560				
		2.5	400-80	17-34	8	125-25	442-885				
		3.3	300-60	25.5-51	12	80-17	648-1296				
1.5KW 4P n1=1400r/min	UD1.5-C	15	65-13	130-260	1.5	655-134	124-248				
		25	40-8	200-400	2.5	400-80	186-373				
		40	25-5	300-600	3.3	300-60	280-560				
	UD1.5-2C	1.5	655-134	17-34	5	200-40	442-885				
		2.5	400-80	28.5-57	8	125-25	648-1296				
		3.3	300-60	37.5-75	12	80-17	972-1944				

安装方位图 Installation position diagram



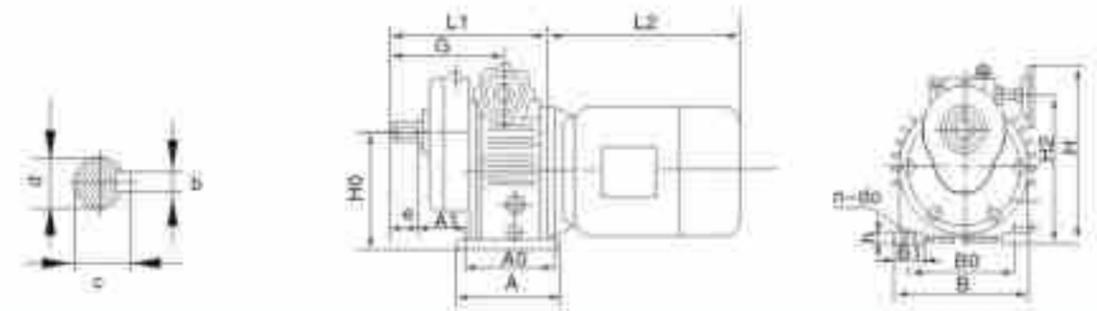
外型及安装尺寸 Outline & installation sizes

行星锥盘无级变速器与一级齿轮减速机组合地脚式 (B3型) 外型及安装尺寸
Outline & installation size for combination of planet cone-disk stepless speed variator and first gear speed reducer with foot screws (B3 type)



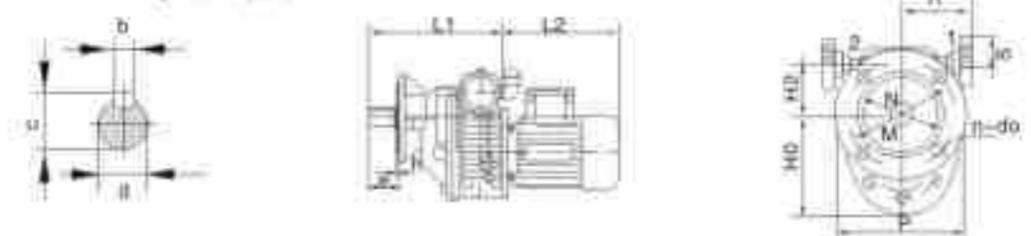
型号 Model	安装尺寸 Installation size				轴伸尺寸 Shaft connect size				外形尺寸 Outline size									
	H1	A0	A1	B0	b	c	d	d0	d	b	c	e	H	H2	R	L1	L2	S
UDL0.25-CB3	130	70	3	150	12	4	12	24js6	8	27	50	112	190	241	40	110	227	75
UDL0.37-CB3																		
UDL0.55-CB3																		
UDL0.75-CB3	162	70	7	165	14	4	13	28js6	8	31.3	60	133	2129	291	46.5	143	268	90

外型及安装尺寸 Outline & installation sizes

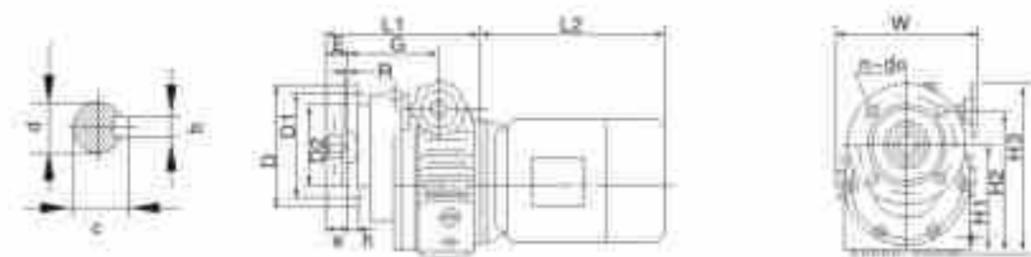


型号 Model	安装尺寸 Installation size				轴伸尺寸 Shaft connect size				外形尺寸 Outline size										
	H1	A0	A1	B0	b	c	d	d0	d	b	c	e	H	H2	R	L1	L2	S	
UD1.1-CB5	190	140	78	180	50	18	4	12	30	8	33	45	313	246	230	165	178	245	270
UD1.5-CB5																			
UD2.2-CB5																			
UD3.0-CB5	230	250	93	245	55	20	4	14	40	12	43	60	355	300	300	270	234	306	340
UD4.0-CB5																			
UD5.5-CB5																			
UD7.5-CB5	320	250	157	315	70	30	4	18	50	14	53.5	82	475	389	365	290	347	455	430

行星锥盘无级变速器与一级齿轮减速机组合法兰式 (B5型) 外型及安装尺寸
Outline & installation size for combination of planet cone-disk stepless speed variator and first gear speed reducer with flanges (B5 type)



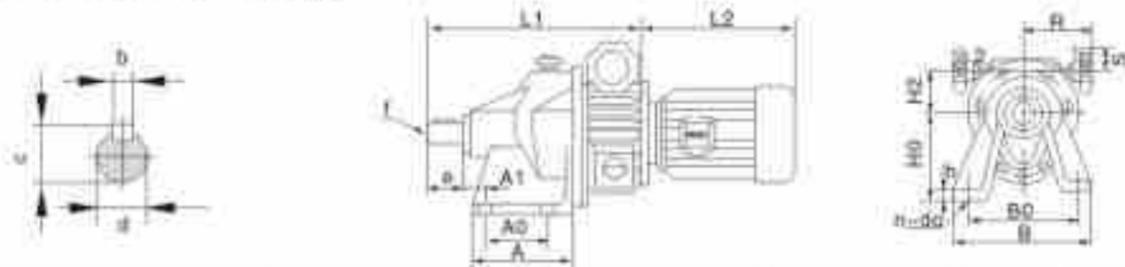
型号 Model	安装尺寸 Installation size				轴伸尺寸 Shaft connect size				外形尺寸 Outline size							
	N	M	b	n	d0	d	b	c	e	H0	H2	R	R	L1	L2	S
UDL0.25-CB5	110	130	8	4	10.5	24js6	8	27	50	131.5	40	160	110	241	227	75
UDL0.37-CB5																
UDL0.55-CB5																
UDL0.75-CB5	130	185	8	4	10.5	28js6	8	31.3	60	164	50	200	143	272	265	90



型号 Model	安装尺寸 Installation size				轴伸尺寸 Shaft connect size				外形尺寸 Outline size										
	H1	A0	A1	B0	b	c	d	d0	d	b	c	e	H	H2	R	L1	L2	S	
UD1.1-CB5	165	130	45	14	4	4	12	30	8	33	45	200	155	190	246	313	252	266	270
UD1.5-CB5																			
UD2.2-CB5																			
UD3.0-CB5	215	180	60	16	4	4	15	40	12	43	60	250	205	290	300	355	286	377	325
UD4.0-CB5																			
UD5.5-CB5																			
UD7.5-CB5	265	230	827	20	5	4	15	50	14	53.5	82	300	263	320	389	475	400	453	430

外型及安装尺寸 Outline & installation sizes

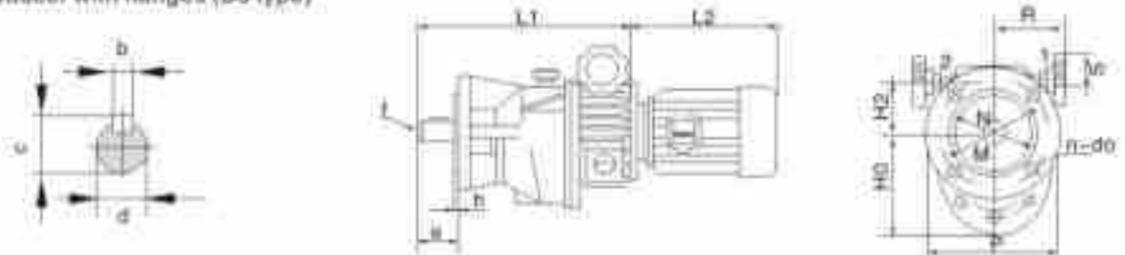
行星锥盘无级变速器与二级齿轮减速组合地脚式 (B3型) 外型及安装尺寸
Outline & installation size for combination of planet cone-disk stepless speed variator and second gear speed reducer with foot screws(B3 type)



型号 Model	安装尺寸 Installation size							轴伸连接尺寸 Shaft connect size						外形尺寸 Outline size						
	H0	A0	A1	B0	n	a	d0	d	e	f	g0	H2	F	R	L1	L2	S			
UDL0.25-2CB3	110	85	25	150	12	4	10	28x6	8	31	55	M8	148	190	275	40	110	227	75	
UDL0.37-2CB3																				
UDL0.55-2CB3	152	106	25	174	14	4	13	28x6	8	31	60	M8	163	212	322	46.5	118	268	90	
UDL0.75-2CB3																				
UD1.1-2CB3	170	130	15	200	16	4	13	38x6	10	41.3	70	M10	200	250	460	121	135	265	90	
UD1.5-2CB3																		290		
UD2.2-2CB3	235	180	43	250	20	4	18	55x8	16	58.3	110	M12	265	320	540	151	145	320	110	
UD3.0-2CB3																		340		
UD4.0-2CB3	280	250	48	300	25	4	21	70x8	20	74.5	140	M16	344	380	592	192	194	395	110	
UD7.5-2CB3																		435		

外型及安装尺寸 Outline & installation sizes

行星锥盘无级变速器与二级齿轮减速组合法兰式 (B5型) 外型及安装尺寸
Outline & installation size for combination of planet cone-disk stepless speed variator and second gear speed reducer with flanges (B5 type)



型号 Model	安装尺寸 Installation size							轴伸连接尺寸 Shaft connect size						外形尺寸 Outline size						
	H0	A0	A1	B0	n	a	d0	d	e	f	g0	H2	F	R	L1	L2	S			
UDL0.25-2CB3	110	130	10	4	10.5	28x6	8	31	55	M8	105	40	160	110	275	227	75			
UDL0.37-2CB3																				
UDL0.55-2CB3	130	165	12	4	11	28x6	8	31	60	M8	123	50	160	118	316	268	90			
UDL0.75-2CB3																				
UD1.1-2CB3	160	215	5	4	13	38x6	10	41.3	70	M10	70	121	250	135	460	265	90			
UD1.5-2CB3																290				
UD2.2-2CB3	230	265	5	4	16	55x8	16	58.3	110	M12	110	151	300	145	540	320	110			
UD3.0-2CB3																340				
UD4.0-2CB3	250	300	5	4	18	70x8	20	74.5	140	M16	140	192	350	194	592	395	110			
UD7.5-2CB3																435				

7. 行星锥盘无级变速器与摆线针轮减速器组合
Combination of planet cone-disk stepless speed variator and cycloid pin wheel speed reducer

型号及标记 Mood & mark

UD L 0.75 - X3 B3 17



性能参数
Performance parameter

功率 Power	型号 Model	i	n2 rpm	M2 N.m
0.12kw 4P n1=1400 r/min	UDL0.12-X2	9	110-22	6-16
		11	90-18	10-20
		17	60-12	15-30
		23	43-9	21-41
		29	35-7	26-52
		38	30-6	32-63
0.18kw 4P n1=1400 r/min	UDL0.18-X2	9	110-22	12-24
		11	90-18	15-30
		17	60-12	23-46
		23	43-9	31-62
		29	35-7	39-78
		35	30-6	47-94
0.25kw 4P n1=1400 r/min	UDL0.25-X2	9	110-22	19-32
		11	90-18	20-40
		17	60-12	31-61
		23	43-9	41-82
		29	35-7	52-104
		35	30-6	63-125

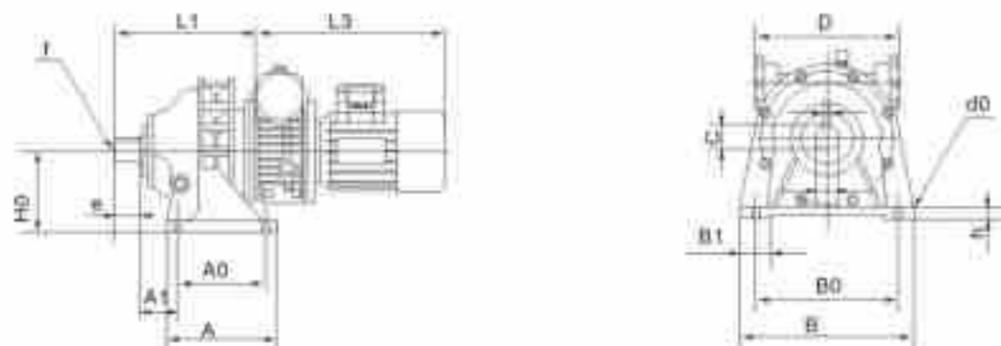
功率 Power	型号 Model	i	n2 rpm	M2 N.m	
0.25kw 4P n1=1400 r/min	UDL0.25-X3	43	25-5	77-154	
		59	18-4	106-212	
		71	14-3	127-254	
	0.37kw 4P n1=1400 r/min	UDL0.25-X4	43	25-5	106-212
			59	18-4	143-286
			71	14-3	180-361
0.55kw 4P n1=1400 r/min		UDL0.37-X2	9	110-22	24-48
			11	90-18	30-60
			17	60-12	46-92
	0.75kw 4P n1=1400 r/min	UDL0.37-X3	23	43-9	62-124
			29	35-7	78-156
			35	30-6	95-189
1.1kw 4P n1=1400 r/min		UDL0.37-X4	43	25-5	116-232
			59	18-4	159-318
			71	14-3	192-384
	1.5kw 4P n1=1400 r/min	UDL0.55-X3	87	12-2.5	234-468
			9	110-22	41-81
			11	90-18	50-99
2.2kw 4P n1=1400 r/min		UDL0.55-X4	17	60-12	77-153
			23	43-9	103-206
			29	35-7	130-260
	3.0kw 4P n1=1400 r/min	UDL0.75-X3	35	30-6	157-314
			43	25-5	193-386
			59	18-4	265-530
UDL0.75-X4		71	14-3	320-640	
		87	12-3	364-728	

性能参数 Performance parameter

功率 Power	型号 Model	i	n2 rpm	M2 N.m	功率 Power	型号 Model	i	n2 rpm	M2 N.m	
0.75kw 4P N1=1400 r/min	UDL0.75-X3	9	110-22	40-97	2.2kw 4P N1=1400 r/min	UDL2.2-X5	9	110-22	140-392	
		11	90-18	60-120			11	90-18	178-356	
		17	60-12	82-164			17	60-12	275-550	
		23	43-9	124-248			23	43-9	372-744	
	UDL0.75-X4	29	35-7	150-312		UDL2.2-X6	29	35-7	470-940	
		35	30-8	198-378			35	30-8	587-1134	
		43	25-5	232-464			43	25-5	696-1392	
		59	18-4	318-636			59	18-4	955-1910	
	UDL0.75-X5	71	14-3	383-766		UDL2.2-X7	71	14-3	1150-2300	
		87	12-3	437-874			87	12-3	1410-2820	
	1.1kw 4P N1=1400 r/min	UDL1.1-X3	9	110-22		73-146	UDL3.0-X5	9	110-22	194-388
			11	90-18		90-176		11	90-18	237-474
17			60-12	137-274	17	60-12		367-734		
UDL1.1-X4		23	43-9	188-372	UDL3.0-X6	23	43-9	499-992		
		29	35-7	234-468		29	35-7	626-1252		
UDL1.1-X5		35	30-8	283-566	UDL3.0-X7	35	30-8	758-1512		
		43	25-5	348-696		43	25-5	929-1858		
UDL1.1-X6		59	18-4	478-956	UDL3.0-X8	59	18-4	1274-2548		
		71	14-3	525-110		71	14-3	1533-3066		
UDL1.1-X7		87	12-3	704-140	UDL3.0-X9	87	12-3	1880-3760		
		9	110-22	73-146		UDL4.0-X5	9	110-22	259-518	
UDL1.5-X3		11	90-18	118-236	UDL4.0-X6		11	90-18	316-633	
	17	60-12	183-366	17		60-12	490-980			
UDL1.5-X4	23	43-9	248-496	UDL4.0-X7	23	43-9	662-1324			
	29	35-7	313-626		29	35-7	835-1670			
	35	30-8	378-756	UDL4.0-X8	35	30-8	1008-2016			
	43	25-5	464-928		43	25-5	1238-2476			
UDL1.5-X5	59	18-4	637-1274	UDL4.0-X9	59	18-4	1700-3400			
	71	14-3	767-1534		71	14-3	2044-4088			
UDL1.5-X6	87	12-3	938-1876	87	11.5-2.3	2505-5010				

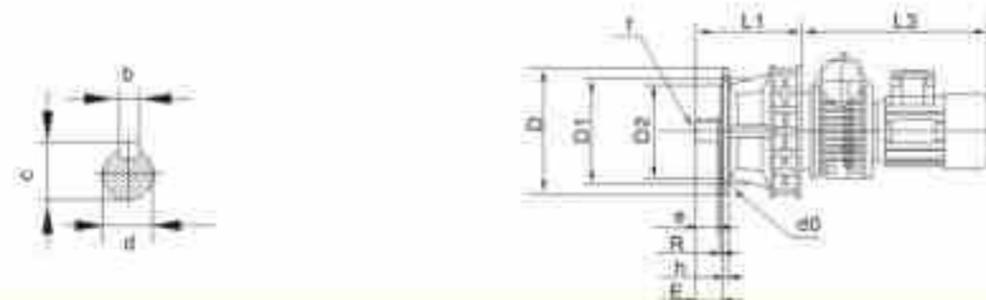
外型及安装尺寸 Outline & installation sizes

B3型
B3 type



型号(可组合型号) Model(A/B combination)	安装尺寸Installation size						轴伸轴径尺寸Shaft connect size						外形尺寸Outline size					
	H0	A0	A1	B0	B1	h	d0	轴径	b	c	e	f	A	B	D	H	L1	L3
UDL0.18-X2	100	90	82	90	90	15	4+0.11	25	8	28	34	M6	120	210	168	184	214	313
UDL0.37-X3(X2,X3,X4)	140	100	121	100	100	20	4+0.15	35	10	38.5	55	M10	150	290	200	270	268	335
UDL0.75-X4(X3,X4,X5,X6)	150	145	120	145	145	22	4+0.15	45	14	48.5	74	M10	185	330	240	316	320	405
UDL1.1-X5(X3,X4,X5,X6,X7)	180	150	170	150	150	25	4+0.15	55	16	59	91	M10	260	420	300	358	416	424
UDL1.5-X6(X4,X5,X6,X7)	200	275	66	275	275	30	4+0.21	65	18	70	89	M12	335	430	340	425	476	462
UDL2.2-X7(X5,X6,X7,X8)	220	320	66	320	320	30	4+0.21	80	22	85	109	M12	380	470	340	435	529	528
UDL3.0-X8(X5,X6,X7,X8,X9)	250	380	65	380	380	35	4+0.22	90	25	95	120	M12	440	530	400	505	600	628
UDL4.0-X9(X5,X6,X7,X8,X9)	290	480	65	480	480	40	4+0.26	100	28	106	141	M20	560	620	500	605	723	548

B5型
B5 type



型号(可组合型号) Model(A/B combination)	安装尺寸Installation size						轴伸轴径尺寸Shaft connect size						外形尺寸Outline size					
	D1	D2	E	h	R	f	d0	轴径	b	c	e	F	D	L1	L3			
UDL0.18-X2	180	130	42	12	3	M6	6+0.12	25	8	28	34	180	214	313				
UDL0.37-X3(X2,X3,X4)	200	170	50	15	4	M10	6+0.12	36	10	38.5	45	230	268	335				
UDL0.75-X4(X3,X4,X5,X6)	230	200	79	15	4	M10	6+0.12	45	14	48.5	63	260	320	405				
UDL1.1-X5(X3,X4,X5,X6,X7)	310	170	93	20	4	M10	6+0.12	55	16	59	79	340	416	424				
UDL1.5-X6(X4,X5,X6,X7)	360	316	92	22	5	M12	6+0.16	65	18	70	80	400	476	462				
UDL2.2-X7(X5,X6,X7,X8)	390	345	114	22	5	M12	6+0.18	80	22	85	98	430	529	528				
UDL3.0-X8(X5,X6,X7,X8,X9)	450	400	112	30	6	M20	12+0.18	90	25	95	110	490	600	628				
UDL4.0-X9(X5,X6,X7,X8,X9)	520	485	170	35	8	M20	12+0.22	100	28	106	129	580	723	548				

8. 使用与保养
Operation & maintenance

UD系列行星锥盘无级变速器使用与保养
Operation & maintenance of UD series planet cone-disk stepless variator

1. 机械无级变速器不宜用于可能超负荷或堵转场合使用。
2. 调速应在运转中进行，严禁停车时转动调速手轮。
3. 输出轴安装联轴器或带轮时，用轴端螺孔压入，或加热装配，严禁锤击。
4. 变速器采用润滑油润滑，润滑油牌号为Ub-3无级变速器专用油。出厂前润滑油已加入，首次使用1000小时后应更换润滑油。（免维护产品除外）
5. 操作盒上通气螺母出厂时为防止漏油中漏油已拧紧，运转时须松开，严禁未松开使用。（免维护产品无须松开）
6. 操作盒下的两端调速限位螺钉已调整完好，请勿再动。
7. 变速器内润滑油应保持在油标三分之二处高度，用户应经常检查油位高度，严禁在润滑不良的情况下使用。
8. 本机不宜在高于40℃环境中工作，温升不得高于45℃。（变速器采用四级电机工作，部件在跑合过程中温升均高于正常工作的环境温度40-50℃，跑合60-80小时后，温升逐渐下降，并保持稳定，跑合时高的温升对部件的使用寿命并无影响。）

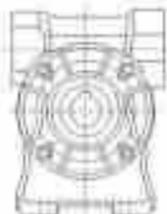
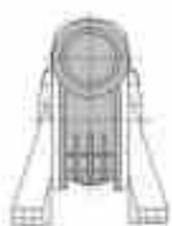
1. The mechanical stepless speed variator is not used in such an occasion where overload or running-blockage happen to occur.
2. Speed-regulation should be effected in running. No turning the hand wheel of speed-regulation when the machine stops.
3. When the output shaft is installed with the coupling or belt wheel, they should be pressed into the screw hole on shaft end, or assembled by heating. No hammering on it.
4. The liquid lubricating oil is used for the speed variator. Its trade mark is Ub-3 stepless speed variator special-purpose oil. The lubricating oil has been added before the speed variator be dispatched from the factory. It should be changed after it has been used a thousand hours of the first use (exclusion the exempt maintain production).
5. The air screw nut on the operating box is screwed up for preventing from oil leakage in moving when leaving the factory. It should be loosed when it starts to run. It is strictly forbidden to use it before loosing. (exclusion the exempt maintain production).
6. The banking screws of speed-regulation on two ends under the operating box are well adjusted. Please don't touch them.
7. The lubricating oil level inside the speed variator should be kept at the height of two-third in the oil scale. Users should usually check up the height of oil level. It is strictly prohibited to operate it short of lubricating oil.
8. This set is not suited to work in the environment of above 40℃, especially no more than 45℃ when the temperature goes up. (when the speed variator adopts a 4-pole motor, the temperature under running-in is 40-50℃ higher than that of normal working environment. After running-in up to 60-80 hours, the temperature rise will go down gradually and keeps its stability. The high temperature rise in running will give no harm to the parts in service life.)

VF系列蜗轮减速机
VF series worm gear speed reducer

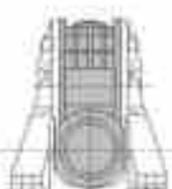
1. 产品图片
Picture of products



2. 设计方案
Design proposal



VF..A..
Foot mounted, overdriven



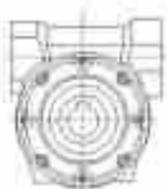
VF..N..
Foot mounted, underdriven



VF..V..
Foot mounted, wormshaft vertical



VF..F..
Standard output flange
VF..FA..
Extended output flange



VF..P..
Side cover for shaft mounting

3. 型号说明
Model illuminate

3.1 VF蜗杆减速机型号说明 Worm gear units model illuminate

VF 30 F - 15 - E SS1 P71B5 B3
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

NO	说明	Comments
1	蜗轮减速机代号	Code of worm gear units
2	蜗轮减速机中心距(规格)	Central distance of worm gear units(spec)
3	结构型式 1). A: 底脚安装, 输入轴置上 2). N: 底脚安装, 输入轴置下 3). V: 底脚安装, 蜗杆垂直 4). F(1/2): 标准输出法兰 5). FA(1/2): 加长输出法兰 6). P: 侧盖用于轴装式	Central distance of worm gear units(spec) 1). A: Foot mounted over driven 2). N: Foot mounted under driven 3). V: Foot mounted worm shaft vertical 4). F(1/2): Standard output flange 5). FA(1/2): Extended output flange 6). P: Side cover for shaft mounting
4	减速器速比..... (i=7;10;14;.....80;100)	Speed ratio of reducer (i=7;10;14;.....80;100)
5	1). 无代号表示不带蜗杆同向输出轴 2). E: 带蜗杆同向输出轴	1). No mark means single extension worm shaft 2). E: Double extension worm shaft
6	1). 无代号表示孔输出 2). SS(1/2): 单向输出轴和位置 3). DS: 双向输出轴	1). No mark means hole output 2). SS(1/2): Single output shaft and position 3). DS: Double output shaft
7	1). IEC 输入法兰 2). HS: 轴输入	1). IEC Output flange 2). HS: Shaft input
8	安装方位代号	Installation position code

3.2 VF/VF双级蜗杆减速机型号说明 Combination worm gear units model illuminate

VF 30/40 F - 15 - E SS1 P71B5 CW1
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

NO	说明	Comments
1	蜗轮减速机代号	Code of worm gear units
2	蜗轮减速机中心距(规格)	Central distance of worm gear units(spec)
3	结构型式 1). A: 底脚安装, 输入轴置上 2). F(1/2): 标准输出法兰 3). FA(1/2): 加长输出法兰 4). P: 侧盖用于轴装式	Central distance of worm gear units(spec) 1). A: Foot mounted overdriven 2). F(1/2): Standard output flange 3). FA(1/2): Extended output flange 4). P: Side cover for shaft mounting
4	减速器速比..... (i=240;245;315;.....)	Speed ratio of reducer (i=240;245;315;.....)
5	1). 无代号表示不带蜗杆同向输出轴 2). E: 带蜗杆同向输出轴	1). No mark means single extension worm shaft 2). E: Double extension worm shaft
6	1). 无代号表示孔输出 2). SS(1/2): 单向输出轴和位置 3). DS: 双向输出轴	1). No mark means hole output 2). SS(1/2): Single output shaft and position 3). DS: Double output shaft
7	1). IEC 输入法兰 2). HS: 轴输入	1). IEC Output flange 2). HS: Shaft input
8	安装方位代号	Installation position code

4. 减速机选型表
Gear unit selection tables

4.1 VF..P(IEC)..性能参数 Performance parameter

VF..P(IEC)

P _{in} [kW]	n ₁ [r/min]	M ₂ [Nm]	i	F ₂ [N]	f _s				Page				
0.06	19.3	14	70	1600	1.1	VF30	5685/B14	5614	87				
	22.5	13	60	1600	1.5								
	34	10	40	1650	1.9								
	45	8	30	1340	2.5								
	66	6	20	1180	2.9								
	90	5	15	1080	3.7								
	105	3	10	950	4.7								
	193	2	7	840	6.4								
	2.4	74	560	2500	0.8					VF30/44	5685/B14	5614	93
	3.2	62	420	2500	1.0								
3.9	53	350	2500	1.1									
5.5	42	245	2500	1.4	VF30/49	5685/B14	5614	94					
2	116	720	3450	0.8									
2.5	85	540	3450	1.1									
3.2	73	420	3450	1.3									
4.3	53	315	3450	1.8									
5.6	45	240	3450	2.1									
0.09	22.5	19	60	1600	1.0	VF30	5685/B14	5624	87				
	34	15	40	1410	1.3								
	45	12	30	1280	1.6								
	66	9	20	1140	2.0								
	90	7	15	1050	2.5								
	105	5	10	920	3.1								
	193	4	7	820	4.3								
	22	22	40	1560	0.9					VF30	6385/B14	6316	87
	29.3	18	30	1440	1.2								
	44	14	20	1230	1.5								
	59	11	15	1170	1.9								
	88	8	10	1050	2.3								
	126	6	7	920	3.2								
	3.9	80	350	2500	0.7					VF30/44	5685/B14	5624	93
	5.5	62	245	2500	1.0								
	12.6	38	70	2300	0.8					VF44	6385/B14	6316	89
	14.7	33	60	2300	1.2								
	18.1	28	46	2300	1.4								
25.1	23	35	2300	1.7									
31	19	28	2300	2.0									
44	15	20	2300	2.6									
3.2	110	420	3450	0.9	VF30/49	5685/B14	5624	94					
4.3	80	315	3450	1.2									
5.6	69	240	3450	1.4									
8.8	41	100	3300	1.3									
11.0	37	80	3300	1.6	VF49	6385/B14	6316	91					
12.6	34	70	3300	1.8									
14.7	31	60	3300	2.1									
19.6	26	45	3300	2.7									
24.4	22	36	3300	3.4									
138	7	20	640	2.1					VF30	5685/B14	5622	87	
275	4	10	740	3.4									
393	3	7	860	4.7									
33	21	40	1360	0.9	VF30	6385/B14	6314	87					
44	17	30	1250	1.2									
66	13	20	1110	1.4									

P _{in} [kW]	n ₁ [r/min]	M ₂ [Nm]	i	F ₂ [N]	f _s				Page								
0.12	87	10	15	1020	1.0	VF30	6385/B14	6314	87								
	131	7	10	900	2.3												
	187	5	7	810	3.1												
	29	24	30	1360	0.9					VF30	6385/B14	6328	87				
	44	18	20	1250	1.1												
	59	15	15	1130	1.4												
	87	10	10	1020	1.7												
	124	8	7	900	2.4												
	18.7	34	70	2300	0.9									VF44	6385/B14	6314	89
	21.8	30	60	2300	1.3												
28.5	25	46	2300	1.6													
37	21	35	2300	1.9													
47	17	28	2300	2.2													
66	13	20	2100	2.9													
94	10	14	1870	2.9	VF44	6385/B14	6328	89									
14.5	42	60	2300	1.1													
19	36	46	2300	1.4													
25	30	35	2300	1.7													
31	25	28	2300	2.0													
44	19	20	2300	2.3													
62	14	14	2150	2.7	VF30/49	6385/B14	6314	94									
4.2	110	315	3450	0.9													
5.5	94	240	3450	1.0													
10.1	42	100	3150	1.2	VF49	6385/B14	6314	91									
16.4	36	80	3150	1.5													
18.7	34	70	3150	1.8													
21.8	30	60	3150	1.9													
29.1	25	45	3040	2.6													
36	21	35	2830	3.0													
8.7	55	100	3300	0.9	VF49	6385/B14	6328	91									
10.9	50	80	3300	1.2													
0.16	90	13	30	1020	1.1	VF30	6385/B14	6312	87								
	135	10	20	900	1.4												
	180	8	15	800	1.8												
	270	5	10	710	2.2												
	386	4	7	640	3.1												
	66	19	20	1040	1.0					VF30	6385/B14	6324	87				
	88	15	15	900	1.2												
	132	11	10	800	1.5												
	189	8	7	770	2.1												
	45	24	60	2300	1.2									VF44	6385/B14	6312	89
	59	20	46	2190	1.4												
	77	16	35	1970	1.8												
	96	14	28	1770	2.1												
	135	10	20	1590	2.8												
	183	7	14	1470	2.9												
	22	45	60	2300	0.9					VF44	6385/B14	6324	89				
	29	37	46	2500	1.1												
	38	31	35	2430	1.3												
47	26	28	2270	1.5													
66	20	20	2040	1.9													
94	15	14	1830	2.0													
132	11	10	1640	2.7													
26	43	35	2340	1.1	VF44	7185/B14	7116	89									
32	36	28	2290	1.4													
45	28	20	2050	1.6													
64	21	14	1830	1.9													
90	16	10	1650	2.5													

P _{in} (kW)	n ₁ (r/min)	M ₂ (Nm)	i	F ₂ (N)	f _s				Page				
0.18	16.5	54	60	3150	1.0	VF49	63B5/B14	6324	91				
	18.9	50	70	3150	1.1								
	22	45	60	3150	1.3								
	29.5	37	45	2300	1.8								
	37	31	36	2760	2.2								
	47	26	26	2560	2.9								
	55	23	24	2430	2.7								
	73	19	18	2230	3.2								
	15	61	60	3000	1.1					VF49	71B5/B14	7116	91
	20	52	45	2790	1.4								
25	43	36	2650	1.7									
32	36	26	2450	2.3									
0.25	135	14	20	640		VF30	63B5/B14	6322	87				
	180	11	15	780									
	270	7	10	690									
	77	23	35	1930	1.3	VF44	63B5/B14	6322	89				
	96	19	26	1730	1.5								
	135	14	20	1550	2.0								
	193	10	14	1400	2.1								
	270	8	10	1300	2.9								
	38	43	36	2300	0.9	VF44	71B5/B14	7126	89				
	47	36	26	2190	1.1								
	66	28	20	1970	1.4								
	94	21	14	1770	1.4								
	132	15	10	1590	1.9								
	169	11	7	1420	2.7								
	32	50	26	2300	1.0					VF44	71B5/B14	7126	89
	45	39	20	2190	1.1								
	64	29	14	1980	1.3								
	90	22	10	1760	1.8								
	129	16	7	1590	2.5								
	39	36	70	2650	1.1	VF49	63B5/B14	6322	91				
45	34	60	2500	1.3									
60	26	45	2350	1.8									
75	23	36	2230	2.2									
96	19	26	2070	2.9									
113	17	24	1930	2.8									
22	63	60	3100	0.9	VF49					71B5/B14	7114	91	
29	51	45	2810	1.3									
37	44	36	2670	1.8									
47	36	26	2480	2.1									
55	33	24	2360	1.9									
73	26	18	2170	2.5									
94	21	14	2010	3.2									
20	72	45	3150	1.0		VF49	71B5/B14	7126	91				
25	60	36	3150	1.2									
32	51	26	3150	1.6									
38	45	24	2800	1.5									
50	36	18	2460	1.9									
64	29	14	2260	2.4									
90	22	10	2040	2.9									
0.37	79	33	35	2860	0.9					VF44	63B5/B14	7112	89
	98	27	26	2720	1.1								
	138	21	20	1570	1.4								
	196	15	14	1400	1.5								
	275	11	10	1260	2.0								
	393	8	7	1120	2.7								

P _{in} (kW)	n ₁ (r/min)	M ₂ (Nm)	i	F ₂ (N)	f _s				Page				
0.37	69	40	20	1670	1.0	VF44	63B5/B14	7124	89				
	98	29	14	1690	1.0								
	137	22	10	1500	1.3								
	196	16	7	1360	1.9								
	61	40	45	2270	1.2					VF49	63B5/B14	7112	91
	76	34	36	2180	1.5								
	98	28	28	2020	2.0								
	115	25	24	1850	1.9								
	153	19	18	1720	2.3								
	30	73	45	2680	0.9					VF49	63B5/B14	7124	91
38	62	36	2530	1.1									
49	51	28	2360	1.4									
57	46	24	2250	1.4									
76	37	18	2080	1.8									
98	29	14	1940	2.2									
137	22	10	1750	2.7									
196	16	7	1570	3.4									
38	67	24	2350	1.0	VF49	63B5/B14	8016	91					
51	53	18	2240	1.3									
65	43	14	2070	1.7									
91	32	10	1930	2.0									
130	23	7	1740	2.6									
0.55	141	30	20	1490	1.0	VF44	71B5/B14	7122	89				
	201	22	14	1360	1.0								
	281	16	10	1210	1.4								
	401	12	7	1060	1.9								
	78	49	36	2090	1.1					VF49	71B5/B14	7122	91
	100	40	28	1960	1.4								
	117	36	24	1800	1.3								
	156	28	18	1650	1.6								
	201	22	14	1420	2.2								
	281	16	10	1390	2.7								
401	12	7	1250	3.5									
49	76	28	2170	1.0	VF49	80B5/B14	8014	91					
58	69	24	2080	0.9									
77	54	18	1930	1.1									
99	43	14	1810	1.5									
138	32	10	1650	1.8									
197	23	7	1480	2.3									
66	63	14	1960	1.1					VF49	80B5/B14	8026	91	
92	47	10	1800	1.4									
131	34	7	1660	1.8									
117	49	24	1710	1.0	VF49	80B5/B14	8012	91					
156	38	18	1580	1.2									
200	30	14	1480	1.6									
280	22	10	1340	2.0									
400	16	7	1200	2.6									
100	58	14	1680	1.1	VF49	80B5/B14	8024	91					
140	43	10	1540	1.4									
200	31	7	1400	1.7									
1.1	200	45	14	1370	1.1	VF49	80B5/B14	8022	91				
	280	33	10	1250	1.3								
	400	23	7	1130	1.8								

4.2 VF..HS.. 性能参数 Performance parameter

VF..HS..

M _e [Nm]	n _e [r/min]	i	P _e [kW]	n ₂ [r/min]	F _e [N]	F ₂ [N]	Page
12	2800	7	0.58	400	510	120	VF30 87
12	2800	10	0.41	280	620	70	
14	2800	15	0.34	187	720	-	
14	2800	20	0.26	140	820	-	
15	2800	30	0.21	93	960	-	
14	2800	40	0.16	70	1090	-	
14	2800	60	0.12	47	1370	-	
11	2800	70	0.08	40	1350	-	
16	1400	7	0.41	200	630	140	VF30 87
16	1400	10	0.30	140	770	80	
18	1400	15	0.24	93	910	-	
18	1400	20	0.18	70	1030	-	
20	1400	30	0.15	47	1200	-	
19	1400	40	0.12	35	1360	-	
18	1400	60	0.09	23.3	1590	-	
15	1400	70	0.07	20	1800	-	
18	900	7	0.30	129	730	150	VF30 87
18	900	10	0.22	90	900	150	
20	900	15	0.17	60	1060	-	
20	900	20	0.14	45	1200	-	
22	900	30	0.12	30	1400	-	
20	900	40	0.09	23	1590	-	
20	900	60	0.07	15	1850	-	
17	900	70	0.05	13	1700	-	
20	500	7	0.19	71	820	150	VF30 87
20	500	10	0.14	50	1120	150	
22	500	15	0.11	33	1320	150	
22	500	20	0.09	25	1490	150	
24	500	30	0.07	16.7	1700	-	
22	500	40	0.06	12.5	1700	-	
22	500	60	0.05	8.3	1700	-	
19	500	70	0.04	7	1700	-	
22	2800	7	1.1	400	950	220	VF44 89
22	2800	10	0.74	280	1150	220	
22	2800	14	0.55	200	1340	220	
29	2800	20	0.52	140	1490	220	
29	2800	28	0.40	100	1710	220	
29	2800	35	0.33	80	1870	220	
29	2800	46	0.27	61	2060	220	
29	2800	60	0.22	47	2290	220	
22	2800	70	0.15	40	2300	220	
21	2800	100	0.11	28	2300	220	
29	1400	7	0.71	200	1180	220	
29	1400	10	0.51	140	1430	220	
29	1400	14	0.37	100	1680	220	
38	1400	20	0.37	70	1860	220	
38	1400	28	0.29	50	2140	220	
38	1400	35	0.25	40	2300	220	
38	1400	46	0.19	30	2300	220	
38	1400	60	0.16	23.3	2300	220	
29	1400	70	0.11	20	2300	220	
28	1400	100	0.09	14	2300	220	
38	900	7	0.63	129	1300	220	VF44 89
38	900	10	0.45	90	1610	220	
38	900	14	0.34	84	1890	220	
45	900	20	0.29	45	2160	220	
49	900	28	0.24	32	2300	220	
49	900	35	0.20	25.7	2300	220	
49	900	46	0.17	19.6	2300	220	
45	900	60	0.13	15	2300	220	
38	900	70	0.10	12.9	2300	220	
30	900	100	0.06	9	2300	220	

M _e [Nm]	n _e [r/min]	i	P _e [kW]	n ₂ [r/min]	F _e [N]	F ₂ [N]	Page
41	2800	7	2	400	950	400	VF49 91
44	2800	10	1.5	280	1140	400	
49	2800	14	1.2	200	1310	400	
44	2800	18	0.87	156	1520	400	
47	2800	24	0.73	117	1670	400	
56	2800	28	0.78	100	1740	400	
52	2800	36	0.59	78	1970	400	
49	2800	45	0.46	62	2180	400	
44	2800	60	0.34	47	2480	400	
41	2800	70	0.28	40	2650	400	
41	2800	80	0.25	35	2780	400	
37	2800	100	0.20	28	3050	400	
54	1400	7	1.3	200	1170	400	VF49 91
59	1400	10	1.0	140	1410	400	
65	1400	14	0.90	100	1630	400	
59	1400	18	0.60	78	1890	400	
63	1400	24	0.50	58	2110	400	
74	1400	28	0.55	50	2170	400	
69	1400	36	0.42	39	2460	400	
65	1400	45	0.33	31	2725	400	
58	1400	60	0.25	23.3	3100	400	
55	1400	70	0.21	20	3150	400	
54	1400	80	0.19	17.5	3150	400	
48	1400	100	0.13	14	3150	400	
81	900	7	0.97	129	1370	400	VF49 91
84	900	10	0.75	90	1670	400	
71	900	14	0.61	84	1920	400	
88	900	18	0.47	50	2190	400	
88	900	24	0.36	38	2480	400	
82	900	28	0.41	32	2640	400	
75	900	36	0.31	25	2880	400	
71	900	45	0.25	20	3190	400	
64	900	60	0.19	15	3380	400	
60	900	70	0.16	12.9	3380	400	
58	900	80	0.14	11.3	3380	400	
52	900	100	0.11	9	3380	400	
74	500	7	0.67	71	1670	400	VF49 91
74	500	10	0.49	50	2060	400	
78	500	14	0.39	36	2400	400	
74	500	18	0.30	27.8	2730	400	
74	500	24	0.24	20.8	3090	400	
88	500	28	0.26	17.9	3180	400	
80	500	36	0.20	13.9	3450	400	
78	500	45	0.17	11.1	3450	400	
69	500	60	0.12	8.3	3450	400	
69	500	70	0.11	7.1	3450	400	
59	500	80	0.09	6.3	3450	400	
53	500	100	0.08	5	3450	400	
45	500	7	0.41	71	1610	220	VF44 89
45	500	10	0.29	50	1980	220	
50	500	14	0.25	36	2280	220	
50	500	20	0.18	25	2500	220	
55	500	28	0.16	17.9	2500	220	
55	500	35	0.14	14.3	2500	220	
50	500	46	0.10	10.9	2500	220	
50	500	60	0.09	8.3	2500	220	
45	500	70	0.07	7.1	2500	220	
32	500	100	0.04	5	2500	220	

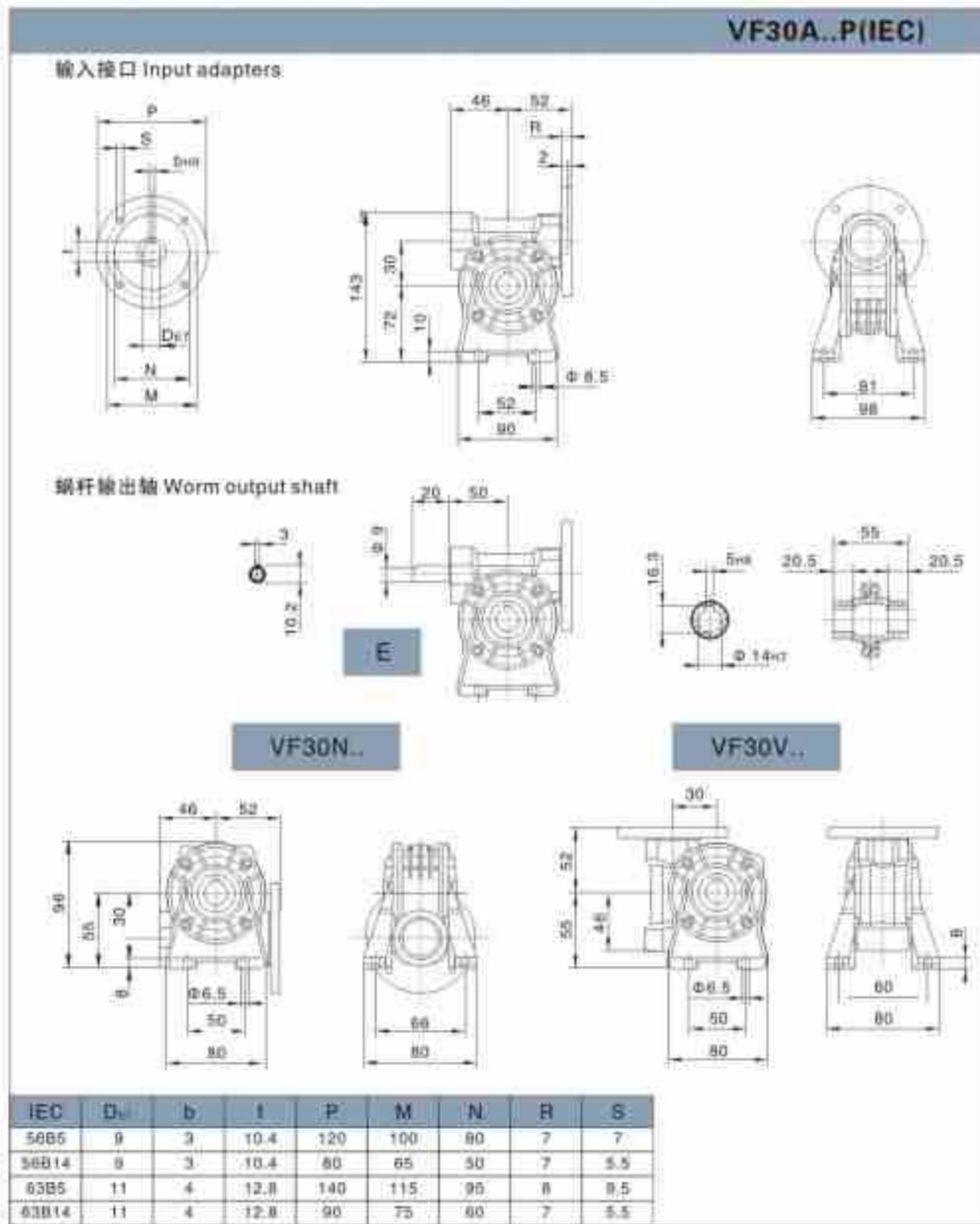
4.3 VF/VF..HS..性能参数 Performance parameter

VF/VF..HS..

M _e [Nm]	n _e [r/min]	i	P _e [kW]	n ₂ [r/min]	F _e [N]	F ₂ [N]	Page
60	1400	245	0.09	5.7	2500	140	VF30/44
60	1400	350	0.07	4.0	2500	90	
60	1400	420	0.06	3.3	2500	-	
60	1400	560	0.05	2.5	2500	-	
60	1400	700	0.04	2.0	2500	-	
60	1400	840	0.04	1.7	2500	-	
60	1400	1120	0.03	1.3	2500	-	
60	1400	1680	0.02	0.83	2500	-	
60	1400	2100	0.02	0.67	2500	-	
70	900	245	0.07	3.7	2500	150	VF30/44
70	900	350	0.05	2.6	2500	150	
70	900	420	0.04	2.1	2500	-	
70	900	560	0.04	1.6	2500	-	
70	900	700	0.03	1.3	2500	-	
70	900	840	0.03	1.1	2500	-	
70	900	1120	0.02	0.8	2500	-	
70	900	1680	0.02	0.54	2500	-	
70	900	2100	0.02	0.43	2500	-	
95	1400	240	0.13	5.8	3450	90	VF30/49
95	1400	315	0.11	4.4	3450	140	
95	1400	420	0.08	3.3	3450	-	
95	1400	540	0.07	2.6	3450	-	
95	1400	720	0.05	1.9	3450	-	
95	1400	900	0.05	1.6	3450	-	
95	1400	1120	0.04	1.3	3450	-	
95	1400	1440	0.04	0.97	3450	-	
95	1400	2160	0.03	0.65	3450	-	
95	1400	2700	0.03	0.52	3450	-	
100	900	240	0.09	3.8	3450	150	VF30/49
100	900	315	0.07	2.9	3450	150	
100	900	420	0.06	2.1	3450	-	
100	900	540	0.05	1.7	3450	-	
100	900	720	0.04	1.3	3450	-	
100	900	900	0.04	1.0	3450	-	
100	900	1120	0.03	0.80	3450	-	
100	900	1440	0.03	0.63	3450	-	
100	900	2160	0.02	0.42	3450	-	
100	900	2700	0.02	0.33	3450	-	

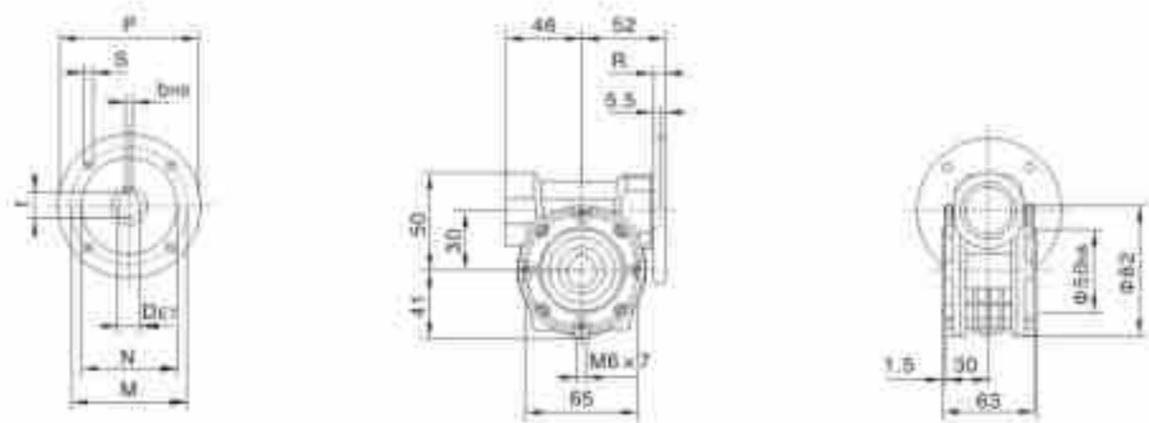
5. 外形尺寸图
Outline dimension sheet

5.1 VF..外形尺寸 Outline dimension

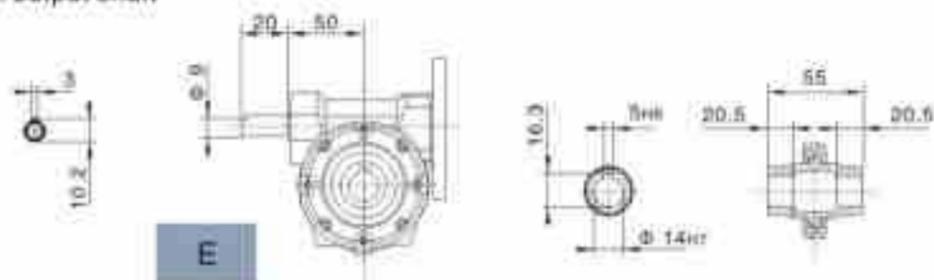


VF30P..P(IEC)

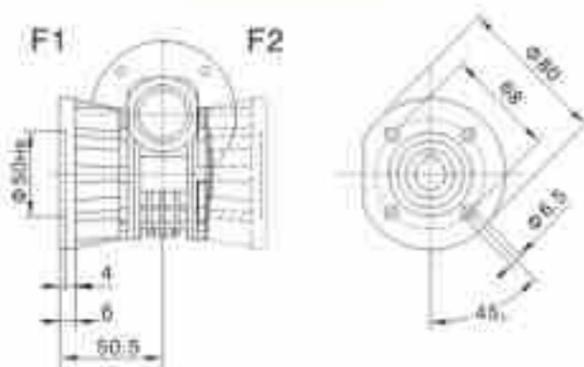
输入接口 Input adapters



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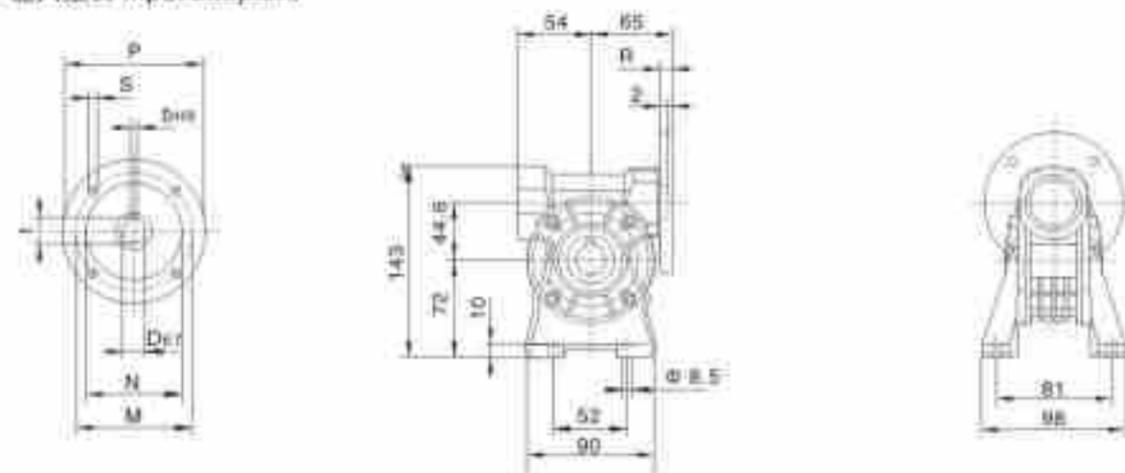
VF30F..



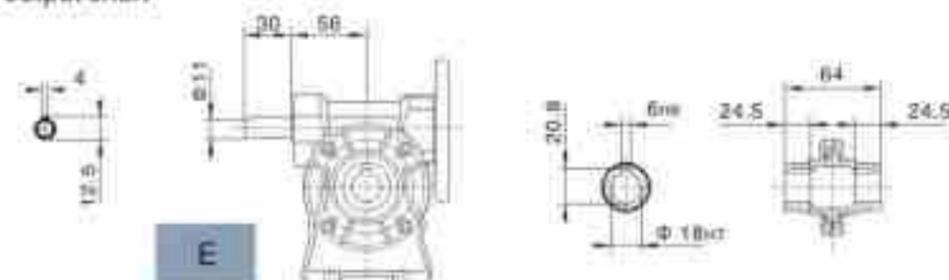
IEC	D _H	b	l	P	M	N	R	S
56B5	9	3	10.4	120	100	60	7	7
56B14	9	3	10.4	80	65	50	7	5.5
63B5	11	4	12.8	140	115	95	8	9.5
63B14	11	4	12.8	90	75	60	7	5.5

VF44A..P(IEC)

输入接口 Input adapters

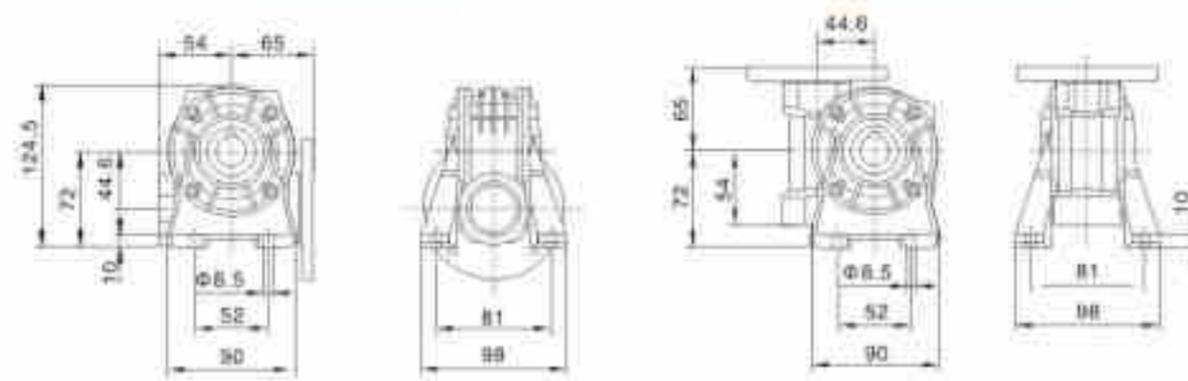


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VF44N..

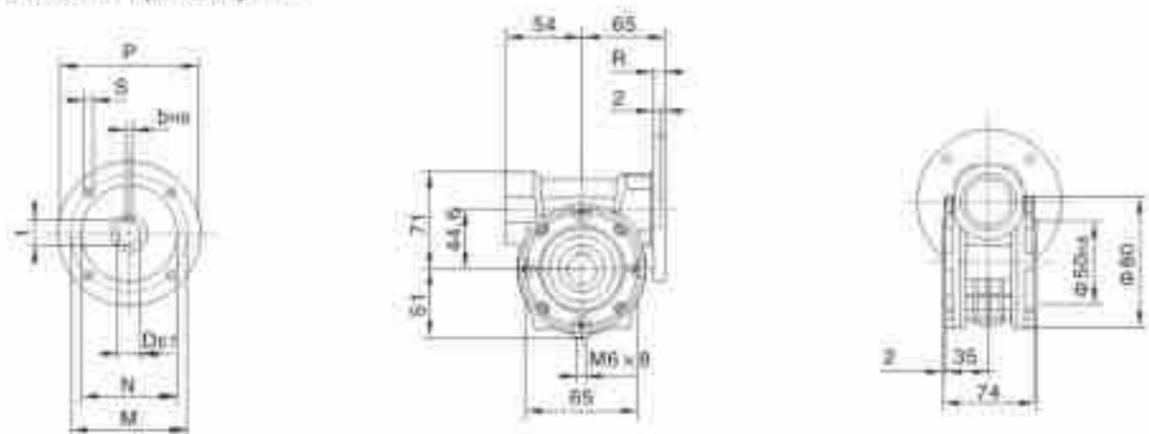
VF44V..



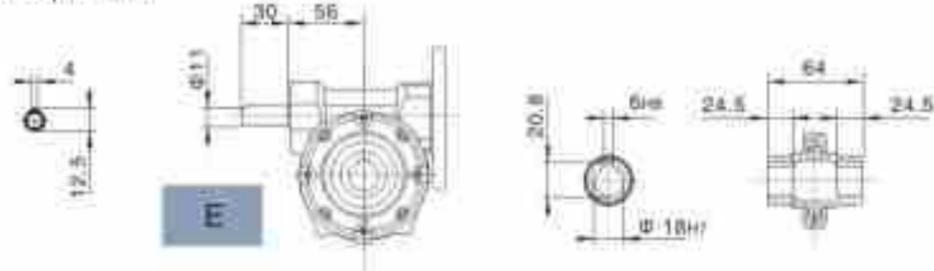
IEC	D _H	b	l	P	M	N	R	S
63B5	11	4	12.8	140	115	95	10	9.5
63B14	11	4	12.8	90	75	60	8	5.5
71B5	14	5	16.3	166	130	110	10	9.5
71B14	14	5	16.3	105	85	70	10	7

VF44P..P(IEC)

输入接口 Input adapters

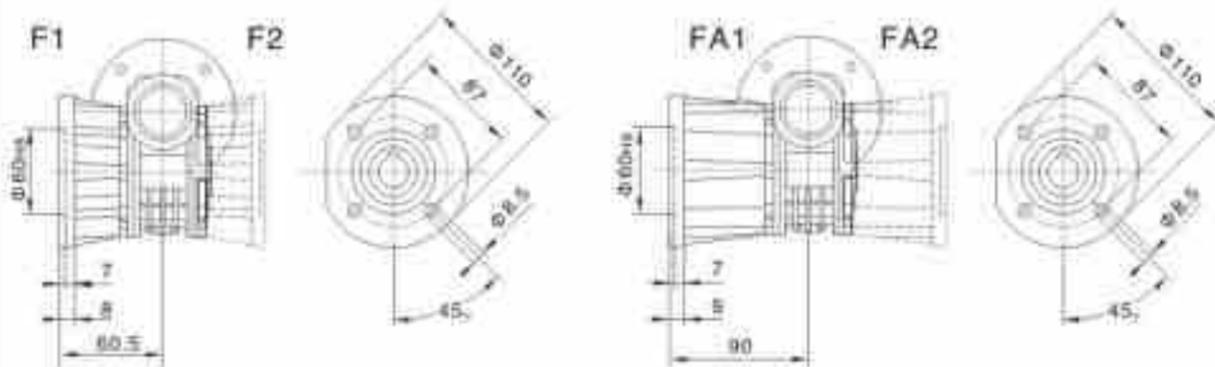


蜗杆输出轴 Worm output shaft



VF44F..

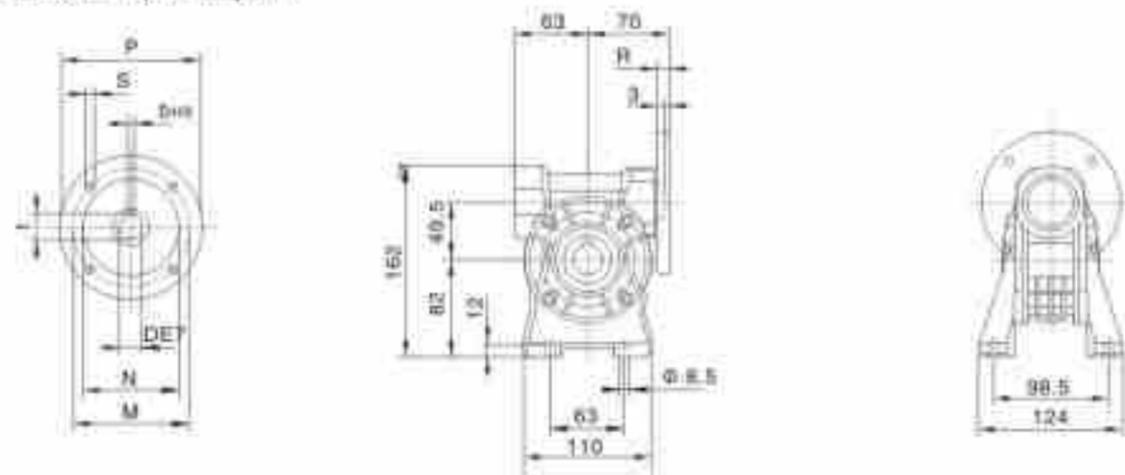
VF44FA..



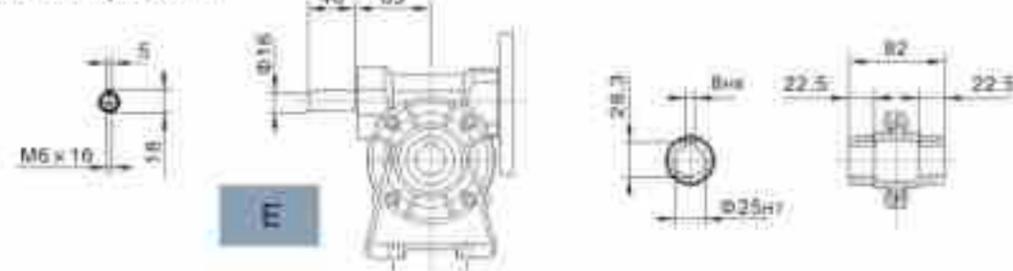
IEC	D _{in}	b	l	P	M	N	R	S
63B5	11	4	12.8	140	115	95	10	9.5
63B14	11	4	12.8	90	75	60	8	5.5
71B5	14	5	16.3	160	130	110	10	9.5
71B14	14	5	16.3	105	85	70	10	7

VF49A..P(IEC)

输入接口 Input adapters

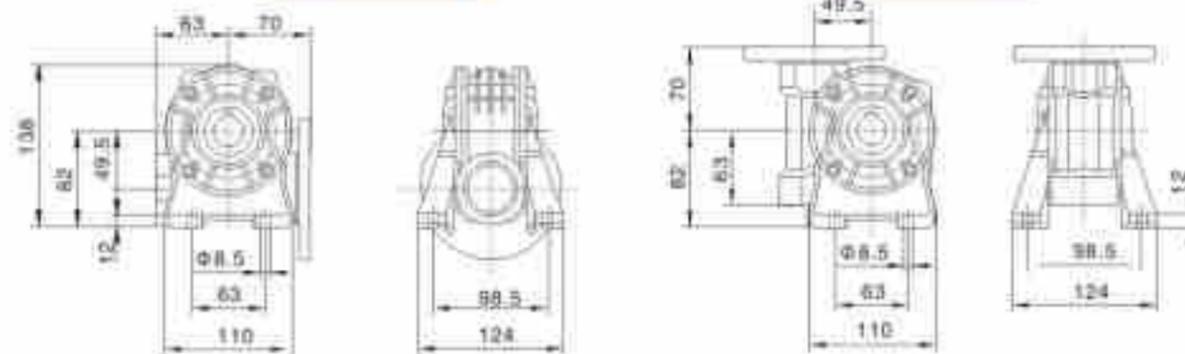


蜗杆输出轴 Worm output shaft



VF49N..

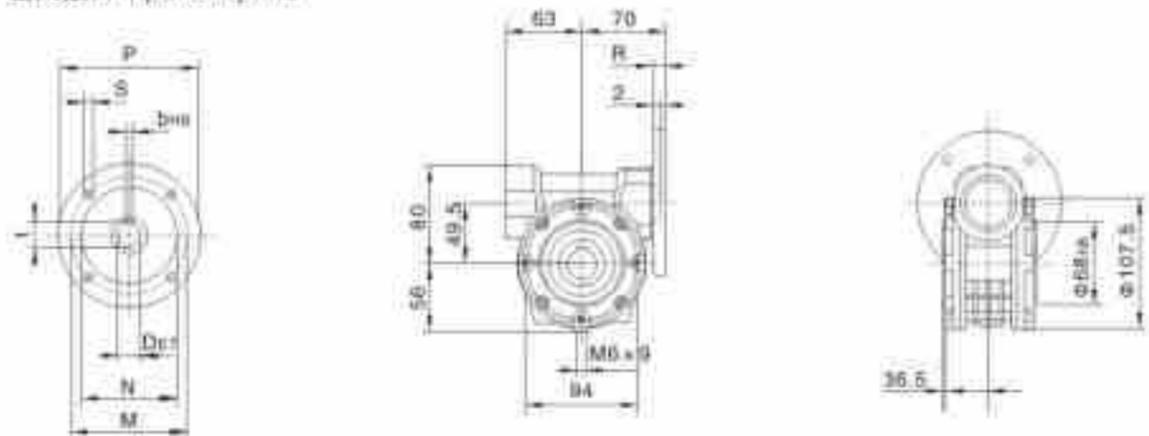
VF49V..



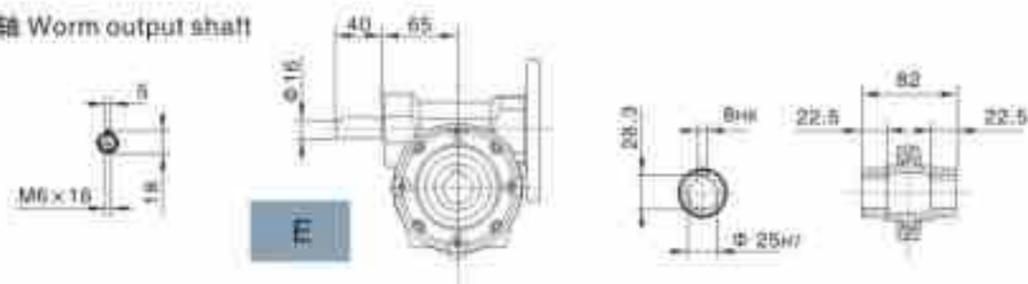
IEC	D _{in}	b	l	P	M	N	R	S
63B5	11	4	12.8	140	115	95	10.5	9.5
63B14	11	4	12.8	90	75	60	7	6
71B5	14	5	16.3	160	130	110	10.5	9.5
71B14	14	5	16.3	105	85	70	10.5	6.5
80B5	19	6	21.8	200	165	130	10	11.5
80B14	19	6	21.8	120	105	80	10	7

VF49P..P(IEC)

输入接口 Input adapters

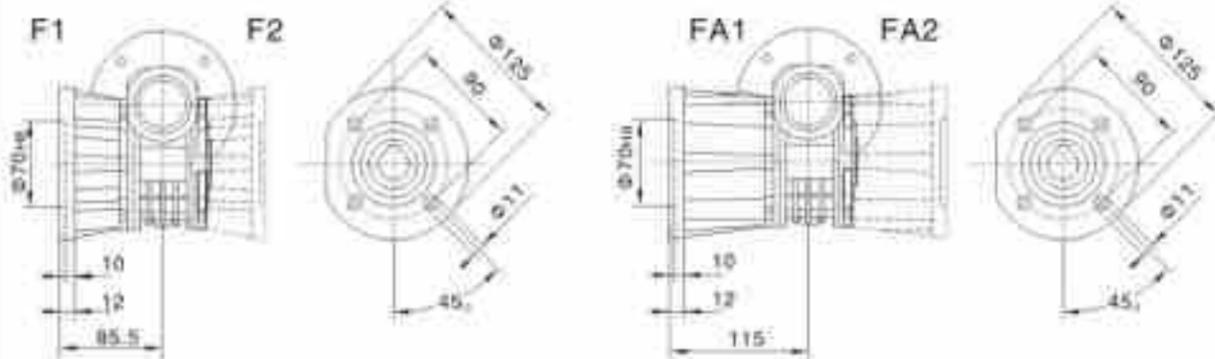


蜗杆输出轴 Worm output shaft



VF49F..

VF49FA..



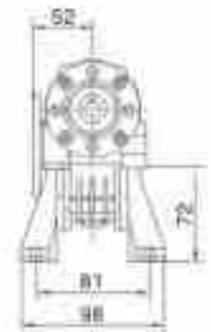
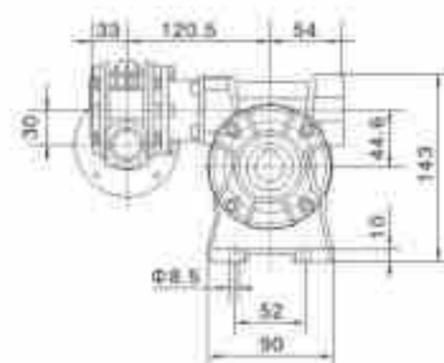
IEC	D _r	b	r	P	M	N	R	S
63B9	11	4	12.8	140	116	95	10.5	9.5
63B14	11	4	12.8	90	75	60	7	6
71B5	14	5	16.3	160	130	110	10.5	9.5
71B14	14	5	16.3	105	85	70	10.5	6.5
80B5	17	6	21.8	200	165	100	10	11.5
80B14	17	6	21.8	120	100	80	10	7

5.2 VF/FV..组合外形尺寸 Outline dimension

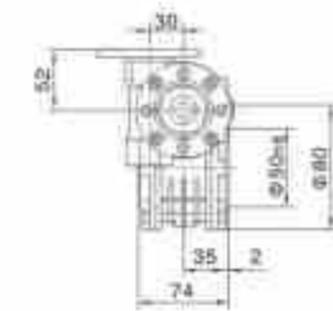
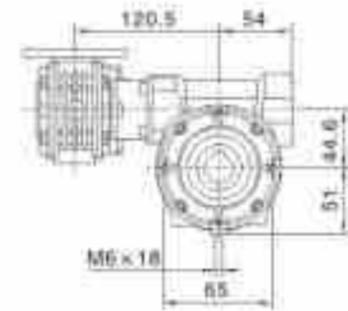
- 有关输入法兰尺寸请查阅49-54页 For the dimensions of the input flanges, please refer to pages 49-54.
- 有关输出空心轴尺寸请查阅49-54页 For the dimensions of the hollow shafts, please refer to pages 49-54.
- 有关单、双输出轴尺寸请查阅59页 For the dimensions of the double extension worm shafts, please refer to page 59.

VF30/44..

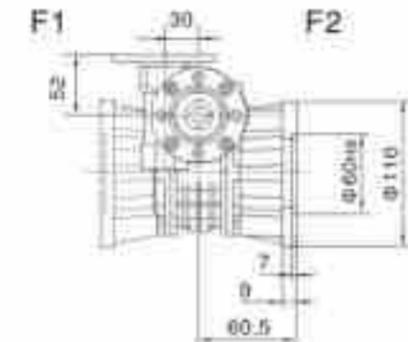
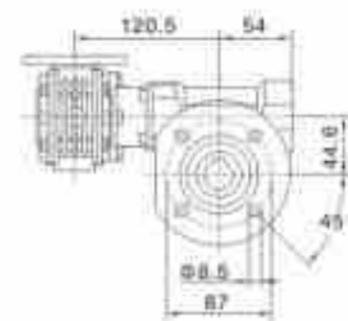
A



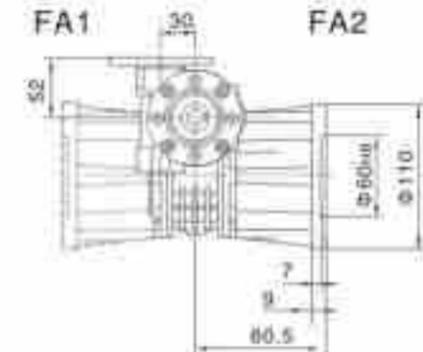
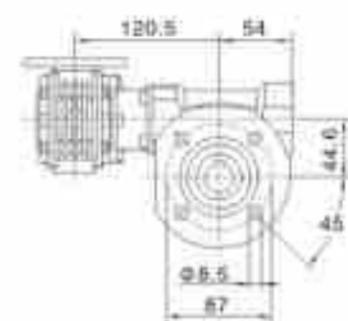
P



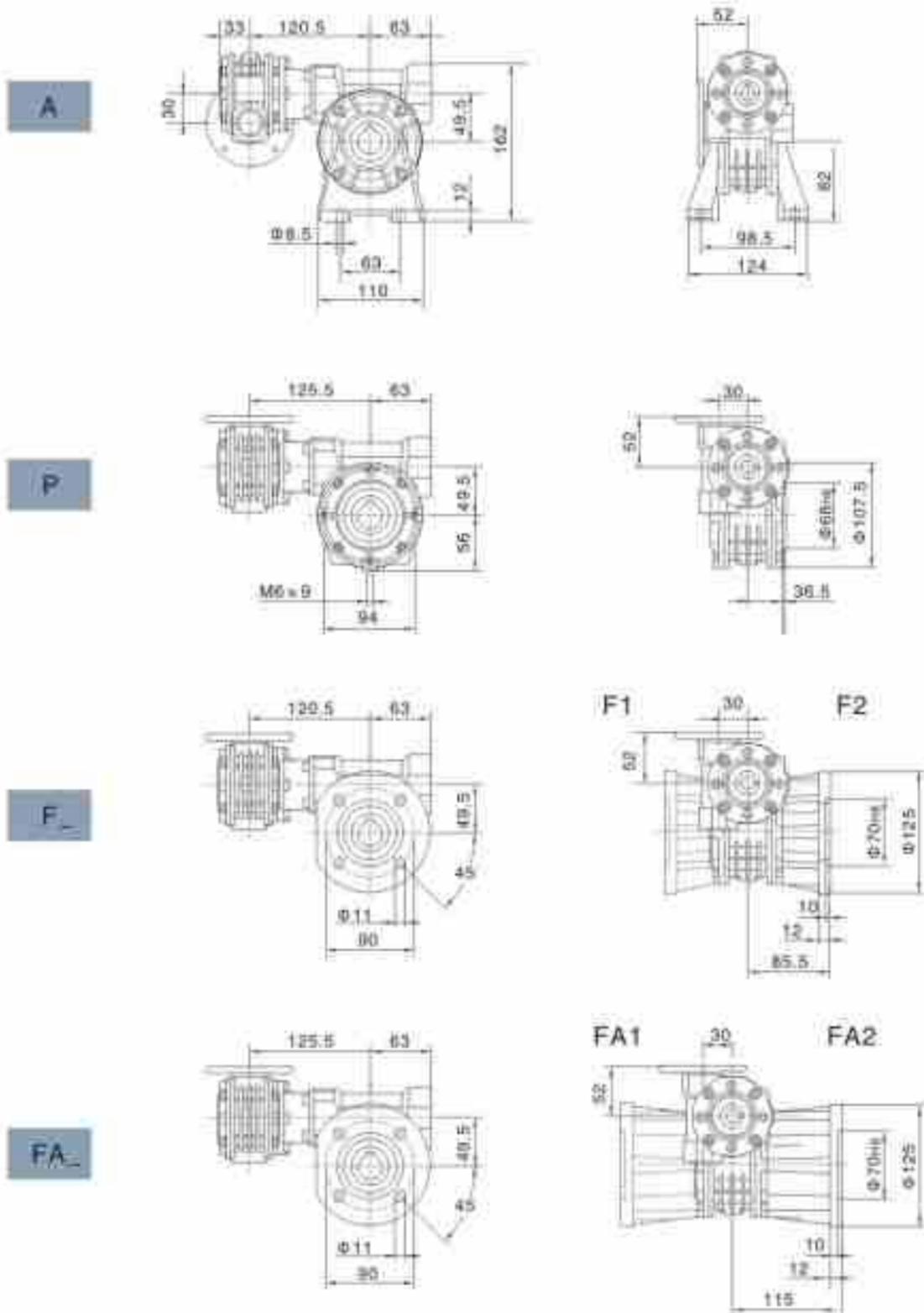
F



FA

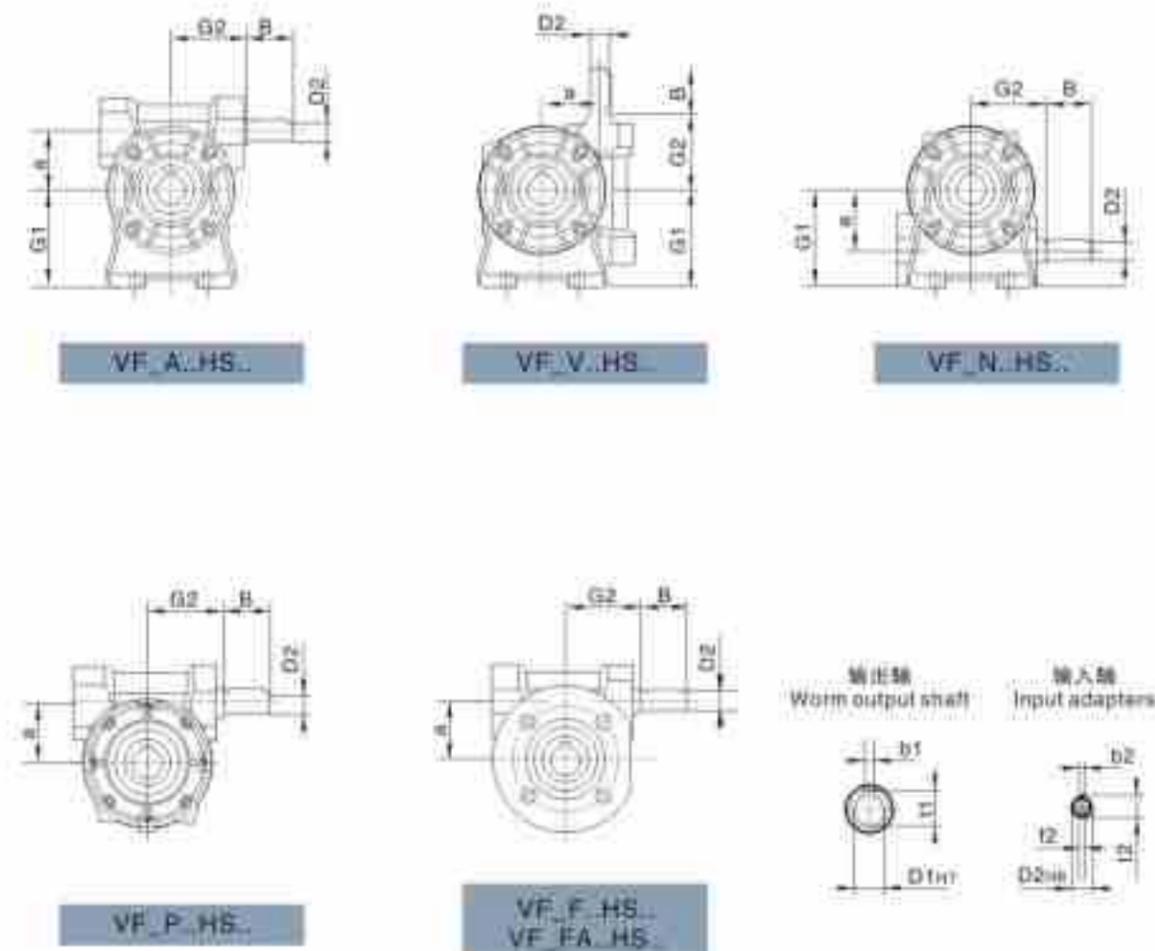


VF30/49..



5.3 VF..HS..外形尺寸 Outline dimension

VF..HS..



	a	D1H7	t1	b1	D2H6	t2	b2	B	G2	G1	G2
VF30_HS	30	14	16.3	5	9	10.2	3	20	90	47	—
VF44_HS	44.5	18	20.8	6	11	12.5	4	30	54	55	—
VF49_HS	49.5	25	26.3	8	16	18	5	40	65	64.5	M6x16

5.4 VF/VF..HS..外形尺寸 Outline dimension

VF/VF..HS..

VF/VF_A..HS..

	B	A1	D1H7	l1	b1	D2H6
VF/VF30/44_HS	44.6	30	18	20.8	6	8
VF/VF30/49_HS	49.5	30	25	26.3	8	9
	G2	G2	B	G2	G2	l2
VF/VF30/44_HS	10.2	3	20	50	72	-
VF/VF30/49_HS	10.2	3	20	50	82	-

VF/VF_P..HS..

VF/VF_F..HS..

输出轴
Worm output shaft

输入轴
Input adapters

5.5 VF/VF..E(EO)..外形尺寸 Outline dimension

在订货时，蜗轮减速机可以自由选择E或EO(双机组合)型蜗轮轴。Worm gears can be optionally requested with extended worm shaft at NDE by specifying the option E or EO(for double worm combined units)at the time of order.

VF/VF..E(EO)..

P(IEC)

	G2H6	l2	G2	B	G2	G2
VF 30	9	10.2	3	20	50	-
VF 40	11	12.5	4	30	56	-
VF 49	16	18	5	40	65	M5

HS

输入轴
Input adapters

6. 附件尺寸表
Accessories outline dimension sheet

6.1 输出轴 Output Shafts

SS

	dH6	B	B1	l1	L	f	D	b1
VF 30	14	30	32.5	16	120	M5×13	55	5
VF 44	18	40	42.7	20.5	149.4	M6×16	64	6
VF 49	25	60	63.2	28	208.4	M6×19	82	8

DS

	dH6	B	B1	l1	L	f	D	b1
VF 30	14	30	32.5	16	120	M5×13	55	6
VF 44	18	40	42.7	20.5	149.4	M6×16	64	6
VF 49	25	60	63.2	28	208.4	M6×19	82	8

*非标产品，订单时请说明。Only on request

6.2 扭力臂 Torque arm

	K1	K2	K3	KD	KE	D	G	KH	l
VF30	100	40	157.5	50	65	7	14	8	4
VF44	100	40	157.5	50	65	7	14	8	4
VF49	100	55	172.5	68	94	7	14	8	4

无振动—无阻尼
Without vibration-dampening bushing

7. 安装方位
Arrangements

7.1 VF..安装方位图 Installation Positions Diagram

	VF..A	VF..N	VF..V	VF..P	VF..F
B3					
B6					
B7					
B8					
V5					
V6					

7.2 VF/VF..安装方式 Arrangements

蜗轮减速机组合时，除非在订货时另有说明，下面图表中灰色背景安装方式将在工厂里配置完成。
For combined worm gear units, unless otherwise specified at the time of ordering, the arrangements highlighted in grey in the diagrams below will be configured at the factory.

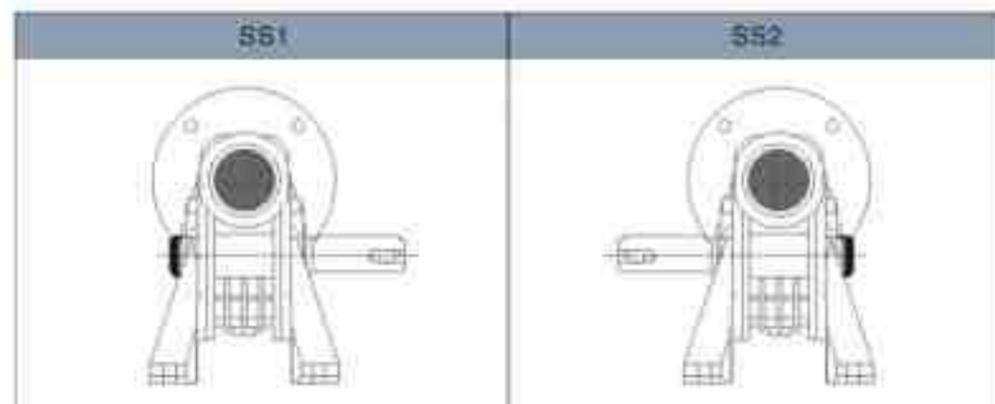
	CW1	CCW1	CW2	CCW2	CW3	CWW3	CW4	CCW4
A								
N								
V								
F1 FA1								
F2 FA2								
P								

图例中所有安装方式都适用于HS输入方式(任意轴)。对于P型输入方式,部分安装方式需要通过使用与表中规定相同尺寸或更小的IEC法兰(B5或B14)才能实现。For units with the HS input (free shaft), all the mounting options shown are available. For units with the P(IEC), certain mounting options can be obtained only by using IEC flanges (B5 or B14) of the same size or smaller than those shown in tables.

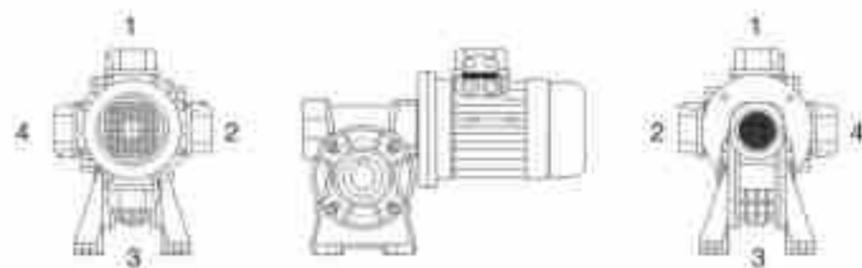
		CW1	CCW1	CW2	CCW2	CW3	CCW3	CW4	CCW4
VF/VF 30/44	N								
	A	56B14							
	V	63B14							
	P								
VF/VF 30/49	N								
	A	56B14							
	V	63B14							
	P								

		CW1(1) CCW1(2)	CCW1(1) CW1(2)	CW2(1) CCW2(2)	CCW2(1) CW2(2)	CW3(1) CCW3(2)	CCW3(1) CW3(2)	CW4(1) CCW4(2)	CCW4(1) CW4(2)
VF/VF 30/44	N	56B14-63B14							
VF/VF 30/49	A	56B14-63B14							

7.3 单向输出轴位置 Position diagram for single output shaft



7.4 接线盒位置 Position of terminal box



如对接线盒位置有特殊要求,请在下单时如图所示来指定接线盒安装方位。In the case of specific requirements, when ordering, specify the position of the terminal box as shown in the diagram.

WP系列蜗轮蜗杆减速机
WP series worm gear speed reducer

1. 产品图片
Products of pictures





2. 产品结构图
Product structural view

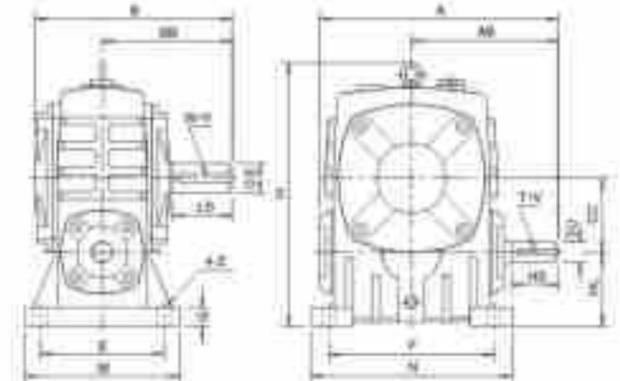


3. 型号说明
Model notes

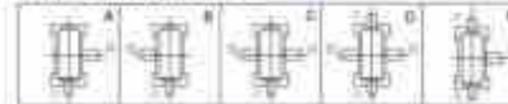
W P W E D K A 50-80 - 600 - B	
W	产品名称: W-蜗杆减速机。 Product name: W-worm speed reducer
P	箱体结构: P-整体, D-分体。 Box structure: P-whole, D-separate
W	箱体型式: W-万能型, 无代码-基本型。 Box model: W-universal, Non-code-basic
E	整机结构: E-双级, EE-多级, 无代码-基本型。 Unit structure: E-double, EE-multistage, Non-code-basic
D	输入轴联接方式: D-带电机法兰, 无代码-基本型。 Connector of input shaft: D-with motor flange, Non-code-basic
K	输出轴结构: K-中空输出轴, 无代码-基本型。 Structure of output shaft: K-hollow, Non-code-basic
A	输出、输入轴型式: A-入轴在下, S-入轴在上, O-出轴向上, X-出轴向下, Z-入轴向上, V-入轴向下, 无代码-万能型。 Arrangement of input or output shaft: A-input shaft is below, S-input shaft is above, O-output shaft is upward, X-output shaft is downward, Z-input shaft is upward, V-input shaft is downward, Non-code-universal
50-80	规格: 以中心距表示 50-80。 Size: Signed by centre distance 50-80
600	传动比: 600。 Ratio: 600
B	轴输出: B。 Shaft direction: B

4. 安装尺寸
Dimensions of outline installation

WPA型[MODEL]

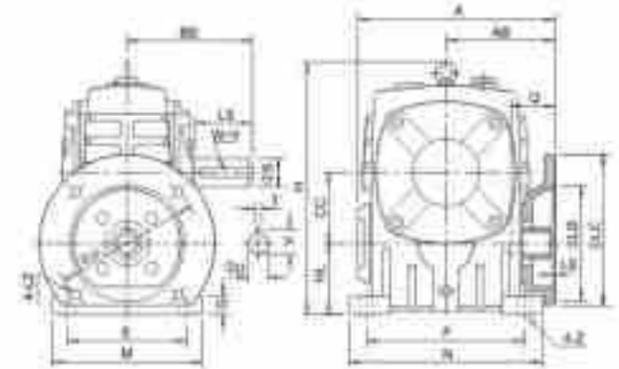


轴输出 SHAFT DIRECTION

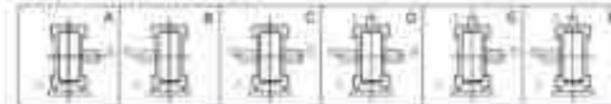


型号 Size	传动比 Ratio	A	AB	B	BB	CC	H	HL	M	N	E	F	G	Z	输入轴 Input shaft			输出轴 Output shaft			重量 Weight
															HS	U	TxV	LS	S	WxY	
40	1/10	143	87	114	74	40	138	40	90	100	70	80	70	70	25	12	4x2.5	28	14	5x3	4
50		175	107	130	87	50	173	50	130	140	85	110	55	12	30	12	4x2.5	40	17	5x3	7
60		198	122	148	112	60	204	60	130	150	105	120	70	12	40	15	5x4	50	22	6x3.5	10
70		221	140	166	131	70	236	70	150	170	115	130	70	15	40	18	6x3.5	60	28	6x4	15
80		251	160	214	142	80	298	80	170	210	135	160	70	15	50	22	6x3.5	85	32	10x5	20
100		322	190	254	168	100	328	100	190	270	155	220	75	15	60	25	8x4	75	38	10x5	35
120		381	229	282	198	120	430	120	230	320	180	280	80	18	65	30	8x4	85	45	14x5.5	60
125		1/20	433	260	317	210	480	135	250	350	200	290	80	18	75	35	10x5	95	55	16x6	80
147		1/30	479	284	324	212	447	151	223	250	220	280	82	18	80	35	10x5	95	55	16x6	90
155		1/40	504	302	352	202	458	151	220	275	240	220	80	21	85	40	12x5	110	60	18x7	110
175		1/50	543	325	402	202	490	160	210	430	250	300	80	21	85	45	14x5.5	110	65	18x7	130
200		1/60	587	350	467	205	500	167	175	360	480	290	80	24	85	50	14x5.5	120	70	20x7.5	215
250	705		410	552	260	550	180	200	480	360	360	80	28	110	60	18x7	150	90	25x9	360	

WPDA型[MODEL]

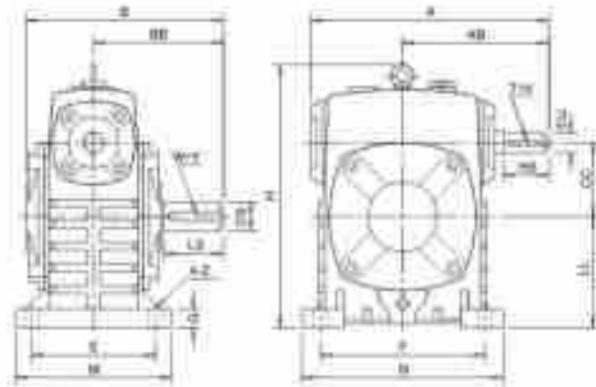


轴输出 SHAFT DIRECTION

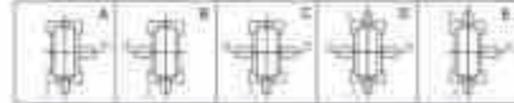


型号 Size	传动比 Ratio	A	AB	B	BB	CC	H	HL	M	N	E	F	G	Z	电机法兰 Flange			输入轴 Input shaft			输出轴 Output shaft			重量 Weight
															GA	LA	LC	LE	LE	U	TxV	LS	S	
30	0.18	103	81	97	55	170	50	130	140	90	110	15	15	115	25	14	M10	31	11	4x1.5	40	11	5x3	4
40	0.27	127	91	116	60	204	55	130	150	100	120	20	12	130	30	15	M10	35	14	5x1.5	50	12	6x3.5	7
50	0.36	152	108	141	70	238	70	150	180	115	150	20	15	150	35	15	M10	40	17	6x3.5	60	15	6x3.5	10
60	0.45	177	117	167	79	272	79	150	190	115	160	20	15	160	40	15	M10	45	18	6x4	70	16	6x4	13
80	0.72	230	139	142	80	308	80	170	220	135	180	20	15	180	50	15	M10	55	20	10x5	80	20	10x5	22
100	1.08	280	168	168	100	338	100	190	270	155	200	20	15	190	60	15	M10	65	24	10x5	90	24	10x5	35
120	1.35	333	181	180	120	430	120	230	320	180	260	30	18	215	80	25	M12	85	28	14x5.5	85	45	14x5.5	64
125	1/20	370	202	210	135	480	135	250	350	200	290	30	18	215	100	25	M12	95	33	16x6	95	55	16x6	85
147	1/30	380	204	212	147	521	123	250	350	200	280	32	18	215	100	25	M12	95	33	16x6	95	55	16x6	95
155	1/40	429	224	212	155	521	130	275	380	220	320	30	21	255	100	30	M12	95	38	18x7	110	60	18x7	110
175	1/50	461	252	252	175	600	160	310	430	260	310	40	21	265	120	30	M12	95	38	18x7	130	65	18x7	135
200	1/60	516	280	305	200	696	175	360	480	290	300	40	24	265	130	30	M12	95	38	18x7	120	70	20x7.5	238
250	1/80	610	330	340	250	800	200	400	500	380	480	45	28	300	150	35	M16	114	42	12x5.5	150	90	25x9	388

WPS型(MODEL)

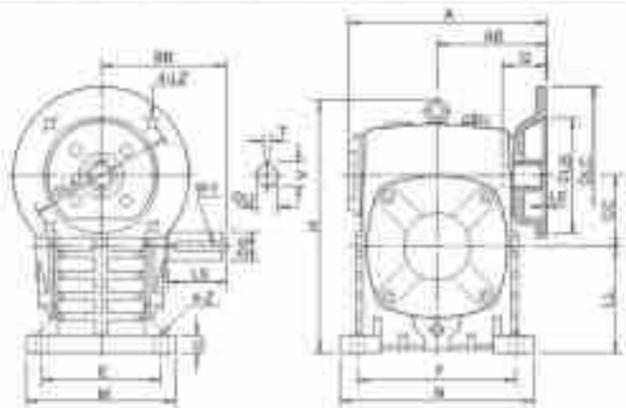


轴视图 SHAFT DIRECTION

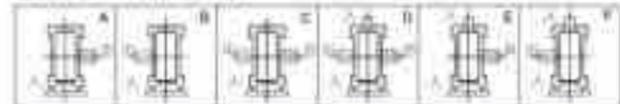


型号 Size	传动比 Ratio	A	AB	E	CC	H	LL	M	N	F	G	Z	输入轴 Input shaft			输出轴 Output shaft			重量 Weight(kg)		
													HS	U	T x V	LB	S	W x Y			
40	1/10	143	87	114	14	40	141	85	90	100	70	80	13	10	25	12	442.5	25	14	5x3	4
50		175	107	130	17	50	180	95	120	140	95	110	13	12	30	12	442.5	40	17	5x3	7
60		198	122	148	19	60	207	99	130	150	105	125	12	12	40	15	543	50	22	6x3.5	10
70		231	142	164	23	70	238	105	150	160	115	130	10	10	50	15	645.5	60	20	6x4	10
80		261	160	184	26	80	270	110	170	180	120	140	10	10	55	22	645.5	65	22	10x5	20
100		302	180	204	30	100	321	130	190	220	150	160	15	15	55	25	844	75	30	10x5	35
120		361	220	242	36	120	423	140	220	260	180	200	10	10	55	30	844	85	40	14x5.5	60
130		430	260	272	43	130	480	150	250	300	200	220	10	10	55	35	1045	85	55	16x6	80
147		430	264	274	47	147	480	200	250	300	200	230	10	10	60	35	1045	85	55	16x6	90
150		504	302	302	50	150	541	235	275	330	230	250	10	10	65	40	1248	110	60	16x7	110
175	545	325	325	54	175	594	260	310	400	260	280	10	10	65	45	1445.5	110	65	16x7	130	
200	587	350	350	60	200	677	280	330	480	280	300	10	10	70	50	1645.5	125	70	20x7.5	210	
250	705	420	420	70	250	824	350	400	580	350	380	10	10	75	60	1847	155	80	25x9	380	

WPDS型(MODEL)

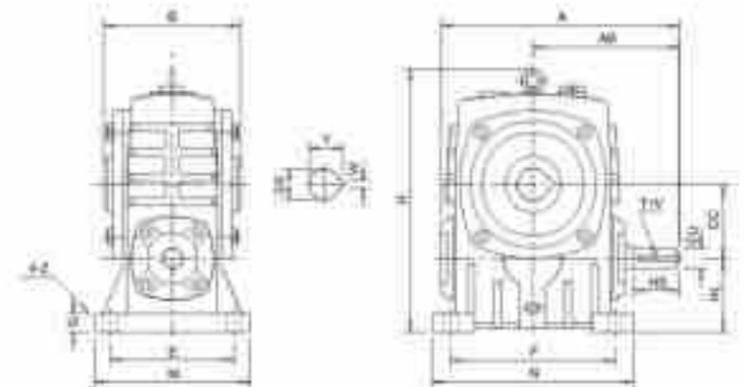


轴视图 SHAFT DIRECTION

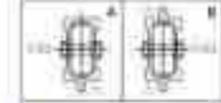


型号 Size	传动比 Ratio	A	AB	E	CC	H	LL	M	N	F	G	Z	蜗轮法兰 Flange						输入轴 Input shaft			输出轴 Output shaft			重量 Weight(kg)
													LA	LB	LC	LE	LF	Q	U	T x V	LB	S	W x Y		
40	1/10	143	87	114	14	40	141	85	90	100	70	80	13	10	25	12	442.5	25	14	5x3	4				
50		175	107	130	17	50	180	95	120	140	95	110	13	12	30	12	442.5	40	17	5x3	7				
60		198	122	148	19	60	207	99	130	150	105	125	12	12	40	15	543	50	22	6x3.5	10				
70		231	142	164	23	70	238	105	150	160	115	130	10	10	50	15	645.5	60	20	6x4	10				
80		261	160	184	26	80	270	110	170	180	120	140	10	10	55	22	645.5	65	22	10x5	20				
100		302	180	204	30	100	321	130	190	220	150	160	15	15	55	25	844	75	30	10x5	35				
120		361	220	242	36	120	423	140	220	260	180	200	10	10	55	30	844	85	40	14x5.5	60				
130		430	260	272	43	130	480	150	250	300	200	220	10	10	55	35	1045	85	55	16x6	80				
147		430	264	274	47	147	480	200	250	300	200	230	10	10	60	35	1045	85	55	16x6	90				
150		504	302	302	50	150	541	235	275	330	230	250	10	10	65	40	1248	110	60	16x7	110				
175	545	325	325	54	175	594	260	310	400	260	280	10	10	65	45	1445.5	110	65	16x7	130					
200	587	350	350	60	200	677	280	330	480	280	300	10	10	70	50	1645.5	125	70	20x7.5	210					
250	705	420	420	70	250	824	350	400	580	350	380	10	10	75	60	1847	155	80	25x9	380					

WPKA型(MODEL)

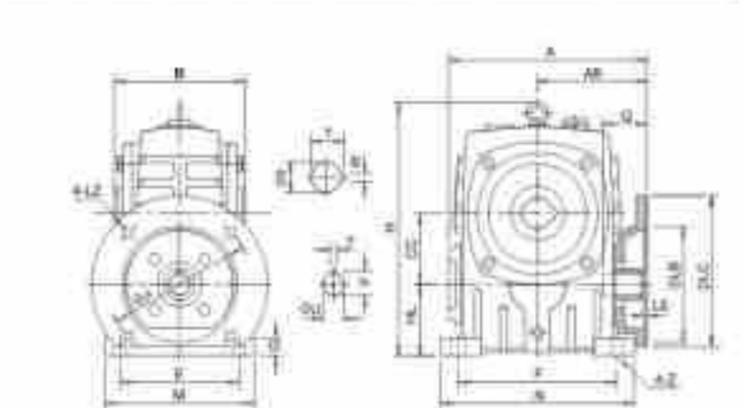


轴视图 SHAFT DIRECTION

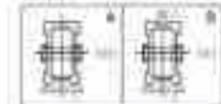


型号 Size	传动比 Ratio	A	AB	E	CC	H	LL	M	N	F	G	Z	输入轴 Input shaft			输出轴 Output shaft			重量 Weight(kg)		
													HS	U	T x V	LB	S	W x Y			
40	1/10	143	87	114	14	40	141	85	90	100	70	80	13	10	25	12	442.5	25	14	5x3	4
50		175	107	130	17	50	180	95	120	140	95	110	13	12	30	12	442.5	40	17	5x3	7
60		198	122	148	19	60	207	99	130	150	105	125	12	12	40	15	543	50	22	6x3.5	10
70		231	142	164	23	70	238	105	150	160	115	130	10	10	50	15	645.5	60	20	6x4	10
80		261	160	184	26	80	270	110	170	180	120	140	10	10	55	22	645.5	65	22	10x5	20
100		302	180	204	30	100	321	130	190	220	150	160	15	15	55	25	844	75	30	10x5	35
120		361	220	242	36	120	423	140	220	260	180	200	10	10	55	30	844	85	40	14x5.5	60
130		430	260	272	43	130	480	150	250	300	200	220	10	10	55	35	1045	85	55	16x6	80
147		430	264	274	47	147	480	200	250	300	200	230	10	10	60	35	1045	85	55	16x6	90
150		504	302	302	50	150	541	235	275	330	230	250	10	10	65	40	1248	110	60	16x7	110
175	545	325	325	54	175	594	260	310	400	260	280	10	10	65	45	1445.5	110	65	16x7	130	
200	587	350	350	60	200	677	280	330	480	280	300	10	10	70	50	1645.5	125	70	20x7.5	210	
250	705	420	420	70	250	824	350	400	580	350	380	10	10	75	60	1847	155	80	25x9	380	

WPKA型(MODEL)

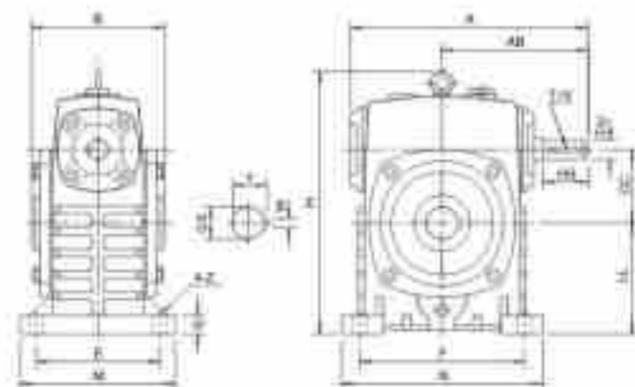


轴视图 SHAFT DIRECTION

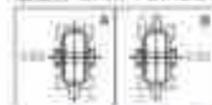


型号 Size	传动比 Ratio	A	AB	E	CC	H	LL	M	N	F	G	Z	蜗轮法兰 Flange						输入轴 Input shaft			输出轴 Output shaft			重量 Weight(kg)
													LA	LB	LC	LE	LF	Q	U	T x V	LB	S	W x Y		
40	1/10	143	87	114	14	40	141	85	90	100	70	80	13	10	25	12	442.5	25	14	5x3	4				
50		175	107	130	17	50	180	95	120	140	95	110	13	12	30	12	442.5	40	17	5x3	7				
60		198	122	148	19	60	207	99	130	150	105	125	12	12	40	15	543	50	22	6x3.5	10				
70		231	142	164	23	70	238	105	150	160	115	130	10	10	50	15	645.5	60	20	6x4	10				
80		261	160	184	26	80	270	110	170	180	120	140	10	10	55	22	645.5	65	22	10x5	20				
100		302	180	204	30	100	321	130	190	220	150	160	15	15	55	25	844	75	30	10x5	35				
120		361	220	242	36	120	423	140	220	260	180	200	10	10	55	30	844	85	40	14x5.5	60				
130		430	260	272	43	130	480	150	250	300	200	220	10	10	55	35	1045	85	55	16x6	80				
147		430	264	274	47	147	480	200	250	300	200	230	10	10	60	35	1045	85	55	16x6	90				
150		504	302	302	50	150	541	235	275	330	230	250	10	10	65	40	1248	110	60	16x7	110				
175	545	325	325	54	175	594	260	310	400	260	280	10	10	65	45	1445.5	110	65	16x7	130					
200	587	350	350	60	200	677	280	330	480	280	300	10	10	70	50	1645.5	125	70	20x7.5	210					
250	705	420	420	70	250	824	350	400	580	350	380	10	10	75	60	1847	155	80	25x9	380					

WPKS型(MODEL)

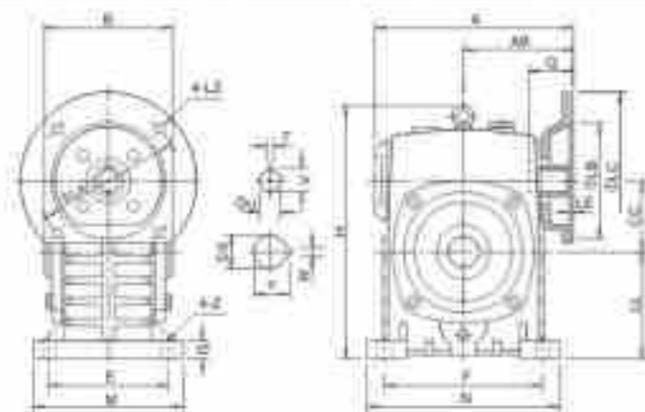


轴输出 SHAFT DIRECTION

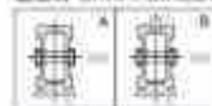


型号 Size	传动比 Ratio	A	AB	B	CC	H	M	N	E	F	G	Z	输入轴 Input shaft			输出轴 Output shaft		重量 Weight(kg)	
													HA	UA	VA	V	S		WxY
50	1/10 1/15 1/20 1/25 1/30 1/35 1/40 1/45 1/50 1/55 1/60 1/65 1/70 1/75 1/80 1/85	140	87	80	60	128	40	80	100	70	80	13	25	12	4x2.5	18	5x18.5	4	
55		175	107	110	80	173	55	100	140	96	110	15	12	30	12	4x2.5	20	5x22.8	7
65		198	122	120	80	204	65	130	180	105	130	20	12	40	15	5x5	25	5x28.3	10.5
75		221	140	132	75	236	75	150	190	115	160	25	15	40	18	5x5.5	30	5x33.3	14.5
85		241	155	150	80	268	85	170	220	135	180	30	15	55	22	5x5.5	35	10x36.3	22
100		322	180	174	100	328	100	190	270	165	230	35	15	55	25	6x4	40	12x45.3	36
120		381	228	180	120	420	120	230	320	195	260	40	18	65	30	6x4	45	14x48.3	50
135		432	255	214	135	480	135	260	360	230	290	40	18	75	35	7x5	50	16x44.4	60
147		438	264	220	147	500	150	290	380	250	300	50	18	80	35	7x5	55	16x44.4	65
165		504	300	258	150	537	150	320	420	275	330	55	21	85	40	7x5	60	20x74.3	114
175		545	325	282	175	620	180	350	450	320	350	45	21	85	45	7x5.5	65	22x80.4	130
200		587	350	304	200	667	175	380	480	350	380	45	24	90	50	7x5.5	70	22x80.4	218
240		705	420	400	240	800	200	460	580	380	480	45	28	115	60	7x7	110	24x110.4	360

WPKS型(MODEL)



轴输出 SHAFT DIRECTION

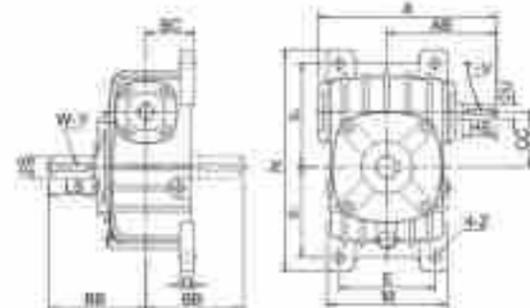


型号 Size	传动比 Ratio	A	AB	B	CC	H	M	N	E	F	G	Z	蜗轮法兰 Flange			输入轴 Input shaft			输出轴 Output shaft		重量 Weight(kg)
													LA	LB	LC	LE	LZ	Q	U	TxV	
50	0.18 0.25 0.32 0.45 0.55 0.75 1.0 1.5 2.0 3.0 4.5 7.5 11.0 16.5	72	83	100	60	120	40	80	100	70	80	13	25	12	4x2.5	20	5x22.8	4			
55		157	110	110	80	173	55	100	140	96	110	15	12	30	12	4x2.5	25	5x28.3	7		
65		200	120	120	80	204	65	130	180	105	130	20	12	40	15	5x5	30	5x33.3	10.5		
75		220	140	132	75	236	75	150	190	115	160	25	15	40	18	5x5.5	35	10x36.3	14.5		
85		240	155	150	80	268	85	170	220	135	180	30	15	55	22	5x5.5	40	12x45.3	22		
100		320	180	174	100	328	100	190	270	165	230	35	15	55	25	6x4	45	14x48.3	36		
120		380	228	180	120	420	120	230	320	195	260	40	18	65	30	6x4	50	16x44.4	50		
135		430	255	214	135	480	135	260	360	230	290	40	18	75	35	7x5	55	16x44.4	60		
147		435	264	220	147	500	150	290	380	250	300	50	18	80	35	7x5	60	20x74.3	114		
165		500	300	258	150	537	150	320	420	275	330	55	21	85	40	7x5	65	22x80.4	130		
175		540	325	282	175	620	180	350	450	320	350	45	21	85	45	7x5.5	70	22x80.4	218		
200		580	350	304	200	667	175	380	480	350	380	45	24	90	50	7x5.5	75	24x86.4	359		
240		700	420	400	240	800	200	460	580	380	480	45	28	115	60	7x7	110	24x110.4	609		

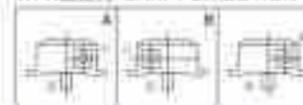
WPX型(MODEL)



WPO型(MODEL)



WPX轴输出 SHAFT DIRECTION



WPO轴输出 SHAFT DIRECTION

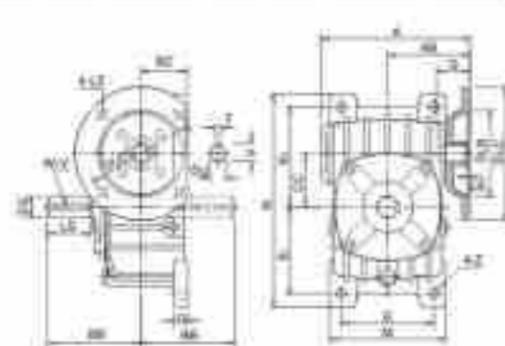


型号 Size	传动比 Ratio	A	AB	B	CC	M	N	E	F	G	Z	输入轴 Input shaft			输出轴 Output shaft		重量 Weight(kg)		
												HA	UA	VA	V	S		WxY	
50	1/10 1/15 1/20 1/25 1/30 1/35 1/40 1/45 1/50 1/55 1/60 1/65 1/70 1/75 1/80 1/85	140	87	80	60	128	40	80	100	70	80	13	25	12	4x2.5	18	5x18.5	4	
55		175	107	80	80	173	55	100	140	96	110	15	12	30	12	4x2.5	20	5x22.8	7
65		198	122	80	80	204	65	130	180	105	130	20	12	40	15	5x5	25	5x28.3	10.5
75		221	140	75	75	236	75	150	190	115	160	25	15	40	18	5x5.5	30	5x33.3	14.5
85		241	155	80	80	268	85	170	220	135	180	30	15	55	22	5x5.5	35	10x36.3	22
100		322	180	80	80	328	100	190	270	165	230	35	15	55	25	6x4	40	12x45.3	36
120		381	228	80	80	420	120	230	320	195	260	40	18	65	30	6x4	45	14x48.3	50
135		432	255	80	80	480	135	260	360	230	290	40	18	75	35	7x5	50	16x44.4	60
147		438	264	80	80	500	150	290	380	250	300	50	18	80	35	7x5	55	16x44.4	65
165		504	300	80	80	537	150	320	420	275	330	55	21	85	40	7x5	60	20x74.3	114
175		545	325	80	80	620	180	350	450	320	350	45	21	85	45	7x5.5	65	22x80.4	130
200		587	350	80	80	667	175	380	480	350	380	45	24	90	50	7x5.5	70	22x80.4	218
240		705	420	80	80	800	200	460	580	380	480	45	28	115	60	7x7	110	24x110.4	360

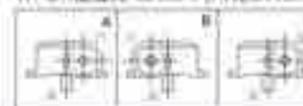
WPDX型(MODEL)



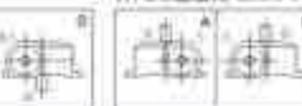
WPDO型(MODEL)



WPDX轴输出 SHAFT DIRECTION

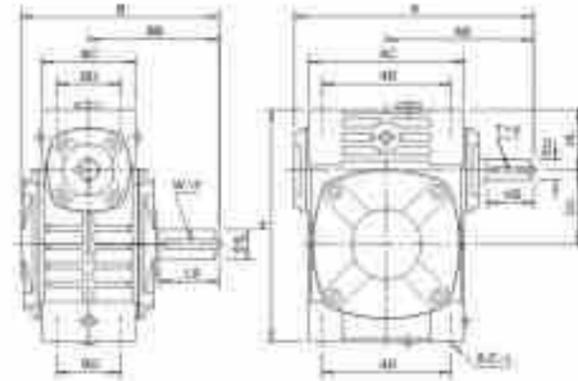


WPDO轴输出 SHAFT DIRECTION

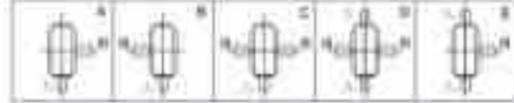


型号 Size	传动比 Ratio	A	AB	B	CC	M	N	E	F	G	Z	蜗轮法兰 Flange			输入轴 Input shaft			输出轴 Output shaft		重量 Weight(kg)
												LA	LB	LC	LE	LZ	Q	U	TxV	
50	0.18 0.25 0.32 0.45 0.55 0.75 1.0 1.5 2.0 3.0 4.5 7.5 11.0 16.5	72	83	100	60	120	40	80	100	70	80	13	25	12	4x2.5	20	5x22.8	4		
55		157	110	110	80	173	55	100	140	96	110	15	12	30	12	4x2.5	25	5x28.3	7	
65		200	120	120	80	204	65	130	180	105	130	20	12	40	15	5x5	30	5x33.3	10.5	
75		220	140	132	75	236	75	150	190	115	160	25	15	40	18	5x5.5	35	10x36.3	14.5	
85		240	155	80	80	268	85	170	220	135	180	30	15	55	22	5x5.5	40	12x45.3	22	
100		320	180	80	80	328	100	190	270	165	230	35	15	55	25	6x4	45	14x48.3	36	
120		380	228	80	80	420	120	230	320	195	260	40	18	65	30	6x4	50	16x44.4	50	
135		430	255	80	80	480	135	260	360	230	290	40	18	75	35	7x5	55	16x44.4	60	
147		435	264	80	80	500	150	290	380	250	300	50	18	80	35	7x5	60	20x74.3	114	
165		500	300	80	80	537	150	320	420	275	330	55	21	85	40	7x5	65	22x80.4	130	
175		540	325	80	80	620	180	350	450	320	350	45	21	85	45	7x5.5	70	22x80.4	218	
200		580	350	80	80	667	175	380	480	350	380	45	24	90	50	7x5.5	75	24x86.4	359	
240		700	420	80	80	800	200	460	580	380	480	45	28	115	60	7x7	110	24x110.4	609	

WPW型(MODEL)

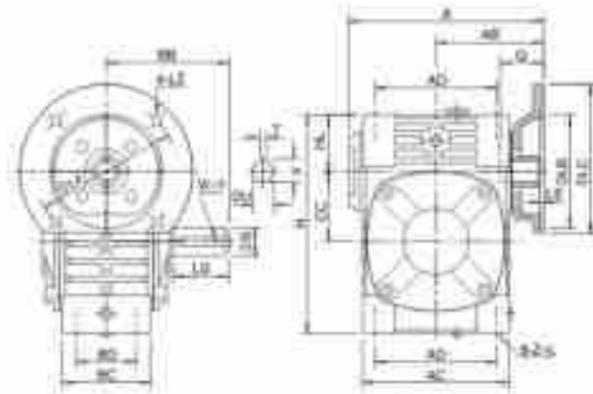


轴型图 SHAFT DIRECTION

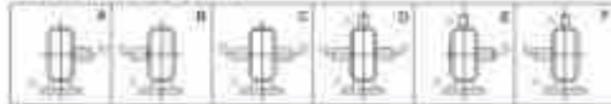


型号 Size	传动比 Ratio	A	AB	B	BB	AC	BC	AD	CD	HL	H	Z+L	输入轴 Input shaft			输出轴 Output shaft			重量 Weight	
													HE	U	T&V	LE	S	WxY		
40	1/10	140	88	124	75	95	81	79	42	40	38	126	M16x12	30	12	442.5	28	14	6x3	8
50	1/10	175	107	150	97	111	98	95	50	50	48	150	M20x18	30	12	442.5	30	17	6x3	8.5
60	1/10	198	122	168	112	127	110	105	60	60	58	177	M25x20	40	16	643.5	30	22	6x3.5	8
70	1/10	231	140	194	131	152	128	125	70	70	68	210	M30x25	40	18	643.5	30	26	6x4	10
80	1/10	261	160	214	142	168	142	140	80	80	78	250	M36x30	50	22	643.5	35	32	10x5	27
100	1/10	322	198	254	168	218	177	180	90	90	88	310	M42x35	50	25	844	35	38	10x5	34
120	1/10	381	228	288	190	258	204	210	100	100	100	370	M48x40	60	30	844	40	46	14x5.5	51
150	1/10	432	260	317	210	288	247	250	110	110	105	425	M56x45	70	35	1045	45	55	16x6	78
160	1/10	504	302	362	252	348	285	290	120	120	115	481	M63x50	80	40	1245	50	65	18x7	102
175	1/10	543	325	402	262	374	302	305	130	130	125	521	M70x55	85	45	1445.5	55	75	18x7	142
200	1/10	587	350	447	300	412	335	340	140	140	135	575	M78x60	95	50	1645.5	60	85	20x7.5	202
250	1/10	708	420	532	360	505	395	420	180	180	170	708	M94x70	110	60	1847	70	100	25x8	340

WPWD型(MODEL)



轴型图 SHAFT DIRECTION

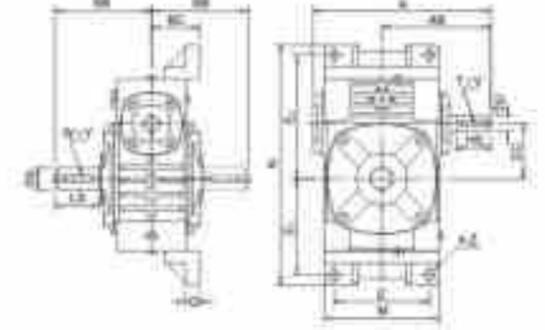


型号 Size	传动比 Ratio	A	AB	B	BB	AC	BC	AD	CD	HL	H	Z+L	法兰连接 Flange			输入轴 Input shaft			输出轴 Output shaft			重量 Weight		
													LA	LB	LC	LE	LE	G	U	T&V	LE		S	WxY
40	1/10	126	75	79	81	81	78	42	40	38	125	M16x12	113	95	140	4	M8	31	11	442.5	28	15	6x3	8
50	1/10	157	95	97	111	108	98	50	50	50	150	M20x18	133	95	140	4	M8	31	11	442.5	30	17	6x3	8.5
60	1/10	187	115	112	124	122	110	60	60	60	177	M25x20	153	115	160	4	M8	31	11	643.5	30	22	6x3.5	8
70	1/10	217	135	131	142	140	128	70	70	70	210	M30x25	173	135	180	4	M8	31	11	643.5	30	26	6x4	10
80	1/10	247	155	151	162	160	148	80	80	80	250	M36x30	193	155	200	4	M8	31	11	643.5	35	32	10x5	27
100	1/10	307	193	189	200	198	186	90	90	90	310	M42x35	213	193	230	4	M8	31	11	844	35	38	10x5	34
120	1/10	367	231	227	238	236	224	100	100	100	370	M48x40	233	231	270	4	M8	31	11	844	40	46	14x5.5	51
150	1/10	427	270	266	277	275	264	110	110	110	430	M56x45	253	270	310	4	M8	31	11	1045	45	55	16x6	78
160	1/10	497	310	306	317	315	304	120	120	120	491	M63x50	273	310	350	4	M8	31	11	1245	50	65	18x7	102
175	1/10	537	330	326	337	335	324	130	130	130	531	M70x55	293	330	370	4	M8	31	11	1445.5	55	75	18x7	142
200	1/10	587	350	346	357	355	344	140	140	140	575	M78x60	313	350	390	4	M8	31	11	1645.5	60	85	20x7.5	202
250	1/10	708	420	416	427	425	414	180	180	180	708	M94x70	333	420	460	4	M8	31	11	1847	70	100	25x8	340

WPWX型(MODEL)



WPWO型(MODEL)



WPWX轴型图 SHAFT DIRECTION



WPWO轴型图 SHAFT DIRECTION

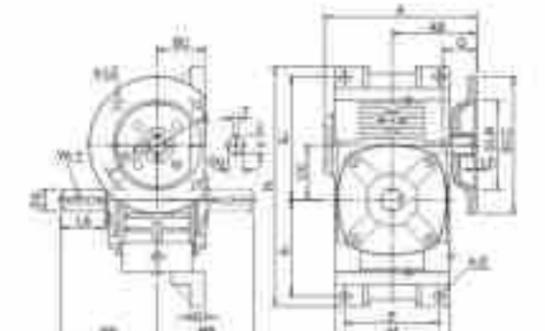


型号 Size	传动比 Ratio	A	AB	B	BB	BC	CC	M	N	E	E	G	Z	输入轴 Input shaft			输出轴 Output shaft			重量 Weight
														HE	U	T&V	LE	S	WxY	
40	1/10	140	88	75	48	40	88	107	70	72	37	12	10	25	12	442.5	28	14	6x3	8
50	1/10	175	107	97	50	50	111	125	80	80	41	14	12	30	12	442.5	30	17	6x3	8.5
60	1/10	198	122	112	58	60	127	157	100	100	43	15	12	40	15	643.5	30	22	6x3.5	8
70	1/10	231	140	131	68	70	152	182	120	120	45	15	14	40	18	643.5	30	26	6x4	10
80	1/10	261	160	151	70	80	174	204	140	140	47	15	16	50	22	643.5	35	32	10x5	27
100	1/10	322	198	189	80	100	224	264	180	180	49	15	18	60	25	844	35	38	10x5	34
120	1/10	381	228	219	90	120	264	304	220	220	51	15	20	80	30	844	40	46	14x5.5	51
150	1/10	432	260	251	110	130	304	344	260	260	53	15	22	90	35	1045	45	55	16x6	78
160	1/10	504	302	293	120	150	344	384	300	300	55	15	24	100	40	1245	50	65	18x7	102
175	1/10	543	325	316	130	170	374	424	340	340	57	15	26	110	45	1445.5	55	75	18x7	142
200	1/10	587	350	341	140	200	424	484	380	380	59	15	28	120	50	1645.5	60	85	20x7.5	202
250	1/10	708	420	411	160	250	510	580	460	460	61	15	32	150	60	1847	70	100	25x8	340

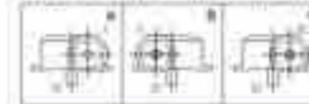
WPWDX型(MODEL)



WPWDO型(MODEL)



WPWDX轴型图 SHAFT DIRECTION



WPWDO轴型图 SHAFT DIRECTION

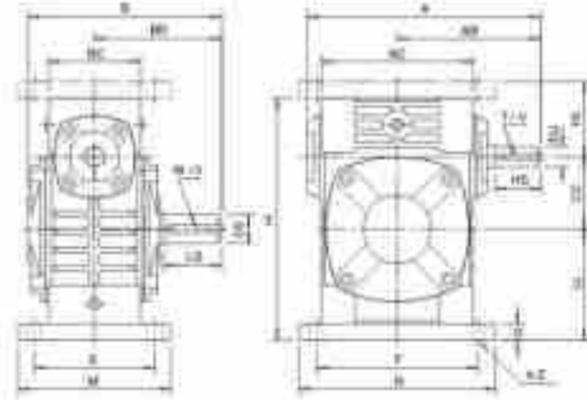


型号 Size	传动比 Ratio	A	AB	B	BB	BC	CC	M	N	E	E	G	Z	法兰连接 Flange			输入轴 Input shaft			输出轴 Output shaft			重量 Weight	
														LA	LB	LC	LE	LE	G	U	T&V	LE		S
40	1/10	126	75	79	81	81	78	42	40	38	125	M16x12	113	95	140	4	M8	31	11	442.5	28	15	6x3	8
50	1/10	157	95	97	111	108	98	50	50	50	150	M20x18	133	95	140	4	M8	31	11	442.5	30	17	6x3	8.5
60	1/10	187	115	112	124	122	110	60	60	60	177	M25x20	153	115	160	4	M8	31	11	643.5	30	22	6x3.5	8
70	1/10	217	135	131	142	140	128	70	70	70	210	M30x25	173	135	180	4	M8	31	11	643.5	30	26	6x4	10
80	1/10	247	155	151	162	160	148	80	80	80	250	M36x30	193	155	200	4	M8	31	11	643.5	35	32	10x5	27
100	1/10	307	193	189	200	198	186	90	90	90	310	M42x35	213	193	230	4	M8	31	11	844	35	38	10x5	34
120	1/10	367	231	227	238	236	224	100	100	100	370	M48x40	233	231	270	4	M8	31	11	844	40	46	14x5.5	51
150	1/10	427	270	266	277	275	264	110	110	110	430	M56x45	253	270	310	4	M8	31	11	1045	45	55	16x6	78
160	1/10	497	310	306	317	315	304	120	120	120	491	M63x50	273	310	350	4	M8	31	11	1245	50	65	18x7	102
175	1/10	537	330	326	337	335	324	130	130	130	531	M70x55	293	330	370	4	M8	31	11	1445.5	55	75	18x7	142
200	1/10	587	350	346																				

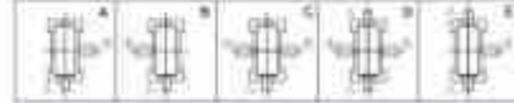
WPWA型(MODEL)



WPWS型(MODEL)

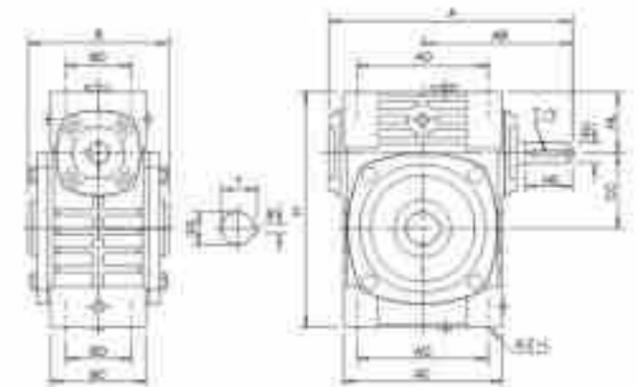


轴型图 SHAFT DIRECTION

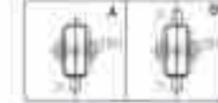


型号 Size	传动比 Ratio	A	AB	B	BB	AC	BC	CC	HL	LL	H	M	N	E	F	G	Z	输入轴 Input shaft				输出轴 Output shaft				重量 Weight
																		HA	U	T+V	W	LA	S	WxY	Wz	
40	1/10 1/15 1/20 1/25 1/30 1/40 1/50 1/60 1/80 1/100	149	88	124	79	95	81	40	45	80	130	108	130	80	110	10	10	25	12	4x2.0	28	14	3x2	4.5		
50		175	107	145	97	111	98	50	50	80	145	120	145	95	115	15	15	30	12	4x2.0	40	17	3x3	7.5		
60		198	120	168	112	127	76	60	60	90	165	130	165	105	125	18	12	40	10	5x3	50	22	4x3.5	11.5		
70		231	140	194	131	152	95	70	70	100	200	150	190	115	150	18	10	40	18	6x3.5	60	28	5x4	15.2		
80		261	160	214	147	169	100	80	80	120	220	170	220	125	180	18	10	50	20	6x3.5	68	32	5x5	24		
100		327	190	254	163	208	117	100	100	150	300	200	270	155	220	20	15	50	25	8x4	75	38	5x5	38		
120		381	220	290	190	236	124	120	120	180	340	230	320	180	260	20	18	60	30	8x4	85	45	5x5	57		
150		453	260	317	210	266	147	130	130	215	400	260	360	205	290	30	18	75	30	10x5	95	55	5x5	85		
160		504	300	362	252	345	156	150	150	235	480	280	380	220	320	32	21	80	40	10x5	110	60	5x5	110		
175		545	325	402	265	379	162	175	160	260	500	300	410	230	350	37	21	80	40	14x5.5	110	60	5x5	102		
200		587	350	447	285	412	170	175	170	280	520	320	440	240	380	40	24	95	40	14x5.5	125	70	5x5	118		
250		702	420	532	300	500	190	200	200	350	700	400	540	280	480	50	28	110	50	18x7	150	80	5x5	150		

WPWK型(MODEL)



轴型图 SHAFT DIRECTION

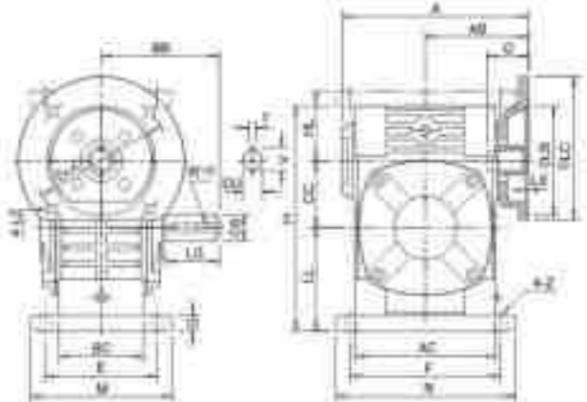


型号 Size	传动比 Ratio	A	AB	B	AC	BC	CD	CC	HL	H	Z+L	输入轴 Input shaft				输出轴 Output shaft				重量 Weight
												HA	U	T+V	W	LA	S	WxY	Wz	
40	1/10 1/15 1/20 1/25 1/30 1/40 1/50 1/60 1/80 1/100	168	88	90	85	81	78	42	45	75	M12	20	12	4x3	18	5x11.5	4			
50		175	107	110	111	86	80	50	50	36	100	M14	30	12	4x2.5	20	5x22.5	6.5		
60		198	122	120	121	76	105	62	60	42	177	M16	40	18	5x5	25	5x28.5	8		
70		231	140	132	133	86	105	65	70	55	215	M18	40	18	5x3.5	30	5x35.5	13		
80		261	160	145	146	102	140	70	80	65	250	M20	50	22	6x3.5	30	5x38.5	21		
100		327	190	174	175	117	180	80	100	80	310	M22	50	25	6x4	40	5x43.5	34		
120		381	220	185	186	124	200	100	120	90	370	M24	60	30	8x4	45	5x48.5	51		
150		453	260	214	215	147	200	110	150	100	420	M26	75	35	10x5	60	5x54.5	78		
160		504	300	235	236	165	240	120	160	100	460	M28	80	40	12x5	70	5x74.5	102		
175		545	325	262	263	182	260	140	175	100	520	M30	80	45	14x5.5	80	5x85.5	142		
200		587	350	304	305	200	300	150	200	130	570	M32	90	50	16x5.5	85	5x95.5	202		
250		702	420	405	406	285	400	180	250	150	700	M36	110	60	18x7	110	5x118.5	340		

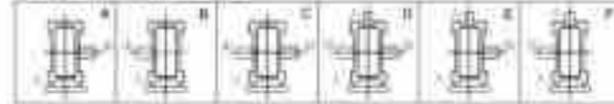
WPWDA型(MODEL)



WPWDS型(MODEL)

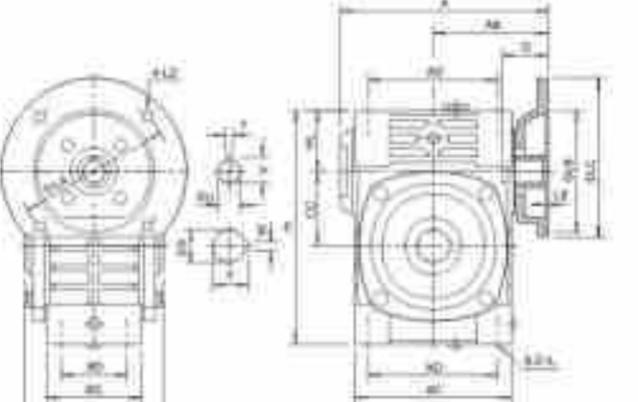


轴型图 SHAFT DIRECTION

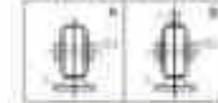


型号 Size	传动比 Ratio	A	AB	B	BC	CC	HL	LL	H	M	N	E	F	G	Z	输入轴 Input shaft				输出轴 Output shaft				重量 Weight
																HA	U	T+V	W	LA	S	WxY	Wz	
40	1/10 1/15 1/20 1/25 1/30 1/40 1/50 1/60 1/80 1/100	135	75	75	85	81	40	40	70	120	100	120	80	110	10	10	25	12	4x2.0	28	14	3x2	4.5	
50		157	85	85	95	91	50	50	80	145	120	145	95	115	15	15	30	12	4x2.0	40	17	3x3	7.5	
60		180	95	95	105	101	60	60	90	165	130	165	105	125	18	12	40	10	5x3	50	22	4x3.5	11.5	
70		210	110	110	120	116	70	70	100	200	150	190	115	150	18	10	40	18	6x3.5	60	28	5x4	15.2	
80		240	125	125	135	131	80	80	120	220	170	220	125	180	18	10	50	20	6x3.5	68	32	5x5	24	
100		300	155	155	165	161	100	100	150	300	200	270	155	220	20	15	50	25	8x4	75	38	5x5	38	
120		360	185	185	195	191	120	120	180	340	230	320	180	260	20	18	60	30	8x4	85	45	5x5	57	
150		450	225	225	235	231	150	150	215	400	260	360	205	290	30	18	75	30	10x5	95	55	5x5	85	
160		510	265	265	275	271	160	160	235	480	280	380	220	320	32	21	80	40	10x5	110	60	5x5	110	
175		555	295	295	305	301	175	175	255	500	300	410	230	350	37	21	80	40	14x5.5	110	60	5x5	102	
200		600	335	335	345	341	190	190	280	520	320	440	240	380	40	24	95	40	14x5.5	125	70	5x5	118	
250		720	405	405	415	411	230	230	350	700	400	540	280	480	50	28	110	50	18x7	150	80	5x5	150	

WPWDK型(MODEL)



轴型图 SHAFT DIRECTION

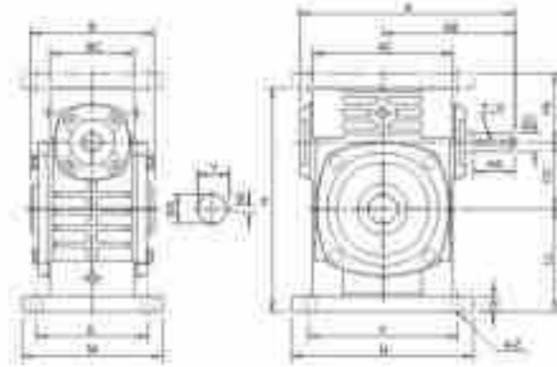


型号 Size	传动比 Ratio	A	AB	B	AC	BC	CD	CC	HL	H	Z+L	输入轴 Input shaft				输出轴 Output shaft				重量 Weight
												HA	U	T+V	W	LA	S	WxY	Wz	
40	1/10 1/15 1/20 1/25 1/30 1/40 1/50 1/60 1/80 1/100	135	75	75	85	81	40	40	70	120	M12	20	12	4x2.5	18	5x11.5	4			
50		157	85	85	95	91	50	50	80	145	120	M14	30	12	4x2.5	20	5x22.5	6.5		
60		180	95	95	105	101	60	60	90	165	130	M16	40	18	5x5	25	5x28.5	8		
70		210	110	110	120	116	70	70	100	200	150	M18	40	18	5x3.5	30	5x35.5	13		
80		240	125	125	135	131	80	80	120	220	170	M20	50	22	6x3.5	30	5x38.5	21		
100		300	155	155	165	161	100	100	150	300	200	M22	50	25	6x4	40	5x43.5	34		
120		360	185	185	195	191	120	120	180	340	230	M24	60	30	8x4	45	5x48.5	51		
150		450	225	225	235	231	150	150	215	400	260	M26	75	35	10x5	60	5x54.5	78		
160		510	265	265	275	271	160	160	235	480	280	M28	80	40	12x5	70	5x74.5	102		
175		555	295	295	305	301	175	175	255	500	300	M30	80	45	14x5.5	80	5x85.5	142		
200		600	335	335	345	341	190	190	280	520	320	M32	90	50	16x5.5	85	5x95.5	202		
250		720	405	405	415	411	230	230	350	700	400	M36	110	60	18x7	110	5x118.5	340		

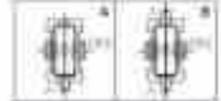
WPWKA型(MODEL)



WPWKS型(MODEL)

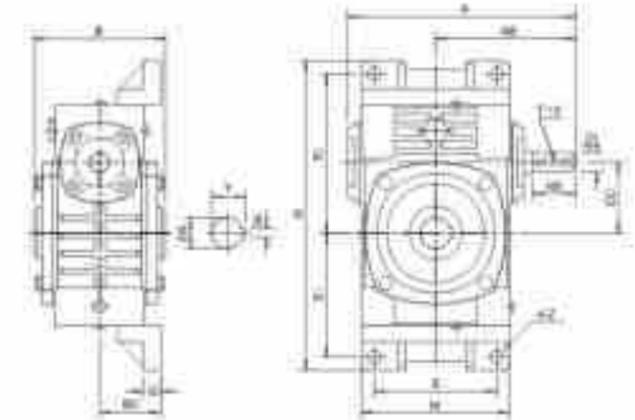


轴指向 SHAFT DIRECTION



型号 Size	传动比 Ratio	A	AB	B	AC	BC	CC	H ₂	L ₂	H	M	E	F	G	Z	输入轴 Input shaft			输出轴 Output shaft		重量 Weight	
																φD	U	T×V	E	W×V		
40		149	89	30	95	81	40	45	80	130	100	130	80	110	10	20	12	442.5	18	6x18.3	4.5	
50		175	107	110	111	88	50	50	80	165	120	140	95	110	15	20	12	442.5	20	6x22.8	7.5	
60		198	122	120	127	78	60	60	60	189	130	180	100	120	18	12	48	16	5x2	25	8x28.2	11.5
70	1/10	231	140	132	152	86	70	75	108	235	150	180	110	130	18	15	40	18	6x3.5	30	8x33.3	15.5
80	1/10	261	160	150	169	102	80	85	123	266	170	220	120	150	18	15	30	22	6x3.5	35	10x38.3	24
100	1/25	322	190	174	215	117	100	120	150	330	190	270	150	220	20	15	25	25	8x4	40	12x45.3	38
120	1/30	381	224	190	255	124	120	120	180	395	230	320	180	260	20	18	20	20	8x4	45	14x48.8	52
150	1/40	432	262	214	298	147	135	130	210	450	250	350	200	290	30	18	15	15	8x5	50	16x54.4	85
160	1/50	504	302	250	345	165	155	130	235	492	280	380	220	320	32	21	20	40	12x5	70	20x74.8	115
175	1/60	545	325	280	374	168	175	160	260	538	310	410	250	350	37	21	20	40	14x5.5	80	22x85.4	152
200		661	390	324	412	230	210	175	300	620	350	445	290	380	45	24	20	30	18x5.5	90	22x90.4	219
250		700	420	400	500	245	250	200	300	750	400	500	380	480	50	28	110	30	18x7	110	28x118.4	320

WPWKO型(MODEL)



轴指向 SHAFT DIRECTION

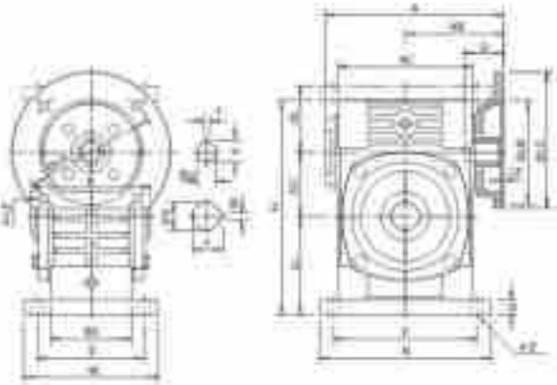


型号 Size	传动比 Ratio	A	AB	B	BC	CC	M	N	E	E ₁	E ₂	Z	输入轴 Input shaft			输出轴 Output shaft		重量 Weight	
													φD	U	T×V	E	W×V		
40		148	88	30	85	40	50	147	70	75	87	12	10	12	17	442.5	18	6x18.3	5
50		175	107	110	88	50	111	228	80	80	110	14	12	20	12	442.5	20	6x22.8	8
60		198	122	120	88	60	127	257	100	100	120	15	12	40	15	5x3	25	8x28.2	11
70	1/10	231	140	130	88	70	152	305	120	120	150	20	15	40	18	6x3.5	30	8x33.3	15.5
80	1/10	261	160	130	70	80	174	350	140	140	180	20	15	30	22	6x3.5	35	10x38.3	24
100	1/25	322	190	174	90	100	224	410	180	180	215	25	15	25	25	8x4	40	12x45.3	38
120	1/30	381	224	180	100	120	264	494	220	190	250	25	18	20	20	8x4	45	14x48.8	52
150	1/40	432	262	214	110	130	304	588	260	230	290	30	18	15	15	8x5	50	16x54.4	85
160	1/50	504	302	250	140	150	345	685	290	250	300	30	21	20	40	12x5	70	20x74.8	115
175	1/60	545	325	280	150	170	374	815	320	270	340	40	21	20	40	14x5.5	80	22x85.4	152
200		661	390	324	170	200	424	948	370	300	380	40	24	20	30	18x5.5	90	22x90.4	219
250		700	420	400	200	250	510	1200	440	370	470	40	28	110	30	18x7	110	28x118.4	320

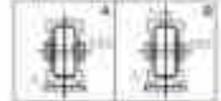
WPWDKA型(MODEL)



WPWDKS型(MODEL)

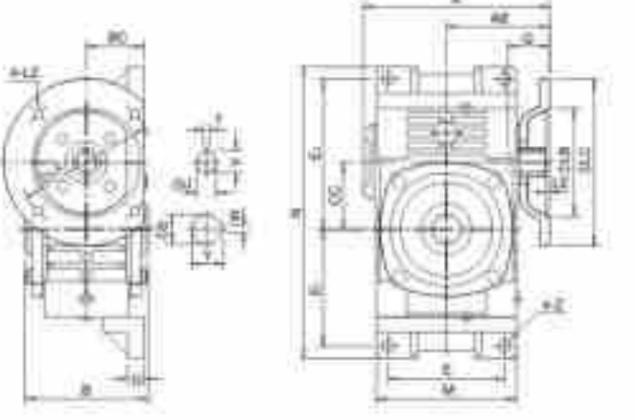


轴指向 SHAFT DIRECTION



型号 Size	传动比 Ratio	A	AB	B	AC	BC	CC	H ₂	L ₂	H	M	E	F	G	Z	输入轴 Input shaft			输出轴 Output shaft		重量 Weight	
																φD	U	T×V	E	W×V		
40	3/10	150	75	30	85	40	45	80	130	100	130	80	110	10	20	12	442.5	18	6x18.3	4.5		
50	3/10	175	83	110	111	58	50	80	165	120	140	95	110	15	20	12	442.5	20	6x22.8	7.5		
60	3/10	187	97	120	127	78	60	80	195	130	180	100	120	18	12	48	16	5x2	25	8x28.2	11.5	
70	2/3	231	129	132	152	86	70	75	108	235	150	180	110	130	18	15	40	18	6x3.5	30	8x33.3	15.5
80	2/3	261	147	140	169	102	80	85	123	266	170	220	120	150	18	15	30	22	6x3.5	35	10x38.3	24
100	1/3	322	179	174	215	117	100	120	150	330	190	270	150	220	20	15	25	25	8x4	40	12x45.3	38
120	1/3	381	209	190	255	124	120	120	180	395	230	320	180	260	20	18	20	20	8x4	45	14x48.8	52
150	1/4	432	252	214	298	147	135	130	210	450	250	350	200	290	30	18	15	15	8x5	50	16x54.4	85
160	1/4	504	292	250	345	165	155	130	235	492	280	380	220	320	32	21	20	40	12x5	70	20x74.8	115
175	1/4	545	322	280	374	168	175	160	260	538	310	410	250	350	37	21	20	40	14x5.5	80	22x85.4	152
200	1/3	661	390	324	412	230	210	175	300	620	350	445	290	380	45	24	20	30	18x5.5	90	22x90.4	219
250	1/3	700	420	400	500	245	250	200	300	750	400	500	380	480	50	28	110	30	18x7	110	28x118.4	320

WPWDKO型(MODEL)



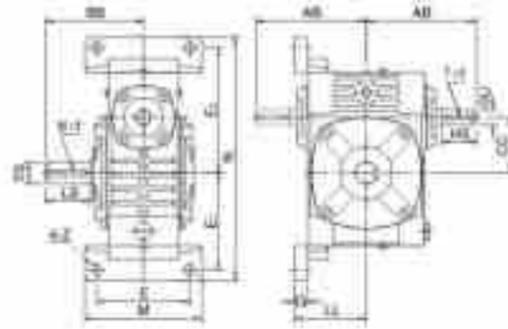
轴指向 SHAFT DIRECTION



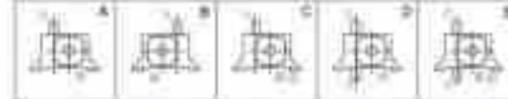
型号 Size	传动比 Ratio	A	AB	B	BC	CC	M	N	E	E ₁	E ₂	Z	输入轴 Input shaft			输出轴 Output shaft		重量 Weight		
													φD	U	T×V	E	W×V			
40	3/10	150	75	30	85	40	50	147	70	75	87	12	10	12	17	442.5	18	6x18.3	4.5	
50	3/10	175	83	110	88	50	111	228	80	80	110	14	12	20	12	442.5	20	6x22.8	7.5	
60	3/10	187	97	120	88	60	127	257	100	100	120	15	12	40	15	5x2	25	8x28.2	11.5	
70	2/3	231	129	132	152	86	70	152	305	120	120	150	20	15	40	18	6x3.5	30	8x33.3	15.5
80	2/3	261	147	140	169	102	80	174	350	140	140	180	20	15	30	22	6x3.5	35	10x38.3	24
100	1/3	322	179	174	215	117	100	224	410	180	180	215	25	15	25	25	8x4	40	12x45.3	38
120	1/3	381	209	190	255	124	120	264	494	220	190	250	25	18	20	20	8x4	45	14x48.8	52
150	1/4	432	252	214	298	147	135	304	588	260	230	290	30	18	15	15	8x5	50	16x54.4	85
160	1/4	504	292	250	345	165	155	345	685	290	250	300	30	21	20	40	12x5	70	20x74.8	115
175	1/4	545	322	280	374	168	175	374	815	320	270	340	40	21	20	40	14x5.5	80	22x85.4	152
200	1/3	661	390	324	412	230	210	424	948	370	300	380	40	24	20	30	18x5.5	90	22x90.4	219
250	1/3	700	420	400	500	245	250	510	1200	440	370	470	40	28	110	30	18x7	110	28x118.4	320

WPWT型(MODEL)

WPWV型(MODEL)



WPWT轴指向 SHAFT DIRECTION



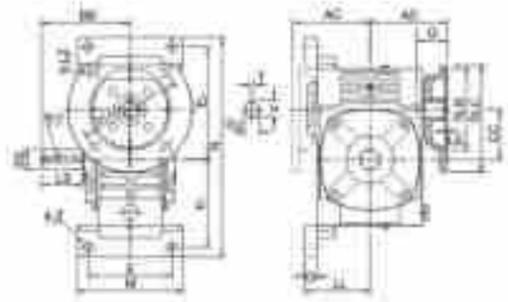
WPWV轴指向 SHAFT DIRECTION



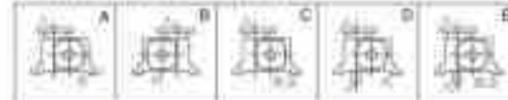
型号 Size	传动比 Ratio	AA	BB	CC	LL	M	N	E	K	L	Z	输入轴 Input shaft				输出轴 Output shaft			重量 Weight
												HA	U	T×V	LS	S	W×X	重量	
40	1/10	87	78	40	62	90	167	70	72	67	12	10	25	12	442.5	28	14	543	5
50		127	87	50	72	120	206	80	80	118	14	12	30	12	442.5	40	12	543	8
60		122	112	60	80	130	257	105	102	128	18	12	40	18	543	50	22	643.5	11
75		140	121	70	90	150	309	115	120	155	20	15	40	18	643.5	60	28	844	15.5
90		168	142	80	105	170	355	135	140	180	25	15	50	22	643.5	65	30	1045	24
100		125	160	100	120	190	410	155	165	215	22	15	50	25	844	75	38	1245	38
120		150	229	150	150	230	484	180	195	255	25	18	55	30	844	85	40	1445.5	54
125		150	258	210	155	250	558	200	230	295	20	18	70	35	1045	95	55	1645	84
150		150	300	252	185	220	675	220	230	305	35	21	85	40	1245	110	60	1847	129
175		150	352	285	175	240	815	250	270	348	40	21	95	45	1445.5	110	65	1847	157
200		150	380	305	200	280	945	280	305	385	40	24	95	50	1645.5	125	70	2047.5	224
250		150	420	352	230	315	1100	320	350	475	45	28	110	60	1847	155	80	2349	374

WPWDT型(MODEL)

WPWDV型(MODEL)



WPWDT轴指向 SHAFT DIRECTION



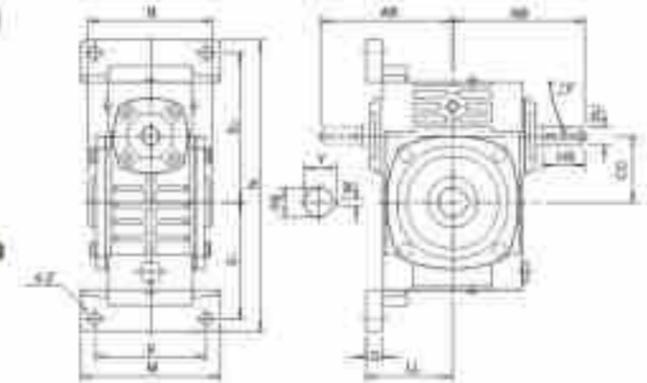
WPWDV轴指向 SHAFT DIRECTION



型号 Size	传动比 Ratio	AA	BB	CC	LL	M	N	E	K	L	Z	输入轴 Input shaft				输出轴 Output shaft			重量 Weight
												HA	U	T×V	LS	S	W×X	重量	
40	1/10	75	78	40	62	90	167	70	72	67	12	10	25	12	442.5	28	14	543	5
50		127	87	50	72	120	206	80	80	118	14	12	30	12	442.5	40	12	543	8
60		122	112	60	80	130	257	105	102	128	18	12	40	18	543	50	22	643.5	11
75		140	121	70	90	150	309	115	120	155	20	15	40	18	643.5	60	28	844	15.5
90		168	142	80	105	170	355	135	140	180	25	15	50	22	643.5	65	30	1045	24
100		125	160	100	120	190	410	155	165	215	22	15	50	25	844	75	38	1245	38
120		150	229	150	150	230	484	180	195	255	25	18	55	30	844	85	40	1445.5	54
125		150	258	210	155	250	558	200	230	295	20	18	70	35	1045	95	55	1645	84
150		150	300	252	185	220	675	220	230	305	35	21	85	40	1245	110	60	1847	129
175		150	352	285	175	240	815	250	270	348	40	21	95	45	1445.5	110	65	1847	157
200		150	380	305	200	280	945	280	305	385	40	24	95	50	1645.5	125	70	2047.5	224
250		150	420	352	230	315	1100	320	350	475	45	28	110	60	1847	155	80	2349	374

WPWKT型(MODEL)

WPWKV型(MODEL)



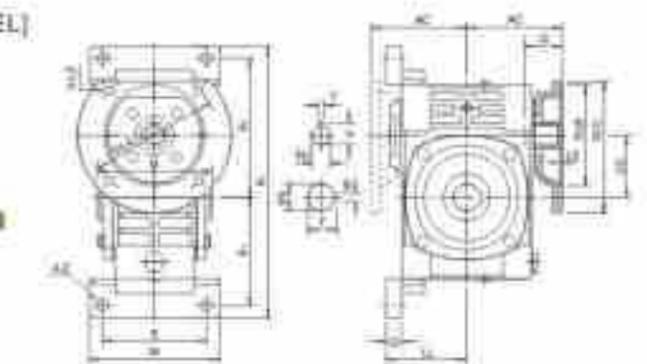
WPWKT轴指向 SHAFT DIRECTION



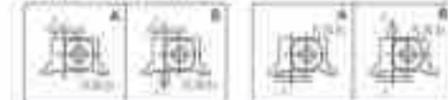
型号 Size	传动比 Ratio	AA	BB	CC	LL	M	N	E	K	L	Z	输入轴 Input shaft				输出轴 Output shaft			重量 Weight
												HA	U	T×V	LS	S	W×X	重量	
40	1/10	87	80	40	62	90	167	70	72	67	12	10	25	12	442.5	28	14	543	5
50		127	110	50	72	120	206	80	80	118	14	12	30	12	442.5	40	12	543	8
60		122	125	60	80	130	257	105	102	128	18	12	40	15	543	50	22	643.5	11
75		140	130	70	90	150	309	115	120	155	20	15	40	18	643.5	60	28	844	15.5
90		168	150	80	105	170	355	135	140	180	25	15	50	22	643.5	65	30	1045	24
100		125	180	174	120	190	410	155	165	215	22	15	50	25	844	75	38	1245	38
120		150	226	180	120	230	484	180	195	255	25	18	55	30	844	85	40	1445.5	54
125		150	260	214	125	250	558	200	230	295	20	18	70	35	1045	95	55	1645	84
150		150	300	258	150	220	675	220	230	305	35	21	85	40	1245	110	60	1847	129
175		150	328	282	175	240	815	250	270	348	40	21	95	45	1445.5	110	65	1847	157
200		150	350	324	200	280	945	280	305	380	40	24	95	50	1645.5	125	70	2047.5	224
250		150	420	400	250	315	1100	320	350	475	45	28	110	60	1847	155	80	2349	374

WPWDKT型(MODEL)

WPWDKV型(MODEL)

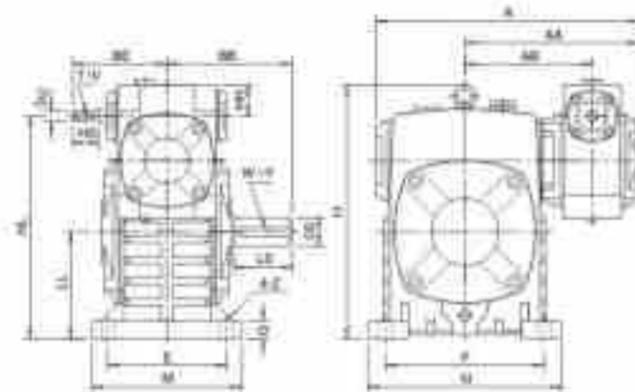


WPWDKT轴指向 SHAFT DIRECTION

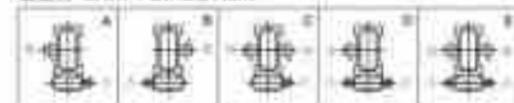


型号 Size	传动比 Ratio	AA	BB	CC	LL	M	N	E	K	L	Z	输入轴 Input shaft				输出轴 Output shaft			重量 Weight
												HA	U	T×V	LS	S	W×X	重量	
40	1/10	75	80	40	62	90	167	70	72	67	12	10	25	12	442.5	28	14	543	5
50		127	110	50	72	120	206	80	80	118	14	12	30	12	442.5	40	12	543	8
60		122	125	60	80	130	257	105	102	128	18	12	40	15	543	50	22	643.5	11
75		140	130	70	90	150	309	115	120	155	20	15	40	18	643.5	60	28	844	15.5
90		168	150	80	105	170	355	135	140	180	25	15	50	22	643.5	65	30	1045	24
100		125	180	174	120	190	410	155	165	215	22	15	50	25	844	75	38	1245	38
120		150	226	180	120	230	484	180	195	255	25	18	55	30	844	85	40	1445.5	54
125		150	260	214	125	250	558	200	230	295	20	18	70	35	1045	95	55	1645	84
150		150	300	258	150	220	675	220	230	305	35	21	85	40	1245	110	60	1847	129
175		150	328	282	175	240	815	250	270	348	40	21	95	45	1445.5	110	65	1847	157
200		150	350	324	200	280	945	280	305	380	40	24	95	50	1645.5	125	70	2047.5	224
250		150	420	400	250	315	1100	320	350	475	45	28	110	60	1847	155	80	2349	374

WPES型(MODEL)

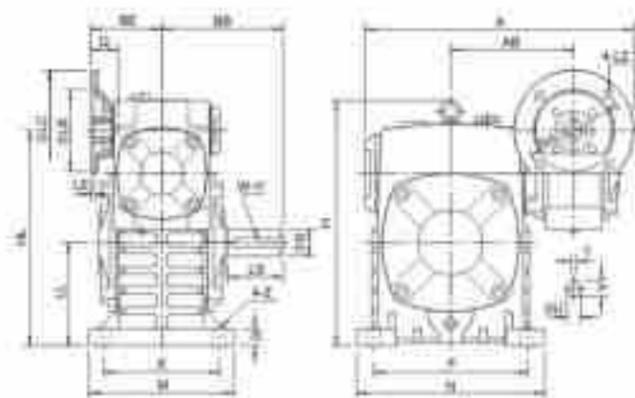


轴视图 SHAFT DIRECTION

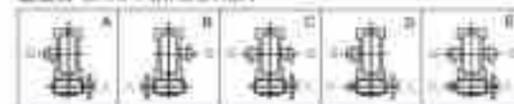


型号 Size	传动比 Ratio	A	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	输入轴 Input shaft				重量 Weight							
																													HC	U	Tax	s		WxY						
40-70		262	171	126	131	86	35	218	126	238	130	190	118	150	20	15	25	12	4x2.5	40	28	8x4																		
80-85		287	187	146	152	107	38	230	130	273	130	200	120	160	20	15	30	12	4x2.5	40	32	10x5																		
80-100	1/200	383	231	175	188	122	42	310	130	334	130	270	165	220	25	15	40	15	5x3	75	38	10x5																		
70-120	1/300	408	258	183	196	140	35	370	180	423	130	320	180	260	30	18	40	18	6x3.5	80	43	14x5.5																		
80-125	1/400	471	298	225	210	180	35	430	215	482	180	360	200	290	35	18	50	22	6x3.5	95	55	16x6																		
80-147	1/500	478	301	229	213	190	35	430	209	496	180	360	205	289	35	18	50	22	6x3.5	95	55	16x6																		
100-155	1/600	551	354	269	254	190	35	490	235	541	215	390	230	320	38	21	50	25	8x4	110	60	18x7																		
120-175	1/800	588	379	287	262	208	35	525	260	600	210	430	250	350	40	21	55	30	8x4	110	65	18x7																		
135-200		682	425	318	305	285	105	625	290	677	385	480	290	380	40	24	75	30	10x5	125	70	20x7.5																		
155-250		730	510	380	368	300	102	755	320	824	450	580	380	480	40	28	85	40	12x5	155	80	25x9																		

WPEDS型(MODEL)

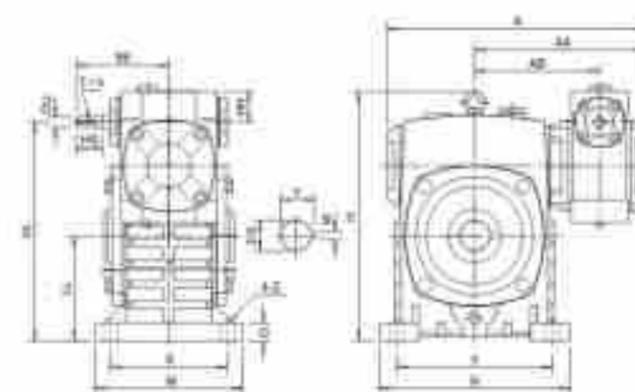


轴视图 SHAFT DIRECTION



型号 Size	输入速 Input speed	传动比 Ratio	A	AA	AB	BC	HL	LL	H	M	N	E	F	G	Z	电机法兰 Flange						输入轴 Input shaft				重量 Weight
																LA	LB	LC	LE	LZ	Q	U	Tax	s	WxY	
40-70	0.12		287	130	131	75	210	105	238	130	190	118	150	20	15	118	85	140	4	M8	21	11	4x12.5	30	8x3.5	19
80-85	0.18		314	144	140	85	230	120	273	130	200	120	160	20	15	115	95	140	4	M8	31	11	6x17.8	35	10x5.5	27
80-100	0.27		367	175	168	91	310	130	334	130	270	165	220	25	15	120	110	180	4	M8	33	14	8x16.5	40	12x5.5	45
70-120	0.37		425	193	180	100	370	180	423	130	320	180	260	30	18	120	110	190	4	M9	40	14	8x16.5	45	14x5.5	75
80-125	0.75	1/200	448			111	370	180	423	130	320	180	260	30	18	120	110	190	4	M10	42	15	8x21.8			
80-135	0.75	1/300	498	330	210	120	430	210	482	180	360	200	290	35	18	140	120	200	4.5	M10	45	15	6x21.8	95	16x6	103
80-147	0.75	1/400	478	301	229	120	430	209	496	180	360	205	289	35	18	140	120	200	4.5	M10	45	15	6x21.8	95	16x6	114
100-155	1.5	1/600	570	268	250	148	490	235	541	215	390	230	320	38	21	180	150	200	4.5	M10	52	24	9x27.5	110	18x7	147
120-175	2.2	1/800	631	287	262	181	585	240	600	310	430	250	350	40	21	215	180	250	5	M12	63	28	8x31.5	110	18x7	204
135-200	3.0		680	318	305	202	625	290	677	385	480	290	380	40	24	215	180	250	5	M12	63	28	8x31.5	125	20x7.5	268
155-250	4.5		818	380	380	247	755	320	824	450	580	380	480	40	28	215	180	250	5	M12	63	28	8x31.5	155	25x9	470

WPEKS型(MODEL)

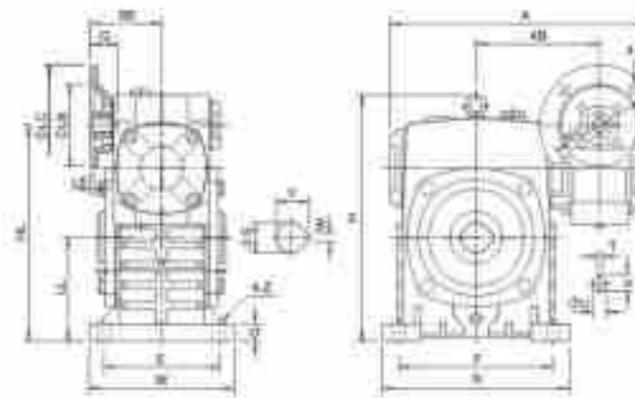


轴视图 SHAFT DIRECTION

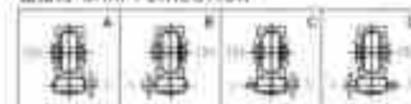


型号 Size	传动比 Ratio	A	AA	AB	R	BE	HL	LL	H	M	N	E	F	G	Z	输入轴 Input shaft				重量 Weight		
																HC	U	Tax	s		WxY	
40-70		282	171	126	132	88	33	215	105	238	130	190	118	150	20	15	12	4x2.5	30	8x3.5	20	
80-85		287	187	144	130	107	35	230	130	273	130	200	120	160	20	15	30	12	4x2.5	35	10x5.5	27
80-100	1/200	383	231	175	174	122	42	310	130	334	130	270	165	220	25	15	40	15	5x3	40	12x5.5	44
70-120	1/300	408	258	183	180	140	35	370	180	423	130	320	180	260	30	18	40	18	6x3.5	45	14x5.5	75
80-125	1/400	471	298	225	214	180	35	430	215	482	180	360	200	290	35	18	50	22	6x3.5	95	16x6	103
100-155	1/600	551	354	269	256	190	35	490	235	541	215	390	230	320	38	21	50	25	8x4	110	18x7	144
120-175	1/800	588	379	287	282	208	35	525	260	600	210	430	250	350	40	21	55	30	8x4	110	18x7	201
135-200		682	425	318	323	285	105	625	290	677	385	480	290	380	40	24	75	30	10x5	125	20x7.5	265
155-250		730	510	380	400	300	102	755	320	824	450	580	380	480	40	28	85	40	12x5	155	25x9	482

WPEDKS型(MODEL)

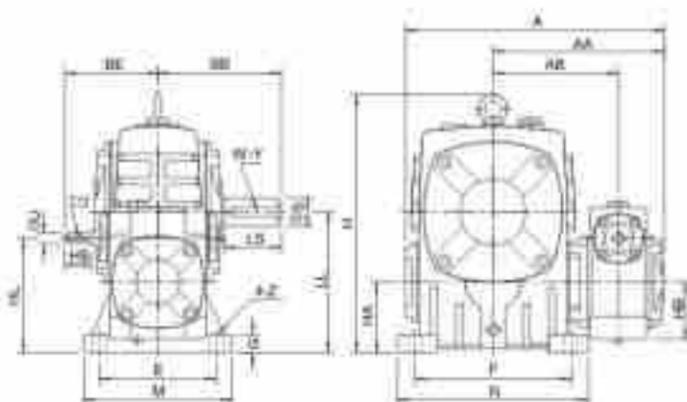


轴视图 SHAFT DIRECTION

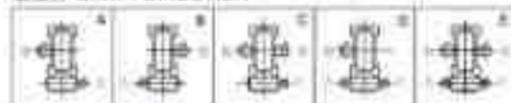


型号 Size	输入速 Input speed	传动比 Ratio	A	AA	R	BE	HL	LL	H	M	N	E	F	G	Z	电机法兰 Flange						输入轴 Input shaft				重量 Weight
																LA	LB	LC	LE	LZ	Q	U	Tax	s	WxY	
40-70	0.12		287	130	132	75	210	105	238	130	190	118	150	20	15	118	85	140	4	M8	21	11	4x12.5	30	8x3.5	19
80-85	0.18		314	144	130	82	230	120	273	130	200	120	160	20	15	115	95	140	4	M8	31	11	6x17.8	35	10x5.5	27
80-100	0.27		367	175	168	91	310	130	334	130	270	165	220	25	15	120	110	180	4	M8	33	14	8x16.5	40	12x5.5	45
70-120	0.37		425	193	180	100	370	180	423	130	320	180	260	30	18	120	110	190	4	M9	40	14	8x16.5	45	14x5.5	75
80-125	0.75	1/200	448			111	370	180	423	130	320	180	260	30	18	120	110	190	4	M10	42	15	8x21.8			
80-135	0.75	1/300	498	330	214	125	430	210	482	180	360	200	290	35	18	140	120	200	4.5	M10	45	15	6x21.8	95	16x6	103
80-147	0.75	1/400	478	301	229	125	430	209	496	180	360	205	289	35	18	140	120	200	4.5	M10	45	15	6x21.8	95	16x6	114
100-155	1.5	1/600	570	268	250	148	490	235	541	215	390	230	320	38	21	180	150	200	4.5	M10	52	24	9x27.5	110	18x7	147
120-175	2.2	1/800	631	287	262	181	585	240	600																	

WPEA型(MODEL)

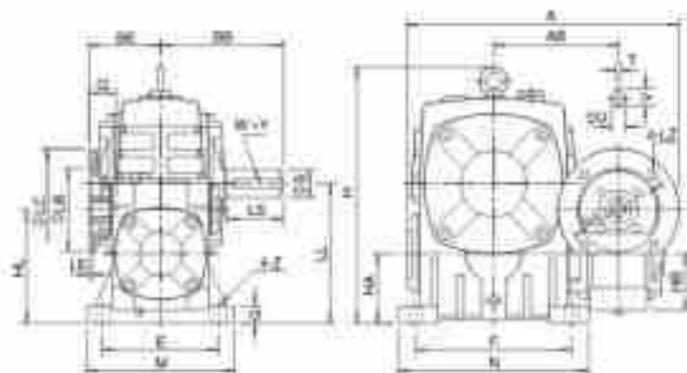


轴输出 SHAFT DIRECTION

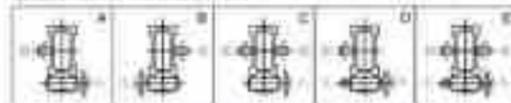


型号 Size	传动比 Ratio	A	AA	AB	BC	HL	LL	H	HA	HB	M	N	E	F	G	Z	输入轴 Input shaft				重量 Weight (kg)					
																	H9	U	TxV	L5		S	WxY			
40-70		282	171	106	131	86	110	160	239	70	25	10	150	180	115	100	20	15	25	10	4x2.5	80	25	6x4	20	
50-80		291	193	144	142	107	130	180	268	80	30	12	170	220	135	100	20	15	30	12	4x2.5	80	30	10x0	27	
60-100	1/200	363	231	175	155	122	160	200	320	100	35	150	270	165	220	25	15	40	15	40	15	5x3	75	38	10x0	44
75-120	1/300	408	258	193	180	140	180	240	430	120	40	200	320	180	280	30	18	40	18	40	18	5x3.5	85	45	14x5.5	73
90-135	1/400	471	298	226	210	150	210	270	480	130	100	250	350	200	280	30	18	50	20	50	20	5x3.5	90	50	16x6	101
100-147	1/600	476	301	229	212	150	200	270	501	140	120	250	350	200	280	30	18	50	20	50	20	5x3.5	90	50	16x6	112
100-180	1/800	552	354	268	262	160	230	280	521	135	130	275	390	220	320	30	21	50	20	50	20	5x4	110	60	18x7	144
120-175	1/800	598	379	287	282	220	280	320	600	160	150	310	430	250	350	40	21	60	30	60	30	5x4	110	60	18x7	201
150-200		662	426	318	300	250	310	375	660	175	180	360	480	280	380	40	24	75	30	75	30	5x5	125	70	20x7.5	282
150-250		730	510	380	360	300	350	450	800	200	200	400	500	300	400	40	28	90	40	90	40	5x5	135	90	22x8	462

WPEDA型(MODEL)

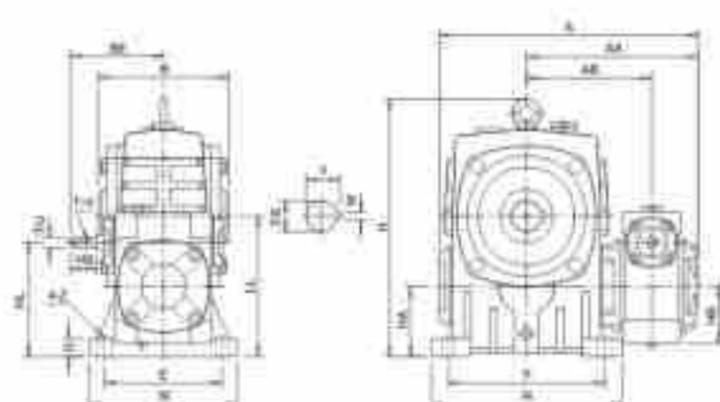


轴输出 SHAFT DIRECTION



型号 Size	入齿速 Input Rev	传动比 Ratio	A	AB	BB	BC	HL	LL	H	HA	HB	M	N	E	F	G	Z	电机法兰 Flange					输入轴 Input shaft				重量 Weight (kg)		
																		LA	LB	LC	LD	LE	LZ	G	U	TxV		L5	S
40-70	0.12		287	138	101	75	110	140	230	70	25	100	180	115	100	20	15	110	80	140	4	M8	31	11	4x1.2.5	20	6x3.3	19	
50-80	0.15		314	144	140	83	130	160	260	80	30	120	220	135	100	20	15	115	90	140	4	M8	31	11	4x1.2.5	20	10x0	27	
60-100	0.27		397	175	180	97	150	200	320	100	35	150	270	165	220	25	15	120	110	190	4	M8	30	14	5x16.3	75	38	12x0	45
75-120	0.37		425	180	180	100	160	210	350	110	40	180	320	180	250	30	18	120	110	200	4	M8	30	14	5x16.3	40	12x0.3	48	
90-135	0.75	1/200	445	180	180	110	160	240	430	120	40	200	320	180	280	30	18	130	110	200	4	M10	42	19	5x21.5	80	40	14x5.5	75
100-147	1.5	1/300	490	220	210	125	210	270	480	130	100	250	350	200	280	30	18	135	130	200	4	M10	42	19	5x21.5	90	50	16x6	103
100-180	3.0	1/600	504	229	212	125	200	270	501	130	120	250	350	200	280	30	18	135	130	200	4	M10	42	19	5x21.5	90	50	16x6	114
120-175	3.0	1/600	570	260	252	140	230	290	531	130	130	275	390	220	320	30	21	135	130	200	4	M10	52	24	5x27.5	110	60	18x7	147
150-200	3.0	1/800	621	287	282	160	280	320	600	160	160	310	430	250	350	40	21	145	180	200	5	M12	43	28	5x21.5	110	60	18x7	204
150-250	4.0	1/800	680	318	300	200	310	375	660	175	180	360	480	280	380	40	24	155	180	200	5	M12	43	28	5x21.5	125	70	20x7.5	288
150-250	5.0		710	380	380	240	350	450	800	200	200	400	500	300	400	40	28	175	180	200	5	M12	43	28	5x21.5	150	90	22x8	470

WPEKA型(MODEL)

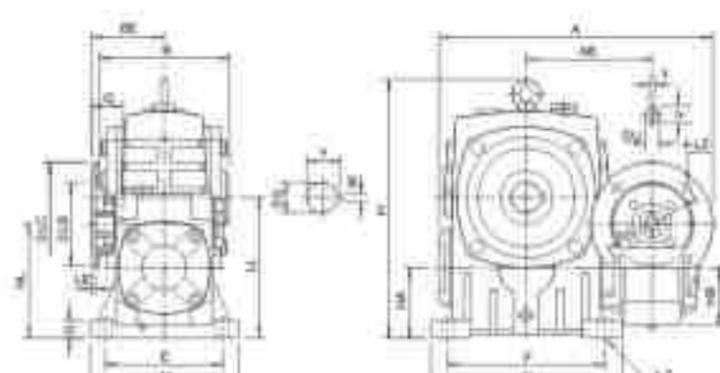


轴输出 SHAFT DIRECTION



型号 Size	传动比 Ratio	A	AA	AB	B	BC	HL	LL	H	HA	HB	M	N	E	F	G	Z	输入轴 Input shaft				重量 Weight (kg)	
																		H9	U	TxV	S		WxY
40-70		282	171	120	132	88	110	140	230	70	30	130	190	115	100	20	15	25	12	4x2.5	20	6x3.3	20
50-80		291	193	144	150	107	130	180	260	80	35	150	220	135	100	20	15	30	12	4x2.5	25	10x0.3	27
60-100	1/200	363	231	175	174	122	160	200	320	100	35	180	270	165	220	25	15	40	15	5x3	40	12x0.3	44
75-120	1/300	408	258	193	190	140	180	240	430	120	40	200	320	180	280	30	18	40	15	5x3.5	45	14x5.5	73
90-135	1/600	471	298	226	214	150	215	270	480	135	130	250	350	200	280	30	18	50	20	5x3.5	60	16x6	101
100-147	1/800	476	301	229	216	150	200	270	501	135	130	275	390	220	320	30	21	50	20	5x4	70	20x7.5	144
120-175	1/800	598	379	287	282	220	280	320	600	160	150	310	430	250	350	40	21	60	30	5x4	80	22x8.5	201
150-200		662	426	318	324	260	310	375	660	175	180	360	480	280	380	40	24	75	35	5x5	100	22x8.5	282
150-250		730	510	380	400	300	350	450	800	200	200	400	500	300	400	40	28	90	40	5x5	110	24x10.4	462

WPEDKA型(MODEL)



轴输出 SHAFT DIRECTION

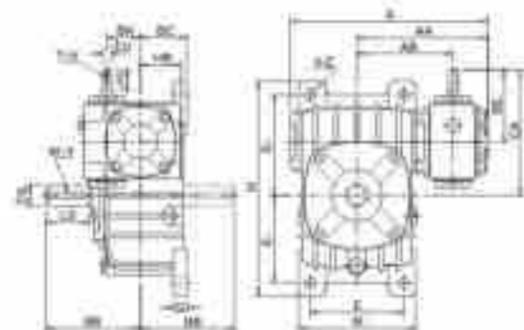


型号 Size	入齿速 Input Rev	传动比 Ratio	A	AB	B	BC	HL	LL	H	HA	HB	M	N	E	F	G	Z	电机法兰 Flange					输入轴 Input shaft				重量 Weight (kg)		
																		LA	LB	LC	LD	LE	LZ	G	U	TxV		S	WxY
40-70	0.12		287	138	132	75	110	140	230	70	25	120	190	115	100	20	15	110	80	140	4	M8	31	11	4x1.2.5	20	6x3.3	19	
50-80	0.15		314	144	140	83	130	160	260	80	30	150	220	135	100	20	15	115	90	140	4	M8	31	11	4x1.2.5	20	10x0.3	27	
60-100	0.27		397	175	174	97	150	200	320	100	35	180	270	165	220	25	15	120	110	190	4	M8	30	14	5x16.3	40	12x0.3	48	
75-120	0.37		425	180	180	100	160	210	350	110	40	200	320	180	250	30	18	120	110	200	4	M8	30	14	5x16.3	40	12x0.3	48	
90-135	0.75	1/200	445	180	180	110	160	240	430	120	40	200	320	180	280	30	18	130	110	200	4	M10	42	19	5x21.5	80	40	14x5.5	75
100-147	1.5	1/300	490	220	214	120	210	270	480	130	100	250	350	200	280	30	18	135	130	200	4	M10	42	19	5x21.5	90	50	16x6	103
100-180	3.0	1/600	504	229	216	120	210	270	501	130	120	250	350	200	280	30	18	135	130	200	4	M10	42	19	5x21.5	90	50	16x6	114
120-175	3.0	1/600	570	260	258	140	230	290	531	130	130	275	390	220	320	30	21	135	130	200	4	M10	52	24	5x27.5	110	60	18x7	147
150-200	3.0	1/800	621	287	282	160	280	320	600	160	160	310	430	250	350	40	21	145	180	200	5	M12	43	28	5x21.5	110	60	18x7	204
150-250	4.0	1/800	680	318	324	200	310	375	660	175	180	360	480	280	380	40	24	155	180	200	5	M12	43	28	5x21.5	125	70	20x7.5	288
150-250	5.0		710	380	400	240	350	450	800	200	200	400	500	300	400	40	28	175	180	200	5	M12	43	28	5x21.5	150	90	22x8	470

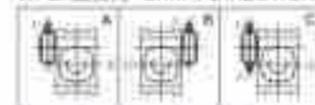
WPEX型(MODEL)



WPEO型(MODEL)



WPEX轴箱方向 SHAFT DIRECTION

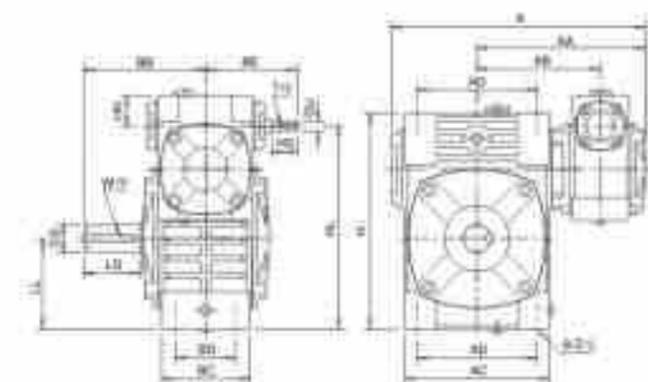


WPEO轴箱方向 SHAFT DIRECTION

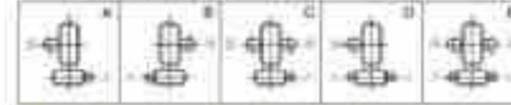


型号 Size	传动比 Ratio	尺寸 (mm)																输入轴 Input shaft			输出轴 Output shaft			重量 Weight(kg)											
		A	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	QA	QB	QC	QD	QE		QF	QG	H	U	TV	LS	S	WxY			
40-70		262	171	128	40	121	65	69	31	109	108	266	120	120	135	20	12	25	12	4x12.5	60	28	8x4												19
80-100		297	187	144	50	142	70	107	36	127	177	226	180	136	150	30	15	26	12	4x12.5	80	32	10x5												27
60-100	1/1000	363	231	175	60	168	80	122	41	222	224	375	190	158	160	35	17	40	15	5x3	75	38	10x5												44
70-120	1/3000	408	258	183	70	190	100	140	46	260	266	420	220	188	210	40	18	40	18	5x3.5	85	40	14x5.5												63
80-135	1/4000	471	298	208	80	210	110	160	100	295	306	480	260	210	230	45	19	50	20	5x3.5	90	45	16x6												86
90-147	1/6000	478	301	219	80	212	113	160	100	307	310	508	259	254	254	52	19	50	20	5x3.5	90	45	16x6												112
100-160	1/8000	552	354	268	100	252	140	190	130	340	350	580	290	248	258	58	21	50	20	5x4	110	50	18x7												149
120-175	1/8000	598	378	287	120	282	150	220	155	404	384	640	320	287	323	62	21	60	20	5x4	110	50	18x7												191
130-200		662	425	318	130	305	170	260	180	460	440	710	370	326	360	65	24	70	20	10x5	125	70	20x7.5												276
150-250		795	510	380	150	360	200	300	200	500	480	880	440	380	440	80	28	85	40	12x5	150	90	25x9												442

WPWE型(MODEL)



轴箱内 SHAFT DIRECTION

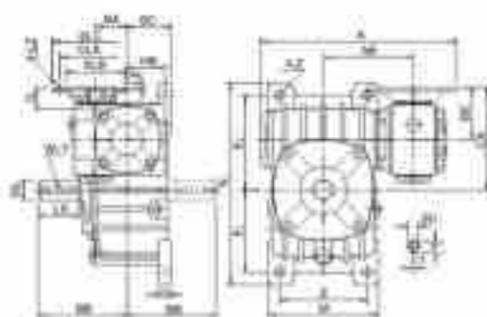


型号 Size	传动比 Ratio	尺寸 (mm)																输入轴 Input shaft			输出轴 Output shaft			重量 Weight(kg)
		A	AA	AB	BE	BE	AC	BC	AD	BD	HC	HL	LL	H	ZxL	HA	U	TV	LS	S	TV	Weight		
40-70		262	171	128	131	69	152	80	120	80	31	200	85	218	M10x25	20	12	4x2.5	60	28	8x4	17		
80-100		297	187	144	140	107	188	120	140	70	20	238	105	250	M12x28	30	13	4x2.5	80	32	10x5	28		
60-100	1/3000	363	231	175	158	122	218	117	180	90	42	298	130	318	M12x28	40	15	5x5	75	38	10x5	40		
70-120	1/4000	408	258	183	180	140	218	124	220	100	50	340	155	370	M14x32	45	18	5x3.5	85	40	14x5.5	64		
80-135	1/5000	471	298	208	210	160	268	147	260	110	65	400	185	425	M16x35	50	20	6x3.5	95	55	16x6	89		
100-150	1/8000	528	354	268	220	180	345	188	290	120	80	458	215	480	M16x35	50	20	6x4	110	60	18x7	130		
120-175	1/8000	598	378	287	260	220	374	180	320	140	90	518	225	521	M16x35	60	20	6x4	110	60	18x7	193		
150-200		662	425	318	305	280	472	230	360	150	105	580	245	575	M20x38	70	26	10x5	125	70	20x7.5	280		
180-250		795	510	380	380	360	508	280	420	190	100	700	300	700	M24x42	80	40	12x5	150	90	25x9	442		

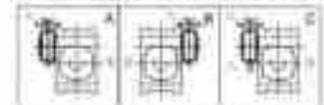
WPEDX型(MODEL)



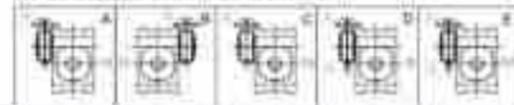
WPEDO型(MODEL)



WPEDX轴箱方向 SHAFT DIRECTION

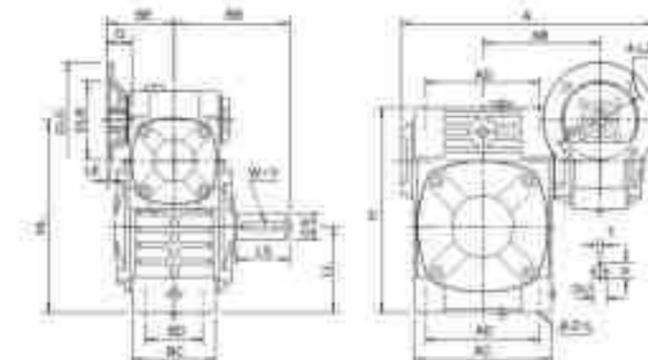


WPEDO轴箱方向 SHAFT DIRECTION

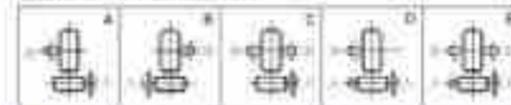


型号 Size	传动比 Ratio	尺寸 (mm)																电轨法兰 Flange			输入轴 Input shaft			输出轴 Output shaft			重量 Weight(kg)
		A	AB	BA	BB	BC	BE	HB	CA	M	N	S	E	E	H	Z	LA	LB	LC	LE	LZ	Q	U	TV	LS	S	
40-70	0.12	287	188	40	121	65	75	50	145	108	288	120	120	135	20	12	11	4x12.5	60	28	8x4	18					
80-100	0.18	314	184	50	140	70	83	62	163	173	330	140	130	150	20	15	11	4x12.5	80	32	10x5	27					
60-100	0.30	387	275	60	168	80	97	75	197	224	375	190	155	160	35	17	14	5x3.5	75	38	10x5	40					
70-120	0.30	425	304	70	190	100	108	80	225	260	430	220	180	210	40	18	14	5x3.5	85	40	14x5.5	64					
80-135	0.30	445	314	80	210	110	113	80	257	300	490	260	210	230	45	19	14	5x3.5	90	45	16x6	89					
90-147	0.30	445	314	80	210	110	113	80	257	300	490	260	210	230	45	19	14	5x3.5	90	45	16x6	89					
100-160	0.30	506	328	90	212	113	126	100	277	310	538	290	248	258	52	19	16	5x4	110	50	18x7	130					
120-175	0.30	570	389	100	252	140	148	130	303	350	590	320	286	295	58	21	16	5x4	110	50	18x7	193					
150-200	0.30	681	467	120	302	160	181	150	358	394	640	320	287	323	62	21	18	5x4	110	50	18x7	193					
180-250	0.30	815	560	150	360	200	224	180	427	430	800	440	380	440	80	28	22	10x5	125	70	20x7.5	280					

WPWED型(MODEL)

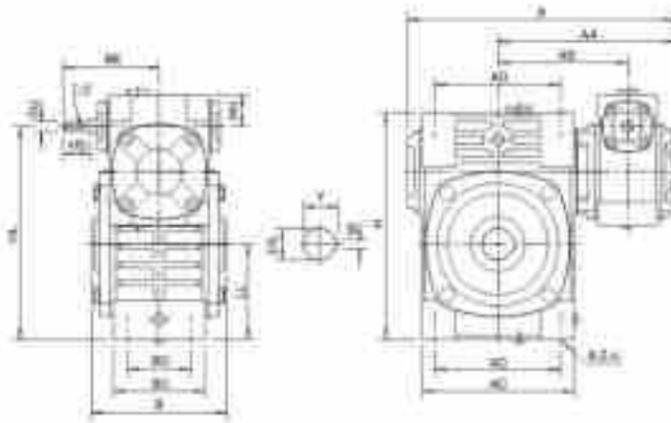


轴箱内 SHAFT DIRECTION

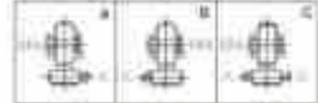


型号 Size	传动比 Ratio	尺寸 (mm)																电轨法兰 Flange			输入轴 Input shaft			输出轴 Output shaft			重量 Weight(kg)
		A	AB	BB	BE	AC	BC	AD	BD	HC	HL	LL	H	ZxL	LA	LE	LC	LE	LZ	Q	U	TV	LS	S	WxY		
80-70	0.12	287	188	121	75	120	88	120	88	208	88	218	M10x28	115	95	140	4	6x6	21	11	4x12.5	60	28	8x4	17		
80-80	0.18	314	184	140	80	160	102	140	70	238	105	250	M12x28	115	95	140	4	6x6	21	11	4x12.5	80	32	10x5	27		
60-100	0.30	387	275	175	90	180	122	158	100	298	130	318	M12x28	130	110	180	4	6x6	21	11	5x3.5	75	38	10x5	40		
70-120	0.30	425	304	190	100	208	124	200	110	340	155	370	M14x32	130	110	180	4	6x6	21	11	5x3.5	85	40	14x5.5	64		
80-135	0.30	445	314	210	110	220	124	220	110	390	185	425	M16x35	130	130	200	4	6x6	21	11	5x3.5	90	45	16x6	89		
90-147	0.30	445	314	210	110	220	124	220	110	390	185	425	M16x35	130	130	200	4	6x6	21	11	5x3.5	90	45	16x6	89		
100-160	0.30	506	328	210	110	220	147	260	110	400	185	425	M16x35	160	130	200	4	6x6	21	11	5x4	110	50	18x7	130		
120-175	0.30	570	389	210	148	160	180	280	120	458	215	480	M16x35	160	130	200	4	6x6	21	11	5x4	110	50	18x7	193		
150-200	0.30	681	467	210	174	160	220	320	140	518	225	521	M16x35	215	160	250	5	6x6	21	11	5x4	110	50	18x7	193		
180-250	0.30	815	560	210	214	180	280	360	150	580	245	575	M20x38	215	160	250	5	6x6	21	11	5x4	125	70	20x7.5	280		
180-250	0.50	815	560	210	214	180	280	360	150	580	245	575	M24x42	215	160	250	5	6x6	21	11	5x4	125	70	20x7.5	280		

WPWEK型(MODEL)

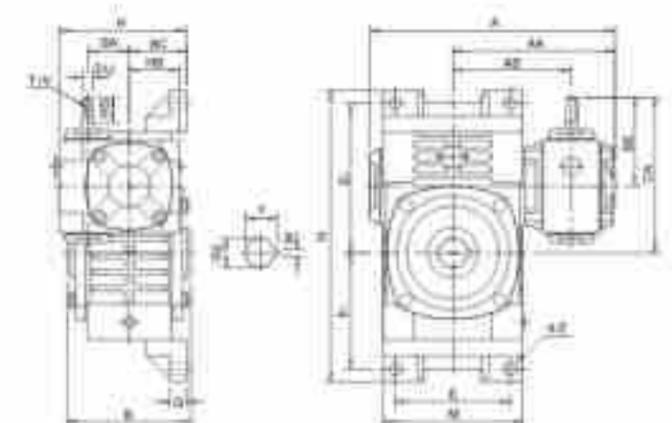


轴输出 SHAFT DIRECTION

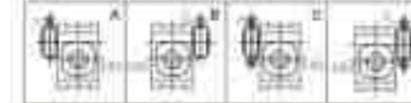


型号 Size	传动比 Ratio	A	AA	AB	B	BE	AC	BC	AD	ED	HL	LL	H	ZxL	输入轴 Input shaft				输出轴 Output shaft				重量 Weight kg
															HL	U	TxV	S	WxY	S	WxY	HL	
40-70		262	171	120	132	88	152	88	125	88	38	218	38	218	M10x25	25	12	4x2.5	38	8x33.3	17		
80-80		287	187	144	150	107	169	122	140	70	38	235	108	250	M12x35	35	12	4x2.5	38	10x38.3	28		
80-100	1/300	303	231	175	174	122	178	117	160	80	42	250	130	310	M12x35	35	15	5x5	40	12x43.3	42		
70-120	1/300	408	256	193	180	140	258	124	220	100	55	340	150	370	M14x35	40	18	6x3.5	40	14x48.3	64		
80-135	1/300	471	298	220	214	160	296	147	200	110	65	400	165	425	M16x35	50	22	6x5.5	40	16x54.4	90		
100-150	1/300	555	354	260	250	180	345	165	280	120	80	480	200	487	M16x35	50	25	8x4	70	20x74.5	138		
120-175	1/300	668	425	287	282	200	412	200	360	150	105	580	245	575	M20x36	75	30	11x5	85	22x90.4	280		
150-250		795	510	380	400	260	500	285	420	180	120	700	300	700	M24x42	85	40	12x5	110	28x116.4	462		

WPWEKO型(MODEL)

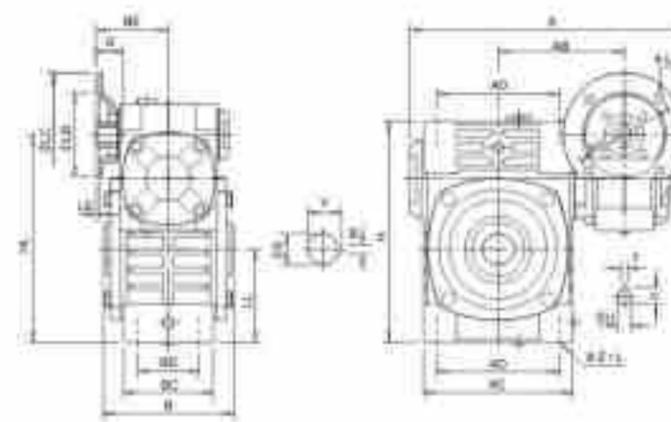


轴输出 SHAFT DIRECTION

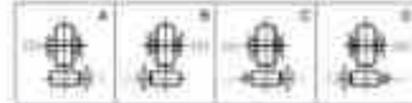


型号 Size	传动比 Ratio	A	AA	AB	B	BA	BC	BE	HB	CA	M	N	E	E	G	Z	输入轴 Input shaft				输出轴 Output shaft				重量 Weight kg
																	HL	U	TxV	S	WxY	S	WxY	HL	
40-70		262	171	120	132	88	88	88	88	159	140	152	120	120	150	20	15	28	12	4x2.5	30	8x33.3	18.1		
80-80		287	187	144	152	107	107	107	107	187	158	174	140	140	180	20	18	30	12	4x2.5	32	10x38.3	30.5		
80-100	1/300	303	231	175	174	122	122	122	122	202	182	204	180	180	220	22	15	40	15	5x5	40	12x43.3	47		
70-120	1/300	408	256	193	180	140	140	140	140	280	225	254	220	220	280	28	18	40	18	6x3.5	45	14x48.3	88		
80-135	1/300	471	298	220	214	160	160	160	160	320	255	304	250	250	320	30	18	60	22	6x5.5	60	16x54.4	100		
100-150	1/300	555	354	260	250	180	180	180	180	340	300	345	300	300	360	30	18	80	22	8x5	70	20x74.5	163		
120-175	1/300	668	425	287	282	200	200	200	200	404	365	414	320	320	440	40	21	85	30	8x6	80	22x90.4	208		
150-250		795	510	380	400	260	260	260	260	502	458	510	440	440	560	45	28	85	40	12x5	110	28x116.4	478		

WPWEDK型(MODEL)

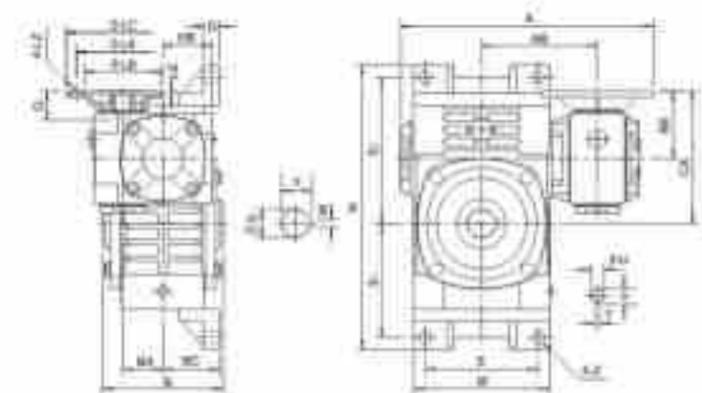


轴输出 SHAFT DIRECTION

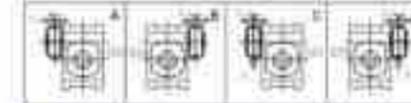


型号 Size	入轴率 Input rate	传动比 Ratio	A	AB	B	BE	AC	BC	AD	ED	HL	LL	H	ZxL	电机法兰 Flange					入力轴 Input shaft				输出轴 Output shaft				重量 Weight kg
															LA	LB	LC	LD	LE	Q	U	TxV	S	WxY	S	WxY	HL	
40-70	0.12		287	128	132	75	152	88	125	88	200	30	218	M10x25	115	85	140	4	88	31	11	4x12.8	30	8x33.3	17			
80-80	0.18		318	144	150	83	188	122	140	75	230	108	250	M12x35	115	85	140	4	88	31	11	4x12.8	35	10x38.3	28			
80-100	0.27		387	175	174	91	210	117	160	90	280	130	310	M10x30	130	110	180	4	88	33	14	5x18.3	48	12x43.3	44			
25-120	0.27	1/300	425	193	180	109	258	124	220	100	345	155	370	M14x32	130	110	190	4	88	40	14	5x18.3	45	14x48.3	66			
80-135	0.25	1/300	445	215	180	111	268	140	200	110	380	180	425	M16x35	165	130	200	4	88	42	18	6x21.8	60	16x54.4	101			
100-150	1.5	1/300	499	226	214	125	298	147	260	110	400	185	425	M16x35	185	150	200	4	88	48	18	6x21.8	60	16x54.4	101			
120-175	1.5	1/300	570	289	254	148	345	188	280	120	458	205	487	M18x35	185	130	200	4	88	52	24	8x27.3	70	20x74.5	139			
150-250	3.0	1/300	651	287	282	181	374	192	320	140	518	225	521	M18x35	215	180	250	5	M12	63	28	8x31.5	80	22x90.4	196			
180-280	4.0		680	318	324	202	412	230	380	150	580	245	575	M20x36	215	180	250	5	M12	63	28	8x31.5	85	22x90.4	285			
180-280	4.0		815	380	400	224	500	285	420	180	700	300	700	M24x42	215	180	250	5	M12	63	28	8x31.5	110	28x116.4	486			
180-280	5.5					247				195					255	230	300	5	M12	83	38	10x41.3						

WPWEDKO型(MODEL)

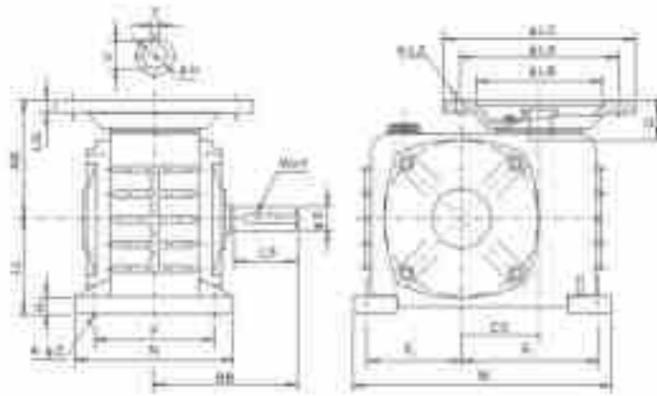


轴输出 SHAFT DIRECTION



型号 Size	入轴率 Input rate	传动比 Ratio	A	AB	B	BA	BC	BE	HD	CA	M	N	E	E	G	Z	电机法兰 Flange					入力轴 Input shaft				输出轴 Output shaft				重量 Weight kg
																	LA	LE	LC	LD	LZ	Q	U	TxV	S	WxY	S	WxY	HL	
40-70	0.12		287	128	132	80	80	80	80	140	132	120	120	120	150	20	15	115	95	140	4	88	31	11	4x12.8	30	8x33.3	20		
80-80	0.18		318	144	150	80	80	80	80	163	174	160	140	140	180	20	18	115	95	140	4	88	31	11	4x12.8	35	10x38.3	31		
80-100	0.27		387	175	174	90	90	90	90	181	204	180	180	180	220	22	15	130	110	180	4	88	33	14	5x18.3	48	12x43.3	45		
25-120	0.27	1/300	425	193	180	100	100	100	100	200	204	190	180	180	220	22	15	150	110	180	4	88	40	14	5x18.3	45	14x48.3	71		
80-135	0.25	1/300	445	215	180	110	110	110	110	221	224	204	200	200	240	24	18	160	130	200	4	M10	42	18	6x21.8	60	16x54.4	101		
100-150	1.5	1/300	499	226	214	120	120	120	120	240	244	220	220	220	260	26	18	180	130	200	4	M10	48	18	6x21.8	60	16x54.4	101		
120-175	1.5	1/300	570	289	254	130	130	130	130	260	264	240	240	240	280	28	21	180	130	200	4	M10	52	24	8x27.3	70	20x74.5	139		
150-250	3.0	1/300	651	287	282	140	140	140	140	280	284	260	260	260	300	30	21	210	180	280	5	M12	63	28	8x31.5	85	22x90.4	211		
180-280	4.0		680	318	324	150	150	150	150	300	304	280	280	280	320	32	24	210	180	280	5	M12	63	28	8x31.5	85	22x90.4	307		
180-280	4.0		815	380	400	160	160	160	160	320	324	300	300	300	340	34	28	210	180	280	5	M12	63	28	8x31.5	110	28x116.4	486		
180-280	5.5					170				303	307	310	320	320	360	36	28	210	180	280	5	M12	63	28	8x31.5	110	28x116.4	486		

WPDZ型(MODEL)

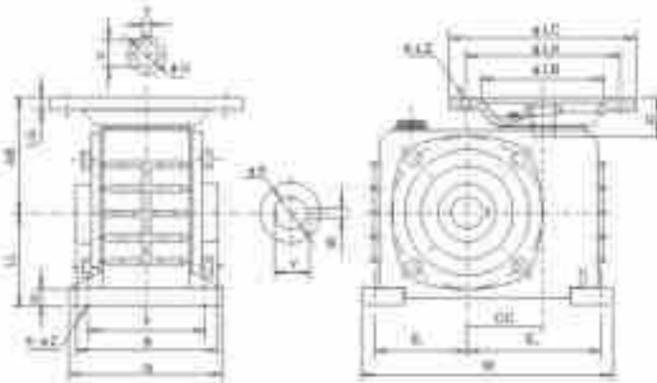


轴输出 SHAFT DIRECTION



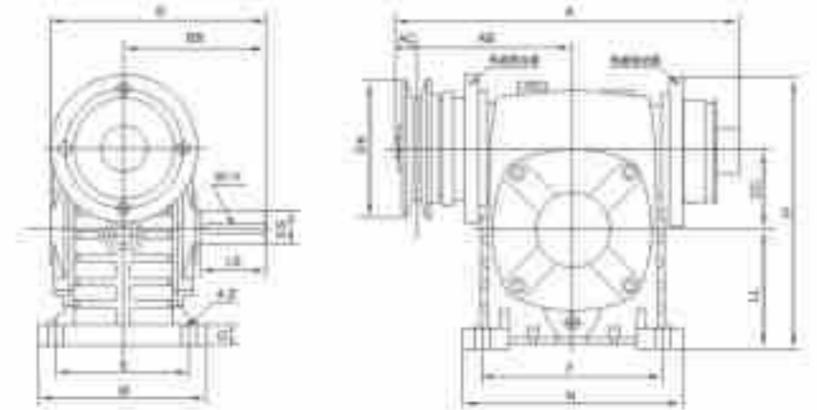
型号 Size	输入功率 Input(kW)	传动比 Ratio	AA	AA	BB	CC	E	E ₁	F	G	H	N	Z	输入法兰 Flange					输入轴 Input shaft			输出轴 Output shaft			重量 Weight (kg)
														LA	LB	LC	LD	LE	Q	U	TxV	LS	S	WxY	
30	0.18	7.5	87	78	88	32	53	77	100	15	80	125	17	110	95	140	10	M8	25	11	4x12.5	40	17	5x3	7.3
40	0.25		78	82	110	40	58	82	100	15	80	130	11	115	95	140	10	M8	25	11	4x12.5	50	22	7x4	12
50	0.37	1/10	101	88	120	78	75	120	120	20	100	130	15	130	110	160	10	M8	32	14	5x16.3	60	28	7x4	15
60	0.55		118	100	140	88	85	130	125	20	100	140	15	160	130	200	10	M10	43	18	6x21.5	85	32	10x4.5	22
80	1.5	1/20	140	130	185	100	100	130	150	22	110	160	15	195	130	200	10	M10	55	24	6x27.3	75	38	10x4.5	38
100	2.2		160	150	200	120	120	150	180	28	130	200	15	215	150	250	10	M12	85	28	8x31.3	85	46	12x4.5	50
120	3.0	1/30	180	180	240	120	120	180	200	30	150	250	15	215	180	250	10	M12	85	28	8x31.3	85	50	15x5	60
135	4.0		180	170	210	130	130	200	200	30	150	250	15	215	180	250	20	M12	85	28	8x31.3	85	50	15x5	60

WPDZK型(MODEL)



型号 Size	输入功率 Input(kW)	传动比 Ratio	AA	B	CC	E	E ₁	F	G	H	N	Z	输入法兰 Flange					输入轴 Input shaft			输出轴 Output shaft			重量 Weight (kg)		
													LA	LB	LC	LD	LE	Q	U	TxV	S	WxY				
30	0.18	1/5	87	107	30	32	77	100	15	78	100	11	110	95	140	10	M8	25	11	4x12.5	20	8x22.5				
40	0.25		78	117	40	38	82	100	15	82	100	11	115	95	140	10	M8	25	11	4x12.5	25	8x25.3				
50	0.37	1/10	101	127	75	78	120	120	20	90	100	15	130	110	160	10	M8	32	14	5x16.3	30	8x35.3				
60	0.55		118	144	80	85	130	125	20	100	140	15	160	130	200	10	M10	43	18	6x21.5	35	10x38.5				
80	1.5	1/20	140	178	100	100	130	150	22	110	160	15	195	130	200	10	M10	55	24	6x27.3	40	12x45.3				
100	2.2		160	200	120	120	180	200	28	130	200	15	215	150	250	10	M12	85	28	8x31.3	45	14x45.5				
120	3.0	1/30	180	200	120	120	180	200	30	150	250	15	215	180	250	20	M12	85	28	8x31.3	45	14x45.5				
135	4.0		180	212	130	130	200	200	30	150	250	15	215	180	250	20	M12	85	28	8x31.3	45	14x45.5				

TWPS型(MODEL)



型号 Size	功率 Input(kW)	重量 Input(kg)	传动比 Ratio	A	AA	AC	B	BB	CC	H	K	LL	M	N	E	F	G	Z	输出轴 Output shaft			重量 Weight (kg)
																			LS	S	WxY	
60	0.18	0.6	1/10	224	158	20	150	87	50	180	78	80	120	140	25	110	15	12	40	17	5x3	3
60E	0.18	0.6		250	116	20	188	112	60	190	70	90	130	150	100	120	20	12	50	22	6x3.5	12
70	0.37	1.1	1/15	254	119	20	184	131	70	200	100	105	150	130	115	150	20	15	60	28	8x4	18
	0.75	2.2		302	145	23	238	127														
80	0.75	2.2	1/25	338	152	20	214	142	80	270	127	120	170	220	105	180	20	15	65	32	10x5	25
	1.5	2.2																				
100	1.5	4.4	1/40	418	214	20	254	180	100	332	127	150	190	275	155	220	25	11	75	38	10x5	44
	2.2	4.4																				
120	2.2	8	1/50	504	227	32	282	190	120	405	215	180	230	320	180	280	30	18	85	45	14x5.5	75
	3	8																				



5. 选型方法 Methods for model chosen

5.1. 选型要素

5.1.1 输入功率、输出转矩

输入功率和输出转矩的转换公式如下:

$$\text{输入功率 } P(\text{kW}) = \text{输出转矩 } T(\text{N}\cdot\text{m}) \times \text{输出轴转速 } N_2(\text{r}/\text{min}) / (9549 \times \text{效率 } \eta)$$

减速机输入功率为减速机的输入动力容量, 输出转矩为减速机许用承载能力, 均在产品的各“功率、转矩”表中列出, 可供选型时参照选用。

5.1. Selection points

5.1.1 Input power & output torque

The formula of transforming input power to output torque listed as follows:

$$\text{Input power } P(\text{kW}) = \text{output torque } T(\text{N}\cdot\text{m}) \times \text{output revolving speed } N_2(\text{r}/\text{min}) / (9549 \times \text{efficiency } \eta)$$

Input power denotes the dynamical capacity of a reducer, and output torque denotes the maximum load a reducer allows, which are both listed in power and torque tables in order to serving selection.

5.1.2 输入轴转速、输出轴转速

输入轴和输出轴转速的转换公式如下:

$$\text{输出轴转速 } N_2(\text{r}/\text{min}) = \text{输入轴转速 } N_1(\text{r}/\text{min}) / \text{传动比}$$

当减速机以皮带轮、链轮及联轴器传动时, 输入轴转速不宜超过2000(r/min), 一般转速范围600-1800(r/min), 转速过高会使轴承加重磨损而缩短寿命。

5.1.2 Revolving speed of input shaft and output shaft

The formula of transforming input revolving speed to output listed as follows:

$$\text{Output revolving speed } N_2(\text{r}/\text{min}) = \text{input revolving speed } N_1(\text{r}/\text{min}) / \text{ratio } i$$

With belt-pulley, couplings or sprocket wheel shaft transmission, the input speed should not exceed 2000(r/min); the general range is 600-1800RPM. If the revolving speed is too high, the bearing will have less life due to over-friction.

5.1.3 效率

效率计算公式如下:

$$\text{效率 } \eta = (\text{输出功率} / \text{输入功率}) \times 100\%$$

由于减速机运转时内部存在摩擦及振动, 部分输入能量将转化为热能等非工作消耗, 效率就是减速机输入能量的利用率, 效率的高低取决于蜗杆头数、蜗杆转速、润滑油粘度、轴承摩擦阻力及蜗轮材质的摩擦系数等。每种规格、传动比的减速机, 其效率数值各不相同, 下表列出效率的一般范围数值, 可供选型时参考。

5.1.3 Efficiencies

The efficiency calculation formula listed as follows:

$$\text{Efficiency } \eta = \text{output power} \times 100\% / \text{input power}$$

Due to the internal vibration and wear, partial input energy will be transformed to be heat energy and fade away. Efficiency is the utilization ratios of input energy. The efficiency depends on worm's tooth number, revolving speed, lubricant oil viscosity, bearing friction and worm gear's material friction factor. Reducers with vary model or ratio have vary efficiency. The following table lists the range of the efficiency value.

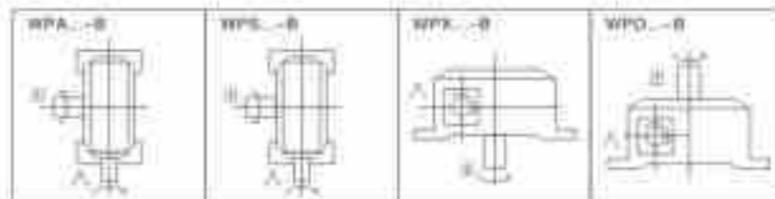
速比 Ratio	1/10	1/15	1/20	1/25	1/30	1/40	1/50	1/60
效率 Efficiency	77-90%	76-88%	75-84%	72-82%	68-82%	64-75%	62-72%	60-71%

5.1.4 输入轴、输出轴回转方向

蜗杆减速机输出轴回转方向取决于蜗杆螺旋方向, 基本型蜗杆减速机均为右旋螺旋。以本产品样本上WPA照片为依据, 面对输入轴, 输出轴观察, 当输入轴顺时针方向旋转时, 输出轴旋转方向为逆时针; 以WPS照片为依据, 面对输入轴, 输出轴观察, 当输入轴顺时针方向旋转时, 输出轴旋转方向为顺时针; 或参照下图型。其余各种输出轴装配结构可按以上方法判定转向。当按特殊需要蜗杆螺旋方向制成左旋时, 情况正好相反。

5.1.4 Revolving direction of input and output shaft

The revolving direction of output shaft relies on worm thread's direction; right-directed thread is for basic use. According to the photograph of WPA in our product manual, facing input shaft and output shaft, when input shaft is in clockwise, output shaft is in counterclockwise; and according to the photograph of WPS, facing input shaft and output shaft, when input shaft is in clockwise, output shaft is in clockwise too; for other output shaft assembly structure, the method of ensuring revolving direction is as above or the outline. It will be adverse when the worm shaft is left-directed.



5.1.5 工况系数

减速机在设计时, 其输入动力容量及许用承载能力的强度计算按照每天连续运转八小时, 载荷稳定不变的理想工况设定, 在实际使用时, 现场工况(如是否有反复启动停止或频繁正反转, 使用时间是否少于或多于八小时, 冲击载荷大小及特性)可能与理想工况相差甚远, 在选型时应予充分考虑, 在选用减速机输入功率或输出转矩时, 可按下列公式加以修正:

$$\text{修正输出转矩 } T_2(\text{N}\cdot\text{m}) = \text{理论输出转矩 } T_1(\text{N}\cdot\text{m}) \times \text{工况系数 } K$$

5.1.5 Service Factor

When reducer is designed, the input load capacity and allowed intensity are calculated per a continual operation of 8 hours a day and per the ideal conditions of a uniform load design. However, the on-site use (e.g. repetitive start-up, stop or obverse and reverse rotation, use time more or less than 8 hours a day, different value and characteristics of impact load from standard conditions and so on) may be different from ideal use. Which should be taken into account. While selecting reducer input power or output torque, revise then according to the following formula:

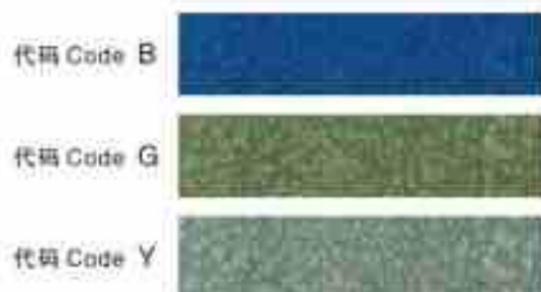
$$\text{Revised output torque } T_2(\text{N}\cdot\text{m}) = \text{theoretic output torque } T_1(\text{N}\cdot\text{m}) \times \text{running condition factor } k$$

工况系数K表 Table of Service factor k

原动机 Prime mover	载荷状况 Load	每日运转时间(小时) Operation time per day(hour)			
		0.5-2	2-6	6-10	10-24
电动机 Electromotor	平稳载荷 Uniform	0.80	0.90	1.00	1.25
	中等冲击 Medium shock	0.90	1.00	1.25	1.50
	较大冲击 Heavy shock	1.00	1.25	1.50	1.75

注: 当正反转或停开次数1小时内达10次以上时, 上表K值还应乘以1.2
Annotate: when the times of start-up, stop or obverse per hour is more than 10, the value K must multiply 1.2.

5.1.6 产品标准色 Standard Color of Products



注意: 1. 常规减速机颜色为G。
2. 由于印刷原因, 颜色与实物有差异。
1. Colour of normal reducer is G.
2. Due to printing limitation the color do not match the actual products exactly.

5.2 选型实例 Selection example

5.2.1 基本情况 The basic condition

传动结构 Transmission struture	相关数据 Relative data
	<ul style="list-style-type: none"> 起吊物体重量 W=600Kg Weight of suspended object W=600Kg
	<ul style="list-style-type: none"> 起吊物体速度 V=12m/min Speed of suspended object V=12m/min
	<ul style="list-style-type: none"> 滚轮直径 D=0.4m Roll-pulley diameter D=0.4m
	<ul style="list-style-type: none"> 皮带轮传动效率 $\eta_1=0.92$ Efficiency of belt-pulley $\eta_1=0.92$
	<ul style="list-style-type: none"> 减速机传动效率 $\eta_2=0.71$ Efficiency of reducer $\eta_2=0.71$
	<ul style="list-style-type: none"> 运转时间 8小时/日 Running time 8 hours per day
	<ul style="list-style-type: none"> 启动次数 2次/小时, 较大冲击 2 Times per hour heavy shock
<ul style="list-style-type: none"> 使用电源 三相380V, 50Hz Electrical source three-phase 380V, 50Hz 	

5.2.2 选型步骤 Selection steps

序号 Number	内容 Contents	计算公式 Formula	计算示例 Example
1	定传动比 Calculate ratio	根据输入轴及输出轴的转速确定传动比 1. 计算皮带轮转速N3 $N3 = \text{起吊速度} V / (\text{滚轮直径} D \times \pi)$ 2. 计算总传动比 $i = \text{输入轴转速} N1 / \text{皮带轮转速} N3$ 3. 计算减速机传动比i1 $i1 = \text{总传动比} i / \text{皮带轮传动比} i2$ Calculate the ratio according to input and output shaft revolving speed 1. get belt-pulley revolving speed N3 $N3 = \text{speed of suspended object } V / (\text{roll-pulley diameter } D \times \pi)$ 2. Calculate general ratio i $i = \text{input revolving speed } N1 / \text{belt-pulley revolving speed } N3$ 3. Calculate reducer ratio i1 $i1 = \text{general ratio } i2$	1. $N3 = 12 / (0.4 \times 3.142) = 9.6 \text{r/min}$ 2. $i = 1440 / 9.6 = 150$ 3. 设定 $i2 = 5$, 则 $i1 = 150 / 5 = 30$
2	计算输出转矩 Calculate output torque	计算减速机输出转矩T $T = \text{物体重量} W \times 10 \times \text{滚轮半径} (D/2) / (\text{皮带轮传动比} i2 \times \text{皮带轮传动效率} \eta_1)$ Calculate reducer output torque T $T = \text{weight of suspended object } W \times 10 \times \text{roll-pulley radius } (D/2) / (\text{belt-pulley ratio } i2 \times \text{belt-pulley transmission efficiency } \eta_1)$	$T = 600 \times 10 \times (0.4/2) / (5 \times 0.92) = 260.9 \text{N.m}$
3	修正输出转矩 Revise output torque	根据使用条件, 8小时运转, 较大冲击, 工况系数K=1.5 计算修正输出转矩T1 $T1 = \text{输出转矩} T \times K$ according to using condition: operation 8 hours a day, heavy shock, running condition factor K=1.5 calculate revised torque T1 $T1 = \text{output torque } T \times k$	$T1 = 260.9 \times 1.5 = 391 \text{N.m}$
4	计算输入功率 Calculate input power	换算功率P $P = \text{修正输出转矩} T1 \times \text{输出轴转速} N2 / (9549 \times \text{减速机传动效率} \eta_2)$ Calculate input shaft power P $P = \text{revised output torque } T1 \times \text{output revolving speed } N2 / (9549 \times \text{reducer transmission efficiency } \eta_2)$	$P = 391 \times (1440/30) / (9549 \times 0.71) = 2.77 \text{KW}$
5	选型号规格 Select model	根据产品样本, 选定型号120, 传动比1/30, 输入轴功率3KW, 输出轴转矩413N.m According to product manual, the selection is: Model 120, ratio 1/30, rating input power 3KW, output torque 413N.m	

6. 选型参数
Parameter for model chose

WP.WPK.WPW.WPWK(A.S.X.O.T.V)型输入功率及输出轴转矩表Input and output
输入轴转速Speed of input shaft:1500r/min

型号 Size	输入轴功率 Input(kw)								输出轴转矩 Output(N.m)							
	10	15	20	25	30	40	50	60	10	15	20	25	30	40	50	60
40	0.40	0.33	0.26	0.24	0.22	0.16	0.14	0.12	19	23	20	25	25	20	22	20
50	0.65	0.52	0.40	0.37	0.34	0.27	0.24	0.20	31	36	32	38	39	36	37	35
60	1.00	0.82	0.65	0.59	0.54	0.45	0.40	0.32	50	58	56	68	62	71	75	59
70	1.60	1.35	1.10	0.96	0.82	0.67	0.61	0.52	83	98	101	112	99	104	113	97
80	2.20	1.78	1.36	1.28	1.20	0.90	0.80	0.75	113	133	120	149	151	140	145	146
100	3.60	3.10	2.60	2.35	2.10	1.68	1.30	1.00	193	237	256	284	277	291	257	229
120	5.20	4.35	3.50	3.25	3.00	2.20	1.90	1.50	262	336	361	404	413	392	399	355
135	9.75	7.65	6.00	5.50	5.00	3.69	2.89	2.30	540	622	619	696	707	687	626	562
147	10.71	8.43	6.18	5.71	5.23	3.84	3.09	2.52	586	676	637	727	739	694	669	616
155	12.80	9.90	7.00	6.53	6.00	4.40	3.60	3.00	709	785	722	842	848	784	770	791
175	17.30	13.60	10.00	9.13	8.30	6.18	4.85	4.07	958	1091	1044	1221	1189	1133	1127	1078
200	22.60	18.20	13.86	12.75	11.67	8.78	6.71	5.58	1280	1477	1482	1643	1782	1654	1516	1449
250	33.20	27.40	21.60	20.00	18.43	14.00	10.43	8.62	1881	2310	2310	2579	2745	2674	2357	2371

注：型号147指代WPW(A.S.X.O.Z.V)及WPWK(A.S.O.Z.V)

WPD.WPK.WPWD.WPWK(A.S.X.O.T.V)型输入功率及输出轴转矩表Input and output
输入轴转速Speed of input shaft:1500r/min(配用A02或Y系列电机 Matching electric motor series A02 or Y)

型号 Size	输入轴功率 Input(kw)								输出轴转矩 Output(N.m)							
	10	15	20	25	30	40	50	60	10	15	20	25	30	40	50	60
40	0.12								6	8	9	13	14	15	19	20
50	0.18								9	12	14	19	20	24	28	34
60	0.37								19	26	34	42	42	58	67	73
70	0.75				0.37				39	54	70	87	95	58	66	70
80	1.5				0.75				77	112	142	174	189	117	136	146
100	1.5								80	115	149	181	198	280	307	344
120	3				2.2				151	232	310	372	413	392	480	521
135	4				3				219	321	413	509	585	542	649	690
147	4				3				219	321	413	509	585	542	649	690
155	5.5				4				305	411	525	709	760	713	853	1039
175	7.5				5.5				415	602	783	1002	1074	1008	1278	1450
200	11				7.5				623	892	1176	1417	1680	1413	1695	1948
250	15				11				850	1246	1604	1933	2234	2101	2486	3025

注：型号147指代WPW(A.S.X.O.Z.V)及WPWK(A.S.O.Z.V)

WPE.WPEK.WPWE.WPWEK.WPED.WPEDK.WPWED.WPWEDK(A.S.X.O)型
输入轴功率及输出轴转矩表 Input and output
输入轴转速 Speed of Input shaft:1500r/min

型号 Size	功率及转矩 Power and torque	WPE.WPEK.WPWE.WPWEK								WPED.WPEDK.WPWED.WPWEDK							
		传动比 Ratio								传动比 Ratio							
		200	300	400	500	600	800	900	1000	200	300	400	500	600	800	900	
40-70	输入轴功率(kW)	0.48	0.34	0.28	0.25	0.23	0.20	0.17	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	
	输出轴转矩(N.m)	250	250	250	250	250	250	250	83	88	107	120	130	150	150	177	
50-80	输入轴功率(kW)	0.65	0.51	0.42	0.38	0.31	0.29	0.25	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	
	输出轴转矩(N.m)	350	350	350	350	350	350	350	97	124	150	166	203	217	252		
60-100	输入轴功率(kW)	0.95	0.67	0.52	0.44	0.40	0.35	0.33	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	
	输出轴转矩(N.m)	500	500	500	500	500	500	500	195	276	356	420	463	529	561		
70-120	输入轴功率(kW)	1.64	1.18	0.91	0.84	0.71	0.58	0.54	0.75	0.75	0.75	0.75	0.37	0.37	0.75		
	输出轴转矩(N.m)	840	840	840	840	840	840	840	384	534	693	750	488	536	887		
80-135	输入轴功率(kW)	2.50	1.75	1.39	1.19	1.08	0.88	0.85	1.5	1.5	1.5	1.5	0.75	0.75	1.5		
	输出轴转矩(N.m)	1400	1400	1400	1400	1400	1400	1400	616	880	1108	1294	1010	1071	1426		
80-147	输入轴功率(kW)	2.79	2.1	1.71	1.47	1.34	1.20	1.06	1.5	1.5	1.5	1.5	0.75	0.75	1.5		
	输出轴转矩(N.m)	1575	1575	1575	1575	1575	1575	1575	662	902	1208	1316	1300	1321	1575		
100-155	输入轴功率(kW)	3.89	2.92	2.41	2.07	1.89	1.69	1.50	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	
	输出轴转矩(N.m)	2100	2100	2100	2100	2100	2100	2100	854	1079	1307	1522	1667	1864	2100		
120-175	输入轴功率(kW)	5.09	3.91	3.27	2.72	2.53	2.50	2.05	3	3	3	3	2.2	2.2	3		
	输出轴转矩(N.m)	3050	3050	3050	3050	3050	3050	3050	1798	2340	2798	3050	2500	2685	3050		
135-200	输入轴功率(kW)	7.22	5.41	4.46	3.83	3.46	2.91	2.71	4	4	4	4	3	3	4		
	输出轴转矩(N.m)	3950	3950	3950	3950	3950	3950	3950	2188	2920	3543	3950	3950	3950	3950		
155-250	输入轴功率(kW)	11.71	8.14	6.00	5.14	4.67	4.07	3.67	5.5	5.5	5.5	5.5	4	4	5.5		
	输出轴转矩(N.m)	6050	6050	6050	6050	6050	6050	6050	2841	4087	5546	6050	6050	6050	6050		

注：型号80-147指代WPWE(A.S.X.O.)及WPWEK(A.S.O.)

润滑油注油量(L)
Adding capacity of lubrication oil

机座 Type Size	WPA WPKA	WPE WPEK	WPX(O) WPDX(O) WPEX(O)	WPW WPWD
40	0.1	0.2	0.2	0.2
50	0.2	0.4	0.5	0.4
60	0.3	0.5	0.6	0.5
70	0.6	0.9	1.2	0.8
80	1	1.3	1.5	1.5
100	1.7	2.7	3.9	2.6
120	2.8	4.5	5.8	4.5
135	4.5	7.2	8.6	5.6
147	4.2	7	11.1	-
155	5.9	10.3	14.2	11.7
175	7.5	12.1	16.7	13.9
200	12.2	18.9	27.2	19.7
250	22	33.9	48.9	30

实际速比
Actual Ratio

机座 Size	名义速比 Ratio	实际速比 Actual Ratio							
		10	15	20	25	30	40	50	60
40	10	15	20	25	30	40	50	60	
50	10	15	20	25	30	40	50	60	
60	10	15	20	25	30	38	50	60	
70	10	15	20	25	30	40	50	60	
80	10	15	20	25	30	40	50	60	
100	10	15	20	25	30	40	50	60	
120	10	15	19.5	25	30	38	50	60	
135	10	15	20	25	30	40	50	60	
147	9.667	14.5	20	25	29	40	50	61	
155	10	15	20	25	30	40	50	59	
175	10	15	20	25	30	40	50	60	
200	10	15	20.5	25	30	41	50	60	
250	10.25	15.25	20.5	25	30.5	41	50	61	

7. 使用说明 Operating installation

7.1. 安装注意事项

- 7.1.1 减速机须安装在平整坚固的底座上，底座螺栓必须紧固，防震。
- 7.1.2 原动机—减速机—工作机的各联接轴伸，安装后必须互相准确对准轴线。
- 7.1.3 减速机输入端及输出端轴伸外径公差尺寸均按h6制作，与之相配的联轴器、皮带轮、链轮等传动件内孔须按合适的公差尺寸配制，避免装配过紧损坏轴承，装配过松影响正常动力传递。
- 7.1.4 链轮、齿轮等传动件装上轴伸时，应尽量靠近轴承，以减少轴伸弯曲应力。
- 7.1.5 WPD型减速机装配电机时，应在蜗杆头部内孔孔壁及键槽处涂抹黄油，避免装配过紧，防止轴孔日久生锈。
- 7.1.6 订购使用各类WPD减速机时，若电机重量较大，应设支撑装置。

7.2. 使用注意事项

- 7.2.1 使用前应注意检查减速机型式结构、中心距规格、传动比、输入轴连接方式、输出轴结构、输入轴输出轴轴伸方向和运转方向等是否符合使用要求。
- 7.2.2 按照样本上“润滑油的选择使用”中所规定的要求，注入合适的品种牌号润滑油。加油后，旋紧顶部的通气器，旋掉通气器上之小锥塞，减速机方可开始运转。必须选用合适牌号的润滑油，必须控制适宜的加油量，必须按规定要求及时换油，尤其要重视首次使用100小时后的更换新油。
- 7.2.3 使用过程中发生不正常情况时，应及时停机检查，可参照“故障原因及解决办法”表处理。（减速机的油温最高允许达到95℃，在此温度界限下，只要油温不再上升，可以放心使用）。

7.1. Notices of installation

- 7.1.1 The base-plate must be plane and stoutness, and the base-bolts must be screwed down and shockproof.
- 7.1.2 The connecting shafts of prime mover, reducer and operation device must be coaxial after installation.
- 7.1.3 The diameter tolerance zone of input and output shaft is h6, the holes of fittings (such as couplings, belt-pulley, sprocket wheel and so on) must properly mate the shaft, which prevents bearing from breakage because of over-tight mate or avoid effecting normal power transmission because of over-loose mate.
- 7.1.4 Drivers such as sprocket wheel and gear must be fitted close to bearings in order to reduce bending stress of hanging shaft.
- 7.1.5 While assembling motor of WPD reducer, it is necessary that proper amount of butter applies to the worm shaft input hole and keyway, avoiding assembling too tightly and rusting after using for a long time.
- 7.1.6 When Ordering or using all kinds of WPD type, if the motor weight is bigger than the common, Supporting Set is required.

7.2. Notices of usage

- 7.2.1 Before using, please check carefully whether the reducer model, distance, ratio, input connecting method, output shaft structure, input and output shaft direction and revolving direction accord with requirement.
- 7.2.2 According to the requirement of “selecting lubricant oil” in the product manual, please fill proper category and brand lubricant. And then screw on the vent-plug, uncork the small cone-plug of vent-plug. Only After doing these, reducer is ready for starting up running. The proper brand and adequate lubricant oil is required; replacing oil in time conforming to the request of product manual is also necessary, especially after using first 100 hours, it is required refilling new oil.
- 7.2.3 When abnormal circumstances occur, please stop and check reducer per “solutions and reasons for faults of reducer” (allowable highest oil temperature is 95°C, under this temperature limit, if oil temperature no more goes up, please let reducer continue running).

8. 油品润滑 Lubricant

蜗轮减速机使用前应用注入N220-N320（环境温度-30℃-40℃）或N320-N460（环境温度25℃-65℃）润滑油至油标中心点之上，并取掉通气器上之小锥塞。首次使用100小时后，洗净内部换上新油，以后每2500小时换油一次。
Before operation, input N220-N320(Ambient temperature -30°C-40°C), N320-460 (Ambient temperature 25°C-65°C) lubrication oil up to the center line of the oil gauge. In the meanwhile, remove the small screw of the air-vent. After having worked for 100 hours for the first time, must clear the inside and change the lubrication oil in it, here after once every 2500 hours.

减速机在使用时，可按下表选用润滑油。
Lubricants for a reducer used in foreign countries can be chosen from the table below.

Worm Shaft Speed(r/min)		Lubricant	Operating position Worm shaft, upper Worm shaft vertical	Operating position Worm shaft, lower Output Shaft Vertical
Over	up to			
1000	3000	Synthetic oils	PG460	PG220
	1000			PG460
2000	3000	Mineral oils	ISO VG460	ISO VG200
750	2000			ISO VG320
250	750			ISO VG460
	250			ISO VG680

环境温度 Ambient Temp	负荷 Load	ISO-VG	GB3141-82		Mobil		HOIYKER
-30℃--15℃	普通 Commonly	VG-100	N100	Shell Titela S100	SHC 627	CARTER SY 100	HOIYKER SHC 100
	重 Heavy	VG-150	N150	Shell Titela S150	SHC 629	CARTER SY 150	HOIYKER SHC 150
-15℃-5℃	普通 Commonly	VG-150	N150	Shell Titela S150	SHC 629	CARTER SY 150	HOIYKER SHC 150
	重 Heavy	VG-220	N220	Shell Titela S220	SHC 630	CARTER SY 220	HOIYKER SHC 220
5℃-25℃	普通 Commonly	VG-220	N220	Shell Titela S220	SHC 630	CARTER SY 220	HOIYKER SHC 220
	重 Heavy	VG-320	N320	Shell Titela S320	SHC 632	CARTER SY 320	HOIYKER SHC 320
25℃-40℃	普通 Commonly	VG-320	N320	Shell Titela S320	SHC 632	CARTER SY 320	HOIYKER SHC 320
	重 Heavy	VG-460	N460	Shell Titela S460	SHC 634	CARTER SY 460	HOIYKER SHC 460
40℃-65℃	普通 Commonly	VG-460	N460	Shell Titela S460	SHC 634	CARTER SY 460	HOIYKER SHC 460
	重 Heavy	VG-680	N680	Shell Titela S680	SHC 636	CARTER SY 680	HOIYKER SHC 680

After the first 100 hours of operation: Drain out and flush with light oil.
Every 2500 hours of operation: Drain, flush and refill.

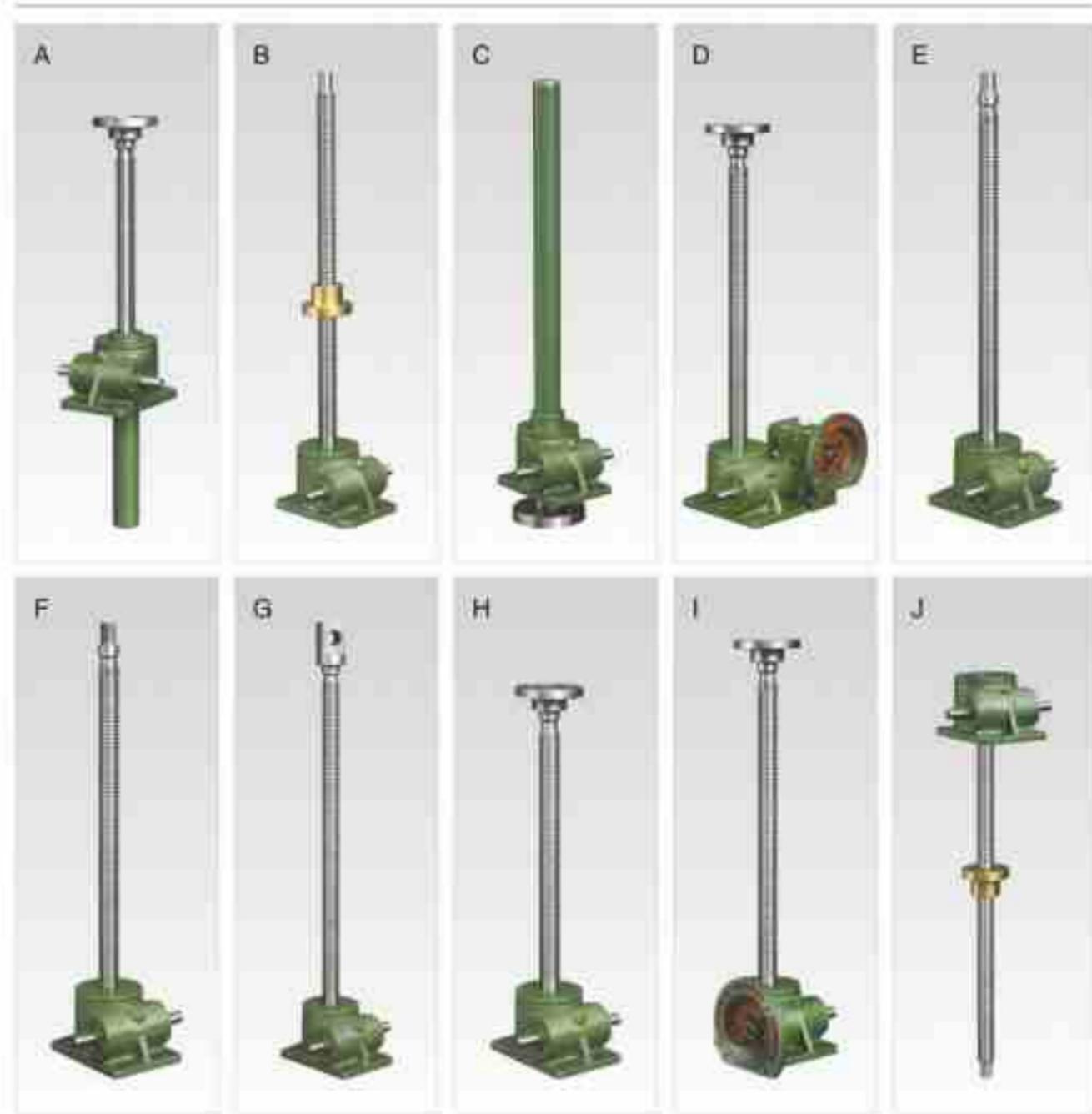
9. 故障分析
Malfunctions analysis

故障情况 Fault Situation	故障原因 Reasons	解决办法 Solutions
过热 Overheating	原动力、减速机、工作机连接不当 Improper connectae among prime mover, reducer and the operation device	调整其适当位置, 使三者相联轴线同轴 Adjust to proper position
	超负荷运转 Overloading	适当调整负荷 Adjust to proper load
	密封过度摩擦 Over friction of oil seals	在密封唇口处滴润滑油 Drop lubricant at oil seal
	润滑油过多或过少 Lubricant oil overmuch or shortage	按油标指示点调整油量 Adjust to proper oil quantity as indication
振动 Vibration	润滑油杂质多或润滑油差 Much impurity in oil or inferior oil	更换合适新油 Refill proper oil
	原动力、减速机、工作机固定不紧 Prime mover, reducer and the operation device mount badly	查出不良固定部件, 正确加紧 Find out the bad place, tighten it
	蜗轮副齿面磨损或损坏 Tooth surface of worm gear sets worn-out or damaged	更换蜗轮副(必要时本公司配合) Replace worm gear sets (we will cooperate with you when necessary)
	轴承磨损 Bearing worn-out	更换轴承 Replace bearing
噪音 Noise	螺栓松动 Bolt loose	螺栓加紧 Tighten Screw
	轴承损坏或间隙过大 Bearing damaged or too large clearance	更换轴承 Replace bearing
	蜗轮副配合不良 Worm gear sets mesh badly	修整齿面或更换蜗轮副(请与本公司联系) Mend tooth surfaces or replace worm gear sets (please contact to us)
	润滑油不足 Lubricant oil shortage	按油标指示点补加润滑油 Fill in adequate oil as indication
漏油 Oil leakage	箱体内有异物 Foreign object in box	倒净润滑油取出异物, 重加清洁润滑油 Discharge all the oil in order to put out foreign object, and refill clean oil
	油封唇口磨损 Oil seal lip worn-out	更换油封 Replace oil seal
	密封档轴轴颈磨损 Shaft of oil seal area worn-out	更换输出轴或输入轴 Replace input or output shaft
	油量过多 Too much oil	按油标指示点调整油量 Discharge adequate oil as indication
	油标螺塞未拧紧 Oil screw plug loose	螺塞处加密密封胶, 旋紧螺塞 Tighten oil screw plug
蜗轮副齿面 磨损过快 Tooth surface of worm gear sets abrade extra-quickly	油标破损 Oil gauge damaged	更换油标 Replace oil gauge
	超负荷运转 Overload	调整适当负荷 Adjust to proper loading
	润滑油不符合要求 Lubricant oil not according with requirement	更换合适的润滑油 Replace proper lubricant oil
	润滑油不足 Lubricant oil shortage	按油标指示点加足润滑油 Fill adequate oil as indication
	未按规定定时换油, 润滑油老化 Not replacing lubricant oil in time according to requirement, oil deteriorates	按指定要求定时更换润滑油 Replacing oil in time according to requirement
运转温度过高 Overheating while running	1. 按“过热”故障处理 2. 采取合适措施, 降低周围环境温度 1. Deal with it as "Overheating" 2. Adopting proper measures to make environment temperature fall	

注: 如遇到难以解决之故障时, 请及时与贵方联系, 以便提供详细服务。
Note: In other faults not listed above, please contact with us at any moment. Our company will supply thorough consultation and service.

SWL系列蜗轮丝杆升降机
SWL series worm gear screw jack

1. 产品图片
Picture of products

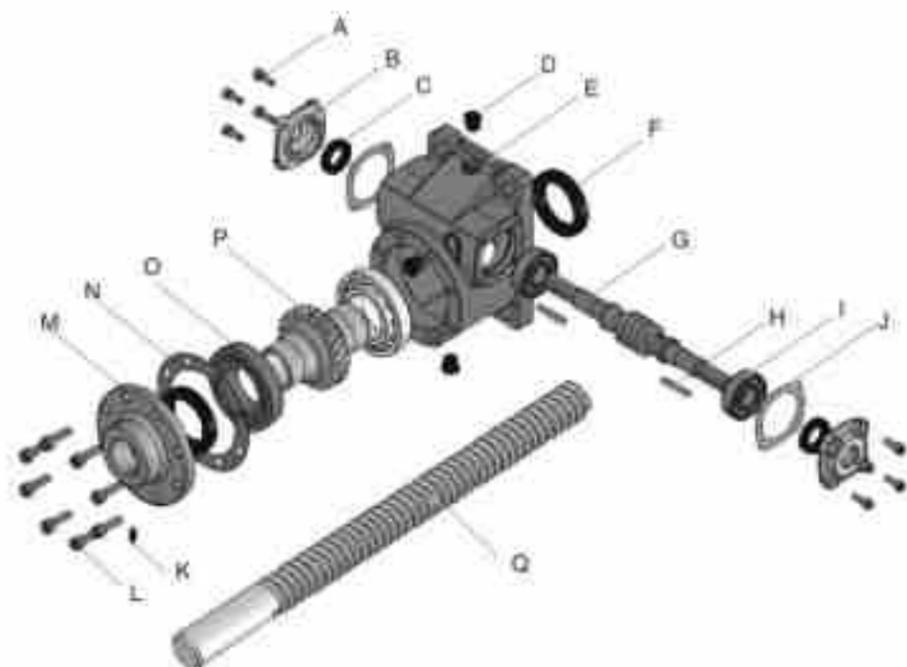


2. 产品概述 Product overview

蜗轮丝杆升降机是通过蜗轮传动螺杆完成提升、下降、推进等功能，广泛应用于机械、冶金、建筑、水利、化工等各行业。具有结构紧凑、体积小、安装方便、可靠性好、稳定性高、使用寿命长等优点。本系列升降机可自锁，承载能力在2.5t-150t之间，最高输入转速1500r/min。工作环境温度在-20℃-100℃之间。

Worm gear screw jack is through the worm gear screw performs moving up, down and forward by worm driving. It is widely used in fields of machinery, architecture, chemistry etc. The life has advantages of compact structure, small size, easy installation, good reliability, high stability and long life-span. It has self locking. The maximum loading capability is 2.5 to 150 ton and the maximum input RPM is 1500r/min. The environment working temperature is between -20℃ and 100℃.

3. 产品结构图 Product structure



Number	名称 Name of parts	Number	名称 Name of parts
A	内六角螺栓 HEX. Screw	J	石棉垫片 Paper Packing
B	入力端盖 Input Shaft Cover	K	牛油嘴 Fittings
C	油封SC Oil Seal SC	L	内六角螺栓 HEX. Screw
D	放油螺栓 Oil Plug	M	出力端盖 output Shaft Cover
E	蜗轮箱 Outer Shell	N	石棉垫片 Paper Packing
F	油封TC Oil Seal TC	O	轴承 Taper Roller Bearing
G	蜗杆 Worm shaft	P	蜗轮 Worm wheel
H	键 Key	Q	丝杆 Screw
I	轴承 Ball Bearing		

4. 型式和标记 Type and earmark

4.1 结构型式

- I型--丝杆同时作旋转运动和轴向移动(见图1);
- II型--丝杆作旋转运动，丝杆上的螺母作轴向移动(见图2)。

4.2 装配型式

- 升降机每种结构型式又分为两种装配型式:
- A型--丝杆(或螺母)向上移动(见图1和图2);
- B型--丝杆(或螺母)向下移动(见图1和图2);

4.3 丝杆头部型式

- I型结构型式的丝杆头部分为I型(圆柱型)、II型(法兰型)、III型(螺纹型)和IV(扁头型)四种型式(见图1);
- II型结构型式的丝杆头部分为I型(圆柱型)和II型(螺纹型)两种型式(见图2)

4.4 传动比

升降机分为两种传动比，即普通(F)和慢速(M)。

4.5 丝杆的防护

- I型升降机丝杆的防护分为：基本型、防旋转型(F)和带防护罩型(Z);
- II型升降机丝杆的防护分为：基本型和带防护罩型(Z)

4.6 标记示例

4.1 Structural mode

- Type I--Screw spins and rotate axially at the same time (see Figure 1);
- Type II--Screw spins while nut on screw is rotating axially (see Figure 2);

4.2 Assemblage mode:

- There are 2 assemblage modes available for each of elevator structural mode:
- Type A--Screw (or nut) moves upwards (see Figure 1 and Figure 2);
- Type B--Screw (or nut) moves downwards (see Figure 1 and Figure 2);

4.3 Screw head mode

- There are IV types available for the head of screw with Type I structural mode: Type I (cylinder mode); Type II (flange mode); Type III (thread mode); and Type IV (flat head mode)(see Figure 1);
- There are II types available for the head of screw with Type II structural mode: Type I (cylinder mode); Type II (thread mode).

4.4 Drive ratio

There are 2 drive ratios available for elevator: common ratio (F) and slow-speed ratio (M)

4.5 Screw protection

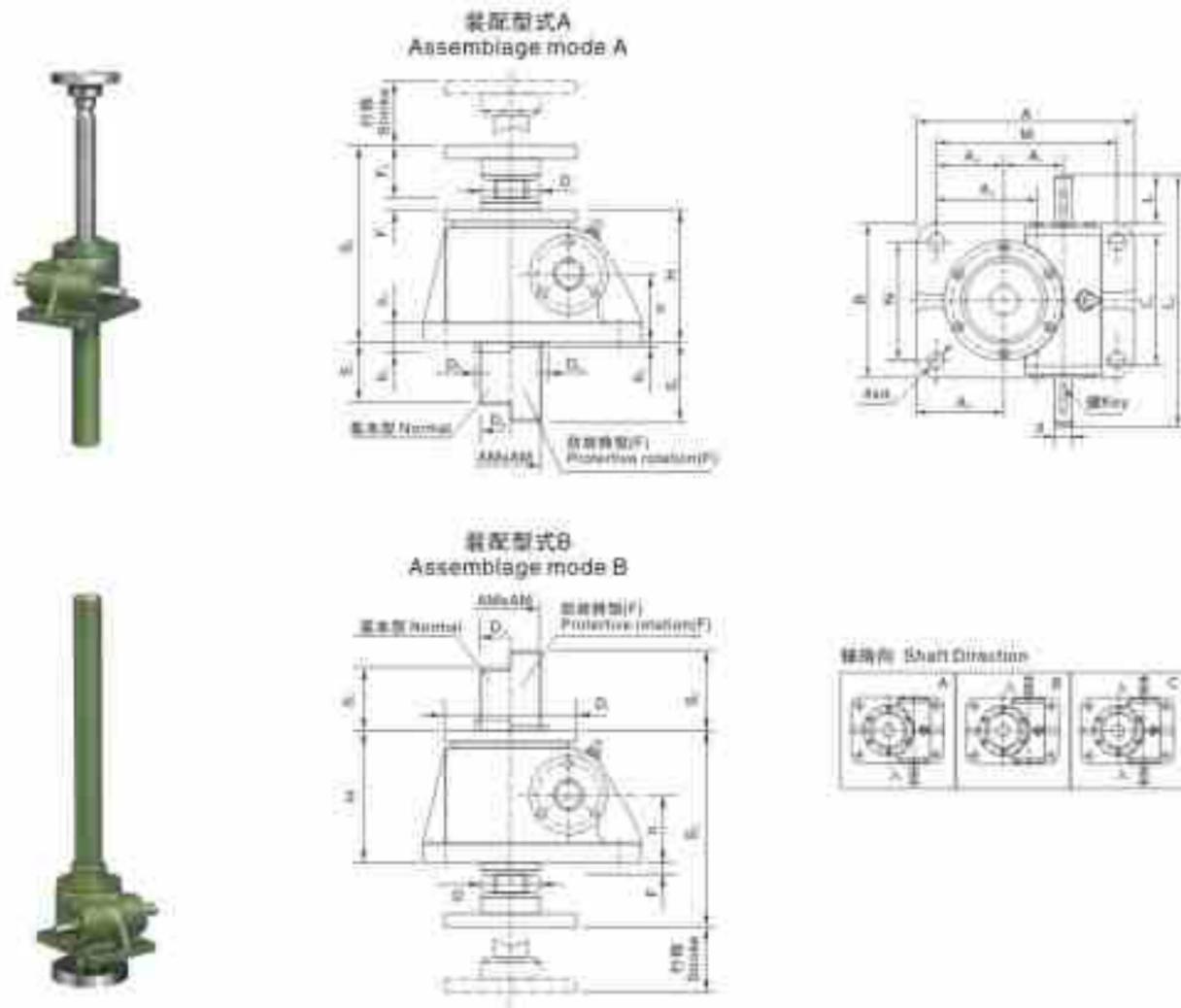
- Protections available for Type I elevator are: basic type, anti-rotary type(F) or shielded type(Z);
- Protections available for Type II elevator are: basic type and shielded type (Z);

4.6 Example of earmark



5. 产品尺寸
Product dimension

5.1 I型升降机的外形结构尺寸见图1和表1。
Fig 1 and Chart 1 show the outer structure and dimension of lifter model I.



丝杆头部型式 Type of screw head

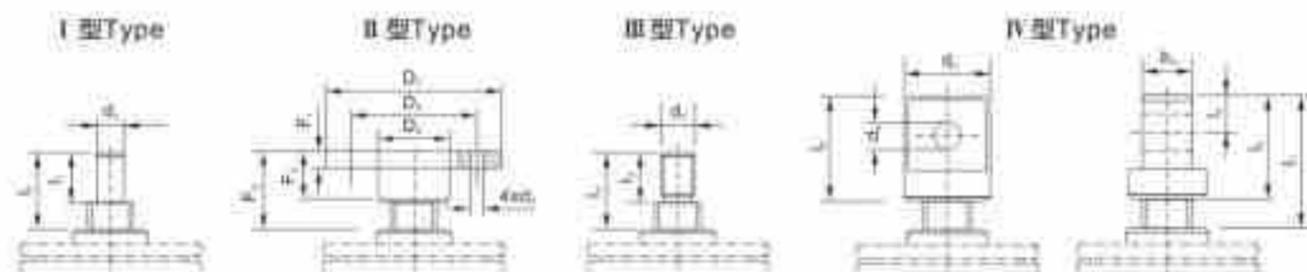


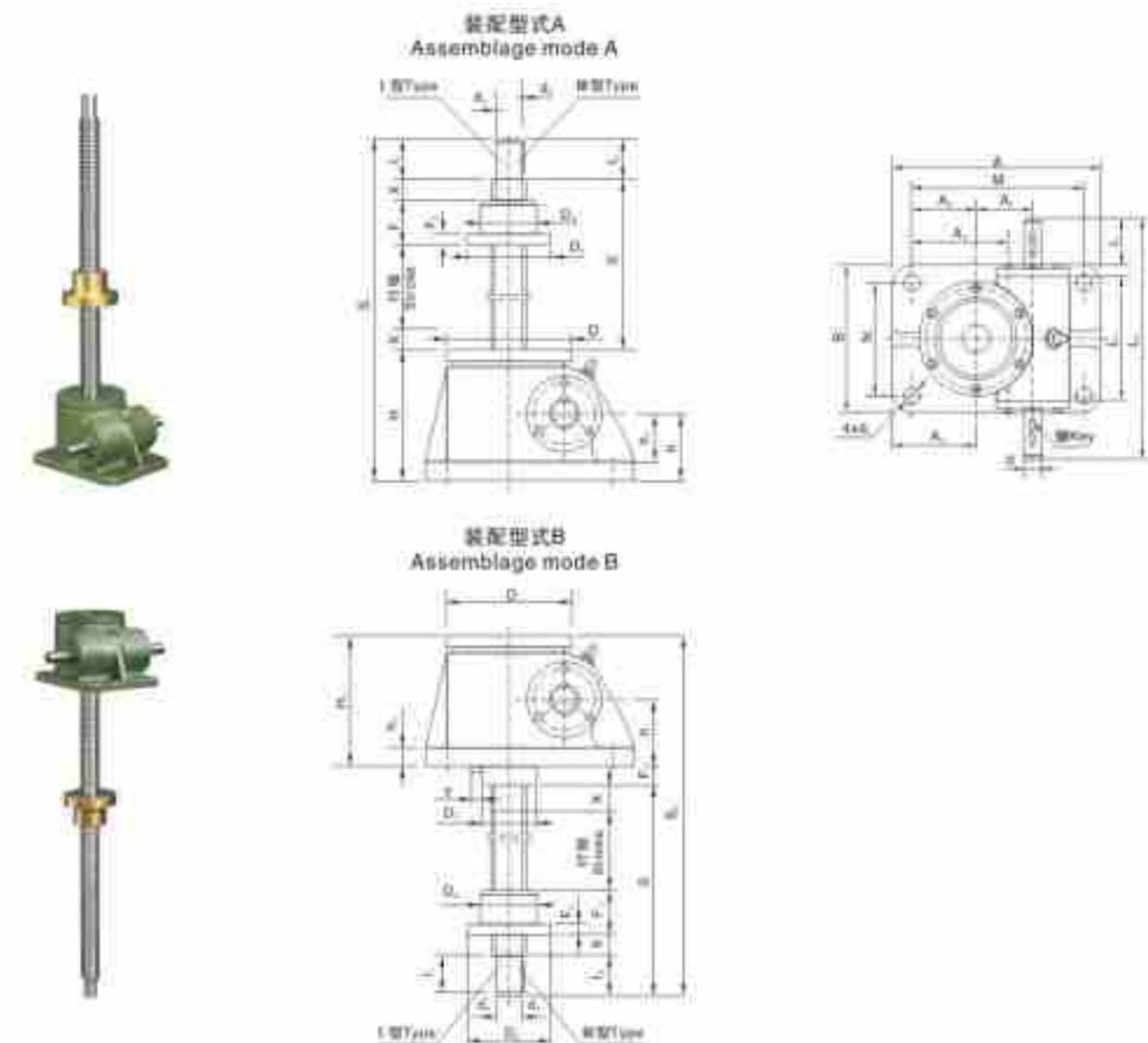
图1 I型结构型式 Type I structural mode

表(Table)1 mm

型号 type	SWL2.5	SWL5	SWL10 SWL15	SWL20	SWL25	SWL35	SWL50	SWL100	SWL120	
S ₁	行程+20	行程+20	行程+30	行程+20	行程+20	行程+20	行程+20	行程+20	行程+20	
S ₂	行程+110	行程+110	行程+150	行程+190	行程+205	行程+250	行程+265	行程+350	行程+400	
S ₃	150.5	193	230	262	317	350	416	550	570	
A	165	212	235	295	350	430	475	527.1	526	
B	120	155	200	215	260	280	500	526	623	
M	135	168	190	240	280	360	385	622	412	
N	90	114	155	160	190	210	406	412	508	
H	97	130	150	176	217	240	280	360	360	
h	45	61.5	70	87	102	115	121	155	155	
h ₁	12	14	16	20	25	30	32	38	42	
d(kB)	16	20	25	28	32	38	38	45	48	
φ	14	17	21	26	35	35	45	48	48	
键GB 1096	5x5x32	6x6x45	8x7x45	8x7x45	10x8x50	10x8x70	10x8x90	14x8x90	14x8x90	
L	-	-	42	42	58	80	100	100	100	
L ₁	110.5	132	172	213.5	221	265	310	380	380	
L ₂	190	228	240	322	355	430	558	610	610	
D	48	65	80	100	130	150	170	240	240	
D ₁	98	122	150	185	205	260	300	420	420	
D ₂	70	90	100	120	150	180	220	310	310	
D ₃	45	60	76	83	114	121	145	180	220	
D ₄	98	110	130	170	200	210	260	370	370	
AMxAM	50x50	60x60	80x80	80x80	120x120	150x150	150x150	200x200	250x250	
A ₁	45.2	56.2	66.8	72.5	87	120	135	190	190	
A ₂	50	58	63.5	95	95	135	160	166	166	
A ₃	65	80	86	122.5	130	170	205	223	223	
A ₄	-	-	-	-	-	-	-	208	208	
b ₁	20	25	30	35	35	35	45	60	60	
b ₂	20	18	12	31	19	40	25	30	30	
F	8.5	12	6.5	6	8	10	20	36.5	40	
丝杆头部型式 Screw head form	d ₁ (kB)	20	25	40	50	70	80	95	130	150
	l ₁	30	40	50	60	63	80	90	120	140
	l ₂	45	51	73.5	80	92	100	120	160	170
	D ₁	98	122	150	185	205	260	300	370	460
	D ₂	75	85	105	140	155	200	225	260	310
	D ₃	40	50	65	90	100	130	150	200	230
	d ₂	14	17	21	26	27	35	30	48	48
	F ₁	12	18	20	20	25	30	35	75	80
	F ₂	30	40	50	60	63	80	90	120	140
	F ₃	45	51	73.5	80	92	100	120	150	170
	d ₂	M22x1.5-6g	M30x2-6g	M42x2-6g	M48x2-6g	M70x3-6g	M80x3-6g	M88x3-6g	M100x4-6g	M150x4-6g
	l ₃	30	39	50	60	63	80	90	120	140
l ₄	45	51	73.5	80	92	100	120	150	170	
II	d ₁	50	65	90	110	130	150	180	220	260
	d ₂ (H8)	25	35	50	60	70	80	80	90	95
	b ₃	30	42	60	75	80	105	120	160	180
	l ₅	25	37.5	50	60	70	80	80	90	100
III	l ₆	50	75	100	120	140	160	180	180	200
	l ₇	65	117	153.5	170	204	240	270	330	360
IV	l ₈	70	105	130	150	175	220	240	300	335

5.2 II型升降机的外形结构尺寸见图2和表2。
Fig 2 and Chart 2 show the outer structure and dimension of lifter model II.

表(Table)2 mm



丝杆头部型式 Type of screw head

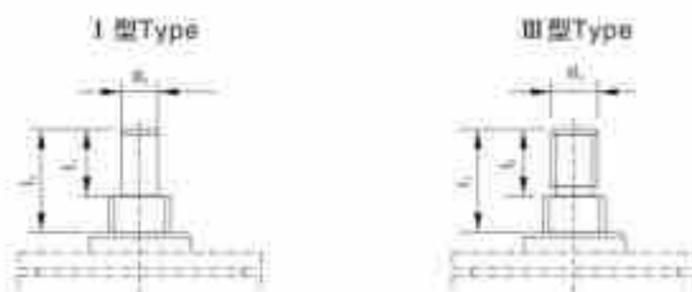
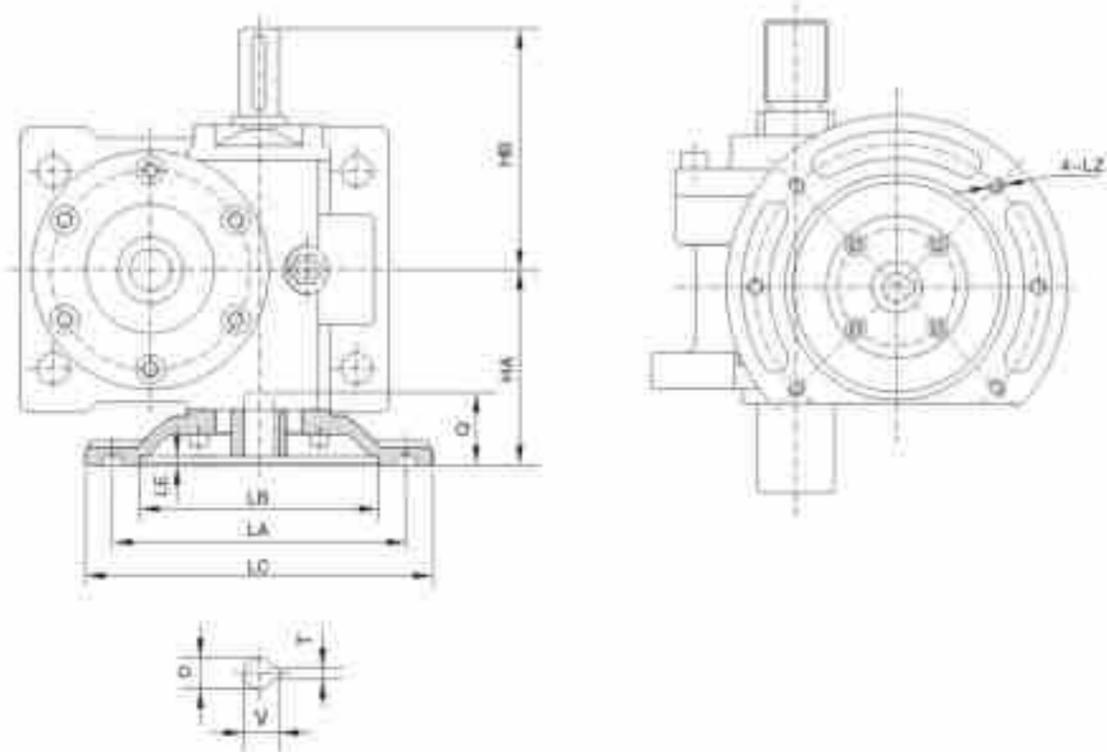


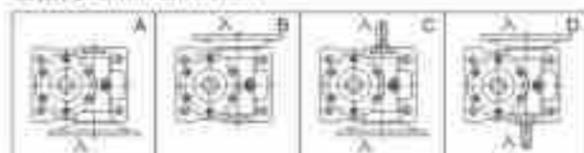
图2 II型结构型式 Type II structural mode

型号 Type	SWL2.5	SWL5	SWL10 SWL1.5	SWL20	SWL25	SWL35	SWL50	SWL100	SWL150	
S	行程+85	行程+100	行程+125	行程+150	行程+170	行程+205	行程+250	行程+320	行程+330	
S ₁	行程+215	行程+270	行程+335	行程+404	行程+478	行程+535	行程+603	行程+815	行程+845	
S ₂	行程+238.5	行程+300	行程+369	行程+430	行程+513	行程+580	行程+685	行程+880	行程+910	
A	188	212	235	295	350	430	478	528	528	
B	120	155	200	215	260	280	500	622	622	
M	135	168	190	240	180	360	385	412	412	
N	90	114	155	160	190	210	405	508	508	
H	100	131	160	154	228	250	290	375	375	
H ₁	97	131	150	181	211	250	280	360	360	
H ₂	45	61.5	70	87	102	115	121	155	155	
h	12	14	16	20	25	30	32	38	42	
d(k8)	16	20	25	28	32	38	38	45H6	48H6	
d ₁	14	17	21	26	35	35	45	48	48	
轴GB 1096	5x5x32	6x6x32	8x7x45	8x7x45	10x8x50	10x8x70	10x8x90	14x9x90	14x9x90	
L	-	-	42	42	58	80	100	100	100	
L ₁	110.5	132	172	213.5	221	265	314	380	380	
L ₂	190	228	290	322	355	430	558	610	610	
D	98	122	150	185	205	260	300	420	420	
D ₁	68	83	110	140	160	180	200	260	260	
A ₁	45.2	56.2	66.8	72.5	97	120	135	190	190	
A ₂	50	58	63.5	95	95	135	160	168	168	
A ₃	65	80	86	122.5	130	170	205	223	223	
A ₄	-	-	-	-	-	-	-	206	206	
F	26.5	30	34	39	52	45	65	80	80	
安全系数 Safety factor	20	20	25	25	25	30	40	50	50	
Y	3	3	4	3	3	4	5	6	6	
蜗轮齿顶圆直径 D _o (mm)	D _o	80	87	110	120	155	190	220	300	330
	D _o (h9)	60	70	90	90	130	150	180	240	280
	F ₁	45	60	75	100	120	145	170	220	270
	F ₂	15	18	25	30	35	35	50	70	80
蜗轮齿顶圆直径 D _o (mm)	d ₁ (h8)	20	25	40	50	70	80	95	130	150
	h	30	40	50	60	80	80	10H	127	130
蜗轮齿顶圆直径 D _o (mm)	d ₂	M22x1.5-6g	M30x2-6g	M42x2-6g	M48x2-6g	M70x3-6g	M80x3-6g	M95x3-6g	M100x4-6g	M150x4-6g
	h ₂	30	39	50	60	83	80	90	120	140

SWLD型结构型式 SWLD Type structure types



轴指向 Shaft Direction



型号 Size	法兰规格 Flange size	HA	HB	LA	LB	LC	LE	LF	D	Q	T _{LV}
SWL2.5	7185	88	102.5	130	110	160	4	M8	14	33	8x16.3
SWL5	8085	111	120	165	130	200	4	M10	19	43	8x21.8
SWL10	9085	138	150	165	130	200	4.5	M10	24	52	8x27.3
SWL15	9085	138	150	165	130	200	4.5	M10	24	52	8x27.3
SWL20	10085	156	181	215	180	250	5	M12	28	63	8x31.3
SWL25	11285	180	177.5	215	180	250	5	M12	28	63	8x31.3
SWL35	13285	202	215	265	230	300	5	M12	38	85	10x41.3

6. 性能参数
Specification

升降机的主要性能参数应按表3

The main specification the lifter is listed in chart 3

表(Table)3 mm

型号 Type	SWL2.5	SWL5	SWL10 SWL15	SWL20	SWL25	SWL35	SWL50	SWL100	SWL150
最大起升力 (kN) Maximum hoisting force	25	50	100/50	200	250	350	500	1000	1200
最大拉力 (kN) Maximum tensile force	25	50	99	186	250	350	500	1000	1200
丝杆螺纹尺寸 Screw thread size	Tr30x6	Tr40x7	Tr58x12	Tr65x12	Tr90x16	Tr100x18	Tr120x20	Tr160x23	Tr180x25
蜗轮蜗杆传动比 (P) Worm wheel and worm screw drive ratio	8:1	6:1	7 $\frac{1}{2}$:1	8:1	10 $\frac{1}{2}$:1	10 $\frac{1}{2}$:1	10 $\frac{1}{2}$:1	12:1	12:1
蜗杆每转行程 (mm) Worm screw travel per turn	1.0	1.167	1.565	1.5	1.5	1.5	1.87	1.92	2.083
蜗轮蜗杆传动比 (M) Worm wheel and worm screw drive ratio	24:1	24:1	24:1	24:1	32:1	32:1	32:1	36:1	36:1
蜗杆每转行程 (mm) Worm screw travel per turn	0.250	0.292	0.5	0.5	0.5	0.56	0.625	0.638	0.694
蜗杆扭矩 (N.m) Worm screw torque	见附件B (提示的附录) See Attachment B (hanging)								
拉力负荷时丝杆的最大伸长 (mm) Maximum elongation of worm screw with tensile load	1500	2000	2500	3000	3500	4000	5500	6500	7000
压力负荷时丝杆的最大伸长 (mm) Maximum elongation of worm screw with compressive load	见附件C (提示的附录) See Attachment C (hanging)								
侧向力负荷时丝杆的最大伸长 (mm) Maximum elongation of worm screw with side force load	见附件D (提示的附录) See Attachment D (hanging)								
最大许用功率 (KW) Maximum allowable power	1.45	2.59	3.47	4.02	5.38	13.06	13.9	28.5	62
普通比(P)总效率% Total efficiency of common ratio (p)%	23	21	23	21	19	18	15	13	12
慢速比(M)总效率% Total efficiency of slow-speed ratio (M)%	14	12	15	13	11	11	11	10	8
润滑油量 Kg Lubricant quantity	0.1	0.25	0.5	0.75	1.1	1.9	2.2	2.5	2.5
不加行程的重量 (Kg) Weight without travel added	7.3	16.2	25	36	70.5	87	420	1010	1350
丝杆每100mm的重量 (Kg) Weight of screw per 100 mm	0.45	0.82	1.67	2.15	4.15	5.20	7.45	13.6	17.3

注: 1. 最大许用功率是在环境温度20°C, 工作持续率为20%的条件下。

2. 本设备为油润滑条件下的参数。

3. 工作环境温度-10°C~40°C。

4. 蜗轮止动齿一般可以自锁。

Note: 1. Maximum allowable power is a parameter applicable for the condition that ambient temperature is 20°C and service continuity rate is 20%.

2. Total power is a parameter applicable for grease lubrication.

3. Ambient temperature for service.

4. Usually self-lock may function at static state.

丝杆传动的许用起升速度、扭矩和功率按表4-表13。

The allowable temperature raise, torsion and efficiency of the worm driving are listed in Chart 4 to Chart 13.

(SWL2.5)

表(Table)4

蜗杆转速 Worm speed rpm	起升速度 Hoisting speed mm/min	起升力 Hoisting force: KN																											
		25		30		15		10		5		2.5		1															
		F	M	F	M	F	M	F	M	F	M	F	M	F	M														
1500	1.500(0.075)	18	2.7	3.1	3.2	18	2.7	3.7	3.8	11	1.7	4.3	4.5	8.9	1.10	3.9	4.0	3.5	3.6	1.4	0.20	1.7	0.27	0.77	0.11	0.7	0.11	0.28	0.03
1000	1.000(0.250)	18	1.8	2.1	2.1	14	1.5	2.7	2.8	11	1.1	4.3	4.5	8.9	0.75	3.9	4.0	3.5	3.6	1.4	0.15	1.7	0.19	0.71	0.07	0.7	0.07	0.28	0.03
750	0.750(0.188)	18	1.4	1.6	1.6	14	1.1	2.7	2.8	11	0.82	4.3	4.5	8.9	0.54	3.9	4.0	3.2	3.3	1.4	0.11	1.7	0.14	0.71	0.05	0.7	0.05	0.28	0.03
500	0.500(0.125)	18	0.91	1.1	1.1	14	0.72	2.7	2.8	11	0.54	4.3	4.5	8.9	0.36	3.9	4.0	2.8	2.9	1.4	0.07	1.7	0.09	0.71	0.04	0.7	0.04	0.28	0.03
300	0.300(0.075)	18	0.54	0.6	0.6	14	0.45	2.7	2.8	11	0.35	4.3	4.5	8.9	0.23	3.9	4.0	1.9	2.0	1.4	0.05	1.7	0.05	0.71	0.03	0.7	0.03	0.28	0.03
200	0.200(0.050)	18	0.36	0.4	0.4	14	0.29	2.7	2.8	11	0.23	4.3	4.5	8.9	0.14	3.9	4.0	1.3	1.4	1.4	0.03	1.7	0.03	0.71	0.02	0.7	0.02	0.28	0.03
150	0.150(0.038)	18	0.27	0.3	0.3	14	0.21	2.7	2.8	11	0.17	4.3	4.5	8.9	0.10	3.9	4.0	0.9	1.0	1.4	0.02	1.7	0.02	0.71	0.01	0.7	0.02	0.28	0.03
100	0.100(0.025)	18	0.18	0.2	0.2	14	0.14	2.7	2.8	11	0.11	4.3	4.5	8.9	0.07	3.9	4.0	0.6	0.7	1.4	0.01	1.7	0.01	0.71	0.01	0.7	0.01	0.28	0.03
50	0.050(0.013)	18	0.09	0.1	0.1	14	0.07	2.7	2.8	11	0.05	4.3	4.5	8.9	0.05	3.9	4.0	0.3	0.4	1.4	0.01	1.7	0.01	0.71	0.01	0.7	0.01	0.28	0.03

(SWL5)

表(Table)5

蜗杆转速 Worm speed rpm	起升速度 Hoisting speed mm/min	起升力 Hoisting force: KN																											
		50		40		30		20		10		5		2.5															
		F	M	F	M	F	M	F	M	F	M	F	M	F	M														
1500	1.500(0.438)	44.2	0.9	10.2	10.5	38.4	0.6	10.5	10.8	28.5	0.2	11.8	1.8	17.7	2.8	2.7	2.2	2.8	1.4	3.9	0.6	4.4	0.7	1.9	0.3	2.2	0.3	1.0	0.2
1000	1.000(0.292)	44.2	0.6	10.2	10.5	38.4	0.4	10.5	10.8	28.5	0.1	11.8	1.2	17.7	1.8	2.7	2.2	2.8	1.4	3.9	0.4	4.4	0.5	1.8	0.2	2.2	0.2	1.0	0.1
750	0.750(0.219)	44.2	0.4	10.2	10.5	38.4	0.3	10.5	10.8	28.5	0.1	11.8	0.8	17.7	1.4	2.7	2.2	2.8	1.4	3.9	0.3	4.4	0.4	1.8	0.2	2.2	0.2	1.0	0.1
500	0.500(0.146)	44.2	0.3	10.2	10.5	38.4	0.2	10.5	10.8	28.5	0.1	11.8	0.6	17.7	1.1	2.7	2.2	2.8	1.4	3.9	0.2	4.4	0.3	1.8	0.1	2.2	0.1	1.0	0.1
300	0.300(0.088)	44.2	0.2	10.2	10.5	38.4	0.1	10.5	10.8	28.5	0.0	11.8	0.4	17.7	0.8	2.7	2.2	2.8	1.4	3.9	0.1	4.4	0.2	1.8	0.1	2.2	0.1	1.0	0.1
200	0.200(0.059)	44.2	0.1	10.2	10.5	38.4	0.1	10.5	10.8	28.5	0.0	11.8	0.2	17.7	0.4	2.7	2.2	2.8	1.4	3.9	0.1	4.4	0.1	1.8	0.1	2.2	0.1	1.0	0.1
150	0.150(0.044)	44.2	0.1	10.2	10.5	38.4	0.1	10.5	10.8	28.5	0.0	11.8	0.1	17.7	0.2	2.7	2.2	2.8	1.4	3.9	0.1	4.4	0.1	1.8	0.1	2.2	0.1	1.0	0.1
100	0.100(0.033)	44.2	0.0	10.2	10.5	38.4	0.0	10.5	10.8	28.5	0.0	11.8	0.1	17.7	0.1	2.7	2.2	2.8	1.4	3.9	0.1	4.4	0.1	1.8	0.1	2.2	0.1	1.0	0.1
50	0.050(0.016)	44.2	0.0	10.2	10.5	38.4	0.0	10.5	10.8	28.5	0.0	11.8	0.1	17.7	0.1	2.7	2.2	2.8	1.4	3.9	0.1	4.4	0.1	1.8	0.1	2.2	0.1	1.0	0.1

(SWL10)

表(Table)6

蜗杆转速 Worm speed rpm	起升速度 Hoisting speed mm/min	起升力 Hoisting force: KN																											
		100		80		60		40		20		10		5															
		F	M	F	M	F	M	F	M	F	M	F	M	F	M														
1500	1.500(0.750)	108	1.7	58	6.3	87	19	43	8.7	85	11	32	5.0	44	6.8	22	3.2	22	3.4	11	1.7	11	1.7	6.3	0.8	9.4	0.8	2.7	0.4
1000	1.000(0.500)	108	1.0	58	3.8	87	9.1	43	4.4	85	8.8	22	3.0	44	6.5	22	3.2	22	3.3	11	1.1	11	1.1	6.3	0.6	9.4	0.6	2.7	0.3
750	0.750(0.375)	108	0.8	58	4.2	87	6.6	43	3.3	85	5.1	32	2.9	44	5.4	22	3.7	22	3.7	11	0.8	11	0.8	6.3	0.4	9.4	0.4	2.7	0.2
500	0.500(0.250)	108	0.5	58	2.9	87	4.5	43	2.2	85	3.4	32	1.7	44	3.3	22	3.1	22	3.1	11	0.6	11	0.6	6.3	0.3	9.4	0.3	2.7	0.1
300	0.300(0.150)	108	0.4	58	1.7	87	2.7	43	1.3	85	2.3	32	1.0	44	1.4	22	0.7	22	0.7	11	0.2	11	0.2	6.3	0.2	9.4	0.2	2.7	0.1
200	0.200(0.100)	108	0.3	58	1.1	87	1.6	43	0.9	85	1.4	32	0.7	44	0.9	22	0.4	22	0.5	11	0.2	11	0.2	6.3	0.1	9.4	0.1	2.7	0.1
150	0.150(0.075)	108	0.2	58	0.8	87	0.9	43	0.6	85	0.7	32	0.5	44	0.6	22	0.2	22	0.2	11	0.1	11	0.1	6.3	0.1	9.4	0.1	2.7	0.1
100	0.100(0.050)	108	0.1	58	0.5	87	0.5	43	0.3	85	0.3	32	0.3	44	0.3	22	0.1	22	0.1	11	0.1	11	0.1	6.3	0.1	9.4	0.1	2.7	0.1
50	0.050(0.025)	108	0.0	58	0.3	87	0.3	43	0.2	85	0.2	32	0.2	44	0.2	22	0.1	22	0.1	11	0.1	11	0.1	6.3	0.1	9.4	0.1	2.7	0.1

(SWL15)

表(Table)7

蜗杆转速 Worm speed rpm	起升速度 Hoisting speed mm/min	起升力 Hoisting force: KN																											
		150		100		80		60		40		20		10															
		F	M	F	M	F	M	F	M	F	M	F	M	F	M														
1500	1.500(0.750)	183	3.0	92	10	108	1.7	92	8.3	87	18	33	0.7	69	11	32	5.0	44	6.8	22	3.2	22	3.4	11	1.7	11	1.7	6.3	0.8
1000	1.000(0.500)	183	1.7	92	5.6	108	1.2	92	5.6	87	11.1	43	4.4	69	8.9	32	3.3	44	4.5	22	2.3	22	2.5	11	1.1	11	1.1	6.3	0.6
750	0.750(0.375)	183	1.0	92	3.8	108	0.8	92	4.2	87	6.6	43	3.0	69	5.1	32	2.9	44	3.4	22	1.7	22	1.7	11	0.8	11	0.8	6.3	0.4
500	0.500(0.250)	183	0.6	92	2.4	108	0.7	92	2.8	87	4.3	43	2.0	69	3.4	22	1.7	44	2.2	22	1.1	22	1.1	11	0.6	11	0.6	6.3	0.3
300	0.300(0.150)	183	0.4	92	1.4	108	0.4	92	1.7	87	2.7	43	1.2	69	2.0	22	1.0	44	1.4	22	0.7	22	0.7	11	0.3	11	0.3	6.3	0.2
200	0.200(0.100)	183	0.3	92	0.9	108	0.3	92	1.1	87	1.8	43	0.9	69	1.4	22	0.7	44	0.9	22	0.4	22	0.4	11	0.2	11	0.2	6.3	0.1
150	0.150(0.075)	183	0.2	92	0.6	108	0.2	92	0.8	87	1.1	43	0.6	69	0.7	22	0.5	44	0.6	22	0.3	22	0.3	11	0.1	11	0.1	6.3	0.1
100	0.100(0.050)	183	0.1	92	0.4	108	0.1	92	0.5	87	0.8	43	0.4	69	0.5	22	0.3	44	0.5	22	0.2	22	0.2	11	0.1	11	0.1	6.3	0.1
50	0.050(0.025)	183	0.0	92	0.3	108	0.1	92	0.3	87	0.5	43	0.2	69	0.3	22	0.2	44	0.2	22	0.1	22	0.1	11	0.1	11	0.1	6.3	0.1

(SWL20)

表(Table)8

蜗杆转速 Worm speed rpm	起升速度 Hoisting speed mm/min	起升力 Hoisting force: KN															
		200		160		120		100		75		50		25			
		F	M	F	M	F	M	F	M	F	M	F	M	F	M		
1500	2.250(0.750)	228	3.6	128													

(SWL100)

表(Table)12

蜗杆转速 Worm speed rpm	提升速度 Hoisting speed m/min		起升力 Hoisting force KN																											
			1000		500		300		200		100		50																	
			F	M	F	M	F	M	F	M	F	M	F	M																
1000	1.589	0.979	1934	209	1012	799	1747	183	975	36	1954	102	813	85	1359	142	711	74	1165	122	811	84	776	81	498	42.8	389	40.8	209	21.3
750	1.189	0.739	1428	152	1012	80	1547	137	916	72	1954	122	813	84	1359	106	711	55	1165	81	811	48	776	81	498	32	389	35.8	209	16
500	0.790	0.516	1028	102	1012	53	1147	81	916	48	1954	81	813	42	1359	71	711	27	1165	81	811	32	776	42	498	21	389	21	209	10.8
400	0.636	0.395	828	81.6	1012	42.5	947	73	916	38	1954	65	813	38	1359	56	711	26	1165	48	811	26.8	776	32	498	17	389	18	209	8.8
300	0.476	0.300	628	61	1012	32	747	55	916	28.8	1954	49	813	25	1359	42	711	22	1165	36	811	19.2	776	24	498	12.7	389	12	209	6.8
200	0.317	0.198	428	40.6	1012	21	547	36	916	19.2	1954	32.5	813	17	1359	28	711	15	1165	24	811	12.8	776	18	498	8.5	389	8	209	4.2
100	0.159	0.099	228	20.3	1012	10.6	347	18.3	916	9.6	1954	16	813	8.5	1359	14	711	7.5	1165	12	811	6.4	776	8	498	4.3	389	4	209	2.1
50	0.08	0.05	128	10.2	1012	5.3	197	9.1	916	4.8	1954	8	813	4.2	1359	7	711	3.8	1165	6	811	3.2	776	4	498	2.1	389	2	209	1.08

(SWL150)

表(Table)13

蜗杆转速 Worm speed rpm	提升速度 Hoisting speed m/min		起升力 Hoisting force KN																											
			1500		900		600		400		300																			
			F	M	F	M	F	M	F	M	F	M	F	M																
1500	2.083	0.894	2015	347	1838	173	2782	289	1380	144	3486	260	1343	130	2208	231	1104	115	1857	173	828	85.5	1103	110	552	57.5	551	57.5	270	28.8
1100	1.583	0.671	1515	250	1838	130	2182	217	1380	100	3486	196	1343	87	2208	173	1104	86	1857	130	828	85	1103	86	552	49	551	49	270	21.5
750	1.082	0.547	1015	175	1838	87	1782	144	1380	52	3486	130	1343	65	2208	119	1104	57	1857	86	828	43.8	1103	57	552	39.5	551	38.5	270	14.2
600	0.832	0.477	815	138	1838	69	1582	115	1380	37	3486	104	1343	51	2208	80	1104	46	1857	69	828	34.5	1103	46	552	29	551	29	270	11.8
450	0.632	0.358	615	104	1838	52	1382	80	1380	28	3486	76	1343	38	2208	66	1104	35	1857	52	828	26	1103	34.5	552	17.5	551	17.5	270	8.7
300	0.417	0.198	415	69	1838	34	1182	59	1380	20	3486	52	1343	26	2208	46	1104	25	1857	34.5	828	27	1103	22	552	11.8	551	11.8	270	5.7
150	0.208	0.099	215	24	1838	17	782	29	1380	14	3486	26	1343	13	2208	22	1104	11.5	1857	27	828	8.5	1103	11.5	552	5.7	551	5.7	270	2.8
50	0.104	0.050	115	17	1838	8.5	382	14.5	1380	7	3486	13	1343	6.5	2208	11.5	1104	5.7	1857	8.5	828	4.2	1103	5.7	552	2.8	551	2.8	270	1.8

注：表4-表13中的参数适用于环境温度20℃，工作连续率为20%或30%、10min的条件下，对蜗轮齿面的参数，应同时按生产厂10倍，买产加注意。
Note: Parameters listed in Table 4-Table 13 are applicable for the condition that ambient temperature is 20℃ and service continuity rate is 20% or 30% 10min. For those parameters within bold line, screw flap selected during torsion, so it should be closely monitored.

7. 附录 Attachment

附录A Attachment A (提示的附录 Hanging)

1. 升降机驱动功率的计算

1. Permitted radial force on worm shaft end

A1 驱动功率 A1 driving power

$$P = \frac{F_a \cdot u}{60 \eta}$$

式中：P—驱动功率 Driving power, kW;

F_a—起升力(或拉力) Hoisting force, kN;

u—起升速度, Hoisting speed m/min;

η—传动总效率(见表A1和表A2) Total efficiency of transmission (see Table A1 and Table A2)

A2 驱动扭矩 A2 driving torque

$$M_t = 9550 \times \frac{P}{n}$$

式中：M_t—驱动扭矩 Driving torque, N.m;

P—驱动功率 Driving power, kW;

n—转速 Rotate speed, r/min.

2. 油脂润滑时的总效率 η

2. The final efficiency when thick grease lubrication η

表(Table) A1

型号 Type	SWL											
	2.5	2.5M	5	5M	10/15	10M/15M	20	20M	25	25M	35	35M
η	0.23	0.14	0.21	0.12	0.23	0.15	0.21	0.13	0.19	0.11	0.18	0.11

3. 蜗杆副采用稀油润滑时的总效率 η (仅用于2型)

3. The final efficiency when thin grease lubrication on worm (only for model 2)

表(Table) A2

蜗杆转速 Worm speed rpm	型号 Type SWL											
	2.5	2.5M	5	5M	10/15	10M/15M	20	20M	25	25M	35	35M
1500	0.283	0.214	0.257	0.188	0.290	0.236	0.273	0.275	0.262	0.210	0.248	0.204
1000	0.279	0.206	0.252	0.180	0.285	0.227	0.268	0.217	0.257	0.200	0.243	0.186
750	0.275	0.201	0.249	0.175	0.282	0.222	0.266	0.212	0.253	0.194	0.240	0.189
500	0.272	0.194	0.245	0.168	0.277	0.215	0.262	0.205	0.249	0.187	0.236	0.183
300	0.267	0.187	0.241	0.161	0.272	0.207	0.257	0.198	0.243	0.179	0.231	0.175
100	0.257	0.172	0.231	0.146	0.261	0.191	0.247	0.183	0.233	0.164	0.222	0.160
50	0.251	0.164	0.225	0.138	0.255	0.180	0.242	0.175	0.226	0.155	0.216	0.152

附录B Attachment B (提示的附录 Hanging)

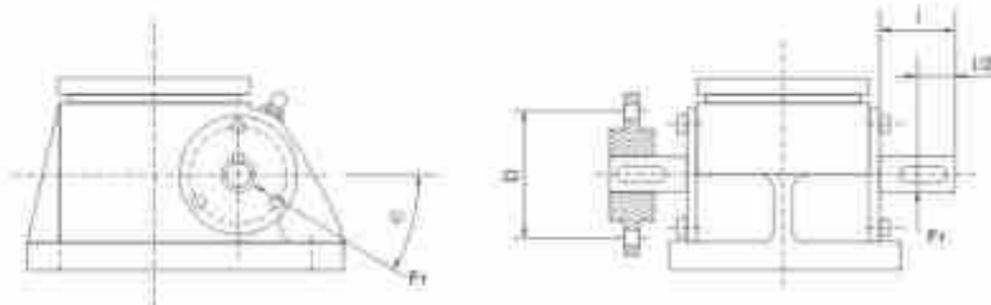
蜗杆轴伸的许可径向力

Calculation of the lifer efficiency

B1 蜗杆轴伸上，由于安置齿轮、链轮或带轮所产生的径向力F₁，其最大许用力与起升力和型号有关。在1/2处所许用的最大径向力和扭矩见图B1和表B1。

B1 As gear, chain wheel and pulley are mounted on worm shaft end, it makes radial force F₁. The maximum allowable force is depend on lifting force and model. The maximum allowable radial force and torsion at 1/2 position are shown in Fig B1 and B2.

图B1 Figure B1



表(Table) B1

型号 Type	F_{max} N	M_{max} N.m
SWL2.5/2.5M	350	18
SWL5/5M	750	44.2
SWL10/10M/15/15M	1000	100
SWL20/20M	1300	162
SWL25/25M	2000	314
SWL35/35M	2300	398

注：表中参数是在 20°C 或 200°C 时计算的。 Note: Parameters listed in the table are calculated according to the temperature of 20°C or 200°C .

B2 齿轮或带轮的最小直径。
B2 The minimum diameter of gear and pulley.

$$D_{min} = 19100 \times \frac{P}{F_{max} \cdot n} = \frac{2M}{F_{max}}$$

式中： D_{min} —齿轮或带轮的最小直径 Minimum diameter of gear wheel or belt wheel, m;

P —驱动功率 Driving power, kW;

F_{max} —最大径向力 Maximum radial force, N;

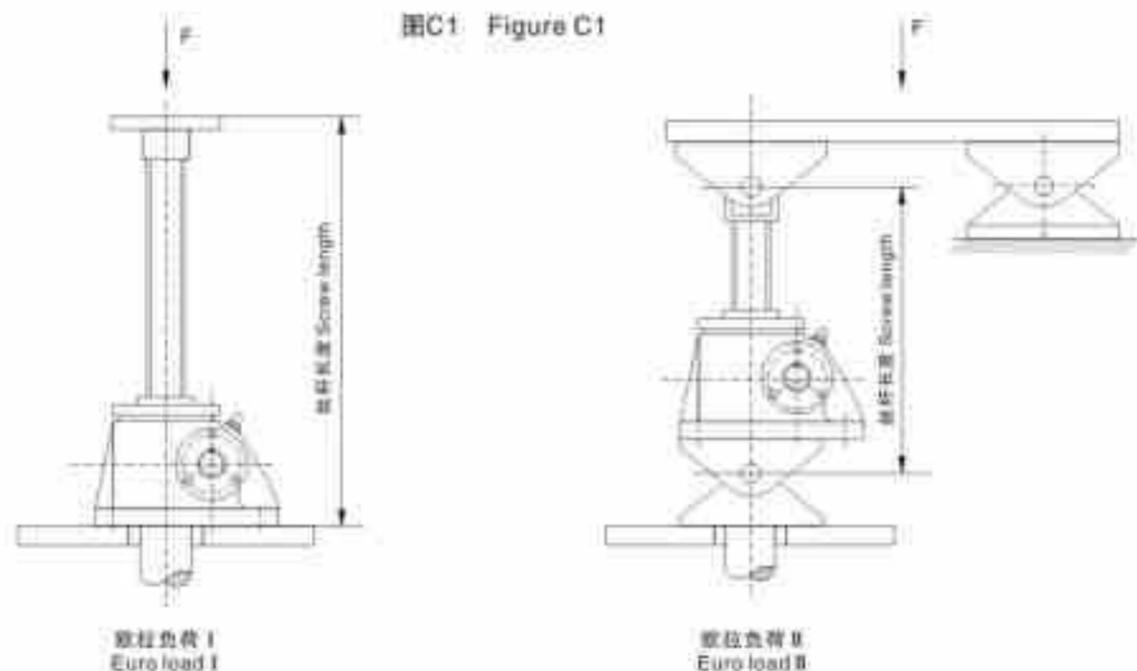
n —蜗杆转速 Worm screw speed, r/min;

M —驱动扭矩 Driving torque, N.m.

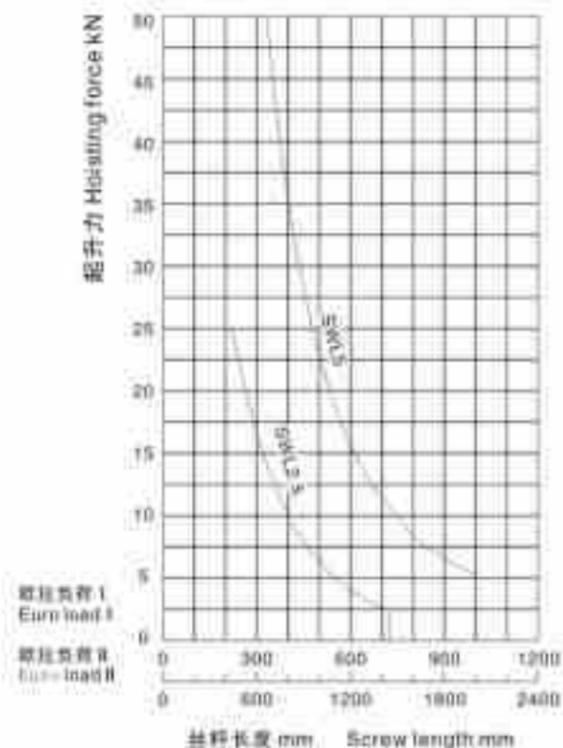
附录C Attachment C (提示的附录 Hanging)

丝杆长度与极限负荷的关系
The relation of worm length and loading limit

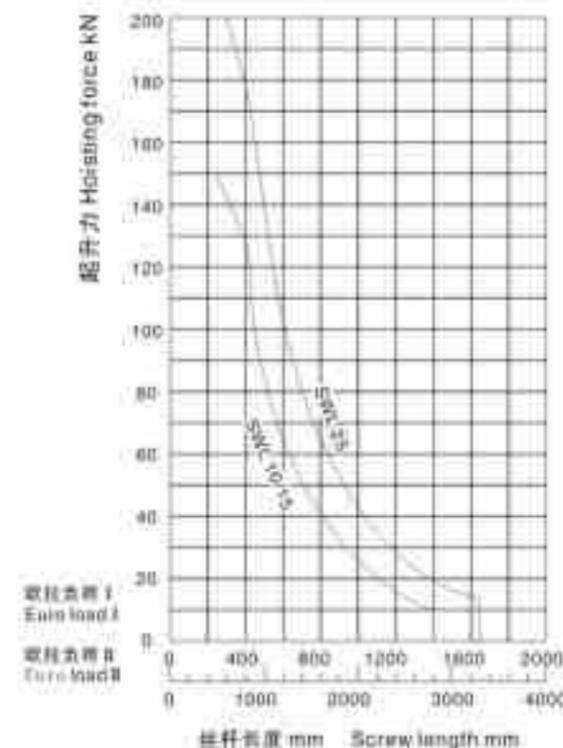
在欧拉负荷I和II情况下，丝杆长度与极限负荷的关系见图C1~图C4。
Under condition of load I and II, the relation of worm length and load limit is shown in Chart C1 to chart C4.



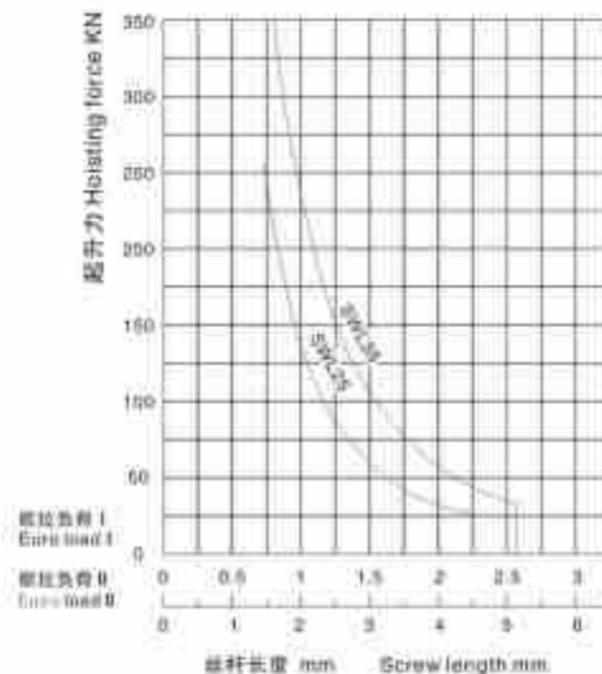
图C2 Figure C2



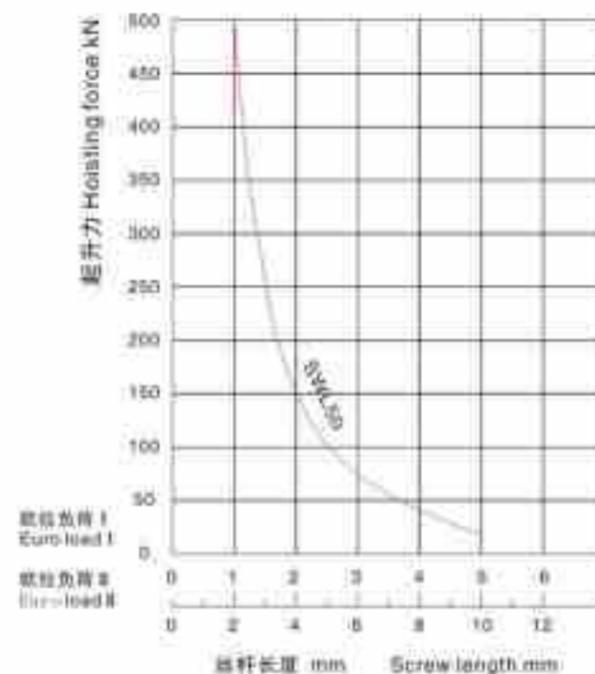
图C3 Figure C3



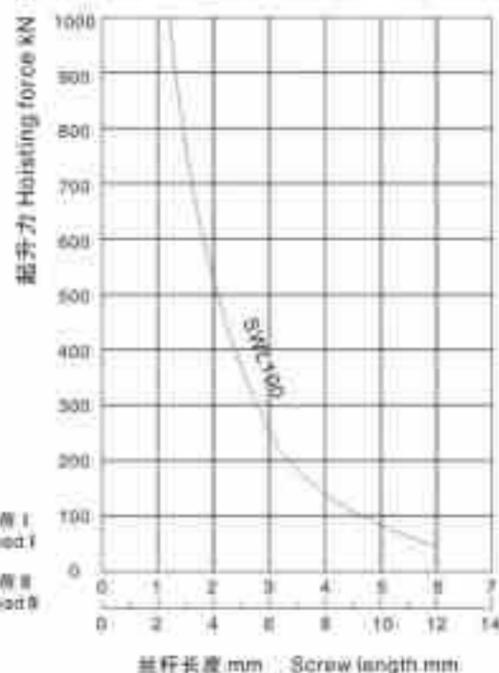
图C4 Figure C4



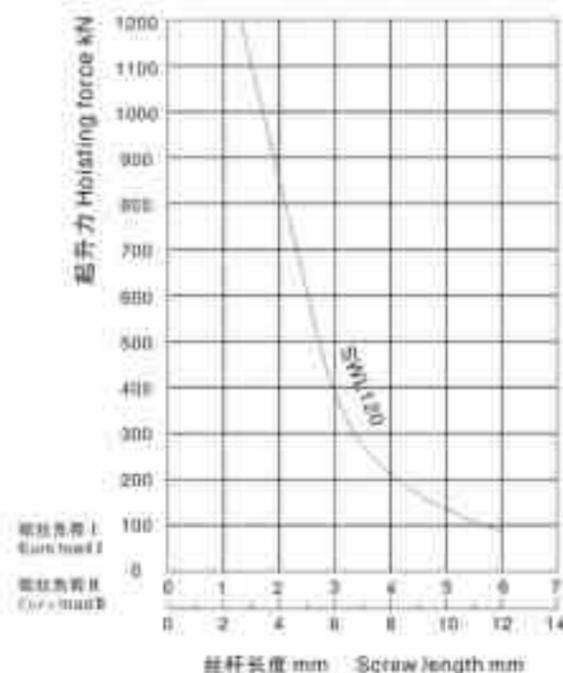
图C5 Figure C5



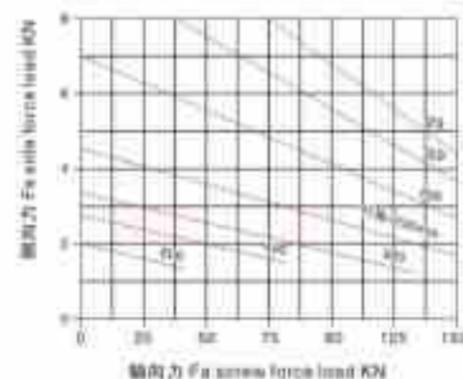
图C6 Figure C6



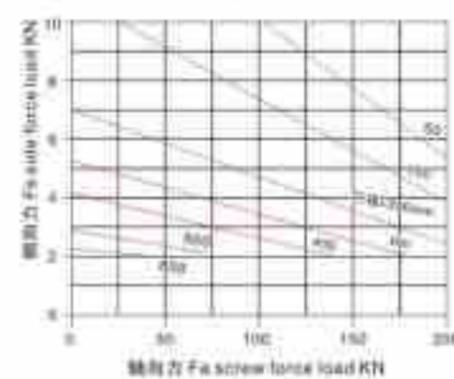
图C7 Figure C7



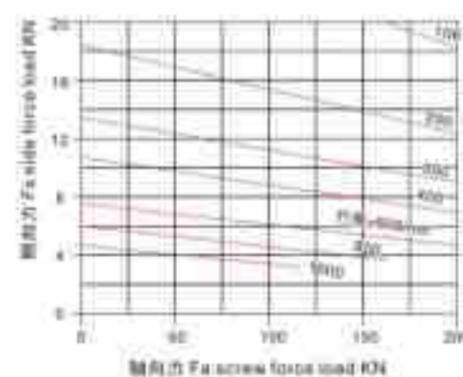
图D4 Figure D4 SWL10/15



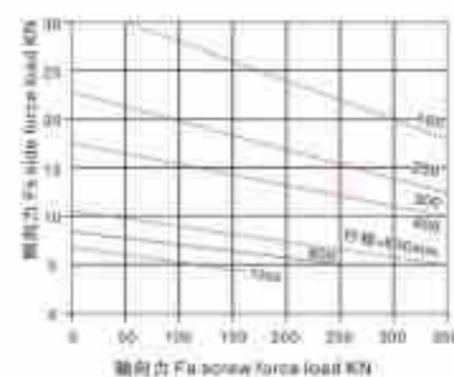
图D5 Figure D5 SWL20



图D6 Figure D6 SWL25



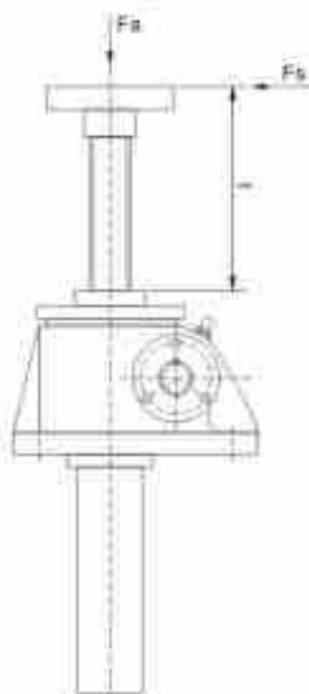
图D7 Figure D7 SWL35



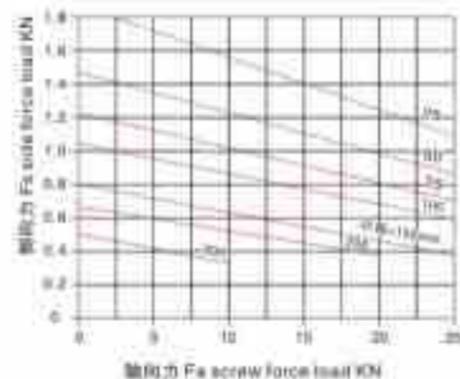
附录D Attachment D (提示的附录 Hanging)

丝杆许用侧向力 F_s ，和轴向力 F_a 与行程的关系
The relation of worm allowable side force F_s axial force F_a and moving distance

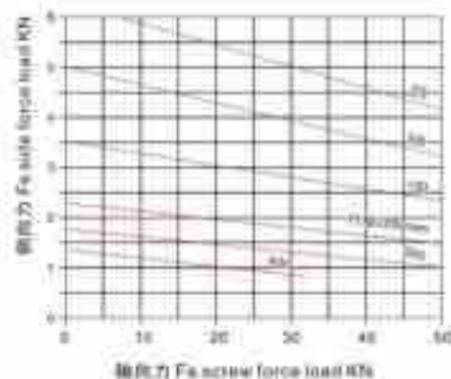
图D1 Figure D1



图D2 Figure D2 AWL2.5



图D3 Figure D3 SWL5



附录E Attachment E (提示的附录 Hanging)

工作持续率与环境温度的关系
The relation of duration and environment temperature

工作持续率与环境温度的关系见表E1。
环境温度超过40℃时，应考虑减小工作持续率。
Chart E1 tells the relation between working duration and environment temperature.
When environment temperature exceeds 40℃, the working duration should be reduced.

表(Table) E1

环境温度 ℃ Ambient temperature ℃	50	60	70	80
许用最大工作持续率 Maximum allowable service continuity rate %/h	18	15	10	5
许用最大工作持续率 Maximum allowable service continuity rate %/10min	36	30	20	10

JW系列丝杆升降机 JW series screw jack

1. 产品图片 Picture of products



2. JW丝杆升降机概述 Product overview

2.1 JWM型(梯形丝杆型)

低速、低频率

JWM型(梯形丝杆型)适用于低速、低频率的场合,主要构成部件为:精密梯形丝杆副与高精度蜗轮蜗杆副。

- 1) 经济: 结构紧凑、操作简单、保养方便。
- 2) 低速、低频率: 主要用于大负荷、低速与无需频繁工作的场所。
- 3) 保持载重: 梯形丝杆具有自动锁定功能, 既使没有制动装置也可保持载重。
* 在受到较大振动、冲击载荷时, 可能会使自锁功能失效, 此时请外加制动装置。

2.1 JWM (Trapezoid-screw)

LOW SPEED, LOW FREQUENCY

JWM (trapezoidal screw) is suitable for low speed and low frequency. Main components: Precision trapezoid screw pair and high precision worm-gears pair.

- 1) Saving: Compact structure, simple operation, convenient servicing.
- 2) Low speed, low frequency: Be suitable for heavy load, low speed, low service frequency.
- 3) Holding load: Trapezoid guide screw has self-locking ability, it can hold up load without the arresting device.
* The arresting device must be added when its self-locking function is lost because of great shock or impact load.

2.2 JWB型(普通滚珠丝杆型)

高速、高频率

JWB型(普通滚珠丝杆型), 适用于高速、高频率和高性能的设备中, 主要构成部件为精密滚珠丝杆副与高精度蜗轮蜗杆副。

- 1) 高效率: 只需很小的驱动力, 就可以产生很大的推动力。
- 2) 高速化: 与梯形丝杆相比, 速度有很大的提高, 能轻松而高速地运转。
- 3) 使用寿命长: 采用高质量的滚珠丝杆, 使其工作寿命提高3倍以上。

2.2 JWB (General ball screw)

HIGH SPEED, HIGH FREQUENCY

JWB (General ball screw) is suitable for high speed, high frequency and excellent performance. Main components: Precision ball screw pair and high precision worm-gears pair.

- 1) High efficiency: Rolling friction improve efficiency greatly, only a little drive power can generate great thrust force.
- 2) High speed: Rolling friction speed up travel of screw easily.
- 3) Lifetime longer: Its service life can be more than three times longer than others by adopting high quality ball screw.

注: 本身无自锁功能, 需外加制动装置或选择带有制动的驱动源。
Note: It hasn't self-locking ability, need to add the arresting device or the drive power has arresting device.

2.3 机器装配形状、特点 Assembly type and features

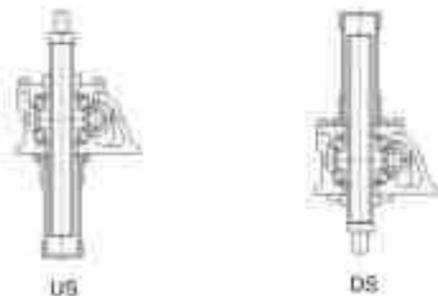
基本形式 (US, DS)

螺母转动, 丝杆上下移动并伴随附加的旋转运动, (如下图):

US: 上伸 DS: 吊下

*请根据载荷方向, 安装方向来选择合适的升降机(US或DS).

*丝杆轴在升降时, 会产生旋转力, 所以必须做好防止旋转措施。



Plain mode (US, DS)

Worm wheel rotating, threaded spindles travel up and down
Ordinary mounting mode is applied here.

US: UPRISE DS: DROP

*Select US or DS according to the load and mounting positions.

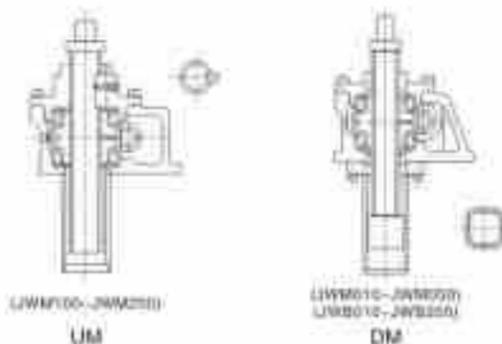
*Anti-rotation measures must be taken because torque on screw will be caused when screw traveling up and down.

止旋构造(UM, DM)

UM: 上伸 DM: 吊下

*丝杆只能上下移动

*请根据载荷方向, 安装方向来选择合适的升降机(UM或DM)



With Anti-rotation device (UM, DM)

UM: UPRISE DM: DROP

* No rotation of screw, which only travel up and down,

*Select UM or DM according to the load and mounting positions.

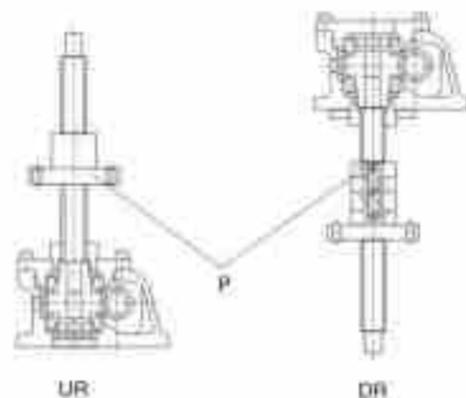
活动螺母构造 (UR, DR)

一般情况下, 升降机必须具有因丝杆轴的升降而产生的行程和丝杆轴所需的空间, 若想在有限的空间内增长行程时, 使用此活动螺母构造非常适应 (丝杆轴旋转, 活动螺母移动)。丝杆轴顶端为圆柱形, 所以在长行程时, 在轴端采用支撑方式, 可一以得到很好的传动效果。

UR: 上伸 DR: 吊下

请根据载荷方向, 安装方向来选择合适的升降机(上伸或吊下)。

造型和型号表示方法中, 还需注明螺母的放置方向。



Moveable nut configuration(UR, DR)

In general, Jack need enough space for screw's traveling journey and dust-hood. Using traveling nut can help jack realize longer traveling journey in limited space. The top end fittings are column, it can be a supporting point for a good transmission effect when a long traveling journey is selected.

UR: UPRISE DR: DROP

Select UR or DR according to the load and mounting positions.

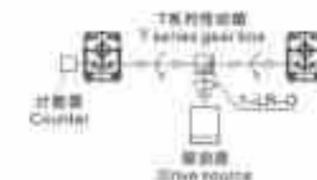
3. 应用示例
Application example

两台联动 Two gear boxes linking:

直线型
Line type

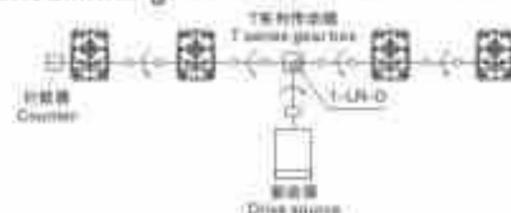


T型
T type

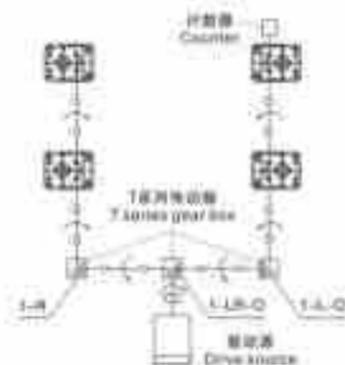


四台联动 Four gear boxes linking:

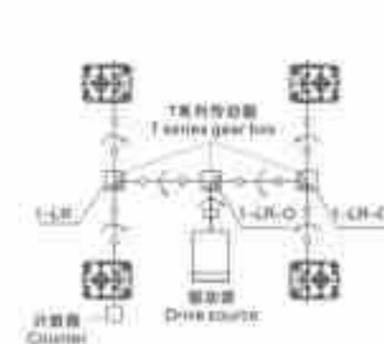
T型
T type



U型
U type

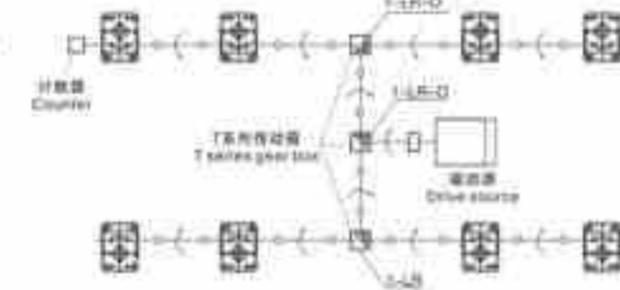


H型
H type

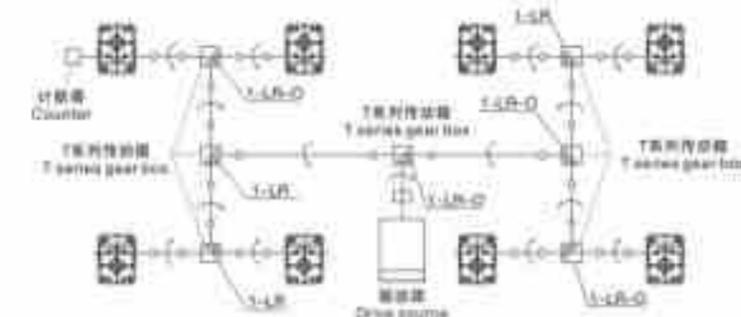


八台联动 Eight gear boxes linking:

H发展型
H development type



2H型
2H type



4. 型号说明 Model introduction



5. 基本参数 Basic parameter

5.1 JWM(梯形丝杆类型)基本参数 JWM (Trapezoid screw) basic parameter

型号 Type	JWM12	JWM16	JWM20	JWM25	JWM32	JWM40	JWM50	JWM63	JWM80	JWM100	JWM125	JWM160
最大载荷(kN) Maximal load	1.95	4.30	8.80	24.5	49.0	98.0	147	196	294	490	735	980
丝杆外径(mm) Outer diameter of screw	12	16	20	25	32	40	50	63	80	100	125	160
丝杆直径(mm) Small diameter of screw	8.8	10.8	14.8	19.7	30.5	38.4	43.4	51.3	67	102	112	127
丝杆螺距(mm) Pitch of screw	3	4	4	5	6	10	10	12	16	16	20	25
减速比(i) Ratio	H速度 Speed	3	3	3	3	3	3	3	10%	10%	10%	12
	L速度 Speed	20	20	20	24	24	24	24	24	32	32	36
综合效率 % Integrated efficiency	H速度 Speed	26	26	21	21	22	20	20	18	15	13	13
	L速度 Speed	15	15	12	12	14	15	14	13	11	10	8
允许输入最大功率(kW) Permissible output maximal power	H速度 Speed	0.18	0.29	0.48	1.0	2.0	2.8	3.1	5.0	8.4	13.4	21.4
	L速度 Speed	0.08	0.18	0.26	0.48	0.63	1.4	2.2	3.2	4.8	5.7	9.4
空载扭矩(N.m) No-load torque	0.11	0.11	0.29	0.60	1.4	2.0	2.8	3.9	6.8	19.6	28.4	39.2
容许输入轴扭矩(N.m)* Permissible torque of input shaft	9.8	9.8	19.6	49.0	153.9	292.0	292.0	292.0	735.0	1372.0	1784.0	2450.0
最大容许时容许输入轴扭矩(N.m)** Required torque of input shaft at maximal load	H速度 Speed	0.83	2.3	4.2	14.1	35.7	90.7	148.0	238.1	400.1	638.0	1380.5
	L速度 Speed	0.42	1.1	2.0	7.4	20.0	45.3	72.3	124.0	244.0	453.0	761.3
输入轴轴向位移—滚珠丝杆 (滚动螺母)轴向位移量(mm) Axial journey of screw when input shaft rotate a circle	H速度 Speed	0.60	0.80	0.80	0.83	1.33	1.25	1.29	1.50	1.50	1.50	1.67
	L速度 Speed	0.15	0.20	0.20	0.21	0.33	0.42	0.50	0.50	0.50	0.50	0.58
最大容许时容许输入轴转速(rpm) Permissible rotational speed of screw shaft at maximal load	H速度 Speed	1800	1500	700	600	400	300	200	200	200	150	100
	L速度 Speed	1800	1500	1200	600	300	300	290	250	180	120	70
最大容许时丝杆容许扭矩(N.m) Rotational torque of screw at maximal load	2.8	8.8	20.1	85.1	201.5	603.8	813.2	1287.7	2531.0	6551.3	8821.8	13878.3

*低速时输入轴的容许扭矩 (低速容许扭矩值)
**低速时输入轴容许扭矩值。

* Permissible torque of shaft of reducer.
** Include torque under the condition of no-load operating.

5.2 JWB(普通滚珠丝杆)基本参数 JWB (General ball screw) basic parameter

型号 Type	JWB015	JWB20	JWB25	JWB30	JWB40	JWB50	JWB60	JWB80	JWB100
最大载荷(kN) Maximal load	4.30	9.80	24.5	49.0	98.0	147	196	294	490
丝杆外径(mm) Outer diameter of screw	16	20	25	30	40	50	63	80	100
丝杆直径(mm) Small diameter of screw	13.5	17.5	21.4	31.3	39.1	43.1	55.7	74.8	87
丝杆螺距(mm) Pitch of screw	5	5	6	10	12	16	16	20	24
减速比(i) Ratio	H速度 Speed	3	3	3	3	3	3	10%	10%
	L速度 Speed	20	20	24	24	24	24	24	32
综合效率 % Integrated efficiency	H速度 Speed	63	61	62	64	65	63	62	58
	L速度 Speed	37	34	35	38	43	43	41	34
允许输入最大功率(kW) Permissible output maximal power	H速度 Speed	0.25	0.54	1.3	2.2	3.8	4.0	5.5	8.8
	L速度 Speed	0.12	0.27	0.60	1.0	1.9	2.1	2.8	4.1
空载扭矩(N.m) No-load torque	0.11	0.29	0.62	1.07	1.96	2.65	3.92	9.81	18.4
容许输入轴扭矩(N.m) Permissible torque of input shaft	H速度 Speed	0.68	1.27	4.31	10.75	19.9	39.2	51.0	66.6
	L速度 Speed	0.14	0.26	0.91	2.4	3.8	11.8	16.0	19.5
最大容许时容许输入轴扭矩(N.m)** Required torque of input shaft at maximal load	H速度 Speed	1.3	2.8	8.0	21.5	39.1	77.0	104.5	189.6
	L速度 Speed	0.60	1.4	4.3	9.8	20.4	38.8	54.2	96.5
输入轴轴向位移—滚珠丝杆 (滚动螺母)轴向位移量(mm) Axial displacement of screw when input shaft rotate a circle	H速度 Speed	1	1	1.33	1.67	1.5	2	2	1.88
	L速度 Speed	0.25	0.25	0.33	0.42	0.5	0.67	0.67	0.83
最大容许时容许输入轴转速(rpm) Permissible rotational speed of screw shaft at maximal load	H速度 Speed	1500	1500	1400	1000	800	500	500	400
	L速度 Speed	1500	1500	1400	1000	800	500	500	350
最大容许时丝杆容许扭矩(N.m) Rotational torque of screw at maximal load	4.3	9.7	34.7	85.7	208.2	416.3	655.1	1048.9	2381.7

*低速时输入轴的容许扭矩 (低速容许扭矩值)
**低速时输入轴容许扭矩值。

* Permissible torque of shaft of reducer.
** Include torque under the condition of no-load operating.

6. 注意事项 Cautions

- 选择升降机时不论静载、动载、冲击载荷均不得超过其允许承受的额定载荷。根据安全系数、使用行程、校对丝杆的稳定性选择具有充分容量的升降机。
Select a Jack with sufficient capacity according to safety factor, service journey and stability. And stationary load, Dynamic load and shock load must be lower than permissible maximum load.
- 一定要注意丝杆轴转速与承受的载荷进行匹配。对升降机的容许最大载荷、容许外加负载、容许丝杆轴的旋转速度项目进行校验, 如果超过产品的数据将会造成升降机设备整体的重大损伤。
Please note that rotation speed of screw must match load, permissible maximum load, permissible maximum outer load, and permissible rotation speed of screw must be verified. If these figures exceed that of products, jacks will be damaged greatly.
- 升降在工作时其减速部表面温度应控制在-15℃-80℃的范围以内, 确保活动螺母的表面温度也在上述范围以内。
The surface temperature will be limited in -15℃-80℃ when jack working to ensure the temperature of traveling nuts in -15℃-80℃.
- 输入轴容许转速为1500r/min, 输入轴不得超过此转速。
Maximum input speed is 1500r/min.
- JWM和JWB都不可连续运转。

单台升降机的负荷时间率(%ED)以30分为单位计算, JWM(梯形丝杆-类型)的负荷时间率不得超过20%ED, JWB(普通滚珠丝杆)的负荷时间率不得超过30%ED。

$$\text{负荷时间率}\%ED = \frac{\text{1动作周期的工作时间}}{\text{1动作周期的工作时间} + \text{1动作周期的停放时间}} \times 100\%$$

JWM and JWB aren't suitable for continuous operation Jack Duty(%ED).
JWM duty(%ED) cannot exceed 20%ED.
JWB duty(%ED) cannot exceed 30%ED.

$$\text{Duty \%ED} = \frac{\text{Jack operating time(lift \& lower cycle)}}{\text{Elapsed cycle time}} \times 100\%$$

6.6 对于在同一轴线上连接多台升降机时, 请务必对输入轴强度进行校核, 使每台升降机所承受的扭矩都在其容许输入轴扭矩以内。

When several Jacks are connected on the same axial line, the loaded torque with each Jack must be verified and limited within permissible input torque.

6.7 额定速的启动扭矩应确保在使用扭矩的200%以上。

Starting torque must be 200% of service torque.

6.8 在零摄氏度以下工作时因受到润滑油粘性变化的影响使得整机效率下降, 所以必须选有充足的驱动源。

At below 0°C ambient temperature, changed adhesion of lubrication will lower Jack's efficiency so that sufficient drive is necessary. 6.9 JWM型理论上具有自锁功能, 但工作在振动冲击较大的场合时会导致自锁功能失灵, 因此须外加一制动装置或选

择带有制动的驱动源。

JWB型升降机本身不具有自锁功能; 为了防止由于轴向载荷和丝杆的自重而产生逆转, 必须外加制动装置或选择带有制动的驱动源, 请确保制动扭矩大于保持扭矩。

JWM has self-lock function, but an Extra braking device or drive source with braking device is necessary to be equipped because self-lock will be of mal-function when Jack is loaded a heavy shock.

JWB has no self-lock function, to avoid backspin of screw under axial load and its weight, a braking device or drive source with braking device is necessary to be equipped and braking torque must be larger than operating torque of Jack.

6.10 升降机使用的环境如下:

Jack's operating conditions

使用场所 Working Location	室内无雨水侵入的场所 Indoor location without rainwater
周围空气 Ambient Air	灰尘为一般工厂状态 Normal
环境温度 Ambient Temperature	-15℃~40℃
相对湿度 Relative Humidity	85%以下 Less than 85%

6.11 当升降机工作在多灰尘的场所中时, 请务必选择防尘罩伸套附件来保护丝杆, 在室外使用时请务必考虑使用罩壳等装置, 使机器不直接受到风吹雨打。

When working in dusty space, Jack must be equipped with elastic dust-hood on screw; in open air, shield must be equipped to prevent exposure to wind and rain.

6.12 升降机工作时, 不得进行人为的强行停机, 否则将使升降机受到严重破坏。

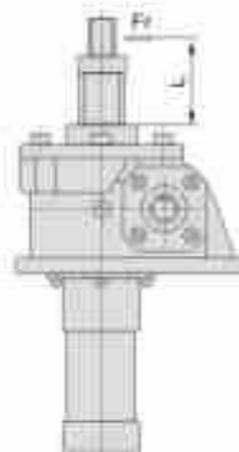
When working, Jack cannot be forced to stop, or will be damaged seriously.

6.13 在有负载的情况下, 请不要将JWB型的输入轴驱动方式变为手动操作, 负载有可能会造成输入轴旋转非常危险。

Under load, don't change motor drive mode into manual drive, or which will cause backspin of screw and cause Great danger.

7. 许用横向载荷及校验 Permitted radial load and verify

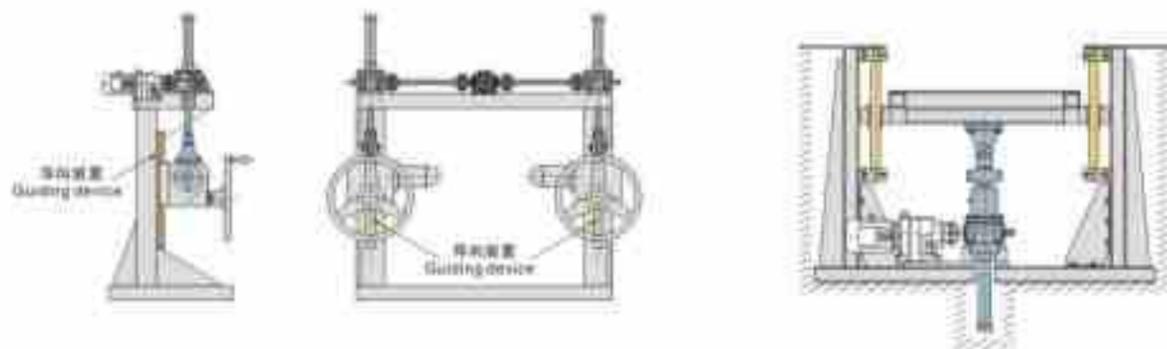
7.1 JWM许用横向载荷 Permitted radial load Fr (N)



Fr(N) L(mm)	Type	002	005	010	025	050	100	150	200	300	500	750	1000
100		63	128	318	570	2500	4010	4610	8210	38200	85300	73500	186200
200		42	84	159	290	1250	2010	2300	4110	23000	50400	56800	145000
300		28	43	106	190	830	1340	1540	2740	15300	33600	48100	104700
400		21	32	79	140	620	1000	1150	2050	11400	25200	38300	78500
500		27	64	64	110	500	800	920	1640	9100	20200	33900	
600		25	53	53	100	420	670	770	1370	7800	16800	29900	
700		23	51	51	90	360	570	660	1170	6500	14400	26700	
800		21	48	48	90	310	500	580	1030	5700	12600	24100	
900			45	45	90	280	450	510	910	5000	11200	22000	
1000			42	42	90	250	400	460	820	4500	10100	20200	

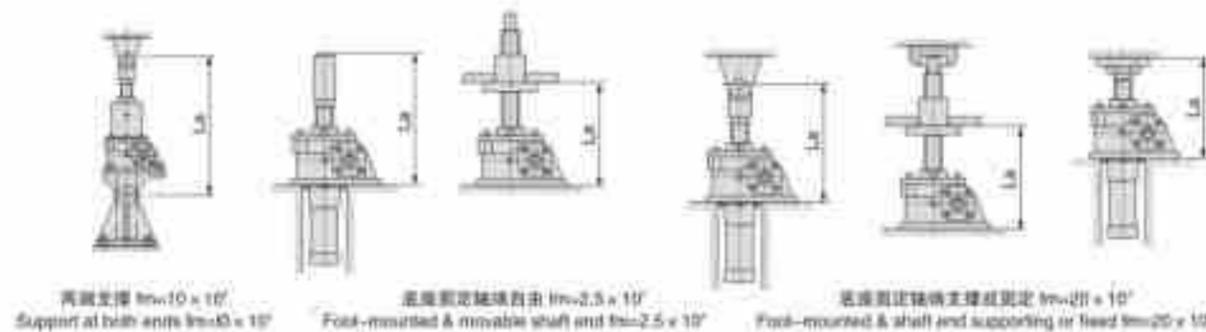
7.2 JWB或JWM超过许用横向载荷时, 请外加导向装置, 举例如下:

When operating radial load exceeds critical radial load, please add guiding device, for example.

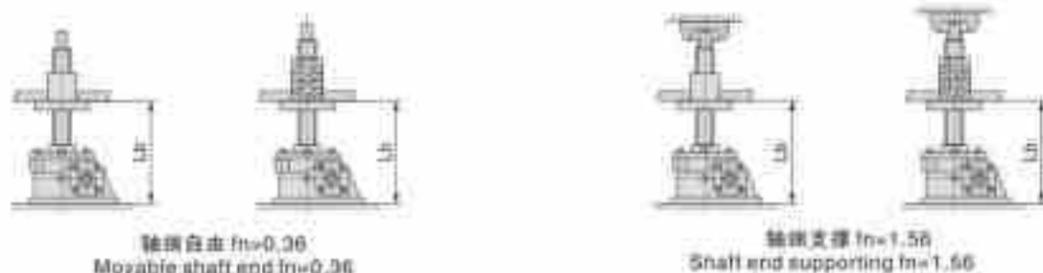


7.3 丝杆轴稳定性校验时, La(La值计算根据各型号尺寸)与fm(支撑系数)选取如下:

Verifying the stability of screw, the values of La and fm as follows.



7.4 丝杆轴转速校验时, Lb(Lb值计算根据各型号尺寸)与fn(长度系数)选取如下:
Verifying the rotation speed of screw, the values of Lb and fn as follows.



8. 选型方法
How to select type

8.1 升降机型号的确定 Type confirmation

- 1) 计算总机的当量载荷Ws(N) Calculate total equivalent loadWs (N)
Ws=最大载荷Wmax × 使用系数f1(N) Ws=Wmax × f1(N)
被驱动设备系数(f1)表 Service factor for driven machine (f1):

载荷性质 Load character	使用举例 Example	被驱动设备系数 (f1) Factor for driven machine
无冲击载荷, 负荷惯性小 Shockless load & small inertia load	开关、阀门传动带切换装置 Switch, valve transmission belt switching device	1.0~1.3
轻微冲击载荷, 负荷惯性中等 Moderate shock & moderate inertia	各种移动装置; 升降用各种升降机 All kinds of moving devices, all kinds of elevators	1.3-1.5
大冲击启动载荷, 负荷惯性大 Heavy shock & large inertia	用台车搬运东西; 保持压纸滚轮的位置 Carrying something by trolley to keep the position of idling gear	1.5-3.0

- 2) 计算单台升降机的当量载荷W
Calculate equivalent load single lifter W:

$$WS = \frac{WS}{\text{使用台数} \times \text{连动系数} / d} \quad \text{Number} \times \text{Linkage factor} (fd)$$

连动系数 Linkage factor(fd):

连动台数 Number of linkage jack	1	2	3	4	5-8
连动系数 Linkage factor	1	0.95	0.9	0.85	0.8

- 3) 确定升降机型号 Temporarily determine Jack type:
充分考虑重量, 速度, 行程, 效率, 驱动源后暂时选定型号。
Temporarily determine Jack type after taking full consideration of load, speed, journey, efficiency and drive source.
4) 根据使用行程, 环境条件, 输出顶端的联接方式, 确定升降机的整体型号。
Determine JW type according to service journey, ambient conditions, connection mode of end-fittings.

6.2 输入功率校验 Verify input power:

负载所需输入功率与许容最大输入功率相比较, 如果超过请提高型号或降低丝杆轴转速再计算。
If required input power under load exceeds permissible maximum input power, please select larger type or lower the speed of screw rotation.

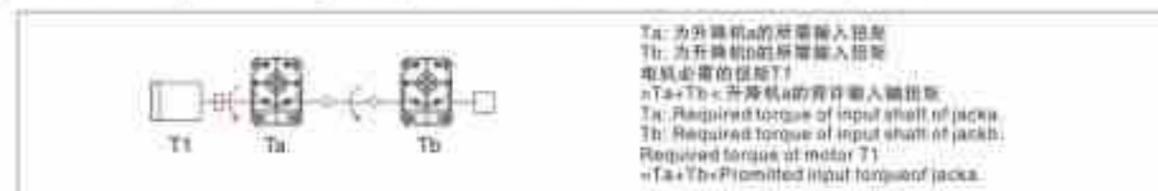
负载所需输入功率计算 Calculation of required input power under load:

输入轴转速 Required rotation speed of input shaft n1 (r/min)	$n1 = \frac{V}{L1} \times i$
所需输入轴扭矩 Required torque of input shaft T1 (N.m)	$T1 = \frac{W \times L1}{2\pi \times i \times \eta} + To$
所需输入功率 Required input power P1 (kW)	$P1 = \frac{T1 \times n1}{9550}$

V: 升降机丝杆轴(活动螺母)升降速度mm/min L1: 丝杆螺距(mm) i: 减速比 W: 单台升降机当量载荷(N)
π: 圆周率 η: 升降机的综合效率 To: 空载扭矩(N.m) (L1, i, η, To参照基本参数表)
V: linear speed of screw mm/min L1: Pitch of screw (mm) i: ratio
W: Equivalent load of single jack π: pi η: integrated efficiency To: No-load torque (N.m)
(L1, i, η, To refer to basic parameter table)

8.3 其他校验项目 Other checking items:

- 1) 当所选类型为活动螺母类型时, 请对丝杆轴转速进行校验。
 - 2) 当有横向载荷时, 请外加导向器。
 - 3) 当升降机传动配置为串联时(即同一轴线配置了两个或以上数量的升降机)如图须对各升降机输入轴端进行强度校验。
- 1) Please check screw shaft rotational speed as the type selected is moveable nut type.
2) Please add the guider when include lateral load.
3) Must check every lifter strength of input shaft side as connection in series as picture.



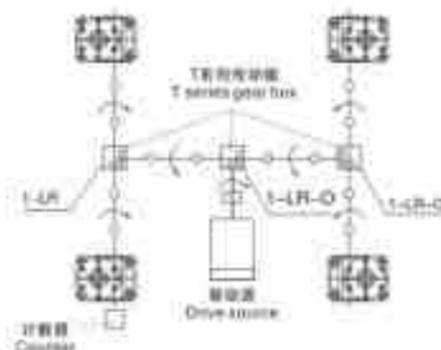
9. 升降机选择举例
Example

9.1 例题: 4台连动举上用, 结构如下图所示的4台连动模式, 工厂内保持常温, 有少许灰尘, 有横向负荷, 在升降机侧面设置了导向器, 安装状态采用底座固定, 轴端采用一固定一支撑, 电源为三相380V/50Hz, 使用频率为2次/小时 × 8小时。

- 1) 最大轴向载荷: 85 KN/4台
- 2) 升降速度: 10mm/s(600mm/min)
- 3) 使用行程: 260mm

Example: Four Jacks, linked as the following drawing, normal temperature, thin dust, radial load, with guiding devices on one side, foot-mounted, fixed the screw top-end, 380V/50Hz, service frequency 2cycle/hour × 8 hours.

- 1) Maximum axial load: 85 KN/4sets
- 2) Linear speed: 10mm/s (600mm/min)
- 3) Service journey: 260mm



9.2 升降机型号确定 Determine Jack type:

- 1) 计算总机当量载荷 W_s (取被驱动设备系数为1.3) $W_s = W_{max} \cdot ts = 88200 \times 1.3 = 114660N$
Calculate total equivalent load W_s (Factor for driven machine is 1.3)
- 2) 计算单台当量载荷 W
Calculate single equivalent load W : $W = \frac{114660}{4 \times 0.85} = 33724N$
- 3) 暂定型号 Temporarily determine type:
考虑速度、效率、驱动器、载重后暂定选择JWB050USH(参照基本参数表)。
Temporarily determine JWB050USH according to speed, efficiency, drive and Load (refer to basic parameter table).
- 4) 行程校核 Verify Journey:
使用行程为260mm, 充分考虑余量后选定行程为300mm(参照TWB050US尺寸表)。
Service journey is 260mm, determine journey should be 300 after considering surplus.
(Please refer to dimension sheet of JWB050US).
- 5) 输入功率校核 Check input power:
(1) 所需输入功率计算 Calculate required input power:

$$n1 = \frac{V}{L1} \times i = \frac{0.60}{0.010} \times 8 = 360r/min$$

$$T1 = \frac{W \times L1}{2\pi \times i \times \eta} + T0 = \frac{33724 \times 0.010}{2 \times 3.14 \times 6 \times 0.64} + 1.37 = 15.4N.m$$

$$P1 = \frac{T1 \times n1}{9550} = \frac{15.4 \times 360}{9550} = 0.58kW$$

(2) 参照基本参数表, $P_{max} = 2.2kW > P1$ ----- OK
Refer to basic parameter table, $P_{max} = 2.2kW > P1$ ----- OK

10. 校验
Checkings

10.1 丝杆稳定性校核 Verify the stability of screw:

升降机丝杆临界稳定载荷通过以下公式计算:
The formula to calculate the critical load as follows:

确保 ensure $P_{crit} = fm \times \left(\frac{d^4}{L_a}\right)^2$
 $P_{crit} > W \times SF (SF=4)$

P_{crit} : 临界载荷(N)
 d : 丝杆直径mm(参照基本参数表)
 fm : 支撑系数
 L_a : 作用点间距mm
 W : 单台升降机当量载荷(N)
 SF : 安全系数(一般SF=4)

P_{crit} : Critical load (N)
 d : Small diameter of screw and (mm) (refer to basic parameter table)
 fm : Support factor
 L_a : Distance between load-supporting point and mounting point as drawing.
 W : Equivalent load of single Jack (N)
 SF : Safety factor (SF=4 as usual)

10.2 容许丝杆轴转速 Safety screw shaft rotational speed

如为活动螺母选型时, 请务必将丝杆轴转速控制在临界转速以下, 若超出临界转速, 请提高型号再计算。(当升降机工作在速度为H速度、行程为机器的标准行程内各标准的行程见各型号的尺寸图), 当其输入轴转速在900r/min以上, 是, 或者工作在超过本型号的标准行程使用, 请务必核对其转速。

Must control the screw shaft rotational speed lower than critical speed when select moveable nut type. Please select one grade higher type if the value exceeds the safety speed. Must check the rotational speed if input speed more than 900r/min or exceeds the standard stroke.

$$n_s = \frac{96 \times fn \times d \times 10^7}{L_a^2} \quad n_c = \frac{n1}{i}$$

n_s : 容许丝杆轴转速 r/min
 d : 丝杆直径mm(参照基本参数表)
 fn : 支撑系数(参照基本参数表)
 L_a : 支撑间距mm
 n_c : 丝杆轴转速r/min
 $n1$: 输入轴转速r/min
 i : 减速比

n_c : Safety screw shaft rotational speed
 d : Small diameter of screw (refer to basic parameter table)
 fn : Length factor (refer to basic parameter table)
 L_a : Distance between both supporting face
 n_c : Rotational speed of screw
 $n1$: Rotational speed of input shaft
 i : Ratio

请确保 Ensure: $n_c > n_s$

计算举例 Example for calculation:

JWM200UR-H1200P1在输入转速为1200r/min, 轴端支撑下运转, 根据外形尺寸与传动能力表查得: $d=51.3$, $L_b=1437$ 。
Take JWM200UR-H1200P1 as example, $n1=1200r/min$, connecting mode of top-end: I, we can know $d=51.3$, $L_b=1437$ referring to dimension and transmission capacity table.

$$n_s = \frac{n1}{i} = \frac{1200}{10/1} = 112.5r/min$$

$$n_c = \frac{96 \times fn \times d \times 10^7}{L_a^2} = \frac{96 \times 1.56 \times 51.3 \times 10^7}{(1437)^2} = 3720r/min$$

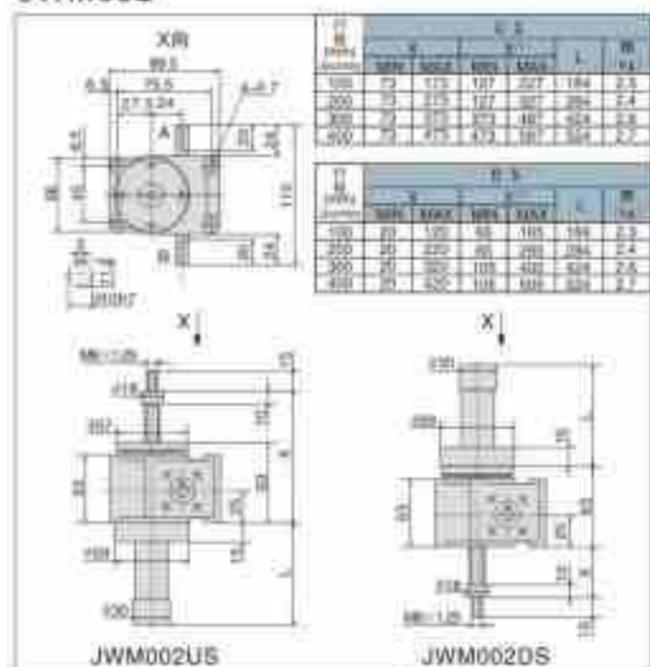
$$n_c = 3720r/min > n_s = 112.5r/min \text{ ----- OK}$$

11. JW系列外形尺寸表
JW series outline size chart

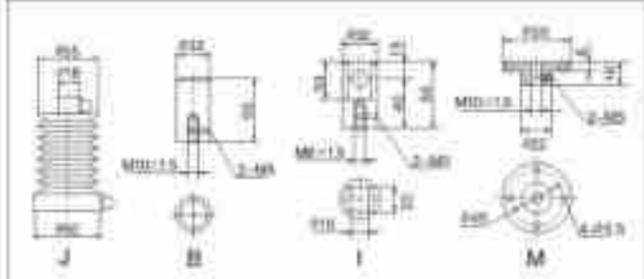
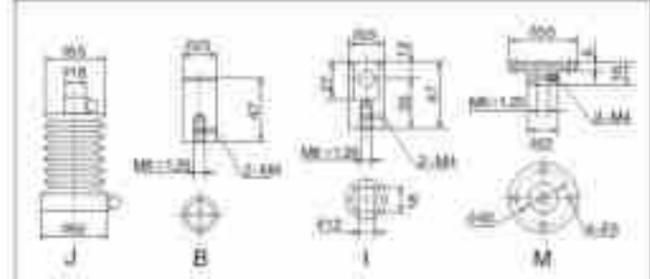
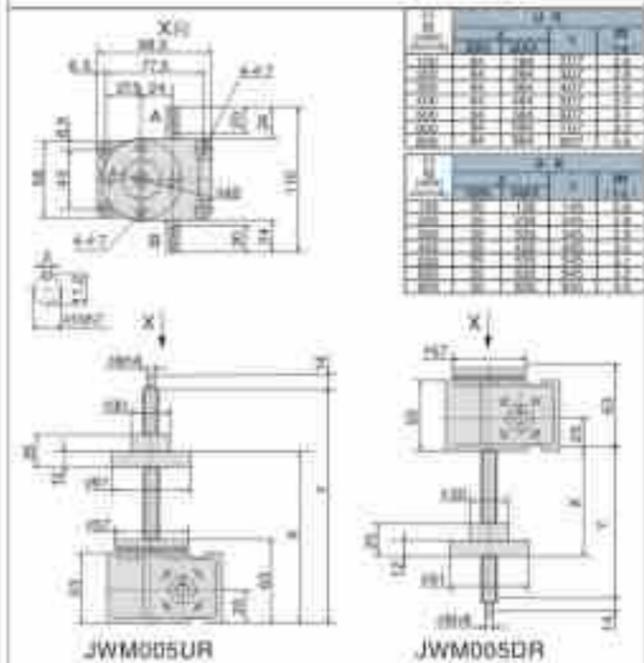
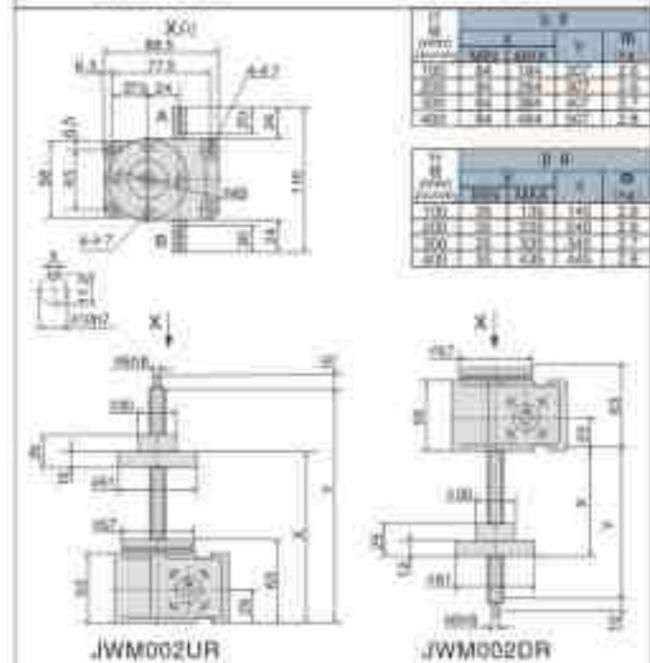
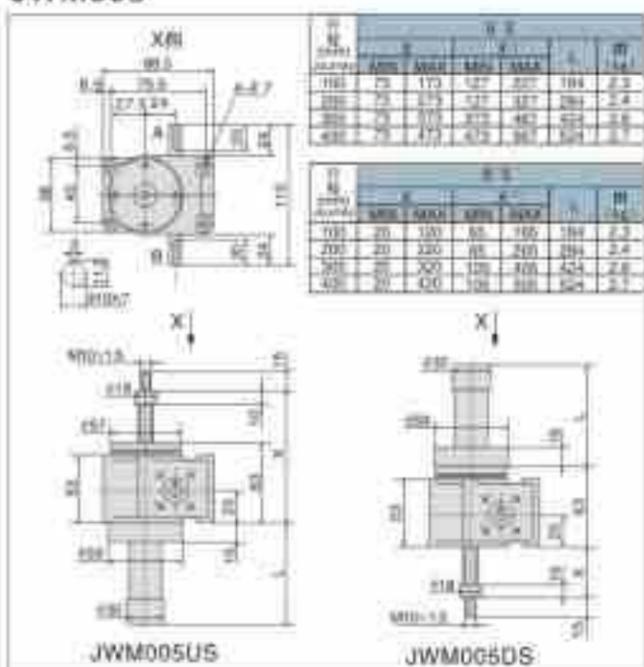
备注: 1. JW外形基本相同JWB, 选型时另咨询。
2. UM, DM型结构的基本尺寸与US, DS的基本相同, 选型时另咨询。
3. X"为加防尘罩时的尺寸。

Note: 1. Please contact us when select JW and JWB type as their outline is similar.
2. Please contact us when select the type as size of UM/DM and US/DS is similar.
3. X" is the size with dust-proof cover.

JWM002

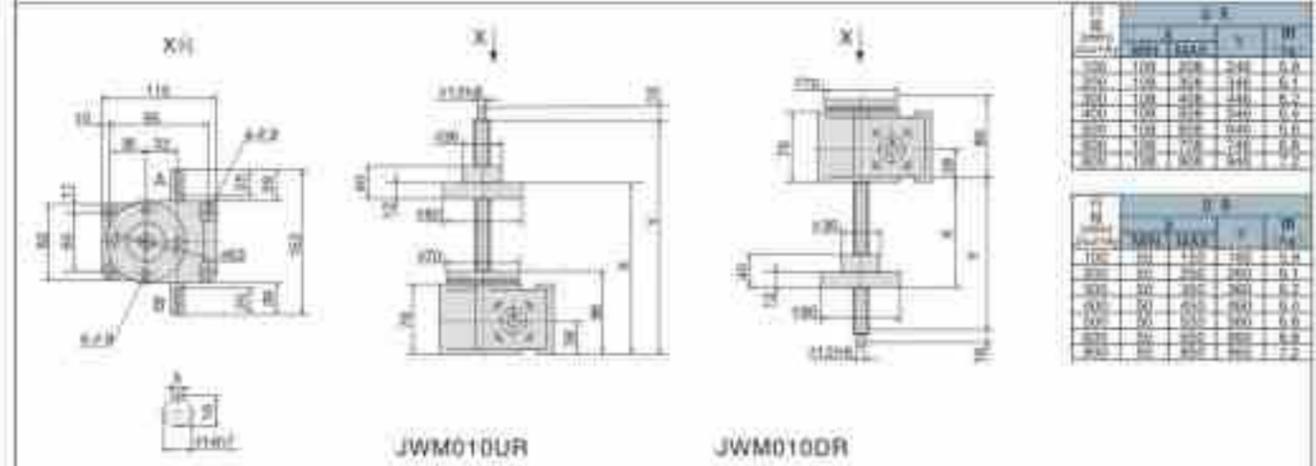
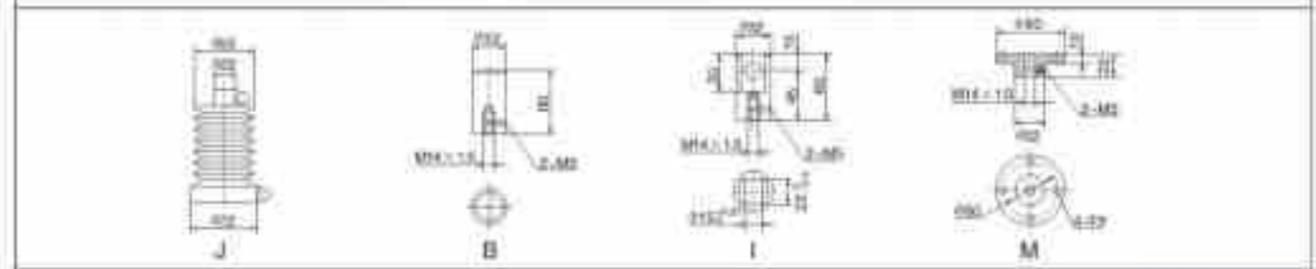
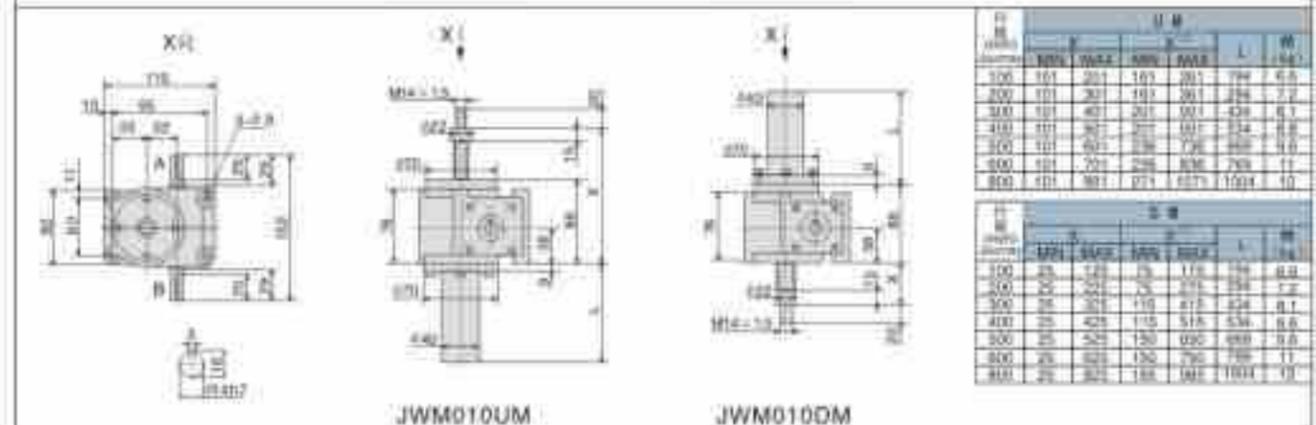
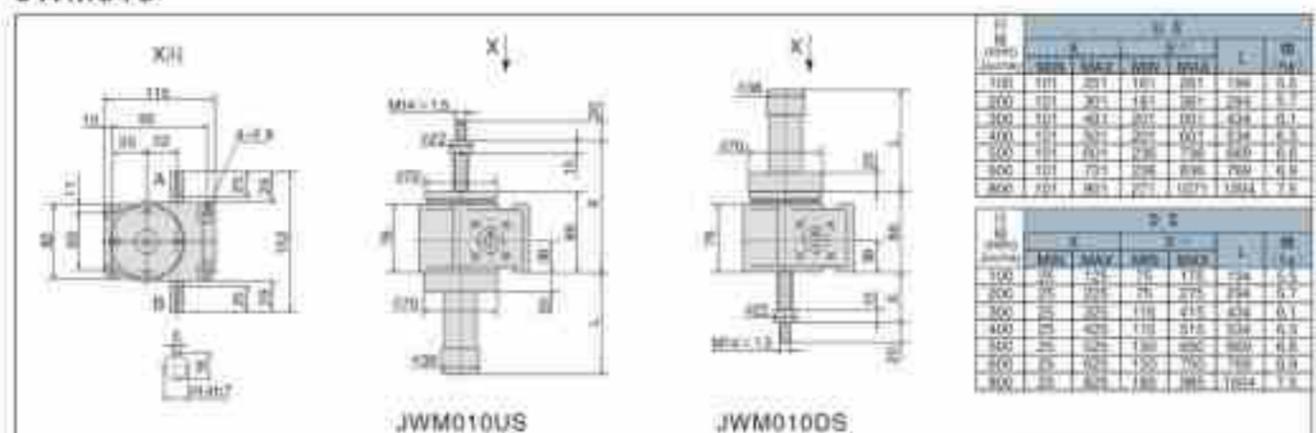


JWM005



注: X"为加防尘罩时的尺寸。 Note: X" is the size with dust-proof cover.

JWM010



注: X"为加防尘罩时的尺寸。 Note: X" is the size with dust-proof cover.

JWM025

JW (mm)	U S				L	H
	MIN	MAX	MIN	MAX		
100	132	202	147	247	149	7.7
200	132	202	147	247	249	8.1
300	132	202	147	247	350	8.5
400	132	202	147	247	450	8.9
500	132	202	147	247	550	9.3
600	132	202	147	247	650	9.7
800	132	202	147	247	850	11
1000	132	202	147	247	1050	12

JW (mm)	U S				L	H
	MIN	MAX	MIN	MAX		
100	47	140	17	157	143	7.7
200	47	140	17	157	244	8.1
300	47	140	17	157	341	8.5
400	47	140	17	157	438	8.9
500	47	140	17	157	535	9.3
600	47	140	17	157	632	9.7
800	47	140	17	157	829	11
1000	47	140	17	157	1026	12

JW (mm)	U S				L	H
	MIN	MAX	MIN	MAX		
100	32	122	12	127	112	6
200	32	122	12	127	215	6
300	32	122	12	127	312	6
400	32	122	12	127	410	6
500	32	122	12	127	507	6
600	32	122	12	127	605	6
800	32	122	12	127	802	6
1000	32	122	12	127	1000	6

JW (mm)	U S				L	H
	MIN	MAX	MIN	MAX		
100	4.4	12.0	0.7	10.7	11.0	1.1
200	4.4	12.0	0.7	10.7	20.0	1.1
300	4.4	12.0	0.7	10.7	29.0	1.1
400	4.4	12.0	0.7	10.7	38.0	1.1
500	4.4	12.0	0.7	10.7	47.0	1.1
600	4.4	12.0	0.7	10.7	56.0	1.1
800	4.4	12.0	0.7	10.7	75.0	1.1
1000	4.4	12.0	0.7	10.7	94.0	1.1

JWM050

JW (mm)	U S				L	H
	MIN	MAX	MIN	MAX		
100	134	204	149	249	147	10
200	134	204	149	249	247	10
300	134	204	149	249	346	10
400	134	204	149	249	445	10
500	134	204	149	249	544	10
600	134	204	149	249	643	10
800	134	204	149	249	842	10
1000	134	204	149	249	1041	10

JW (mm)	U S				L	H
	MIN	MAX	MIN	MAX		
100	47	142	17	157	147	10
200	47	142	17	157	244	10
300	47	142	17	157	341	10
400	47	142	17	157	438	10
500	47	142	17	157	535	10
600	47	142	17	157	632	10
800	47	142	17	157	829	10
1000	47	142	17	157	1026	10

JW (mm)	U S				L	H
	MIN	MAX	MIN	MAX		
100	32	122	12	127	112	6
200	32	122	12	127	210	6
300	32	122	12	127	308	6
400	32	122	12	127	406	6
500	32	122	12	127	504	6
600	32	122	12	127	602	6
800	32	122	12	127	800	6
1000	32	122	12	127	998	6

JW (mm)	U S				L	H
	MIN	MAX	MIN	MAX		
100	4.4	12.0	0.7	10.7	11.0	1.1
200	4.4	12.0	0.7	10.7	20.0	1.1
300	4.4	12.0	0.7	10.7	29.0	1.1
400	4.4	12.0	0.7	10.7	38.0	1.1
500	4.4	12.0	0.7	10.7	47.0	1.1
600	4.4	12.0	0.7	10.7	56.0	1.1
800	4.4	12.0	0.7	10.7	75.0	1.1
1000	4.4	12.0	0.7	10.7	94.0	1.1

注: "X"为加防尘罩时的尺寸。

Note: "X" is the size with dust-proof cover.

JWM100

JWM100US **JWM100DS**

JWM100UM **JWM100DM**

JWM100UR **JWM100DR**

T mm	U				L	W
	MIN	MAX	MIN	MAX		
100	101	201	171	271	101	47
200	101	301	171	371	101	47
300	101	401	166	466	101	47
400	101	501	156	566	101	47
500	101	601	151	671	101	47
600	101	701	141	771	101	47
800	101	901	126	1026	101	47
1000	101	1101	106	1276	110	47
1200	101	1301	91	1481	130	47

T mm	U				L	W
	MIN	MAX	MIN	MAX		
100	40	140	17	157	101	47
200	40	240	17	257	101	47
300	40	340	17	357	101	47
400	40	440	17	457	101	47
500	40	540	17	557	101	47
600	40	640	17	657	101	47
800	40	840	17	857	101	47
1000	40	1040	17	1117	110	47
1200	40	1240	17	1347	130	47

T mm	U				L	W
	MIN	MAX	MIN	MAX		
100	101	201	204	304	101	47
200	101	301	204	404	101	47
300	101	401	219	519	101	47
400	101	501	219	619	101	47
500	101	601	214	724	101	47
600	101	701	214	824	101	47
800	101	901	204	1079	101	47
1000	101	1101	184	1284	110	47
1200	101	1301	154	1484	130	47

T mm	U				L	W
	MIN	MAX	MIN	MAX		
100	40	140	17	157	101	47
200	40	240	17	257	101	47
300	40	340	17	357	101	47
400	40	440	17	457	101	47
500	40	540	17	557	101	47
600	40	640	17	657	101	47
800	40	840	17	857	101	47
1000	40	1040	17	1117	110	47
1200	40	1240	17	1347	130	47

注: X"为加防尘罩时的尺寸。 Note: X" is the size with dust-proof cover.

JWM150

JWM150US **JWM150DS**

JWM150UM **JWM150DM**

JWM150UR **JWM150DR**

T mm	U				L	W
	MIN	MAX	MIN	MAX		
100	101	201	171	271	101	47
200	101	301	171	371	101	47
300	101	401	166	466	101	47
400	101	501	156	566	101	47
500	101	601	151	671	101	47
600	101	701	141	771	101	47
800	101	901	126	1026	101	47
1000	101	1101	106	1276	110	47
1200	101	1301	91	1481	130	47

T mm	U				L	W
	MIN	MAX	MIN	MAX		
100	40	140	17	157	101	47
200	40	240	17	257	101	47
300	40	340	17	357	101	47
400	40	440	17	457	101	47
500	40	540	17	557	101	47
600	40	640	17	657	101	47
800	40	840	17	857	101	47
1000	40	1040	17	1117	110	47
1200	40	1240	17	1347	130	47

T mm	U				L	W
	MIN	MAX	MIN	MAX		
100	101	201	204	304	101	47
200	101	301	204	404	101	47
300	101	401	219	519	101	47
400	101	501	219	619	101	47
500	101	601	214	724	101	47
600	101	701	214	824	101	47
800	101	901	204	1079	101	47
1000	101	1101	184	1284	110	47
1200	101	1301	154	1484	130	47

T mm	U				L	W
	MIN	MAX	MIN	MAX		
100	40	140	17	157	101	47
200	40	240	17	257	101	47
300	40	340	17	357	101	47
400	40	440	17	457	101	47
500	40	540	17	557	101	47
600	40	640	17	657	101	47
800	40	840	17	857	101	47
1000	40	1040	17	1117	110	47
1200	40	1240	17	1347	130	47

注: X"为加防尘罩时的尺寸。 Note: X" is the size with dust-proof cover.

JWM200

Technical drawings for JWM200 series screw jacks, including front, side, and detail views for models JWM200US, JWM200DS, JWM200UM, JWM200CM, JWM200UR, and JWM200DR. Each model includes a table of dimensions and performance parameters.

H mm (Inch)	S S				L	S S				W mm (Inch)	
	MIN	MAX	MIN	MAX		MIN	MAX	MIN	MAX		
100	200	300	410	510	100	50	150	50	165	170	114
200	200	400	510	610	200	50	200	50	200	200	122
300	200	500	610	710	300	50	250	50	250	275	128
400	200	600	710	810	400	50	300	50	300	325	134
500	200	700	810	910	500	50	350	50	350	375	139
600	200	800	910	1010	600	50	400	50	400	425	143
800	200	1000	1110	1310	800	50	500	50	500	525	158
1000	200	1200	1310	1510	1000	50	600	50	600	625	162
1200	200	1400	1510	1710	1200	50	700	50	700	725	167

注: X"为加防尘罩时的尺寸。 Note: X" is the size with dust-proof cover.

JWM300

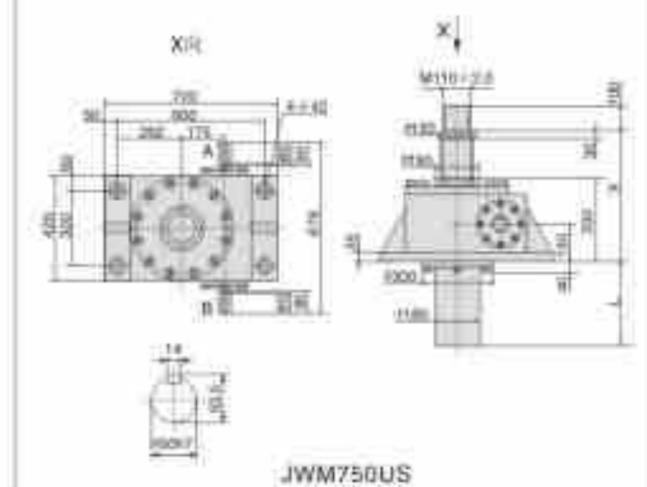
Technical drawings and tables for JWM300 and JWM500 series screw jacks. Each model includes a table of dimensions and performance parameters.

H mm (Inch)	S S				L	S S				W mm (Inch)	
	MIN	MAX	MIN	MAX		MIN	MAX	MIN	MAX		
100	250	350	460	560	100	50	150	50	165	170	114
200	250	450	560	660	200	50	200	50	200	200	122
300	250	550	660	760	300	50	250	50	250	275	128
400	250	650	760	860	400	50	300	50	300	325	134
500	250	750	860	960	500	50	350	50	350	375	139
600	250	850	960	1060	600	50	400	50	400	425	143
800	250	1050	1160	1360	800	50	500	50	500	525	158
1000	250	1250	1360	1560	1000	50	600	50	600	625	162
1200	250	1450	1560	1760	1200	50	700	50	700	725	167
1500	250	1750	1860	2060	1500	50	850	50	850	875	179

注: X"为加防尘罩时的尺寸。 Note: X" is the size with dust-proof cover.

JWM750

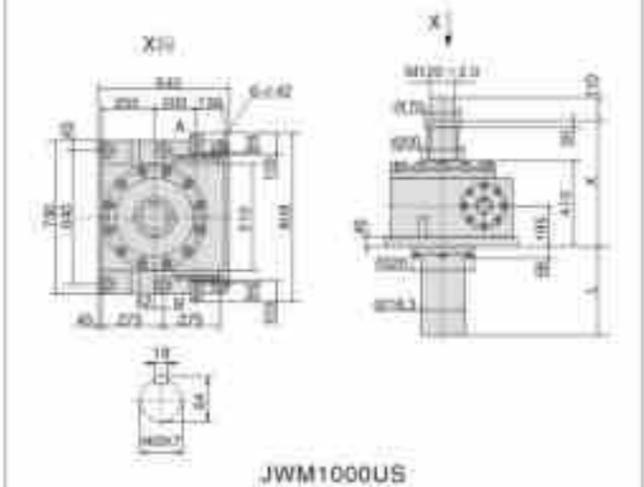
J (mm)	J				L (mm)	S				W (mm)	
	MIN	MAX	MIN	MAX		MIN	MAX	MIN	MAX		
100	170	470	340	450	765	70	170	80	180	175	470
200	370	970	380	550	2865	70	270	80	280	265	266
300	570	1470	390	630	2865	70	370	85	385	265	401
400	770	1970	395	710	4815	70	470	90	485	285	415
500	970	2470	410	810	3865	70	570	110	610	305	427
600	1170	2970	430	910	4865	70	670	110	710	325	445
800	1570	3970	465	1010	6865	70	870	125	925	315	475
1000	1970	4970	495	1120	8865	70	1070	135	1135	325	505
1200	2370	5970	530	1230	10865	70	1270	145	1345	335	535
1500	2970	7470	585	1380	13865	70	1570	165	1655	355	581
2000	3970	9970	660	1580	18865	70	2070	195	2185	395	667



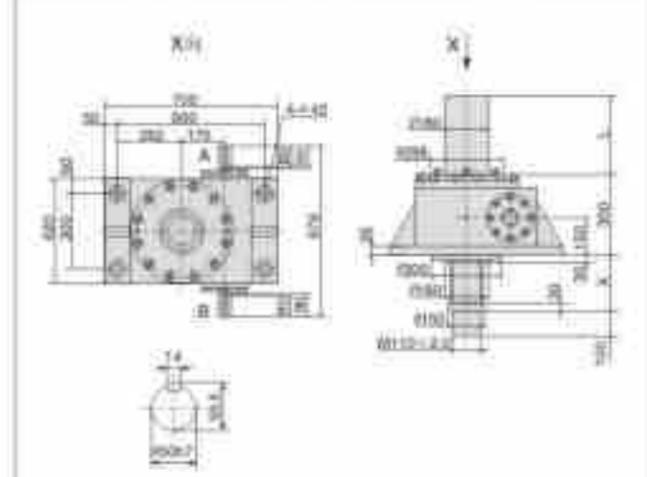
JWM750US

JWM1000

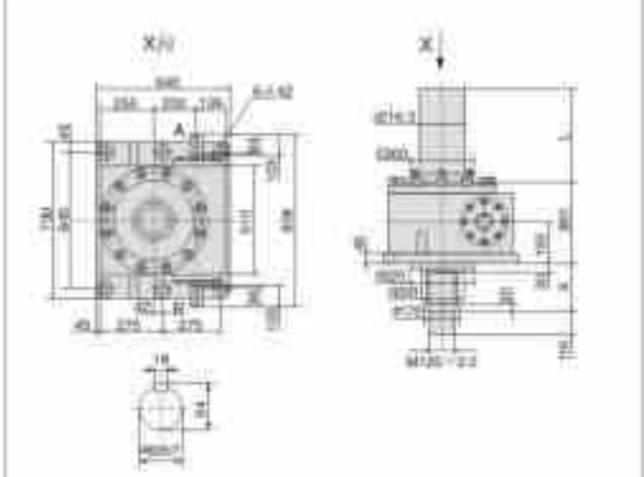
J (mm)	J				L (mm)	S				W (mm)	
	MIN	MAX	MIN	MAX		MIN	MAX	MIN	MAX		
100	150	450	460	560	165	70	170	80	180	165	748
200	350	950	480	660	265	70	270	80	280	265	766
300	550	1450	475	775	365	70	370	85	385	265	787
400	750	1950	475	875	465	70	470	90	485	285	805
500	950	2450	495	985	565	70	570	105	600	295	824
600	1150	2950	515	1095	665	70	670	105	705	305	842
800	1550	3950	550	1205	865	70	870	120	920	310	881
1000	1950	4950	580	1315	1065	70	1070	130	1120	315	918
1200	2350	5950	615	1425	1265	70	1270	140	1320	325	957
1500	2950	7450	660	1535	1565	70	1570	160	1620	335	1014
2000	3950	9950	735	1735	2065	70	2070	190	2180	375	1158



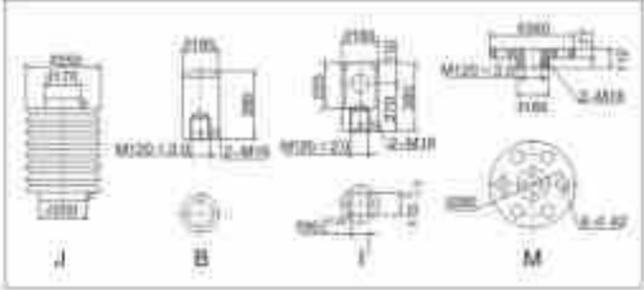
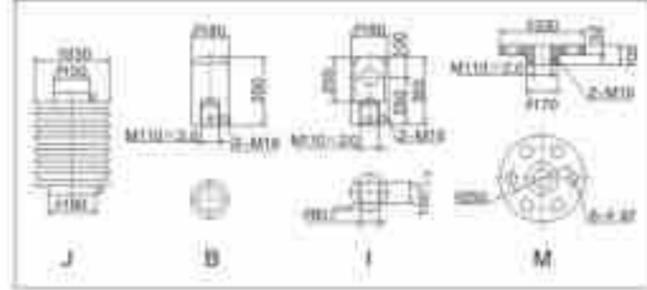
JWM1000US



JWM750DS



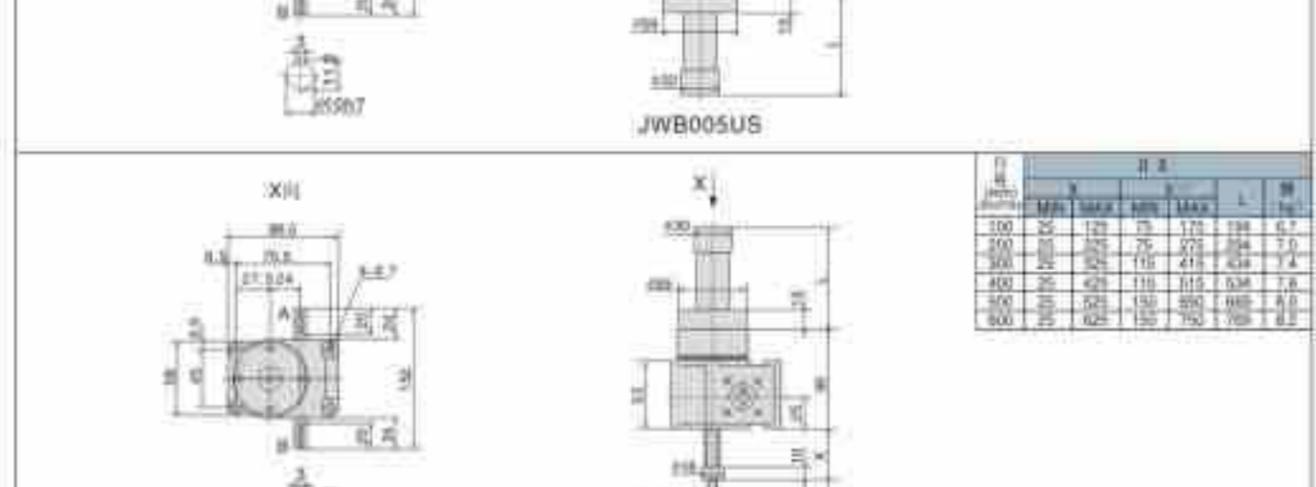
JWM1000DS



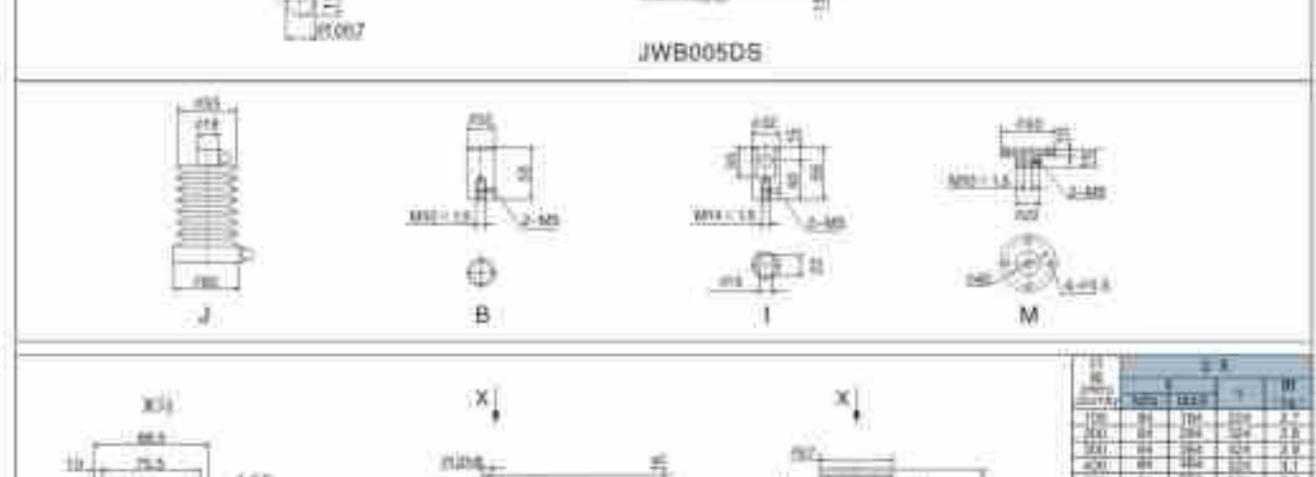
注: X"为加防尘罩时的尺寸。 Note: X" is the size with dust-proof cover.

JWB005

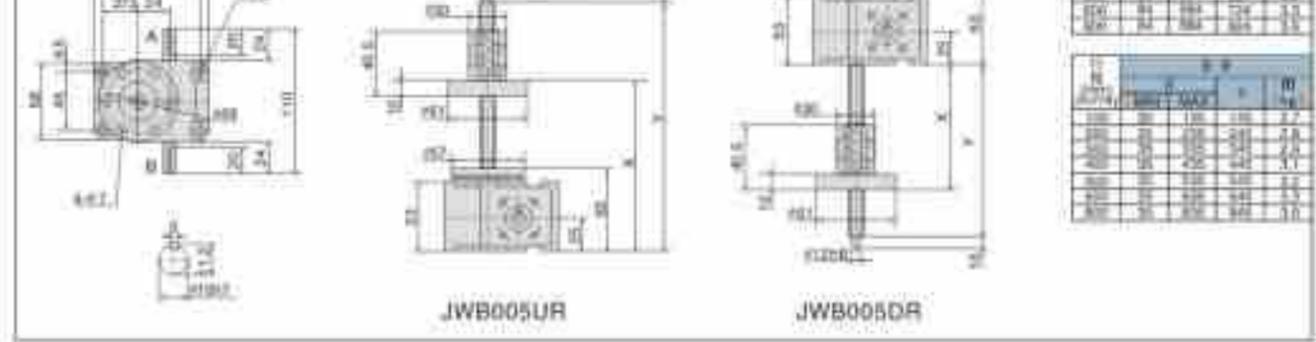
J (mm)	J				L (mm)	W (mm)
	MIN	MAX	MIN	MAX		
100	150	350	110	310	134	6.7
200	350	850	110	410	284	7.0
300	550	1350	110	510	434	7.4
400	750	1850	110	610	534	7.8
500	950	2350	110	710	634	8.0
600	1150	2850	110	810	734	8.2



JWB005US



JWB005DS



JWB005UR

JWB005DR

注: X"为加防尘罩时的尺寸。 Note: X" is the size with dust-proof cover.

JWB010

H (mm)	S		U		L	M
	MIN	MAX	MIN	MAX		
100	150	250	110	170	184	6.7
200	150	350	110	270	284	7.0
300	150	450	110	370	384	7.2
400	150	550	110	470	484	7.6
500	150	650	110	570	584	8.0
600	150	750	110	670	684	8.2

H (mm)	S		U		L	M
	MIN	MAX	MIN	MAX		
100	20	120	7	170	184	6.7
200	20	220	7	270	284	7.0
300	20	320	7	370	384	7.2
400	20	420	7	470	484	7.6
500	20	520	7	570	584	8.0
600	20	620	7	670	684	8.2

H (mm)	S		U		L	M
	MIN	MAX	MIN	MAX		
100	20	120	7	170	184	7.0
200	20	220	7	270	284	8.2
300	20	320	7	370	384	8.7
400	20	420	7	470	484	9.2
500	20	520	7	570	584	11
600	20	620	7	670	684	12

注: X'为加防尘罩时的尺寸。 Note: X' is the size with dust-proof cover.

JWB025

H (mm)	S		U		L	M
	MIN	MAX	MIN	MAX		
100	210	310	230	330	344	11
200	210	410	230	430	444	11
300	210	510	230	530	544	11
400	210	610	230	630	644	12
500	210	710	230	730	744	12
600	210	810	230	830	844	13

H (mm)	S		U		L	M
	MIN	MAX	MIN	MAX		
100	40	140	17	187	140	11
200	40	240	17	287	240	11
300	40	340	17	387	340	11
400	40	440	17	487	440	12
500	40	540	17	587	540	13
600	40	640	17	687	640	13

H (mm)	S		U		L	M
	MIN	MAX	MIN	MAX		
100	40	140	17	187	140	12
200	40	240	17	287	240	13
300	40	340	17	387	340	13
400	40	440	17	487	440	16
500	40	540	17	587	540	17
600	40	640	17	687	640	18

注: X'为加防尘罩时的尺寸。 Note: X' is the size with dust-proof cover.

JWB050

JWB050US **JWB050DS**

L (mm)	S		W		H (mm)
	MIN	MAX	MIN	MAX	
100	43	140	57	157	147
200	43	140	57	157	172
300	43	140	57	157	197
400	43	140	57	157	222
500	43	140	57	157	247
600	43	140	57	157	272
800	43	140	57	157	322
1000	43	140	57	157	372

JWB050UM **JWB050DM**

L (mm)	S		W		H (mm)
	MIN	MAX	MIN	MAX	
100	43	140	57	157	147
200	43	140	57	157	172
300	43	140	57	157	197
400	43	140	57	157	222
500	43	140	57	157	247
600	43	140	57	157	272
800	43	140	57	157	322
1000	43	140	57	157	372

JWB050UR **JWB050DR**

L (mm)	S		W		H (mm)
	MIN	MAX	MIN	MAX	
100	43	140	57	157	147
200	43	140	57	157	172
300	43	140	57	157	197
400	43	140	57	157	222
500	43	140	57	157	247
600	43	140	57	157	272
800	43	140	57	157	322
1000	43	140	57	157	372

注: X"为加防尘罩时的尺寸。 Note: X" is the size with dust-proof cover.

JWB100

JWB100US **JWB100DS**

L (mm)	S		W		H (mm)
	MIN	MAX	MIN	MAX	
100	50	150	64	164	154
200	50	150	64	164	179
300	50	150	64	164	204
400	50	150	64	164	229
500	50	150	64	164	254
600	50	150	64	164	279
800	50	150	64	164	329
1000	50	150	64	164	379

JWB100UM **JWB100DM**

L (mm)	S		W		H (mm)
	MIN	MAX	MIN	MAX	
100	50	150	64	164	154
200	50	150	64	164	179
300	50	150	64	164	204
400	50	150	64	164	229
500	50	150	64	164	254
600	50	150	64	164	279
800	50	150	64	164	329
1000	50	150	64	164	379

JWB100UR **JWB100DR**

L (mm)	S		W		H (mm)
	MIN	MAX	MIN	MAX	
100	50	150	64	164	154
200	50	150	64	164	179
300	50	150	64	164	204
400	50	150	64	164	229
500	50	150	64	164	254
600	50	150	64	164	279
800	50	150	64	164	329
1000	50	150	64	164	379

注: X"为加防尘罩时的尺寸。 Note: X" is the size with dust-proof cover.

JWB150

JWB150US **JWB150DS**

H (mm)	L				W
	MIN	MAX	MIN	MAX	
100	254	420	207	432	110
200	347	512	299	524	110
300	440	604	391	616	110
400	532	696	483	708	110
500	625	788	575	800	110
600	717	880	667	892	110
800	900	1063	850	1075	110
1000	1082	1246	1033	1250	110
1200	1264	1429	1216	1430	110

JWB150UM **JWB150DM**

H (mm)	L				W
	MIN	MAX	MIN	MAX	
100	42	142	37	152	82
200	42	232	37	242	82
300	42	322	37	332	82
400	42	412	37	422	82
500	42	502	37	512	82
600	42	592	37	602	82
800	42	775	37	785	82
1000	42	958	37	968	82
1200	42	1141	37	1151	82

JWB150UR **JWB150DR**

H (mm)	L				W
	MIN	MAX	MIN	MAX	
100	42	142	37	152	82
200	42	232	37	242	82
300	42	322	37	332	82
400	42	412	37	422	82
500	42	502	37	512	82
600	42	592	37	602	82
800	42	775	37	785	82
1000	42	958	37	968	82
1200	42	1141	37	1151	82

J **B** **I** **M**

注: X"为加防尘罩时的尺寸。 Note: X" is the size with dust-proof cover.

JWB200

JWB200US **JWB200DS**

H (mm)	L				W
	MIN	MAX	MIN	MAX	
100	300	476	216	488	120
200	393	568	309	580	120
300	486	660	401	672	120
400	579	752	493	764	120
500	672	844	585	856	120
600	765	936	677	948	120
800	948	1119	860	1131	120
1000	1131	1302	1043	1314	120
1200	1314	1485	1226	1497	120

JWB200UM **JWB200DM**

H (mm)	L				W
	MIN	MAX	MIN	MAX	
100	42	142	37	152	82
200	42	232	37	242	82
300	42	322	37	332	82
400	42	412	37	422	82
500	42	502	37	512	82
600	42	592	37	602	82
800	42	775	37	785	82
1000	42	958	37	968	82
1200	42	1141	37	1151	82

J **B** **I** **M**

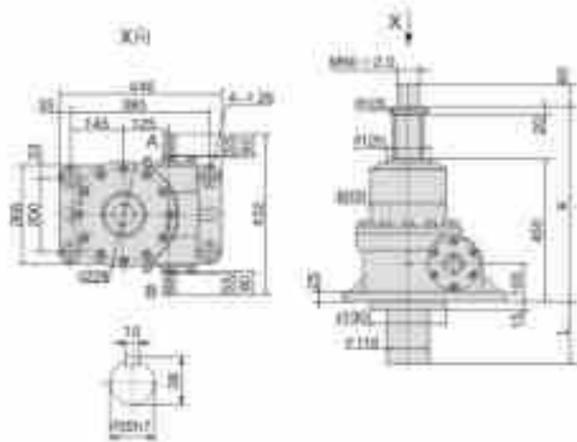
JWB200UR **JWB200DR**

H (mm)	L				W
	MIN	MAX	MIN	MAX	
100	42	142	37	152	82
200	42	232	37	242	82
300	42	322	37	332	82
400	42	412	37	422	82
500	42	502	37	512	82
600	42	592	37	602	82
800	42	775	37	785	82
1000	42	958	37	968	82
1200	42	1141	37	1151	82

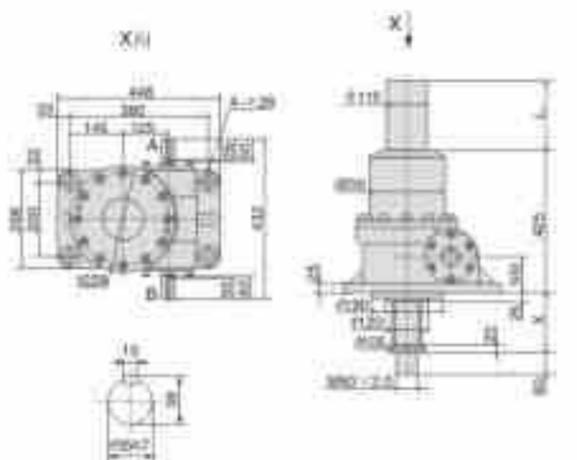
注: X"为加防尘罩时的尺寸。 Note: X" is the size with dust-proof cover.

JWB300

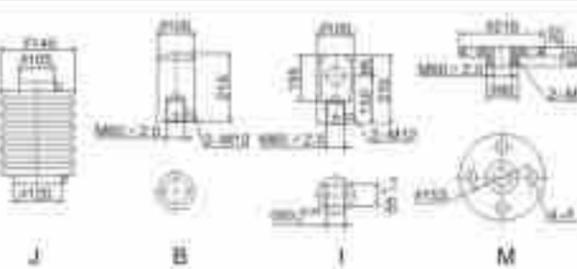
升降速度 (mm/min)	J 2				L	E 2				H (mm)	
	MIN	MAX	MIN	MAX		MIN	MAX	MIN	MAX		
100	480	580	490	590	180	55	155	65	165	180	155
200	490	600	490	600	200	55	155	65	165	200	160
300	490	600	500	600	220	55	155	65	165	220	166
400	490	600	500	600	240	55	155	65	165	240	172
500	490	600	500	600	260	55	155	65	165	260	178
600	490	600	500	600	280	55	155	65	165	280	184
800	490	600	500	600	320	55	155	65	165	320	194
1000	490	600	500	600	360	55	155	65	165	360	204
1200	490	600	500	600	400	55	155	65	165	400	214
1500	490	600	500	600	440	55	155	65	165	440	224



JWB300US

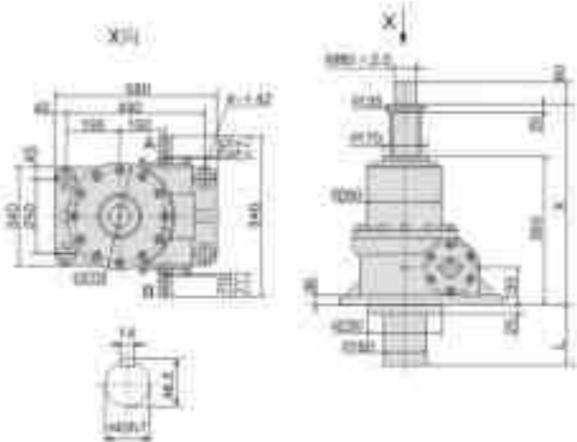


JWB300DS

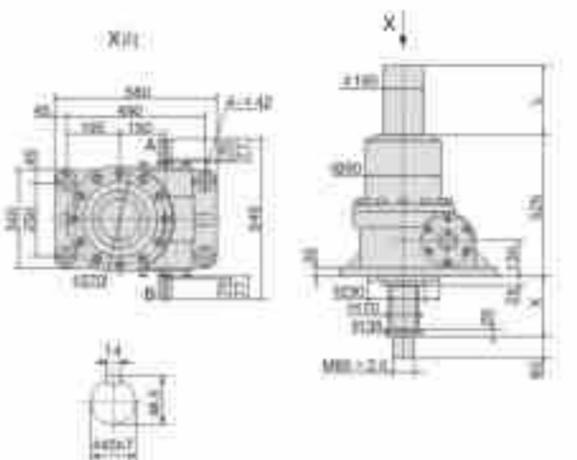


JWB500

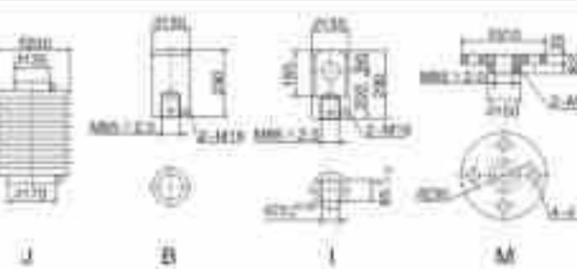
升降速度 (mm/min)	J 2				L	E 2				H (mm)	
	MIN	MAX	MIN	MAX		MIN	MAX	MIN	MAX		
100	580	680	590	690	220	55	155	65	165	220	210
200	590	700	600	700	240	55	155	65	165	240	220
300	590	700	610	700	260	55	155	65	165	260	230
400	590	700	610	700	280	55	155	65	165	280	240
500	590	700	610	700	300	55	155	65	165	300	250
600	590	700	610	700	320	55	155	65	165	320	260
800	590	700	610	700	360	55	155	65	165	360	270
1000	590	700	610	700	400	55	155	65	165	400	280
1200	590	700	610	700	440	55	155	65	165	440	290
1500	590	700	610	700	480	55	155	65	165	480	300



JWB500US



JWB500DS

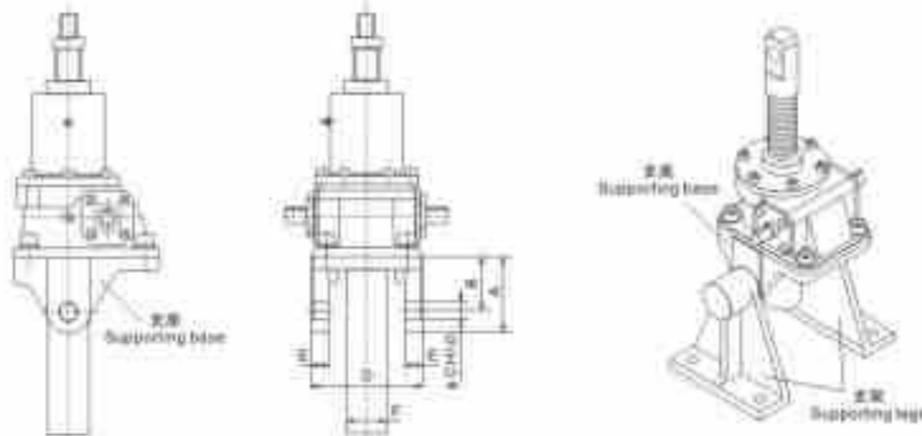


注: X*为拆卸防尘罩时的尺寸。 Note: X* is the size with dust-proof cover.

12. 附件的确认
Accessory confirmation

12.1 支座 (C型安装) Support (Mode C mounting):

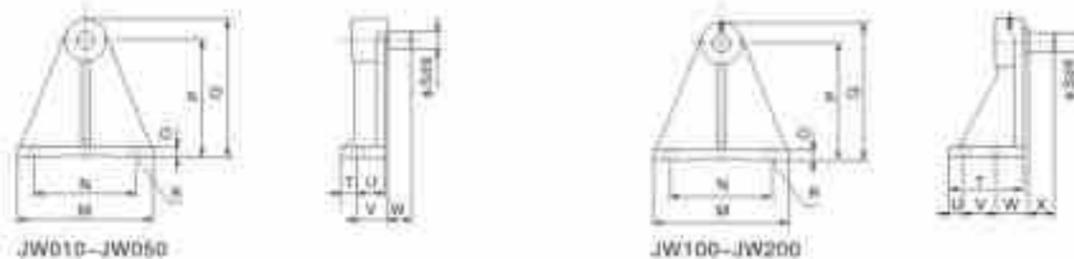
支座安装广泛应用于开关装置、倾斜装置。 Support-mounted mode widely apply to tilting equipment.



型号	A	B	C	D	E	F
002	75	80	15	64	12	25
005	75	80	15	64	12	25
010	75	80	15	86	15	35
025	100	75	20	115	20	45
050	105	75	25	158	25	58
100	145	100	40	201	30	76.3
150	155	105	50	224	44	76.3
200	173	110	63	244	50	80.1

12.2 支架 Supporting legs

支架与支座配合, 实现多方位升降。
Matching supporting base and legs realizes multi-angles lifting and lowering.



型号	M	N	O	P	Q	R	S	T	U	V	W	X
002	130	100	12	100	118.5	2-φ12	15	15	28	30	15	-
005	130	100	12	100	118.5	2-φ12	15	15	28	30	15	-
010	180	130	15	150	178	2-φ18	15	25	40	45	17	-
025	180	130	15	150	178	2-φ18	20	25	40	45	30	-
050	200	150	15	170	200	2-φ18	25	25	40	45	35	-
100	280	220	22	240	290	4-φ22	40	159	90	70	70	55
150	360	280	27	300	360	4-φ33	50	195	40	65	85	70
200	400	320	30	380	450	4-φ33	63	210	40	90	90	75

12.3 手轮盘 Hand wheel

此件只适用于JWM型工作在冲击、振动不大的场合，请不要应用在JWB、JWH结构中。
手轮操作扭矩=所需输入扭矩/手轮操作盘半径
Hand wheel only apply to JWM under light shock or vibration condition but not for JWB.
Manual operation torque=Input torque required/Hand wheel radius.



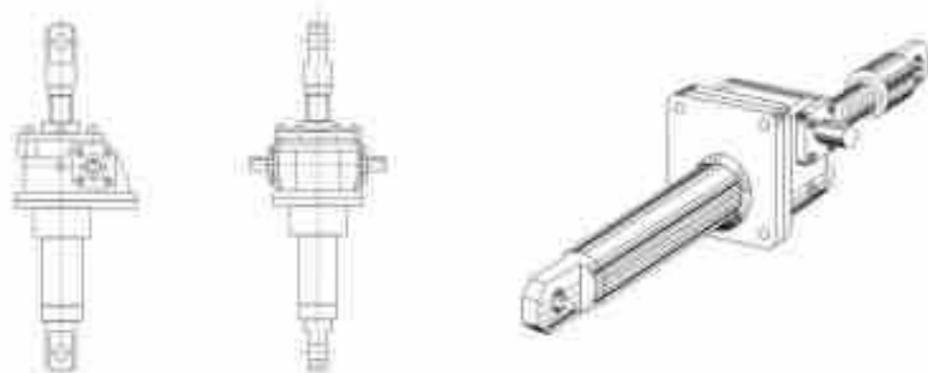
尺寸表 Dimension sheet:

型号 Type	NV80		NV100		NV200		NV280		NV450	
	HD	HL	HD	HL	HD	HL	HD	HL	HD	HL
JWM002	80	100	—	—	—	—	—	—	—	—
JWM005	80	100	—	—	—	—	—	—	—	—
JWM010	80	122	100	125	—	—	—	—	—	—
JWM025	—	—	100	140	200	198	—	—	—	—
JWM050	—	—	—	—	200	221	250	229	—	—
JWM100	—	—	—	—	—	—	250	242	450	295
JWM150	—	—	—	—	—	—	250	247	450	300
JWM200	—	—	—	—	—	—	—	—	450	304

注：手轮为外购件，以定货时采购尺寸为准。
Note: The dimension of hand wheel is subject to product purchased from other factories.

12.4 双头输出 Double end output

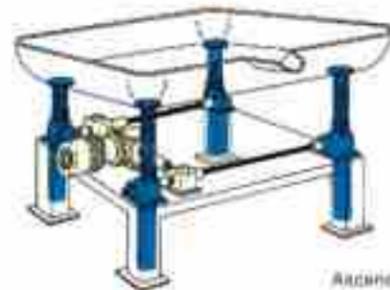
适用于开闭装置、反转装置。Apply to open and close devices, reversing devices.



12.5 带电机示意图 Link with the motor sketch:



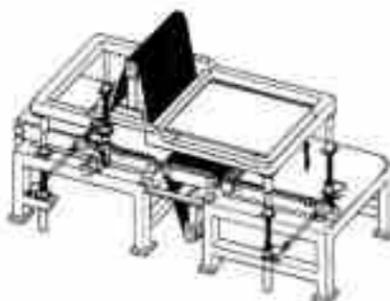
13. 应用举例 Application example



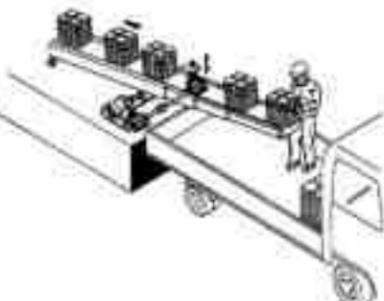
平台升降
Ascending and descending of flat slab



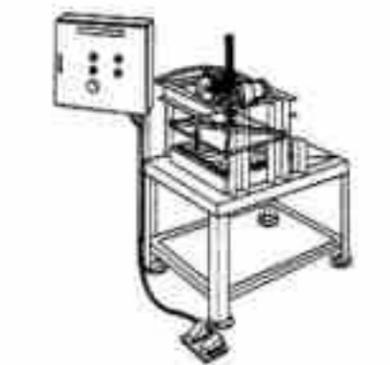
调整输送机传送带的倾斜程度
Adjust inclination pitch of conveyor apron



调整表面加工机的工作高度
Adjust operation height of surface-machining tool



大型窗户(门)自动开关
Automatic switch on large windows (doors)



更改校正器的作业高度
Operation height of straightening machine

