



## 禹神减速机 YUSHEN SPEED REDUCER

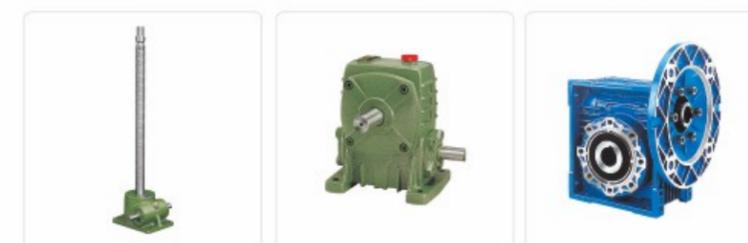
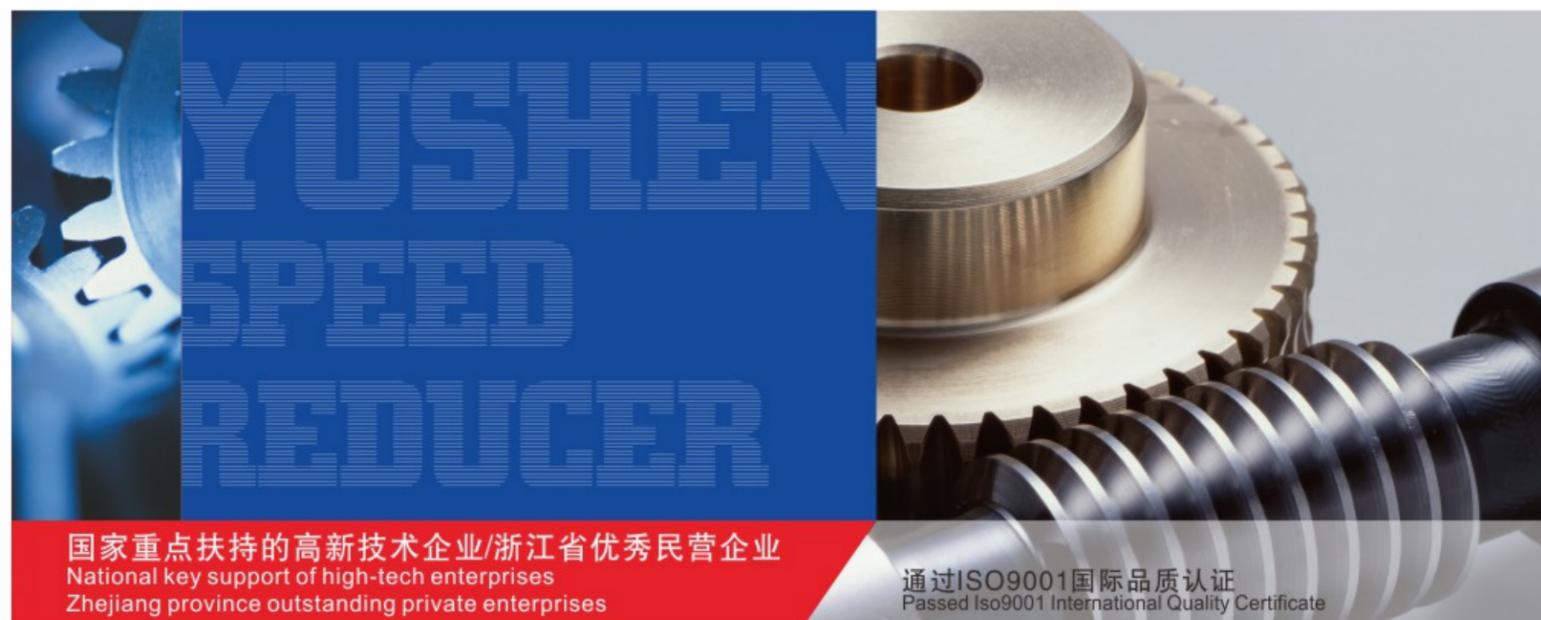


地址：中国杭州·萧山党山众安工业园  
销售热线·客服电话：+86-571-82536388  
电话：+86-571-8253 8068 8253 5033  
传真：+86-571-8253 7388  
邮编：311245

ADD: DANGSHAN INDUSTRIAL AREA, XIAOSHAN, HANGZHOU, CHINA  
TEL: +86-571-8253 6388 8253 5033  
FAX: +86-571-8253 7388

http://www.yushen.com  
E-mail: GMwilson@Yushen.com

经销商：



杭州禹神减速机有限公司  
HANGZHOU YUSHEN SPEED REDUCER CO.,LTD.



## 减速新概念 · 传动无极限

NEW REDUCER, DRIVE WITHOUT LIMIT

起步在行业蓬勃之初，成长在市场惊涛骇浪；

克服无数艰难险阻，一次次超越前人超越自我，开拓者的勇往直前！

Start at the beginning of the industry, growth in market waves;

Overcome numerous difficulties and obstacles,

and surmount forefathers to surpass ourselves and to pioneer the courage!

国家重点扶持的高新技术企业

浙江省优秀民营企业

National key support of high-tech enterprises

Zhejiang province outstanding private enterprises



# QUALITY

公司质量方针 POLICY OF COMPANY

- 顾客满意是禹神永远的追求  
Customer satisfaction is the eternal pursuit of yusheng
- 优质低耗是禹神最高的目标  
High quality and low consumption is the target of yusheng
- 开发创新是禹神兴旺的源泉  
Development and innovation is the resource of yusheng
- 持续改进是禹神发达的动力  
Sustained improvement is the power of yusheng

★国家重点扶持的高新技术企业/浙江省优秀民营企业  
National key support of high-tech enterprises  
Zhejiang province outstanding private enterprises

## 公司简介 BRIEF INTRODUCTION

国家重点扶持高新技术企业,浙江省优秀民营企业—杭州禹神减速机有限公司地处风景秀丽的钱塘江南岸杭州萧山,距浙江省省会城市杭州和国家级历史文化名城绍兴各25公里,离杭州萧山国际机场5公里,杭甬高速公路瓜沥出口仅2公里,交通十分便捷。

公司成立于1997年5月,前身为始建于1971年的萧山县长沙农机厂,三十多年来,坚持“团结、创业、专业、发展”的企业精神,开拓创新、务实奋进,现有资产近6千万元,同时拥有自营进出口权,“禹神”牌商标连续五次被杭州市工商局评定为杭州市著名商标。公司现有职工300余人,其中技术人员占80%;有新老两个厂区,总占地面积50000平方米,建筑面积35000平方米;主要设备有车、铣、刨、镗、磨等一系列完备的机械切削加工设备和铸造设备200余台,并配有进口立式加工中心、高精度蜗杆磨床、数控机床等设备。公司四大产业:减速机、喷灌机、门业、产品远销欧美等发达国家和地区。

公司注重技术进步,科技创新,积极引进人才,培养人才,引进高新技术,并与浙江大学有关单位合作,不断开发新产品,提高产品质量,因此,产品的技术水平一直处于行业领先地位,企业的经济效益也较为显著,公司建立和完善了ISO9001质量管理体系,产品历年通过国家、部、省级产品质量监督抽样检查。

我们将继续以领先的技术与管理带给您质量的保证;独特的企业文化,增强企业市场竞争力;全新的理念,塑造企业的品牌;我们始终遵循“追求无止境”和“一切为用户”的经营宗旨,以不断创新的精神,更优质的产品,更完善的服务去开创一个现代化的企业。

用科技、智慧和勤劳的双手托起现代化的明天!

National key support high and new technology enterprise, outstanding private enterprises in zhejiang province, hangzhou yu god speed reducer co., LTD is located in the beautiful qiantang river in xiaoshan of hangzhou, from the provincial capital city hangzhou and the national famous historical and cultural city of shaoxing, zhejiang province, each 25 kilometers, 5 kilometers away from hangzhou xiaoshan international airport, hangzhou-ningbo expressway guali export only 2 kilometers, traffic is very convenient.

In may the company was founded in 1997, the predecessor of xiaoshan county changsha machinery was founded in 1971, thirty years, adhere to the "unity, entrepreneurship, professional, development" spirit of enterprise, innovation, pragmatic endeavor, the existing assets of nearly 60 million yuan, the self-support right of import and export at the same time, "god yu" brand trademark for five consecutive times be evaluation for hangzhou city industrial and commercial bureau of hangzhou famous trademarks. Company existing staff 300 people, including technical staff account for 80%; With new and old two factory, the total area 50000 square meters, construction area of 35000 square meters; Major equipment have a car, milling, planing, boring, grinding and a series of complete mechanical machining equipment and casting equipment more than 200 sets, and is equipped with imported vertical machining center, high-precision worm grinder, CNC machine tool equipment, etc. Company: four industrial reducer, sprinkler, door industry, products are exported to Europe and the United States and other developed countries and regions.

Company pays attention to technological progress, technological innovation, and actively introduce talents, training talents, the introduction of high and new technology, and cooperate with the relevant units, zhejiang university, constantly develop new products, improve product quality, therefore, the product technology level is the industry leader, enterprise's economic benefits are significant, the company set up and perfect the ISO9001 quality management system, all products through the national, ministry, provincial product quality supervision and sampling inspection.

We will continue to leading technology and management to bring you quality assurance; Unique corporate culture, enhance the enterprise market competitiveness; New ideas, to build brand enterprises; We always follow "the pursuit of endless" and "all for users" business purposes, by the spirit of continuous innovation, better products, more perfect service to create a modern enterprise.

With the modernization of science and technology, intelligent and industrious hands hold up tomorrow!



## 禹神减速机 · 四大产业 YUSHEN SPEED REDUCER

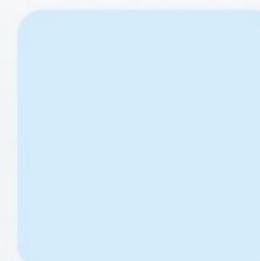
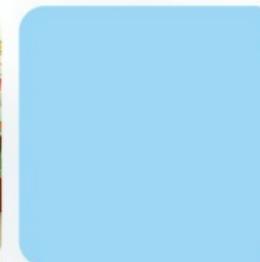
起步在行业蓬勃之初，成长在市场惊涛骇浪；克服无数艰难险阻，一次次超越前人超越自我，开拓者的勇往直前！  
Start at the beginning of the industry, growth in market waves; Overcome numerous difficulties and obstacles, and surmount forefathers to surpass ourselves and to pioneer the courage!



■ 禹神减速机系列  
YUSHEN Reducer serie



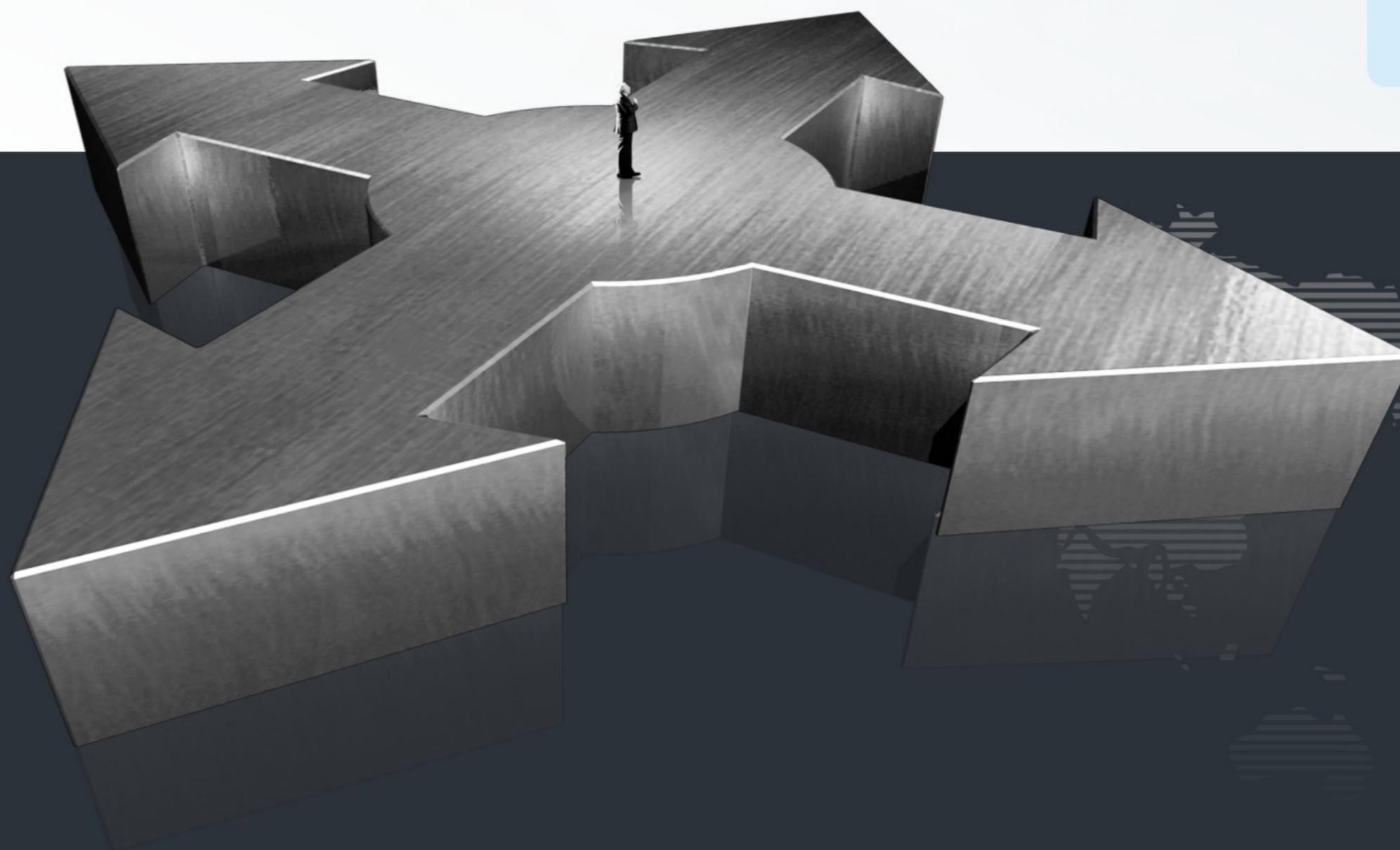
■ 禹神喷灌机系列  
YUSHEN Sprinkler serie



■ 禹神门业  
YUSHEN Door



■ 禹神铸造  
YUSHEN Casting





NMRV 多置式减速机	NMRV Multi-placed reductor	01/01
产品图片	Product Picture	02/04
产品结构	Product Structure	05/05
型号说明	Model Instructions	05/07
安装尺寸	Installation Dimensions	08/22
选型方法	Methods for Model Chosen	23/25
选型参数	Parameter for Model Chosen	26/42
WP产品结构图	Product Structural drawing	43/44
WP型号及表示法	Model andstruretable	44/44
单级WP系列	SingleWP Series	45/49
单级WPW系列	Single WPW Series	50/58
双级WPE系列	Double WPE Series	59/66
减速机选型方法	Reducer Selection Methods	67/69

二十余年 MORE THAN TEN YEARS  
THE DEVELOPMENT OF SURE-FOOTED  
发展步履稳健

## 企业目录 YUSHEN CONTENTS



承载能力表	Dynamical Capaci - Table	70/71
安装与使用	Insalland Usage	72/72
润滑油的选择使用	Choice Oflubricants	73/73
故障原因及解决方法	Solutionsand Reasonsf Or the General Faults	73/74
SWL蜗轮丝杆升降机	SWL Series Worm Wheel Screwe, Evator	75/76
概述	AN OVERVIEW OF THE	77/77
外形尺寸	Overall Dimensions	78/80
升降机的主要性能参数表	Capacity and Model Selection	81/81
升降机的选型说明	Elevator Selection	82/82
YRSS系列蜗轮丝杆升降机	Prodeuct Pictures Of TRSS Series	83/83
产品结构	Product Structure	84/84
型号说明	Model Instructions	84/84
安装尺寸	Installation Dimensions	85/87
选型方法	Methods for Model Chosen	88/92
选型参数	Parameter for Model Chosen	93/93
使用说明	Directions For Use	94/95
油品润滑	Lubricant	95/95
故障分析	Maifunctions Analysis	96/96



## 工艺及检测设备

PROCESS & TEST EQUIPMENT

# 1

禹神拥有行业领先的自动化制造设备,为零部件精度的不断提升给予持续的支持。  
YUSHEN has advanced automatic producing equipments which gives the continuous support to improving the precision of spare parts.



内修其身，外行其道，厚积方能薄发。  
地势厚，以承接上天，君子以厚德载物。

全面倡导“全程实战营销”，以专业素养和精锐团队为企业基石。

以创新超越、永不止步为发展理想，

以专业、敬业、诚信为服务精神，不断满足客户要求，

我们把客户的成功视为最终的目标，将企业的命运与客户的发展紧紧相连。

与客户一起快速成长，力求创造和谐共赢的远大宏景。

Within the body, lay the way, who can thin hair.

Is thick, to carry on the heaven, the gentleman hold world with virtue.

Comprehensively promote "practical marketing" all the way, with professional and elite team foundation for the enterprise.

With the ideal, to develop innovation beyond, never stop

In a professional, dedicated, the good faith for the service spirit, continue to meet customer requirements,

Fully exploiting project value, bring maximum benefits to customers.

The success of our customers as the ultimate goal, closely linked the fate of the enterprise and the development of the customer.

Rapid growth with customers, and strive to create harmony and win-win broad macro view.

## 工艺及检测设备 2

PROCESS & TEST EQUIPMENT

我们拥有先进而完善的检验设备,为零件及整机作精密的检测。  
We have advanced and perfect inspecting equipment to inspect the spare parts and whole machine precisely.

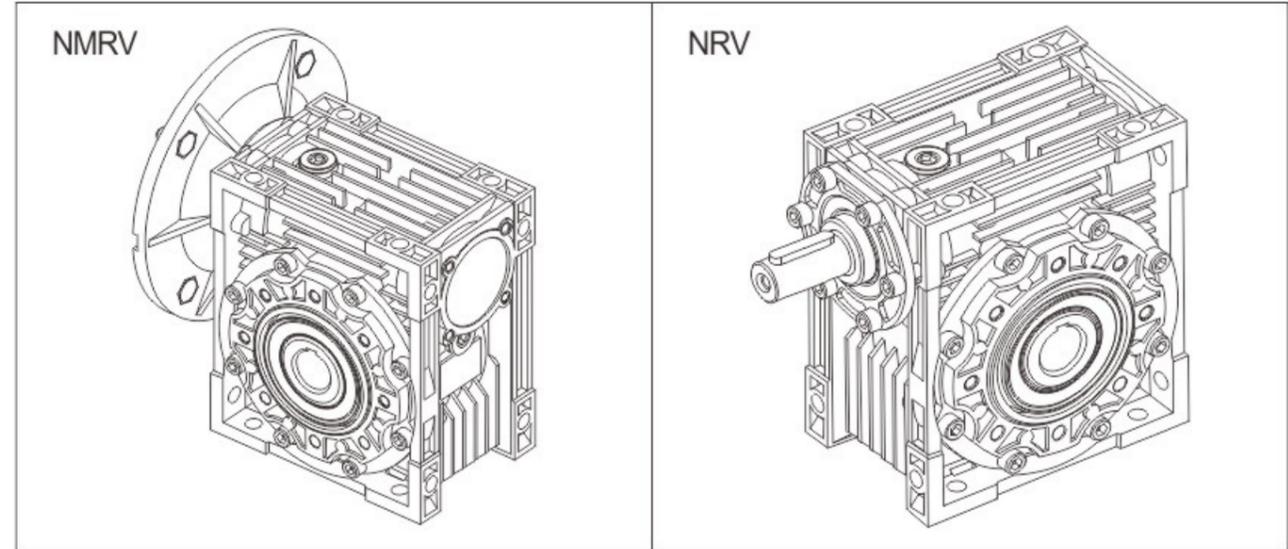


- 碳硫分析仪、电弧炉  
Carbon-sulphur analyser  
Arc furnace
- 铸铁综合性能液态  
在线智能检测仪  
Liquid on-line intelligent detector  
for cast-iron's comprehensive  
performance
- HB3000布氏硬度计、  
HR150洛氏硬度计  
HR3000 Brinell hardometer  
HR150 Rockwell hardometer
- 分析天平、三元素分析仪  
Analytical balance  
Three-element analyser
- 箱体模型工艺  
Housing model technology

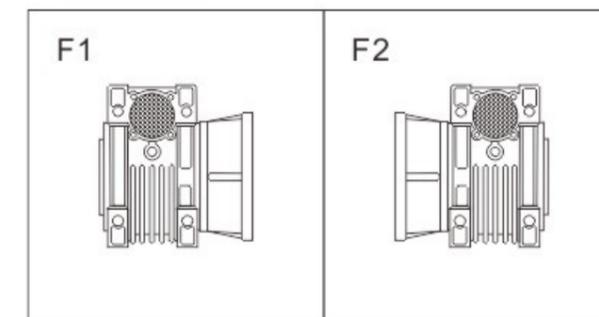
NMRV/NRV



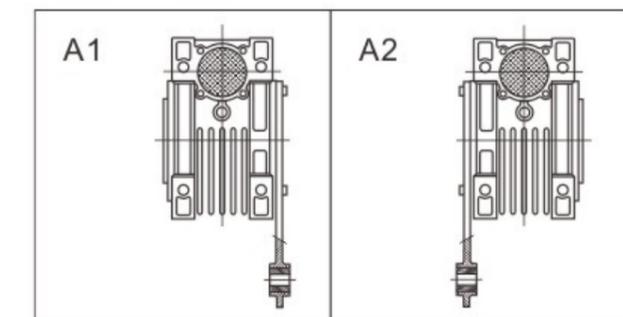
## NMRV/NRV



⊛ 法兰位置 Flange F-FL



⊛ 扭力臂配置 Pos. of torque arm



产品图片 Product Picture

NMRV



NMRV  
 (for servo motor)



NRV..F



NRV



NRV..VS



NMRV..VS



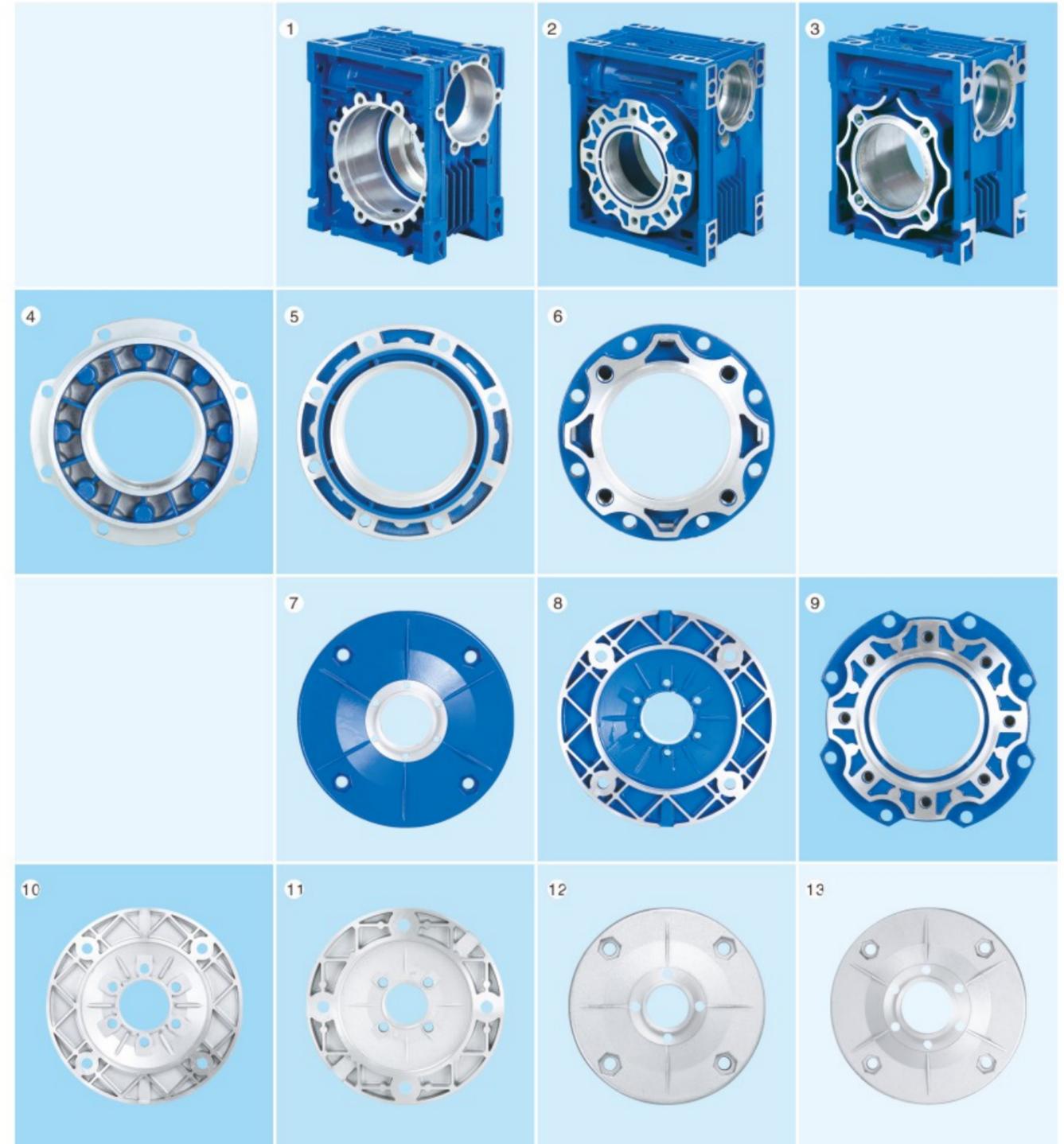
NMRV..F



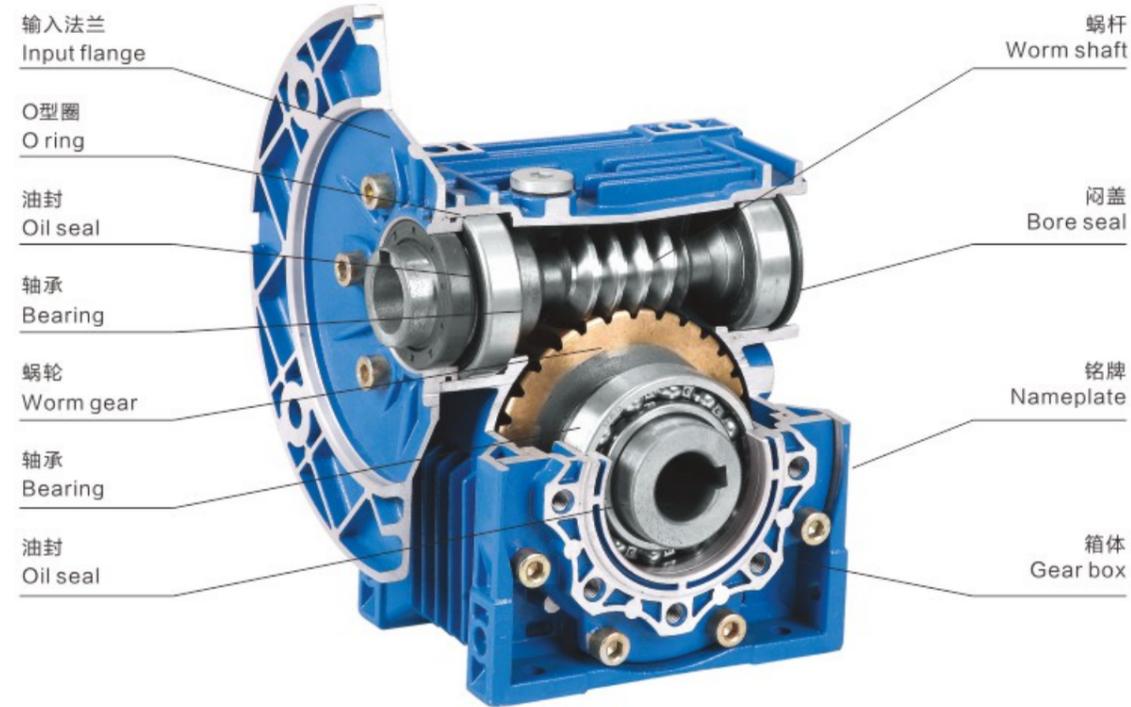
NMRV+NMRV



铝铸件 Aluminum casting



## 产品结构 Products Structure

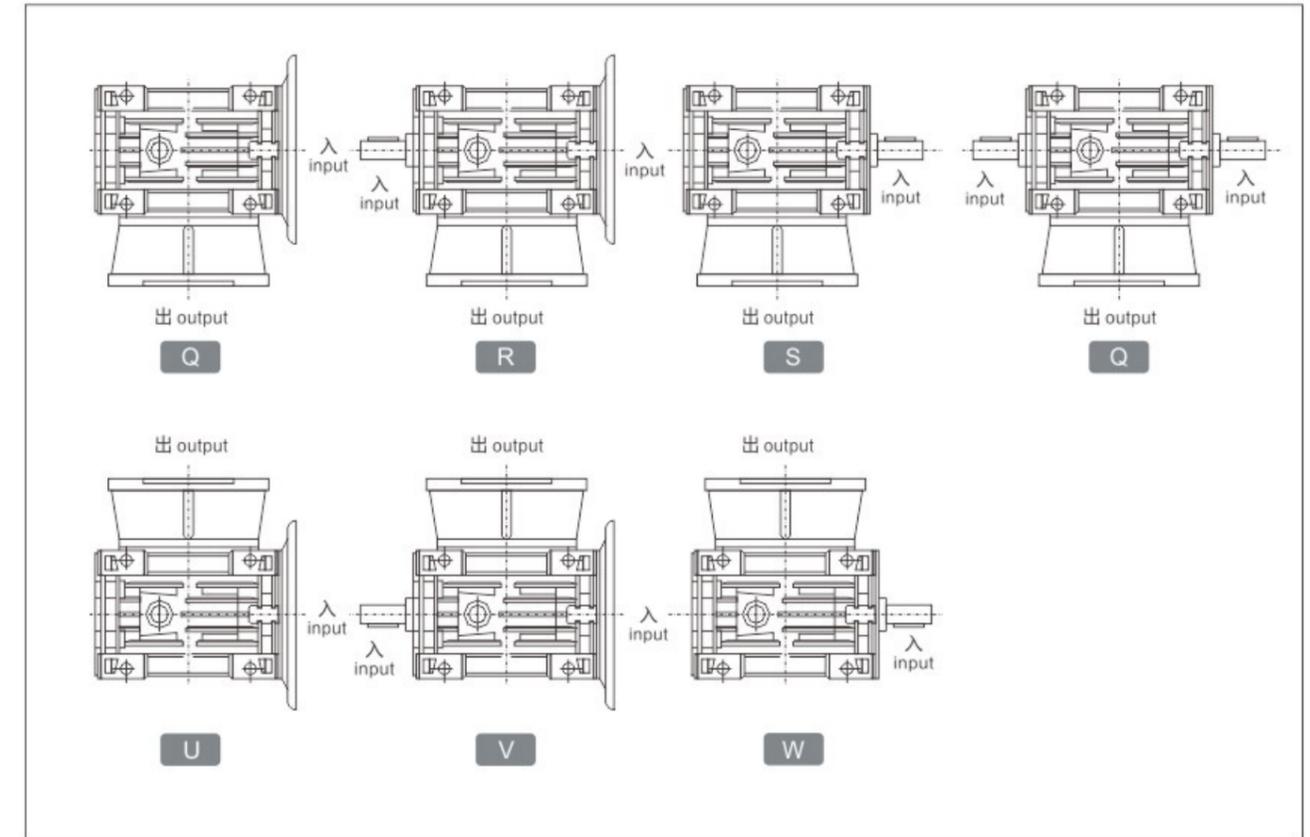


## 型号说明 Model Instruction

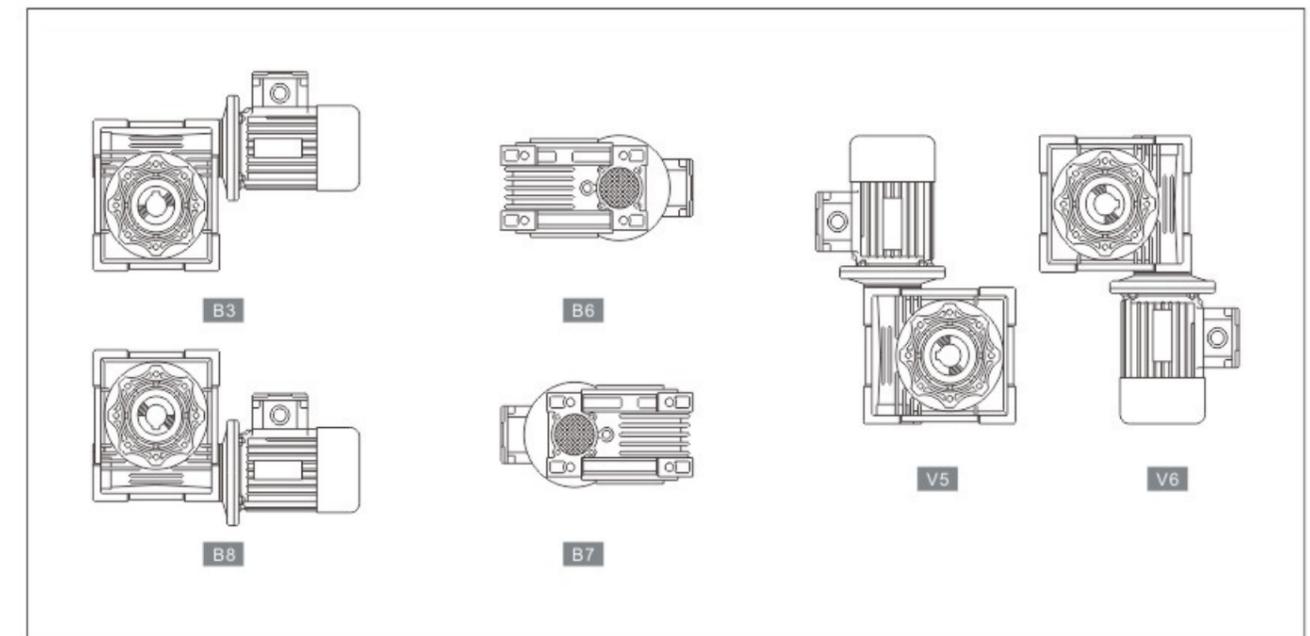
### NMRV 型号标记 NMRV Model

NMRV-063-30-VS-F1(FA)-AS-80B5-0.75kW-B3			
NMRV	蜗轮减速器 Worm Reducer		
NRV	蜗轮减速器 (配接输入轴) Worm Reducer (With input shaft)		
063	蜗轮减速器中心距 Center Dictance		
30	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	单向输入轴 Single output shaft	AB	双向输出轴 Double output shaft
PAM	电机连接 Electrical motor connection	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	B3	安装方位 Mounting position

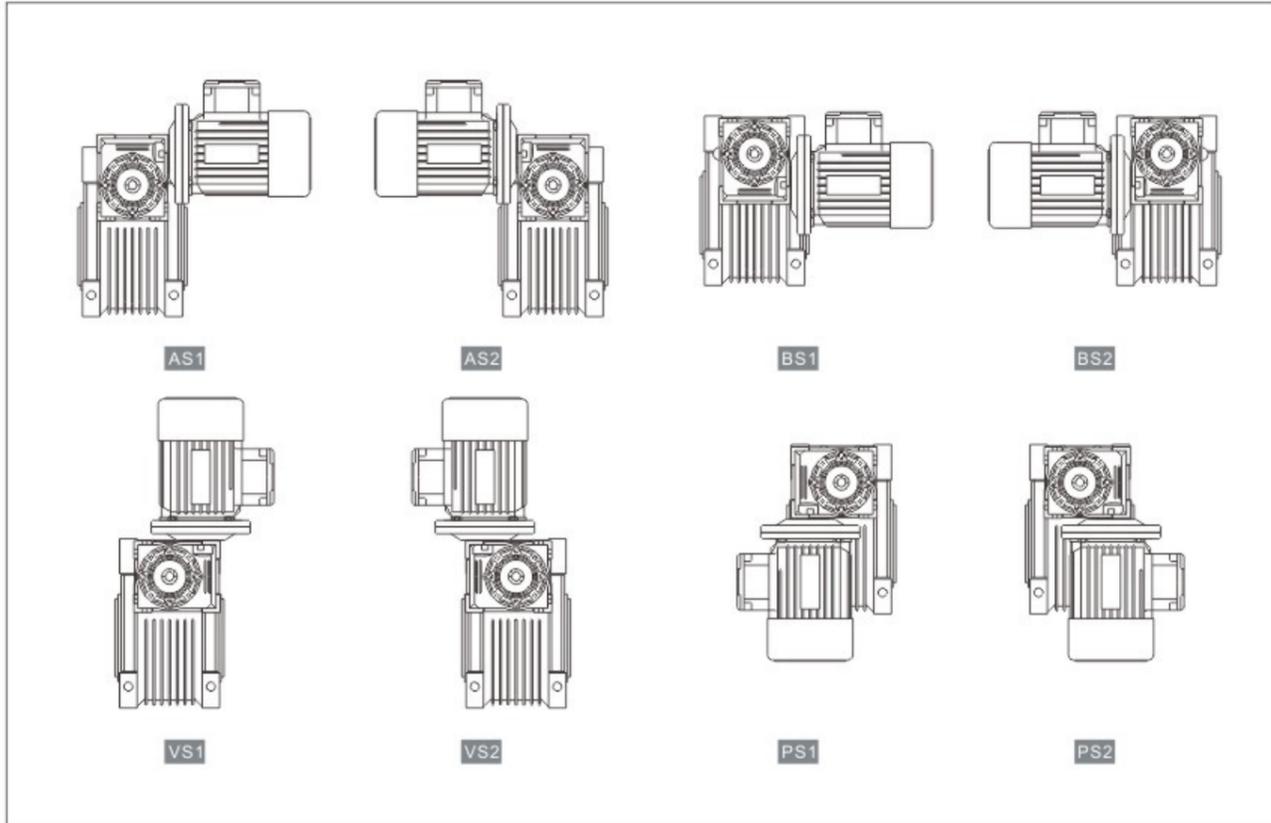
## 入力轴和输出法兰指向图 Directions of input shaft & output flange



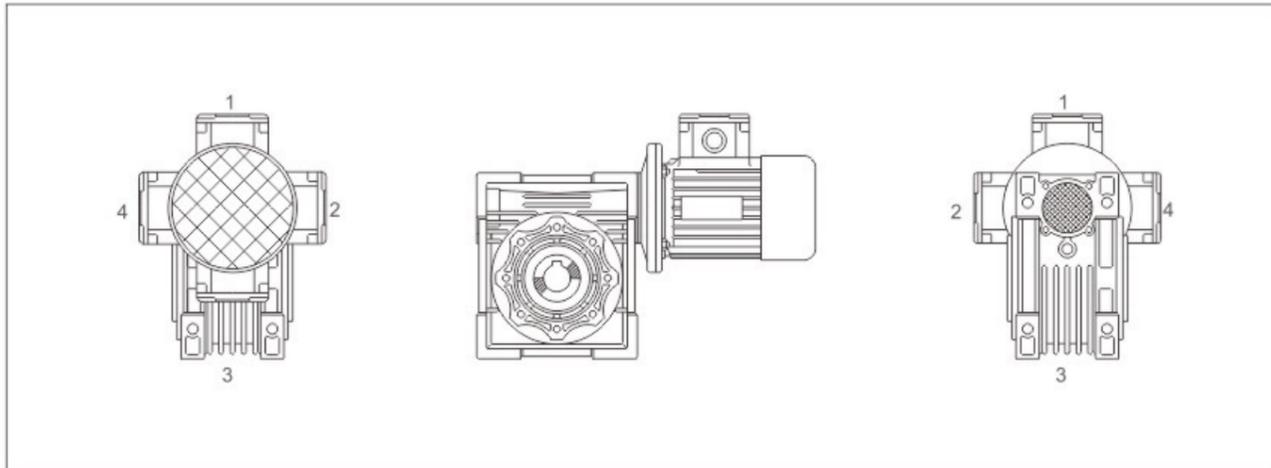
## 单级安装形式 Single Step Mounting Positions



## 双级安装形式 Double Step Mounting Positions

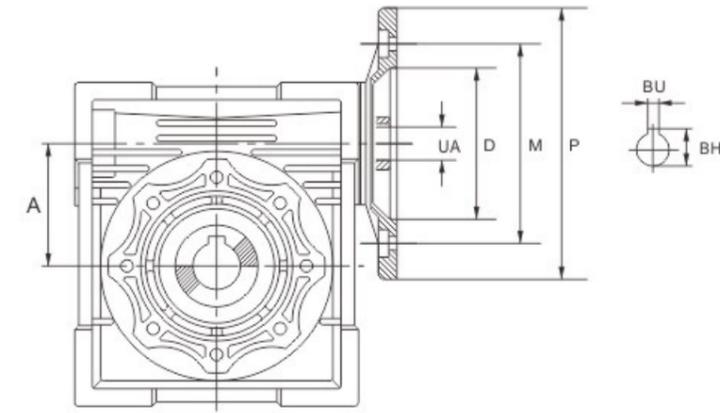


## 接线盒安装方式 Pos. of terminal box



## 安装尺寸 Mounting dimensions

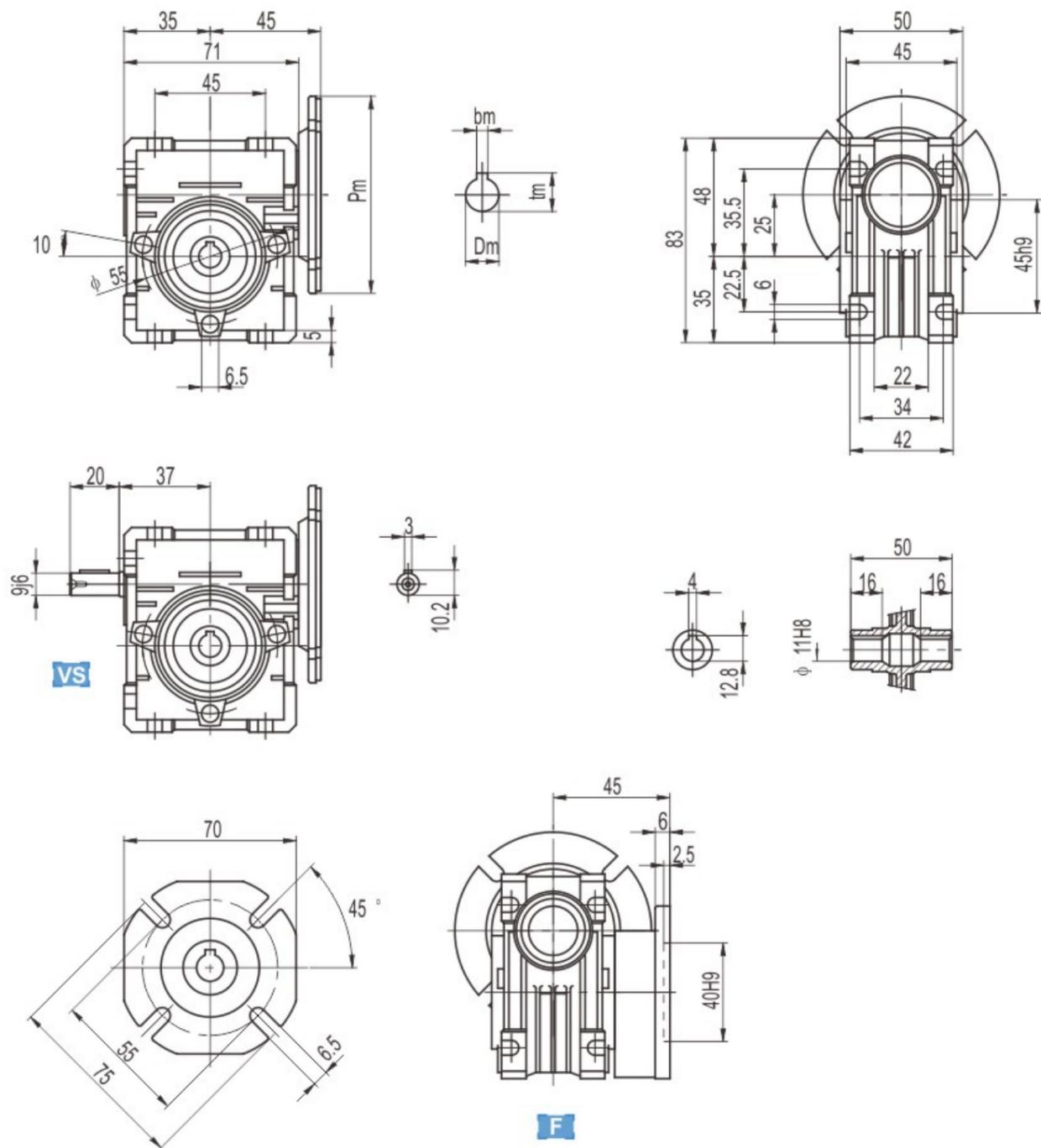
### 单级蜗杆减速机 Single Step Worm Gear Reducer



电机输入法兰 Motor Input Flange

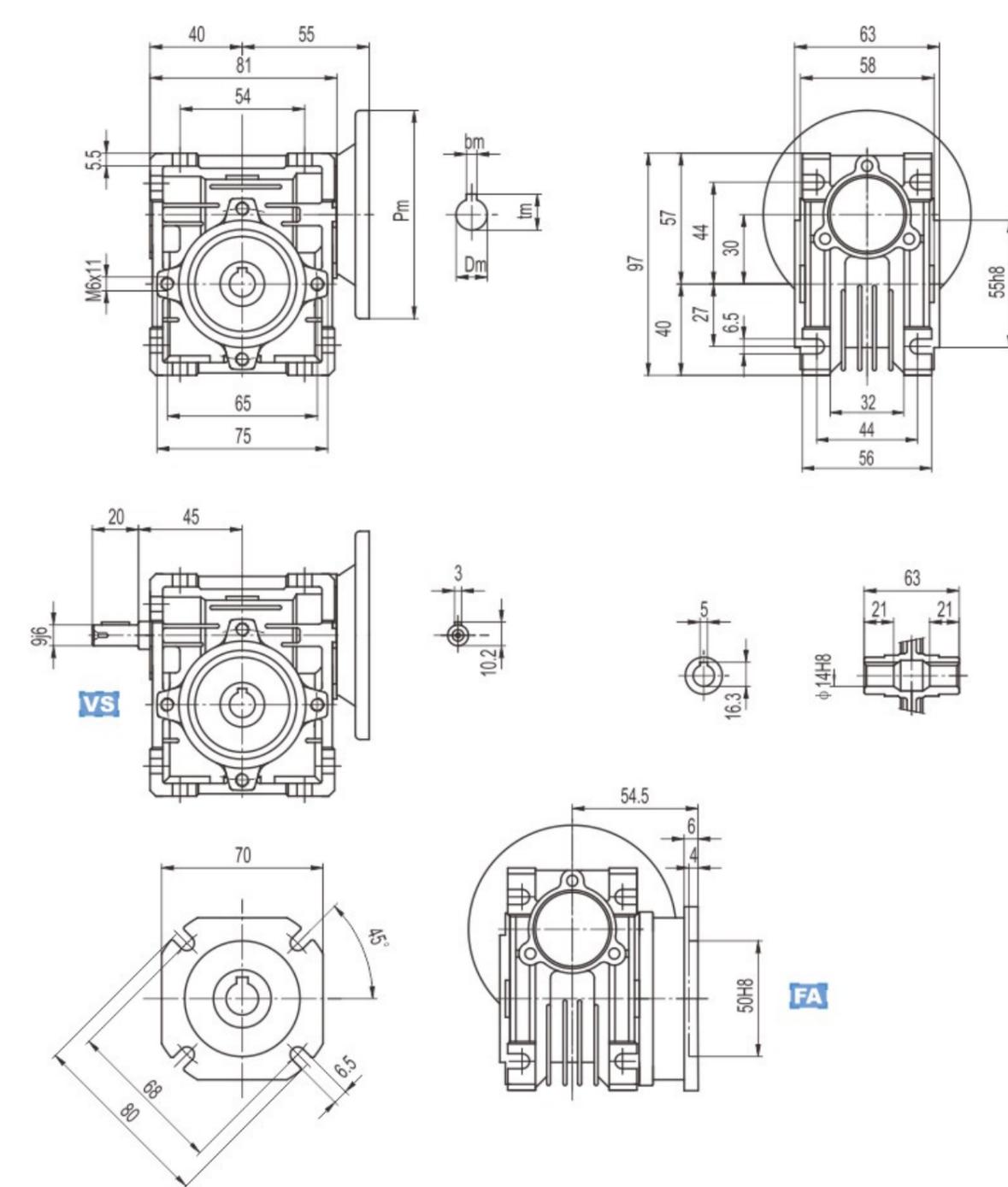
中心轴 Center Distance A	电机法兰 Motor Flange						输入轴孔直径 UA The Hole Diameter of Shaft											
	PAM IEC	D	M	P	BU	BH	传动比 i Transmission Ratio											
							7.5	10	15	20	25	30	40	50	60	80	100	
25	56B14	50	65	80	3	10.4	9	9	9	9	-	9	9	9	9	-	-	
	63B5	95	115	140	4	12.8	11	11	11	11	11	11	11	11	-	-	-	
	56B5	80	100	120	3	10.4	9	9	9	9	9	9	9	9	9	-	-	
30	56B14	50	65	80														
	71B5	110	130	160	5	16.3	14	14	14	14	14	14	14	-	-	-	-	
	71B14	70	85	105														
	63B5	95	115	140	4	12.8	-	-	-	11	11	11	11	11	11	11	-	
	63B14	60	75	90														
40	56B5	80	100	120	3	10.4	-	-	-	-	-	-	-	-	9	9	9	9
	80B5	130	165	200	6	21.8	19	19	19	19	19	19	19	-	-	-	-	
	80B14	80	100	120														
	71B5	110	130	160	5	16.3	-	14	14	14	14	14	14	14	14	14	-	
	71B14	70	85	105														
50	63B5	95	115	140	4	12.8	-	-	-	-	-	-	11	11	11	11	11	
	90B5	130	165	200	8	27.3	24	24	24	24	24	24	24	-	-	-	-	
	90B14	95	115	140														
	80B5	130	165	200	6	21.8	-	-	19	19	19	19	19	19	19	19	-	
	80B14	80	100	120														
63	71B5	110	130	160	5	16.3	-	-	-	-	-	-	14	14	14	14	14	
	71B14	70	85	105														
	100/112B5	180	215	250	8	31.3	28	28	28	-	-	-	-	-	-	-	-	
	100/112B14	110	130	160														
	90B5	130	165	200	8	27.3	-	24	24	24	24	24	24	24	-	-	-	
75	90B14	95	115	140														
	80B5	130	165	200	6	21.8	-	-	-	-	19	19	19	19	19	19	19	
	80B14	80	100	120														
	100/112B5	180	215	250	8	31.3	28	28	28	28	28	28	28	-	-	-	-	
	100/112B14	110	130	160														
90	90B5	130	165	200	8	27.3	-	-	-	24	24	24	24	24	24	-	-	
	90B14	95	115	140														
	80B5	130	165	200	6	21.8	-	-	-	-	-	-	19	19	19	19		
	80B14	80	100	120														
	132B5	230	265	300	10	41.1	38	38	38	38	-	-	-	-	-	-	-	
110	100/112B5	180	215	250	8	31.3	-	28	28	28	28	28	28	28	28	28	-	
	90B5	130	165	200	8	27.3	-	-	-	-	-	-	24	24	24	24	24	
130	132B5	230	265	300	10	41.1	38	38	38	38	38	38	38	38	-	-	-	
	100/112B5	180	215	250	8	31.3	-	-	-	28	28	28	28	28	28	28	28	
150	160B5	250	300	350	12	45.3	42	42	42	42	42	-	-	-	-	-	-	
	132B5	230	265	300	10	41.3	-	-	-	38	38	38	38	38	38	38	-	
	100/112B5	180	215	250	8	31.3	-	-	-	-	-	-	-	28	28	28	28	

减速机外形尺寸 Dimensions of gear box  
NMRV025



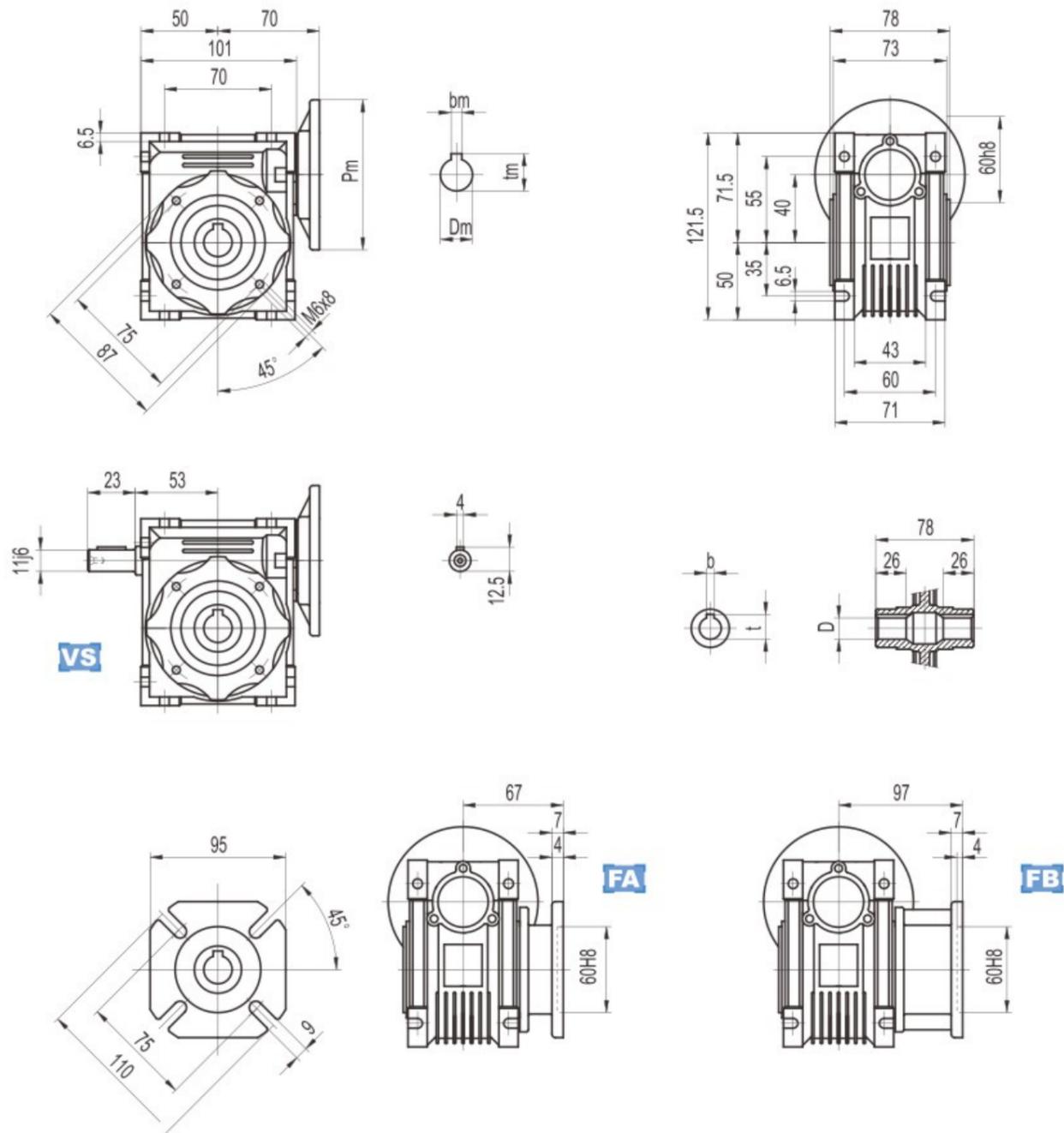
\* 不带电机重量为 :0.7kg  
\* 输入尺寸 ( Pm, Dm, bm, tm )  
\* Weight without motor:0.7kg  
\* input size (Pm, Dm, bm, tm)

NMRV030



\* 不带电机重量为:1.2kg  
\* 输入尺寸 ( Pm, Dm, bm, tm )  
\* Weight without motor:1.2kg  
\* input size (Pm, Dm, bm, tm)

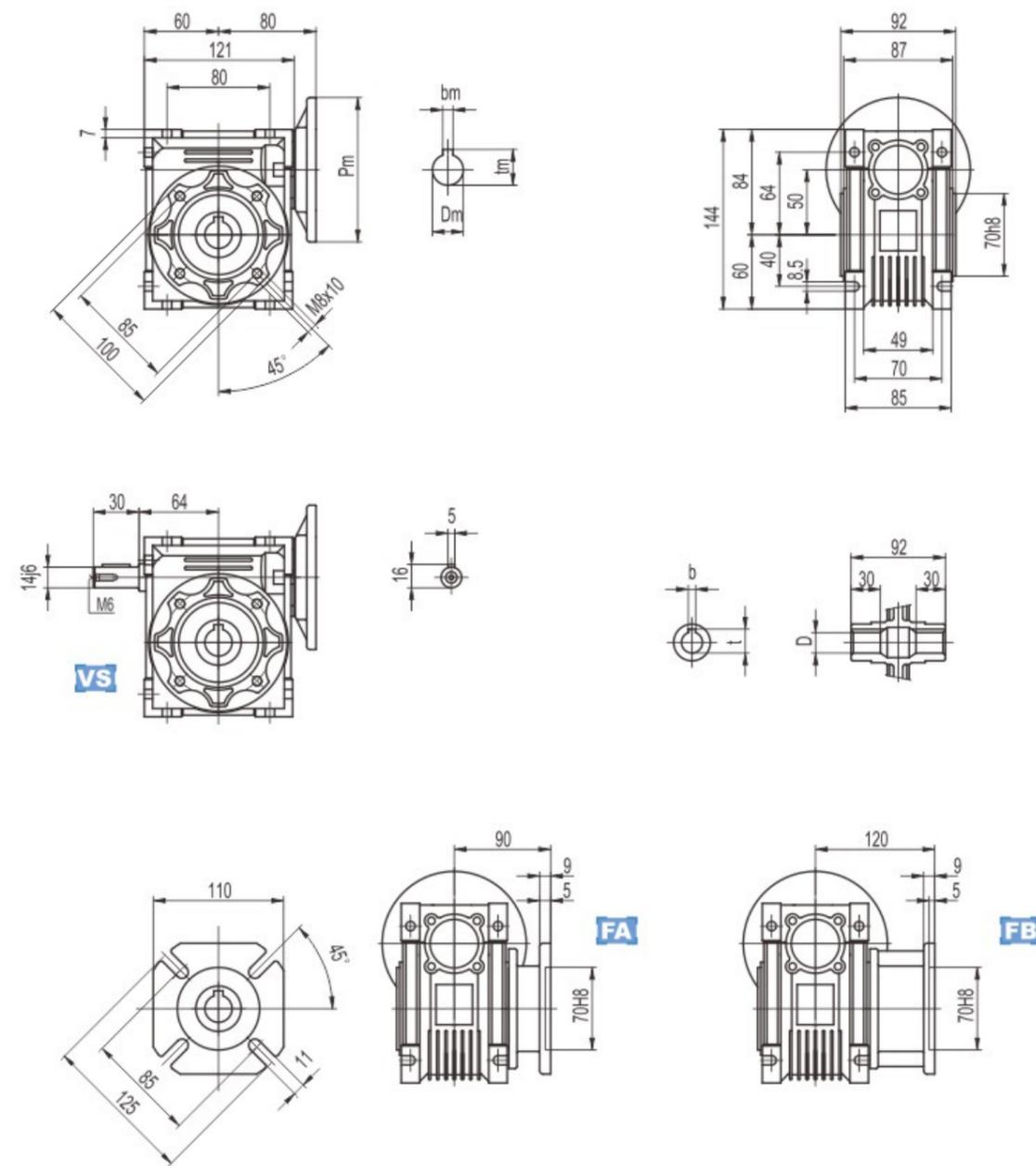
NMRV040



输出/Output		
D H8	b	t
18	6	20.8
(19)	(6)	(21.8)

(..) 根据用户要求定制  
\* 不带电机重量为: 2.3kg  
\* 输入尺寸 (Pm, Dm, bm, tm)  
(..) Only on request  
\* Weight without motor: 2.3kg  
\* input size (Pm, Dm, bm, tm)

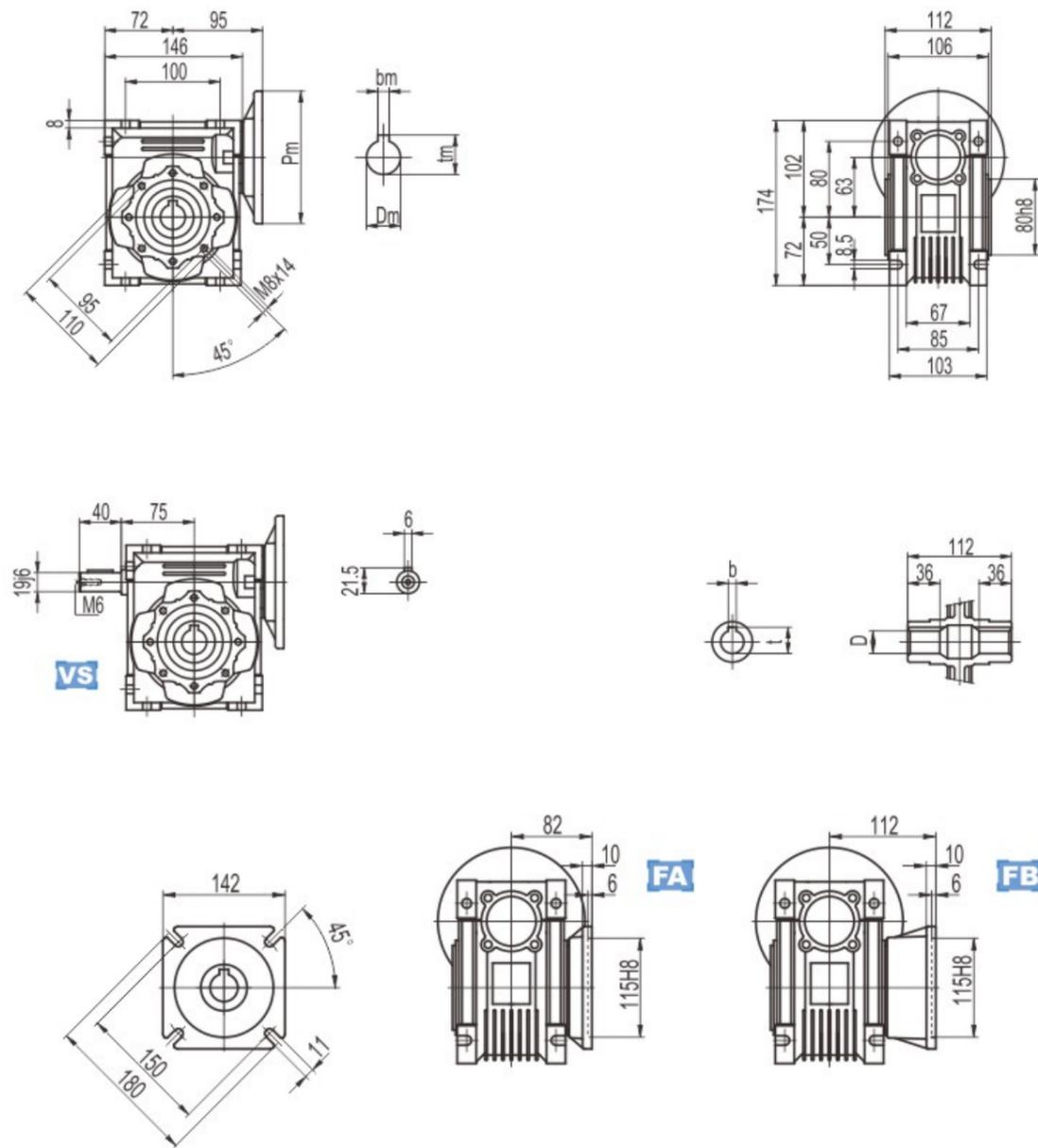
NMRV050



输出/Output		
D H8	b	t
25	8	28.3
(24)	(8)	(27.3)

(..) 根据用户要求定制  
\* 不带电机重量为: 3.5kg  
\* 输入尺寸 (Pm, Dm, bm, tm)  
(..) Only on request  
\* Weight without motor: 3.5kg  
\* input size (Pm, Dm, bm, tm)

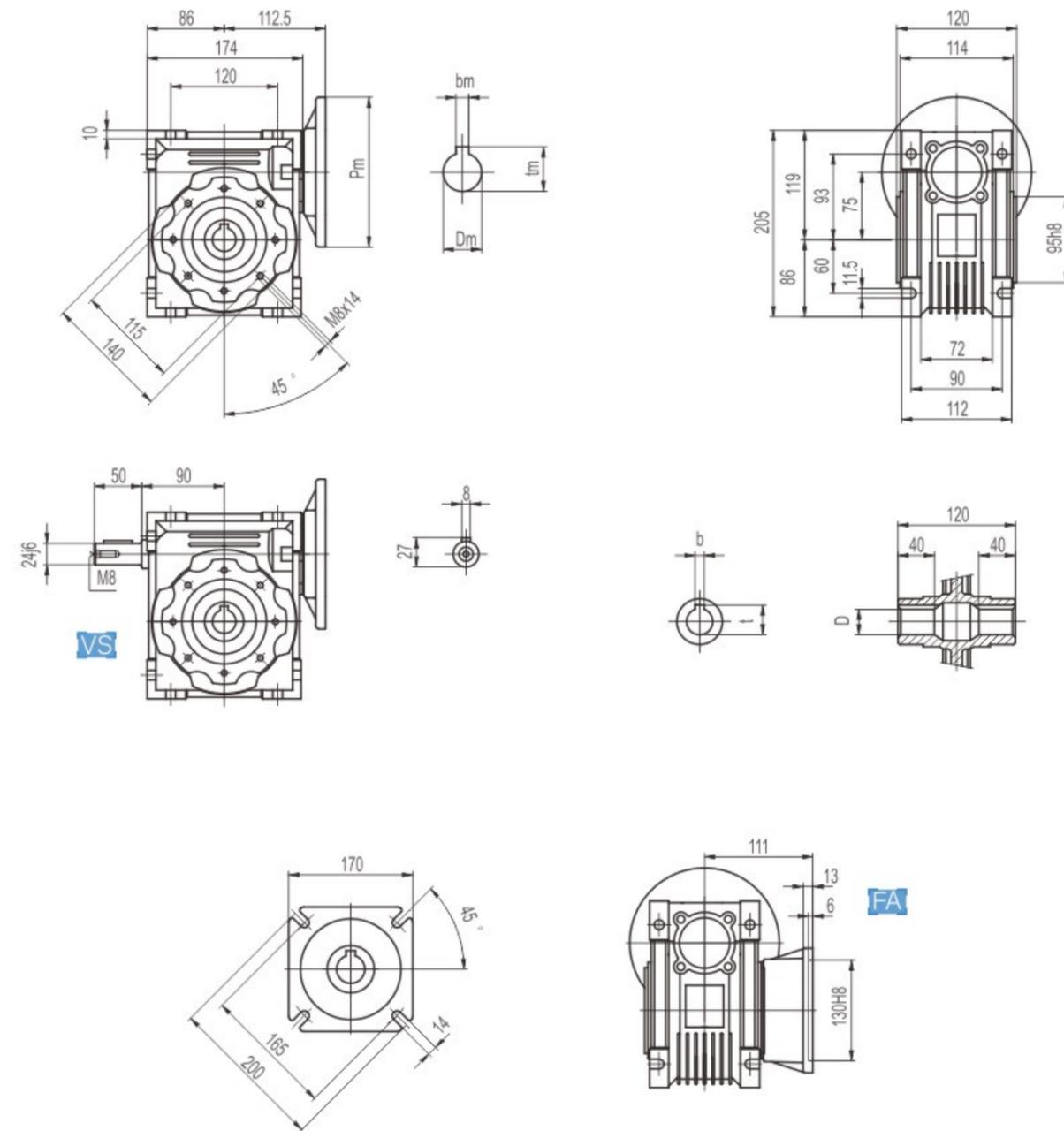
NMRV063



输出/Output		
D H8	b	t
25	8	28.3
(28)	(8)	(31.3)

(.) 根据用户要求定制  
\* 不带电机重量为: 6.2kg  
\* 输入尺寸 (Pm, Dm, bm, tm)  
(.) Only on request  
\* Weight without motor: 6.2kg  
\* input size (Pm, Dm, bm, tm)

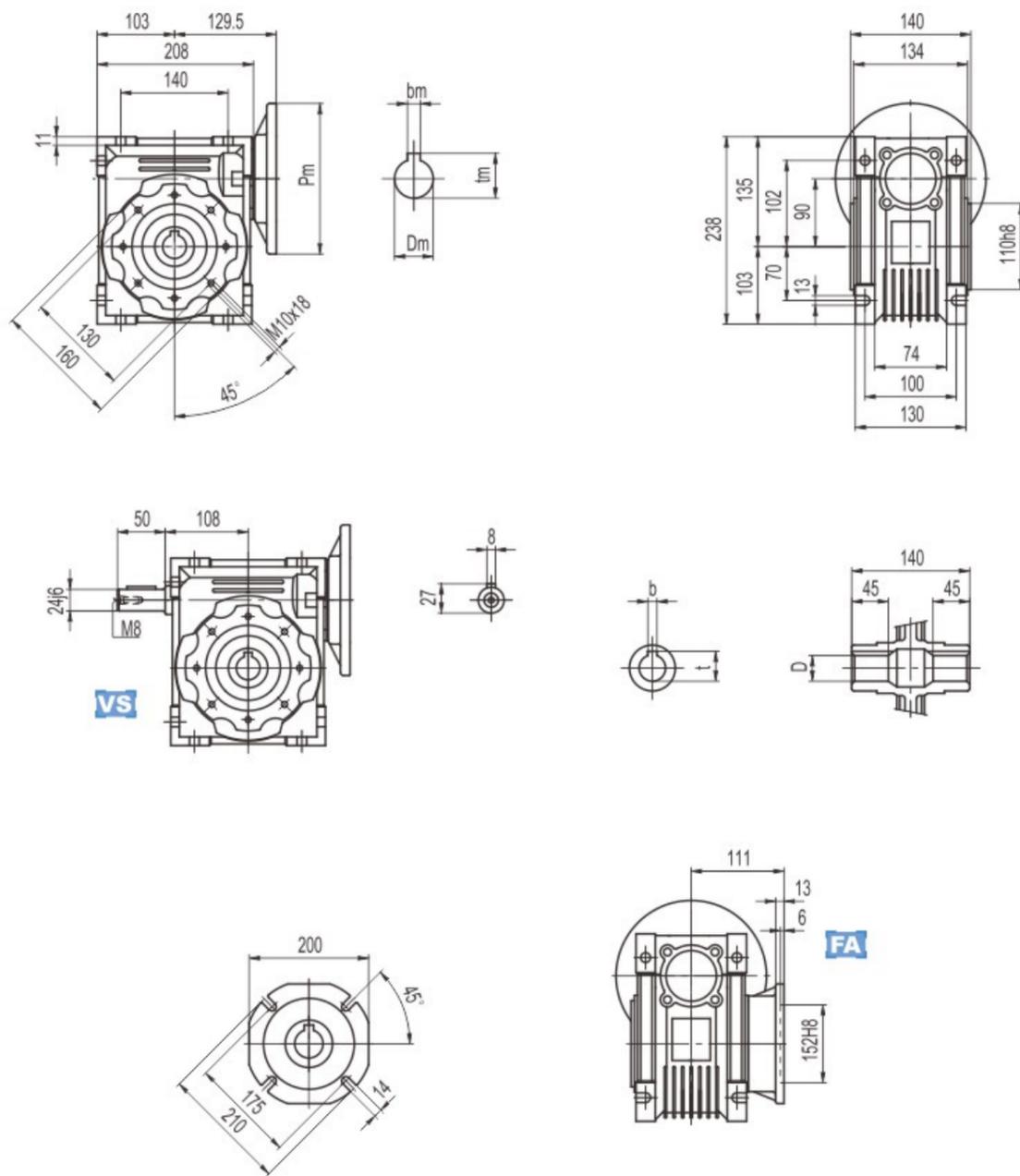
NMRV075



输出 /Output		
D H8	b	t
28	8	31.3
(35)	(10)	(38.3)

(.) 根据用户要求定制  
\* 不带电机重量为: 9kg  
\* 输入尺寸 (Pm, Dm, bm, tm)  
(.) Only on request  
\* Weight without motor: 9kg  
\* input size (Pm, Dm, bm, tm)

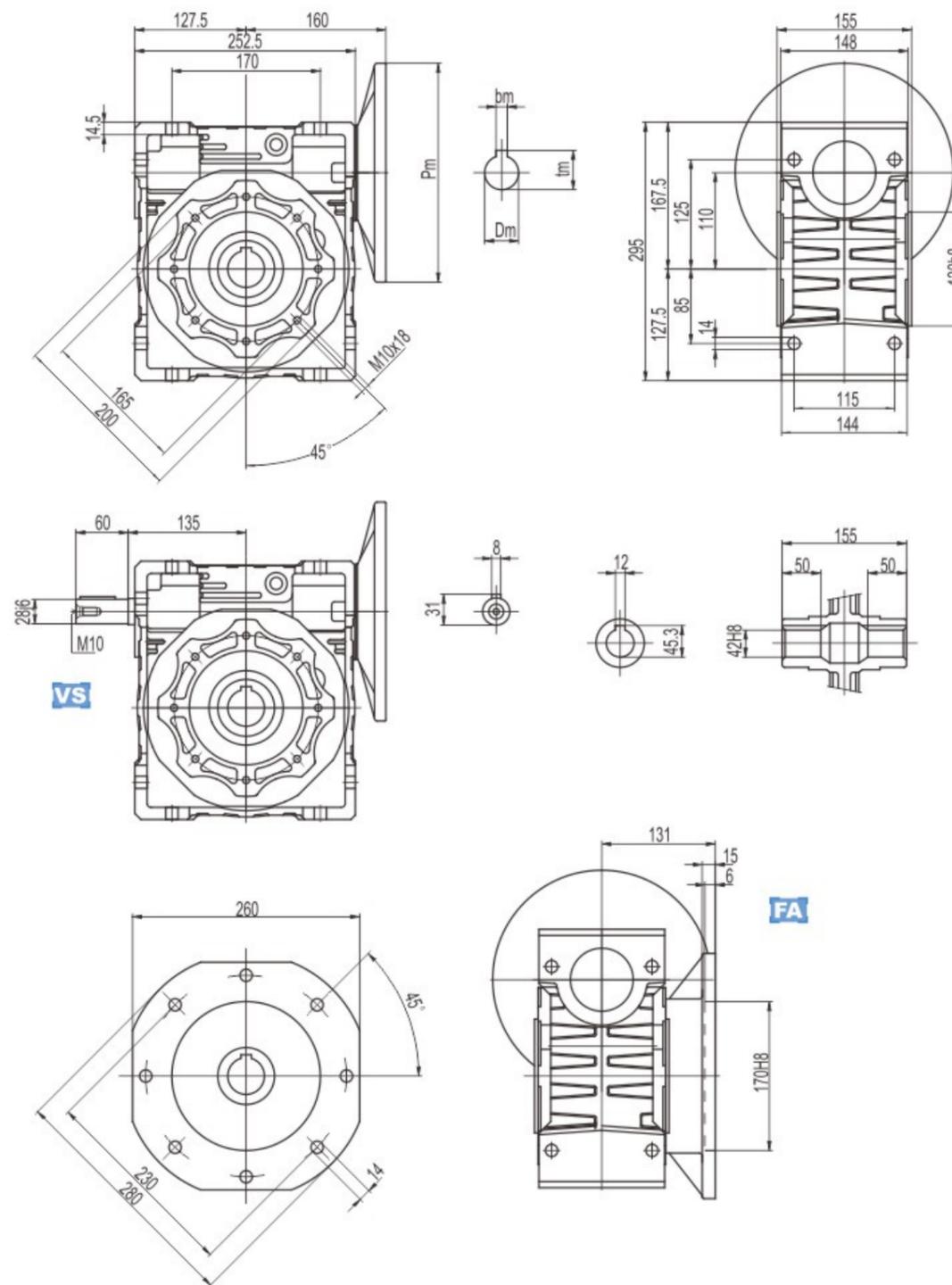
NMRV090



输出/Output		
D H8	b	t
35 (38)	10 (10)	38.3 (41.3)

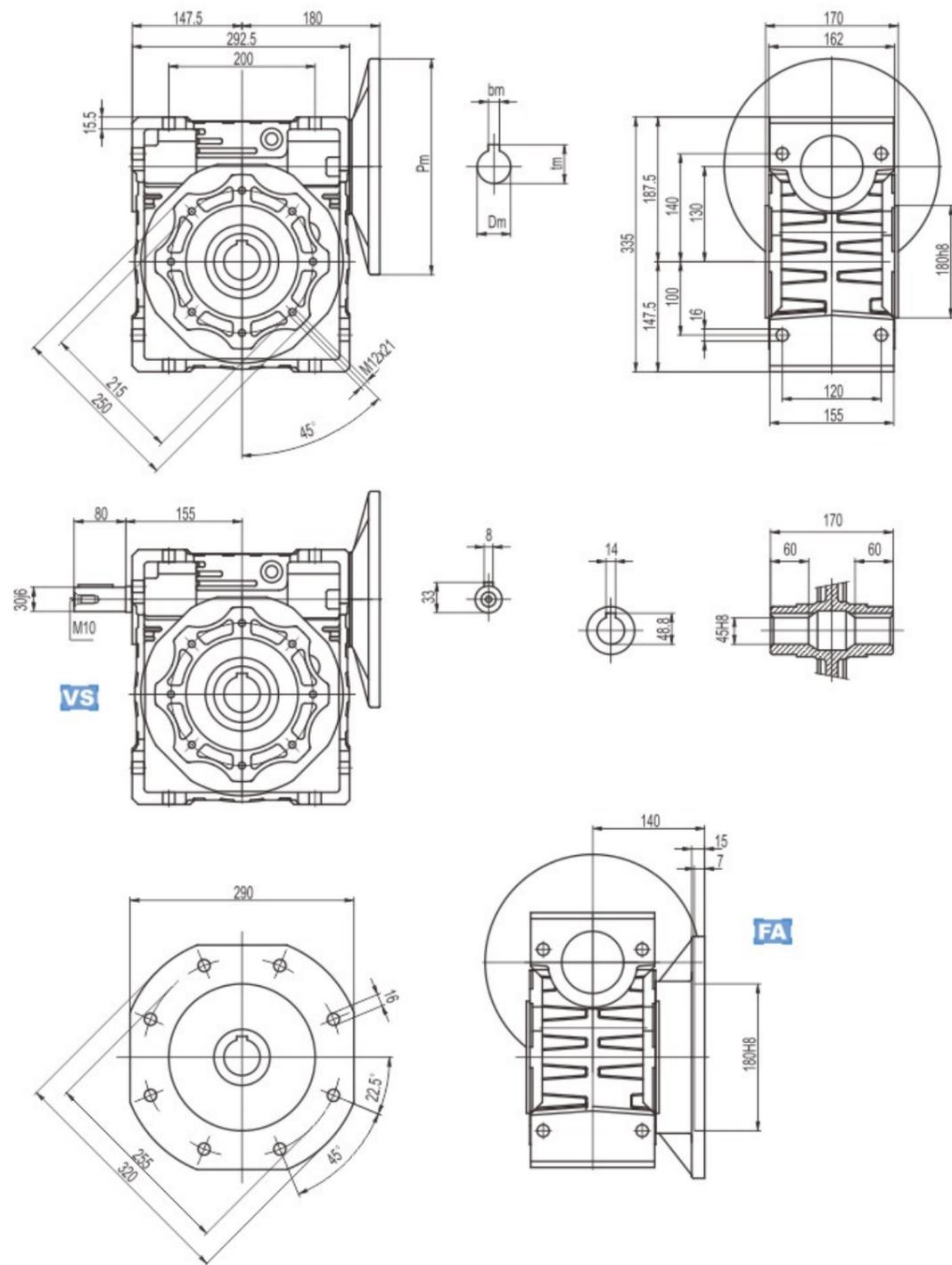
(.) 根据用户要求定制  
\* 不带电机重量为:13kg  
\* 输入尺寸 (Pm, Dm, bm, tm)  
(.) Only on request  
\* Weight without motor:13kg  
\* input size (Pm, Dm, bm, tm)

NMRV110



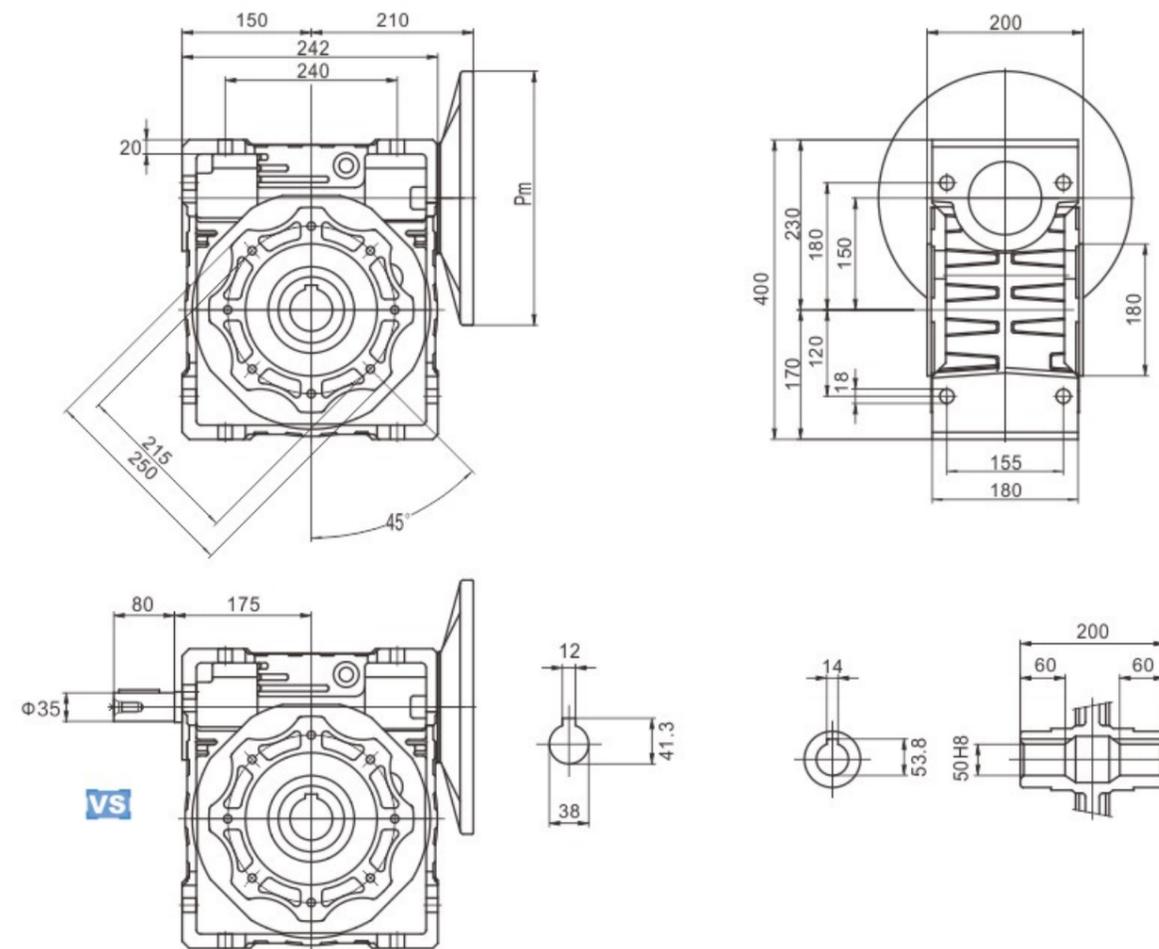
\* 不带电机重量为:35kg  
\* 输入尺寸 (Pm, Dm, bm, tm)  
\* Weight without motor:35kg  
\* input size (Pm, Dm, bm, tm)

NMRV130



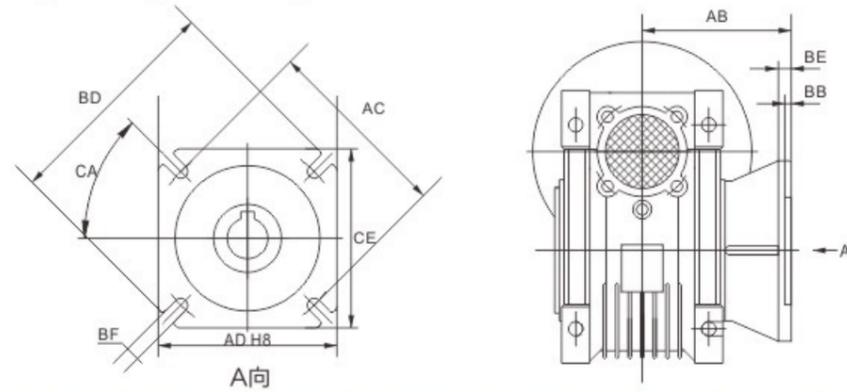
- \* 不带电机重量为:48kg
- \* 输入尺寸 (Pm, Dm, bm, tm)
- \* Weight without motor:48kg
- \* input size (Pm, Dm, bm, tm)

NMRV150



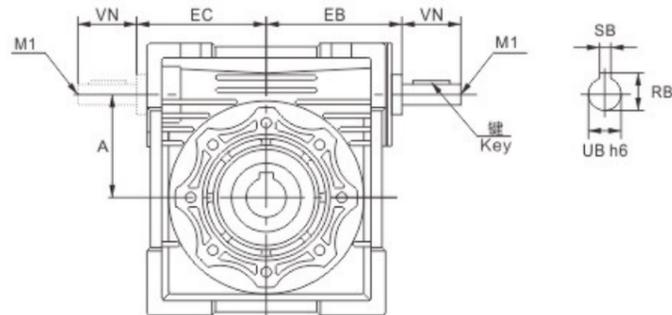
- \* 不带电机重量为:87.8kg
- \* 输入尺寸 ( Pm, Dm, bm, tm )
- \* Weight without motor:87.8kg
- \* input size (Pm, Dm, bm, tm)

输出法兰安装尺寸 Output Flange Mounting Dimensions



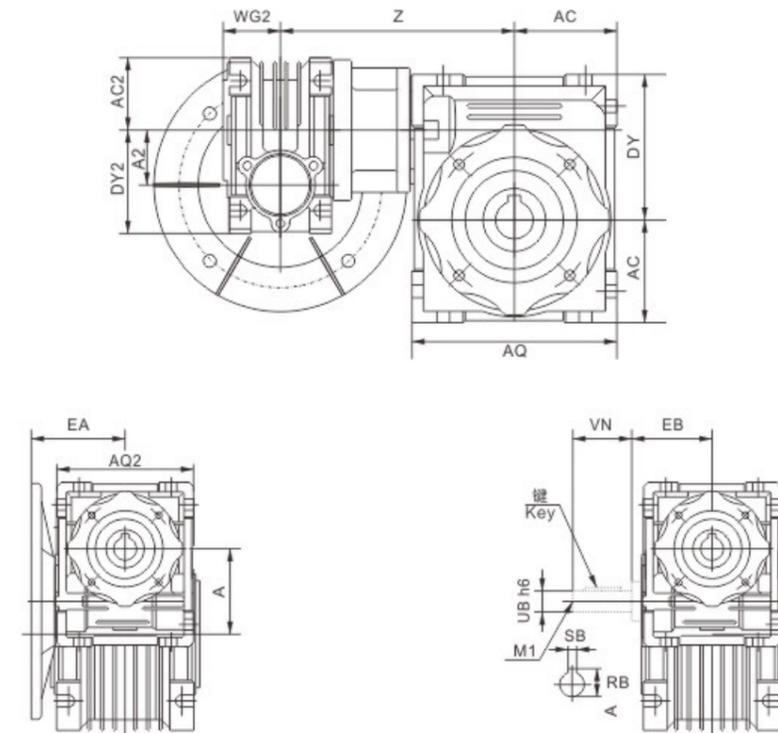
	25	30	40	50	63	75	90	110	130	150
AB	45	54.5	67	90	82	102	111	131	140	155
AC	55	68	80	85	150	165	175	230	255	255
AD	40	50	60	70	115	130	152	170	180	180
AE	3	4	4	5	6	6	6	6	6	7
BD	75	80	110	125	180	200	210	280	320	320
BE	6	6	7	9	10	13	13	15	15	15
BF	6.5(n.4)	6.5(n.4)	9(n.4)	11(n.4)	11(n.4)	14(n.4)	14(n.4)	Φ14(n.8)	Φ16(n.8)	Φ16(n.8)
CA	45°	45°	45°	45°	45°	45°	45°	45°	22.5°	22.5°
CE	70	70	95	110	142	170	200	260	290	290

NMRV(VS) 安装尺寸 NMRV(VS) Mounting Dimensions



	30	40	50	63	75	90	110	130	150
A	30	40	50	63	75	90	110	130	150
EB	50	61	74	90	105	125	142	162	195
EC	45	53	64	75	90	108	135	155	175
M1	-	-	M6	M6	M8	M8	M10	M10	M12
RB	10.2	12.5	16	21.5	27	27	31	33	33
SB	3	4	5	6	8	8	8	8	10
UB	9	11	14	19	24	24	28	30	35
VN	20	23	30	40	50	50	60	80	80
输入轴平键									
规格	3x3	4x4	5x5	6x6	8x7	8x7	8x7	8x7	10x8
长度	15	20	25	35	45	45	55	70	70

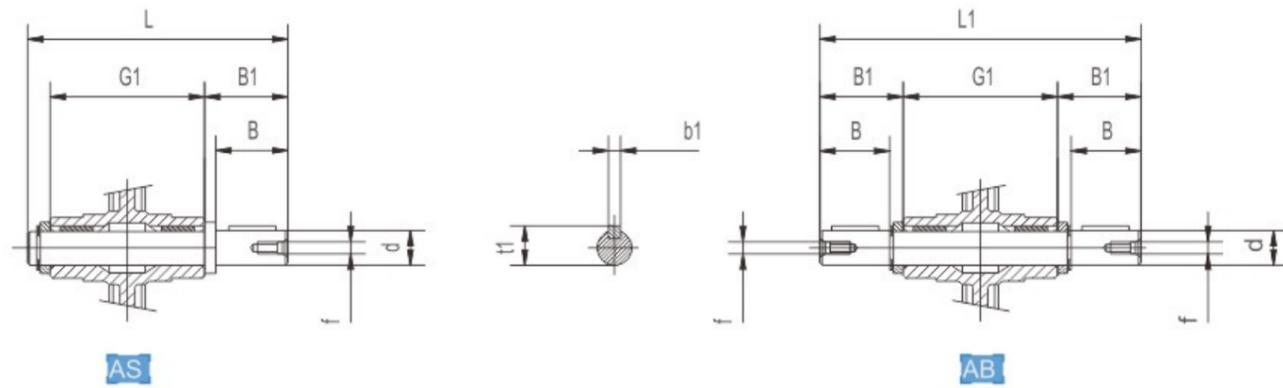
双级蜗杆减速机 Double Step Worm Gear Reducer  
 NMRV(D) 安装尺寸 NMRV(D) Mounting Dimensions



	25/30	25/40	30/40	30/50	30/63	40/75	40/90	50/110	63/130	63/150
A	30	40	40	50	63	75	90	110	130	150
A2	25	25	30	30	30	40	40	50	63	63
AC	40	50	50	60	72	86	103	127.5	147.5	170
AC2	35	35	40	40	40	50	50	60	72	72
AQ	80	100	100	120	144	172	206	252.5	292.5	340
AQ2	70	70	80	80	80	100	100	120	144	144
DY	57	71	71	84	102	119	135	167.5	187.5	230
DY2	48	48	57	57	57	71	71	84	102	102
EA	45	63	63	63	63	71	71	80	95	95
EB	-	-	50	50	50	61	61	74	90	90
M1	-	-	-	-	-	-	-	M6	M6	M6
RB	-	-	10.2	10.2	10.2	12.5	12.5	16	21.5	21.5
SB	-	-	3	3	3	4	4	5	6	6
UB	-	-	9	9	9	11	11	14	19	19
VN	-	-	20	20	20	23	23	30	40	40
WG2	22.5	22.5	29	29	29	36.5	36.5	43.5	53	53
Z	100	115	122	132	145	167.5	184.5	226	245	275
输入轴平键										
规格	-	-	3x3	3x3	3x3	4x4	4x4	5x5	6x6	6x6
长度	-	-	15	15	15	20	20	25	35	35

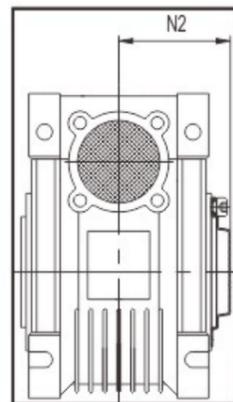
附件 Accessories

单 (AS) / 双出轴 (AB) Single & Double Output Shaft



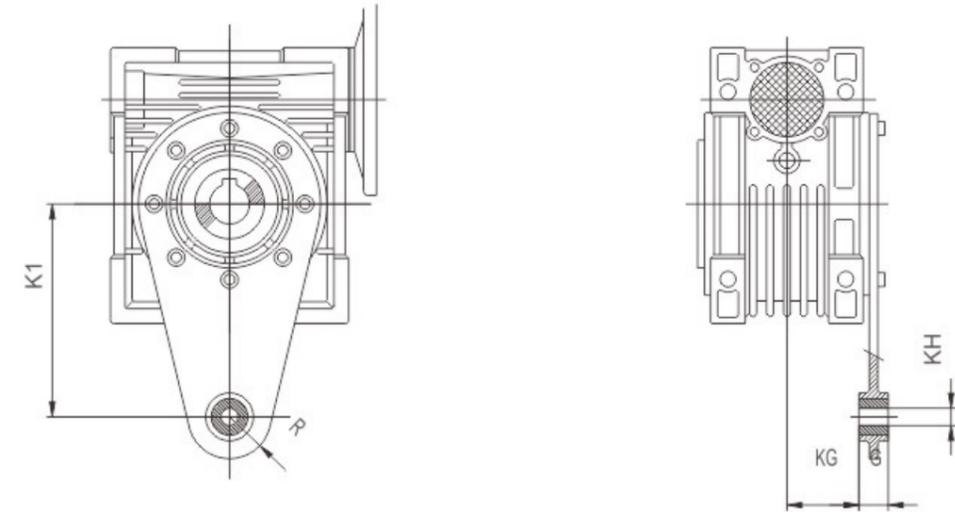
	d	B	B1	G1	L	L1	f	b1	t1
025	11g6 (9)	23 (25)	25.5 (30)	50	81 (85.5)	101	-	4(3)	12.5 (10.2)
030	14g6	30	32.5	63	102	128	M6	5	16
040	18h6	40	43	78	128	164	M6	6	20.5
050	25h6	50	53.5	92	153	199	M10	8	28
063	25h6	50	53.5	112	173	219	M10	8	28
075	28h6	60	63.5	120	192	247	M10	8	31
090	35h6	80	84.5	140	234	309	M12	10	38
110	42h6	80	84.5	155	249	324	M16	12	45
130	45h6	80	85	170	265	340	M16	14	48.5

保护罩 Protection cover



	N2
030	42
040	50
050	58
063	69
075	74
090	86
110	94
130	102

扭力臂 Torque arm



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

## 选型方法 Method for model chosen

为正确选择NMRV蜗杆减速机，敬请用户首先了解以下几点：

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

- 负荷条件
- 使用转速范围或速比 (与双级组合可获得超低输出转速)
- 工作运转情况及环境 (温度、湿度、腐蚀等)
- 安装空间
- Loading condition.
- Speed scope or ratio in application.
- Working condition and environment.
- Installation space.

确定工作情况系数K1及工作情况修正系数K2

Define working condition Coefficient K1 and revise coefficient 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中求得工作情况系数K1
- 根据表2，查取工作情况修正系数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 (time/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

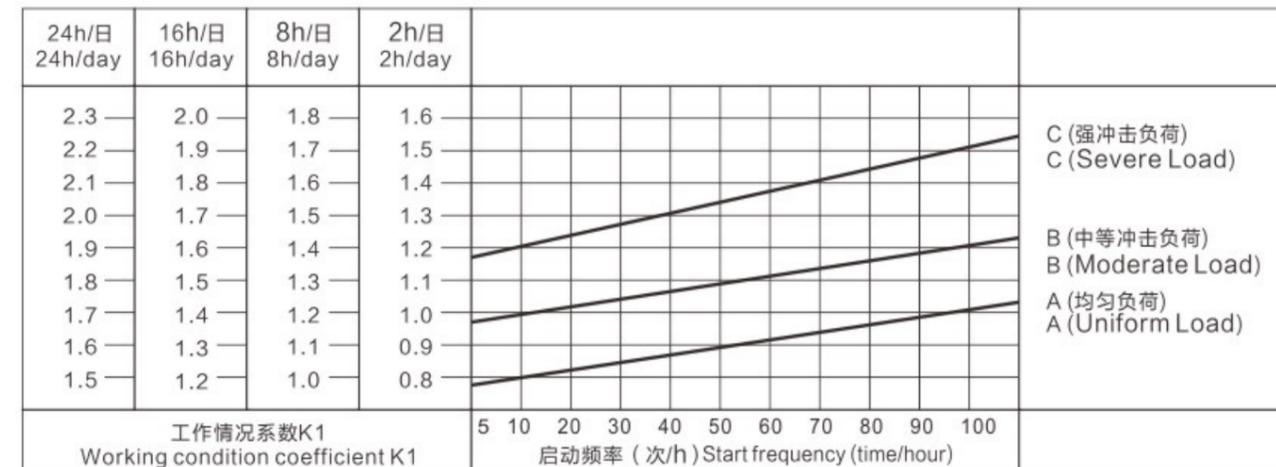
使用情况 Using situation	示范 Example	负荷种类 Load type
无冲击均匀负荷 Uniform load	传送带 (匀速输送) Convey band (uniform conveying)	A (均匀负荷) A (Uniform load)
中等冲击负荷 Moderate Load	传送带 (变速输送) Speed changed conveying	B (中等冲击负荷) B (Moderate load)
强烈冲击负荷 Severe Load	压缩机、粉碎机等 Compressor, pulverizer, etc	C (强冲击负荷) C (Severe load)

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

- 用户须先确定工作机输入机械负荷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，以此为据，并结合速比值或输出转速值，选定所需减速机规格。
- 用户也可以根据已知的输入功率，结合速比值或输出转速值，计算输出转矩，选定减速机。
- 本公司减速机均为右旋螺牙，根据右手定则，确定输入轴、输出轴回转方向。

## 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 T 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 and rotate speed.
- Our standard reducers all have right-hand helical tooth, deciding the rotating direction of input shaft and output shaft according to the right-hand criterion.

## 选型示例

### 例1 通用传送带 (均匀负荷)

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，决定负荷种类  
负荷种类: 无冲击均匀负荷，选A;
- ② 根据图1，在A线上取频率10次/小时的交点; 查出运转时间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19N.m的减速机。

### 选定结果: NMRVD30-1/25

输入功率0.18kW, 输出转速56转/分, 输出转矩21N.m

校核: 实际输出转矩=输出转矩x使用系数(fs)=21x1.0=21N.m>19N.m, 满足使用要求。

**Examples for model chosen**  
 Ex1 Common convey band (uniform load)

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

- Load classification: Uniform load, choose A, Select load classification according to table 1.
- As per 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.
- Get the coefficient K2 according to table 2.
- So the torque value is 19N.m

**Choose mode: NMRVD30-1/25**

Input power is 0.18kW, output speed is 56r/min, output torque is 21N.m

**Check computation**

You can get the actual output torque through the nominal output torque 21N.m multiply with the coefficient fs 1, so the actual output torque is 21N.m>19N.m. The selected model is suitable for use.

**例2 输送带 (中等冲击负荷)**

转矩: 65N.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°C,      电机直联

- ① 根据表1, 决定负荷种类  
 负荷种类: 轻度冲击负荷, 选B;
- ② 根据图1, 在B线上取频率100次/小时的交点; 查出运转时间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 65xK1xK2=65x1.65x1.15=123N.m, 可选择最接近123N.m的减速机。

**选定结果: NMRVD63-1/60**

输入功率0.55kW, 输出转速23.3转/分, 输出转矩140N.m  
 校核: 实际输出转矩=输出转矩x使用系数(fs)=140x0.9=126N.m>123N.m, 满足使用要求。

**Ex2 Convey band (moderate load)**

Torque:65N.m      Turning time: 16hours/day  
 Speed: About 21r/min      Start frequency: 100times/hour  
 Ratio: 1/60      Environment temperature: indoor 35°C      Connect with motor directly

- As per load classification table 1 : moderate load, choose B.
- As per cross point of 100 times/hours frequency on line B in diagram 1, get coefficient K1 value is 1.68 that turning time is 16 hours/day.
- Get the coefficient K2 1.15 according to table 2.
- So the torque value is 65N.m. You can select the model that torque value most close to 123N.m.

**Choose mode: NMRVD63-1/60**

Input power is 0.55kW, output speed is 23.3r/min, output torque is 140N.m

**Check computation**

You can get the actual output torque through the nominal output torque 140N.m multiply with the coefficient fs 0.9, so the actual output torque is 126N.m>123N.m. The selected model is suitable for use.

**选型参数 Parameter Selections**

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

机型代号 Model code	输出转速 Output speed r/min	输出转矩 Output torque N.m	传动比 Transmission ratio i	输出轴径 向力 Output radial force kN	使用系数 fs	机型代号 Model code	输出转速 Output speed r/min	输出转矩 Output torque N.m	传动比 Transmission ratio i	输出轴径 向力 Output radial force kN	使用系数 fs				
025	<b>0.06kw</b>		7.5	0.5	4.2	030	<b>0.12kw</b>		10	0.75	2.7				
	186.7	2.6					140	6.7							
	140	3.4					93.3	9.5							
	93.3	4.9					70	12							
	70	6.1					56	14							
	46.7	8.2					46.7	16							
	35	10					35	19							
	28	12					28	23							
030	186.7	2.6	7.5	0.68	6.9	040	46.7	17.2	30	2.08	2.6				
												140	3.4	35	21
												93.3	4.7	28	25
												70	6	23.3	28
												56	7	17.5	34
												46.7	8	14	38
												35	9.7	100	100
												28	11	60	60
025	<b>0.09kw</b>		7.5	0.5	2.8	050	23.3	29	80	3.61	2.3				
	140	5.1										17.5	35		
	93.3	7.3										14	40		
	70	9.2										10	50		
	46.7	12										80	80		
	35	15										60	100		
	28	17										40	100		
	17.5	14										80	100		
030	186.7	3.9	7.5	0.68	4.6	040	70	19	20	1.82	2.0				
												140	5	56	23
												93.3	7.1	46.7	26
												70	9	35	32
												56	10	28	38
												46.7	12	23.3	43
												35	14	20	40
												28	17	50	50
040	186.7	3.9	7.5	0.68	4.6	050	23.3	43	80	3.61	1.6				
												140	5	17.5	52
												93.3	7.1	14	60
												70	9	10	80
												56	10	80	100
												46.7	12	60	100
												35	14	40	100
												28	17	50	100
23.3	19	60	100												
040	<b>0.12kw</b>		7.5	0.68	3.4	040	186.7	11	7.5	1.31	3.6				
	140	14										140	14		
	93.3	21										93.3	21		
	70	26										70	27		
	56	29										56	29		
	46.7	32										46.7	32		
	35	39										35	39		
	28	43										28	43		
23.3	43	23.3	43												

机型号 Model code	输出转速 Output speed r/min	输出转矩 Output torque N.m	传动比 Transmission ratio i	输出轴径 向力 Output radial force kN	使用 系数 fs
040	<b>0.25kw</b>				
	56	32	25	1.96	1.2
	46.7	36	30	2.08	1.3
	35	44	40	2.29	0.9
050	28	37	50	2.47	0.8
	70	26	20	2.5	2.7
	56	32	25	2.69	2.2
	46.7	37	30	2.86	2.3
	35	46	40	3.15	1.7
	28	54	50	3.39	1.4
	23.3	60	60	3.61	1.1
17.5	72	80	3.97	0.9	
063	28	56	50	4.44	2.4
	23.3	63	60	4.71	2.0
	17.5	78	80	5.19	1.6
040	14	87	100	5.59	1.4
	<b>0.37kw</b>				
	186.7	16	7.5	1.31	2.4
	140	21	10	1.44	1.9
	93.3	31	15	1.65	1.3
	70	39	20	1.82	1.0
56	47	25	1.96	0.8	
46.7	53	30	2.08	0.8	
050	140	21	10	1.98	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
23.3	89	60	3.61	0.8	
063	35	70	40	4.12	2.1
	28	83	50	4.44	1.6
	23.3	94	60	4.71	1.4
	17.5	115	80	5.19	1.1
050	14	129	100	5.59	0.9
	<b>0.55kw</b>				
	186.7	25	7.5	1.8	2.9
	140	32	10	1.98	2.2
	93.3	46	15	2.27	1.6
	70	59	20	2.5	1.2
	56	71	25	2.69	1.0
46.7	81	30	2.86	1.0	
35	80	40	3.15	0.9	

机型号 Model code	输出转速 Output speed r/min	输出转矩 Output torque N.m	传动比 Transmission ratio i	输出轴径 向力 Output radial force kN	使用 系数 fs
063	<b>0.55kw</b>				
	70	60	20	3.27	2.2
	56	73	25	3.52	1.8
	46.7	83	30	3.74	1.9
	35	105	40	4.12	1.4
	28	124	50	4.44	1.1
075	23.3	140	60	4.71	0.9
	35	108	40	4.86	2.0
	28	129	50	5.24	1.6
	23.3	146	60	5.56	1.4
	17.5	180	80	6.13	1.1
	14	206	100	6.6	0.9
	17.5	189	80	6.78	1.5
090	14	221	100	7.3	1.2
	<b>0.75kw</b>				
050	186.7	34	7.5	1.8	2.1
	140	44	10	1.98	1.6
	93.3	63	15	2.27	1.2
70	81	20	2.5	0.9	
063	93.3	63	15	2.97	2.2
	70	83	20	3.27	1.6
	56	100	25	3.52	1.3
	46.7	114	30	3.74	1.4
	35	143	40	4.12	1.0
075	56	102	25	4.16	2.0
	46.7	117	30	4.42	2.0
	35	147	40	4.86	1.5
	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
090	17.5	258	80	6.78	1.1
	14	302	100	7.3	0.9
	<b>1.1kw</b>				
063	186.7	49	7.5	2.35	2.6
	140	65	10	2.59	2.0
	93.3	93	15	2.97	1.5

机型号 Model code	输出转速 Output speed r/min	输出转矩 Output torque N.m	传动比 Transmission ratio i	输出轴径 向力 Output radial force kN	使用 系数 fs
063	<b>1.1kw</b>				
	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
075	93.3	95	15	3.5	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	264	50	4.6	0.9
	23.3	223	60	4.89	0.8
090	35	225	40	5.38	1.6
	28	270	50	5.79	1.3
	23.3	311	60	6.16	1.0
110	17.5	328	80	6.17	0.9
	28	281	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
	<b>1.5kw</b>				
	063	186.7	67	7.5	2.35
140		89	10	2.59	1.5
93.3		127	15	2.97	1.3
70		166	20	3.27	1.0
075	140	90	10	3.06	2.2
	93.3	130	15	3.5	1.5
	70	168	20	3.86	1.3
	56	205	25	4.16	1.0
	46.7	233	30	4.42	1.0
090	70	171	20	4.27	2.1
	56	210	25	4.6	1.6
	46.7	239	30	4.89	1.7
	35	307	40	5.38	1.2
	28	368	50	5.79	0.9
	23.3	424	60	6.16	0.8
	110	35	319	40	6.8
28		384	50	7.32	1.7
23.3		442	60	7.78	1.4
17.5		548	80	8.57	0.9
<b>2.2kw</b>					
075	186.7	100	7.5	2.78	1.8
	140	132	10	3.06	1.5
	93.3	191	15	3.5	1.0
	70	240	20	3.38	0.9
090	46.7	269	30	3.89	0.8
	186.7	101	7.5	3.08	2.9

机型号 Model code	输出转速 Output speed r/min	输出转矩 Output torque N.m	传动比 Transmission ratio i	输出轴径 向力 Output radial force kN	使用 系数 fs
090	<b>2.2kw</b>				
	140	134	10	3.39	2.3
	93.3	194	15	3.88	1.9
	70	252	20	4.27	1.4
	56	308	25	4.6	1.1
	46.7	351	30	4.89	1.2
110	35	433	40	4.9	1.0
	28	393	50	5.28	0.9
	70	255	20	5.39	2.5
	56	315	25	5.81	2.2
	46.7	356	30	6.18	2.0
130	35	468	40	6.8	1.5
	28	563	50	7.32	1.2
	23.3	648	60	7.78	1.0
	35	468	40	8.89	2.2
	28	563	50	9.58	1.7
150	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	13.1	2.5
075	23.3	657	60	13.92	1.9
	17.5	816	80	15.32	1.4
	14	960	100	16.5	1.0
090	<b>3kw</b>				
	186.7	136	7.5	2.78	1.4
	140	180	10	3.06	1.1
	93.3	261	15	3.5	0.8
110	186.7	138	7.5	3.08	2.1
	140	182	10	3.39	1.7
	93.3	264	15	3.88	1.4
	70	344	20	4.27	1.0
	56	420	25	4.6	0.8
	46.7	479	30	4.89	0.9
130	93.3	264	15	4.9	2.5
	70	348	20	5.39	1.9
	56	430	25	5.81	1.6
	46.7	485	30	6.18	1.5
	35	638	40	6.8	1.1
150	28	767	50	7.32	0.9
	56	429	25	7.6	2.2
	46.7	491	30	8.08	2.1
	35	638	40	8.89	1.6
	28	767	50	9.58	1.3
	23.3	884	60	10.18	1.0
	17.5	1113	80	11.21	0.8

机型代号 Model code	输出转速 Output speed r/min	输出转矩 Output torque N.m	传动比 Transmission ratio i	输出轴径 向力 Output radial force kN	使用 系数 fs
150	<b>3kw</b>				
	28	777	50	13.1	1.8
	23.3	896	60	13.92	1.4
	17.5	1113	80	15.32	1.0
075	14	1310	100	16.5	0.8
	<b>4kw</b>				
	186.7	182	7.5	2.44	1.0
090	140	240	10	3.06	0.8
	186.7	184	7.5	3.08	1.6
	140	243	10	3.39	1.3
	93.3	352	15	3.88	1.0
	70	458	20	4.27	0.8
110	140	242	10	4.28	2.5
	93.3	352	15	4.9	1.9
	70	464	20	5.39	1.4
	56	573	25	5.81	1.2
	46.7	647	30	6.18	1.1
	56	573	25	7.6	1.6
130	46.7	655	30	8.08	1.6
	35	851	40	8.89	1.2
	28	1023	50	9.58	1.0
	23.3	1179	60	10.18	0.8
	28	1036	50	13.1	1.4
150	23.3	1195	60	13.92	1.1
	17.5	1484	80	15.32	0.8
	<b>5.5kw</b>				
110	186.7	253	7.5	3.89	2.2
	140	334	10	4.28	1.8
	93.3	484	15	4.9	1.4
	70	638	20	5.39	1.0
	56	711	25	5.15	0.9
130	140	333	10	5.6	2.5
	93.3	490	15	6.41	1.9
	70	645	20	7.06	1.4
	56	788	25	7.6	1.2
	46.7	900	30	8.08	1.2
	35	1171	40	8.89	0.9
	28	1103	50	8.51	0.8
150	70	645	20	9.65	2.0
	56	788	25	10.4	1.5
	46.7	934	30	11.05	1.3
	35	1171	40	12.16	1.3
	28	1426	50	13.1	1.0
	23.3	1643	60	13.92	0.8

机型代号 Model code	输出转速 Output speed r/min	输出转矩 Output torque N.m	传动比 Transmission ratio i	输出轴径 向力 Output radial force kN	使用 系数 fs
110	<b>7.5kw</b>				
	186.7	345	7.5	3.89	1.6
	140	455	10	4.28	1.3
130	93.3	660	15	4.9	1.0
	186.7	349	7.5	5.09	2.1
	140	455	10	5.6	1.8
	93.3	668	15	6.41	1.4
	70	880	20	7.06	1.0
	56	1074	25	7.6	0.9
	46.7	1228	30	8.08	0.8
	35	1596	40	8.89	0.7
150	70	880	20	9.65	1.5
	56	1074	25	10.4	1.1
	46.7	1274	30	11.05	0.9
	35	1596	40	12.16	1.0
	<b>11kw</b>				
150	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
	56	1576	25	10.4	0.8
	<b>15kw</b>				
150	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	1760	20	9.65	0.7

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

组合机 型规格 Combination Model code	输出转速 Output speed r/min	输出转矩 Output torque N.m	总传动比 General Transmission ratio i	高速级 传动比 High speed transmission ratio i	低速级 传动比 Low speed transmission ratio i	输出 轴径 向力 Output radial force kN	使用 系数 fs	
25/30	<b>0.06kw</b>							
	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	
25/40	5.6	44	250	10	25	1.83	0.8	
	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	116	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	
	0.78	217	1800	60	30	3.49	0.3	
30/40	0.6	268	2400	60	40	3.49	0.2	
	0.5	324	3000	60	50	3.49	0.2	
	0.4	294	4000	50	80	3.49	0.1	
	0.3	356	5000	50	100	3.49	0.1	
	4.7	57	300	10	30	3.49	1.3	
	3.5	70	400	10	40	3.49	0.9	
	2.8	96	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	139	900	30	30	3.49	0.5	
30/50	1.2	166	1200	30	40	3.49	0.4	
	0.9	196	1500	50	30	3.49	0.4	
	0.78	218	1800	60	30	3.49	0.3	
	0.58	261	2400	60	40	3.49	0.2	
	1.4	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	
	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	
30/63	0.78	222	1800	60	30	4.84	0.7	
	0.6	266	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	
	0.9	203	1500	30	50	6.27	1.1	
	0.78	225	1800	30	60	6.27	0.9	
	0.58	276	2400	60	40	6.27	0.8	
	40/75	<b>0.06kw</b>						
		0.47	319	3000	60	50	6.27	0.7
0.35		306	4000	50	80	6.27	0.6	
0.28		360	5000	50	100	6.27	0.4	
<b>0.09kw</b>								
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	
0.5		405	3000	60	50	8.18	1.4	
40/90	0.35	365	4000	50	80	8.18	1.3	
	0.28	431	5000	50	100	8.18	1.0	
	14	37	100	10	10	1.62	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	
25/30	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	
	4.7	88	300	10	30	3.49	0.8	
	3.5	107	400	10	40	4.84	1.2	
	2.8	123	500	10	50	4.84	1.0	
30/50	2.3	159	600	20	30	4.84	0.9	
	1.9	185	750	25	30	4.84	0.8	
	1.6	212	900	30	30	4.84	0.7	
	1.6	200	900	15	60	6.27	1.0	
	1.2	263	1200	30	40	6.27	0.9	
	0.93	305	1500	30	50	6.27	0.7	
	0.9	359	1500	50	30	7.38	1.1	
	0.78	404	1800	60	30	7.38	1	
	0.58	496	2400	60	40	7.38	0.7	
	40/90	0.5	608	3000	60	50	8.18	0.9
0.35		548	4000	50	80	8.18	0.8	

组合机 型规格 Combination Model code	输出转速 Output speed r/min	输出转矩 Output torque N.m	总传动比 General Transmission ratio i	高速级 传动比 High speed transmission ratio i <sub>1</sub>	低速级 传动比 Low speed transmission ratio i <sub>2</sub>	输出 轴径 Output radial force kN	使用 系数 fs
<b>0.12kw</b>							
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	500	10	50	6.27	1.3
	2.3	208	600	15	40	6.27	1.1
	1.9	241	750	15	50	6.27	0.9
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
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	639	1200	30	40	8.18	1.0
	0.93	735	1500	30	50	8.18	0.8
50/110	0.78	860	1800	60	30	10.32	1.5
	0.58	1113	2400	60	40	10.32	1.1
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	336	400	10	40	7.38	1.1
	2.8	384	500	10	50	7.38	0.8
40/90	2.3	511	600	15	40	8.18	1.2
	1.9	598	750	15	50	8.18	0.9
	1.6	667	900	15	60	8.18	0.8
50/110	1.2	943	1200	30	40	10.32	1.3
	0.93	1064	1500	50	30	10.32	1.2
	0.78	1195	1800	60	30	10.32	1.1
63/130	0.6	1624	2400	60	40	13.5	1.0
	0.47	1935	3000	60	50	13.5	0.8

组合机 型规格 Combination Model code	输出转速 Output speed r/min	输出转矩 Output torque N.m	总传动比 General Transmission ratio i	高速级 传动比 High speed transmission ratio i <sub>1</sub>	低速级 传动比 Low speed transmission ratio i <sub>2</sub>	输出 轴径 Output radial force kN	使用 系数 fs
<b>0.25kw</b>							
63/130	0.35	2046	4000	50	80	13.5	0.6
	0.28	2430	5000	50	100	13.5	0.5
63/150	0.78	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
	0.4	2026	4000	50	80	18	0.9
63/130	0.3	2251	5000	50	100	18	0.7
	<b>0.37kw</b>						
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
	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
<b>0.55kw</b>							
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	0.9
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

组合机 型规格 Combination Model code	输出转速 Output speed r/min	输出转矩 Output torque N.m	总传动比 General Transmission ratio i	高速级 传动比 High speed transmission ratio i <sub>1</sub>	低速级 传动比 Low speed transmission ratio i <sub>2</sub>	输出 轴径 Output radial force kN	使用 系数 fs
<b>0.75kw</b>							
50/110	4.7	871	300	10	30	10.32	1.5
	3.5	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	0.9
	1.6	2283	900	30	30	13.5	0.8
63/150	2.8	1290	500	10	50	18	1.8
	2.3	1529	600	15	40	18	1.7
	1.9	1783	750	25	30	18	1.3
	1.6	2215	900	30	30	18	0.9
63/150	1.2	2680	1200	30	40	18	1.0
	<b>1.1kw</b>						
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	9.3	752	150	10	15	18	3.1
	7.0	966	200	10	20	18	2.4
	5.6	1175	250	10	25	18	1.7
	4.7	1364	300	10	30	18	1.7
	3.5	1619	400	10	40	18	1.6
	2.8	1893	500	10	50	18	1.2
	2.3	2242	600	15	40	18	1.2
	1.9	2616	750	25	30	18	0.9
<b>1.5kw</b>							
63/130	4.7	1789	300	10	30	13.5	1.0
	3.5	2279	400	10	40	13.5	0.7
63/150	9.3	1026	150	10	15	18	2.3
	7.0	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

单级减速机 (轴伸输入、输入转速1400r/min)  
Single step reducer (shaft extend input, input speed is 1400r/min)

机型代号 Model code	输入轴 功率 Input power kW	输出转速 Output speed r/min	输出转矩 Output torque N.m	传动比 Transmission ratio i	输出轴 径向力 Output radial force kN	输入轴 径向力 Input radial force kN
30	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	0.86	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	1.5	0.21
40	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
50	1.6	186.7	71	7.5	1.8	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	2.5	0.49
	0.5	56	70	25	2.69	0.49
	0.6	46.7	84	30	2.86	0.49
	0.4	35	76	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
63	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	135	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

机型代号 Model code	输入轴 功率 Input power kW	输出转速 Output speed r/min	输出转矩 Output torque N.m	传动比 Transmission ratio i	输出轴 径向力 Output radial force kN	输入轴 径向力 Input radial force kN
63	0.4	17.5	122	80	5.19	0.70
	0.3	14	118	100	5.59	0.70
75	4.1	186.7	185	7.5	2.78	0.70
	3.2	140	195	10	3.06	0.83
	2.3	93.3	200	15	3.50	0.85
	1.9	70	210	20	3.86	0.98
90	1.5	56	200	25	4.16	0.98
	1.5	46.7	230	30	4.42	0.98
	1.1	35	220	40	4.86	0.98
	0.9	28	210	50	5.24	0.98
	0.8	23.3	200	60	5.56	0.98
	0.6	17.5	190	80	6.13	0.98
	0.5	14	180	100	6.60	0.98
	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
110	3.1	70	355	20	4.27	1.27
	2.4	56	340	25	4.60	1.27
	2.6	46.7	410	30	4.89	1.27
	1.8	35	360	40	5.38	1.27
	1.4	28	340	50	5.79	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
	12	186.7	552	7.5	3.89	1.20
	9.8	140	598	10	4.28	1.46
130	7.5	93.3	656	15	4.90	1.60
	5.6	70	644	20	5.39	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
	2.6	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
	1.1	14	483	100	9.23	1.70
	16.1	186.7	750	7.5	5.09	1.50
13.5	140	820	10	5.60	1.84	
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	

机型代号 Model code	输入轴 功率 Input power kW	输出转速 Output speed r/min	输出转矩 Output torque N.m	传动比 Transmission ratio i	输出轴 径向力 Output radial force kN	输入轴 径向力 Input radial force kN
130	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
	2.3	17.5	840	80	11.21	2.10
150	1.7	14	740	100	12.07	2.10
	25.8	186.7	1200	7.5	6.96	1.95
	20.2	140	1240	10	7.66	2.26
	13.9	93.3	1250	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	1200	30	11.05	2.80
	7.3	35	1550	40	12.16	2.80
	5.4	28	1400	50	13.10	2.80
	4.2	23.3	1260	60	13.92	2.80
150	3.1	17.5	1150	80	15.32	2.80
	2.3	14	1000	100	16.50	2.80

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

机型代号 Model code	输入轴 功率 Input power kW	输出转速 Output speed r/min	输出转矩 Output torque N.m	传动比 Transmission ratio i	输出轴 径向力 Output radial force kN	输入轴 径向力 Input radial force 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	750	3.49	0.21	
	0.03	0.6	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	0.78	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	29	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	0.6	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	
	0.13	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	
40/75	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	320	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	
	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	746	5000	10.32	0.49	
63/130	1.5	4.7	1760	300	13.5	0.7	
	1.1	3.5	1650	400	13.5	0.7	
	0.9	2.8	1550	500	13.5	0.7	
	0.8	2.3	1650	600	13.5	0.7	
63/130	0.8	2.3	1650	600	13.5	0.7	
	0.7	1.9	1760	750	13.5	0.7	

机型代号 Model code	输入轴 功率 Input power kW	输出转速 Output speed r/min	输出转矩 Output torque N.m	传动比 Transmission ratio i	输出轴 径向力 Output radial force kN	输入轴 径向力 Input radial force kN
63/130	0.6	1.6	1760	900	13.5	0.7
	0.4	1.2	1650	1200	13.5	0.7
	0.4	0.93	1760	1500	13.5	0.7
	0.3	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
2.7		7.0	2340	200	18	0.7
1.9		4.6	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		0.78	2100	1800	18	0.7
0.5		0.6	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

单级减速机 Single Speed Reducer

速比1/5-1/60



万能型减速机 Universal Speed Reducer

速比1/5-1/60



WPWKV



WPWDKV



双级减速机 Double Speed Reducer

速比1/100-1/3600

WPEA



WPEDA



WPEKA



WPEDKA



WPEO



WPEDO



WPES



WPEDS



WPEKS



WPEDKS



WPEX



WPEDX



WPWE



WPWED



WPWEKO



WPWEDKO



WPEEDO



WPEEA



WPWEK



WPWEDK



AS



TV



OX



其它产品  
Other Products

SUITABLE FOR  
WOODWORKING  
MACHINE 1  
木工机专用 1



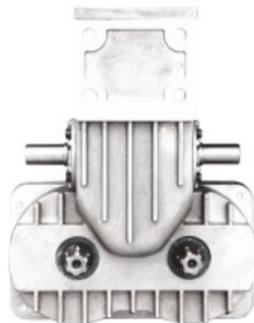
SUITABLE FOR  
WOODWORKING  
MACHINE 2  
木工机专用 2



SUITABLE FOR  
WOODWORKING  
MACHINE 3  
木工机专用 3



SUITABLE FOR  
WOODWORKING  
MACHINE 5  
木工机专用 5



SUITABLE FOR  
WOODWORKING  
MACHINE 4  
木工机专用 4



SUITABLE FOR  
WOODWORKING  
MACHINE 6  
木工机专用 6



SUITABLE FOR  
WOODWORKING  
MACHINE 7  
木工机专用 7



SUITABLE FOR  
WOODWORKING  
MACHINE 8  
木工机专用 8



SUITABLE FOR  
WOODWORKING  
MACHINE 9  
木工机专用 9



SUITABLE FOR  
WOODWORKING  
MACHINE 10  
木工机专用 10



SUITABLE FOR  
WOODWORKING  
MACHINE 11  
木工机专用 11



SPECIAL ELEVATOR FOR  
WOODWORKING  
MACHINE  
木工机专用升降机



SPECIAL USE FOR  
GROOVING  
MACHINE  
开槽机专用



SPECIAL USE FOR  
TUBE MACHINE 1  
制管机专用 1



SPECIAL USE FOR  
TUBE MACHINE 2  
制管机专用 2



SPECIAL USE FOR  
TEXTILE  
MACHINE 1  
纺机专用 1



SPECIAL USE FOR  
TEXTILE  
MACHINE 2  
纺机专用 2



TWPX 82.5  
倍捻机专用



SPECIAL USE FOR  
DUST REMOVER  
除尘机专用



SPECIAL USE FOR  
COATING  
MACHINE  
涂层机专用



TWPO SUITABLE FOR  
SHOE-MAKING MACHINE  
TWPO 鞋机专用



SPECIAL USE FOR  
FINISHING  
MACHINE  
抹光机专用



SUITABLE FOR  
GRINDING MILL  
MACHINE  
研磨机专用



SUITABLE FOR  
GLASS-MAKING MACHINE  
玻璃机专用



SUITABLE FOR PRINTING  
MACHINE A 印刷机专用 A



SUITABLE FOR PRINTING  
MACHINE B 印刷机专用 B



SUITABLE FOR WATERMILL  
水车专用 B



WORM  
WORM WHEEL  
蜗轮蜗杆



FCD 450



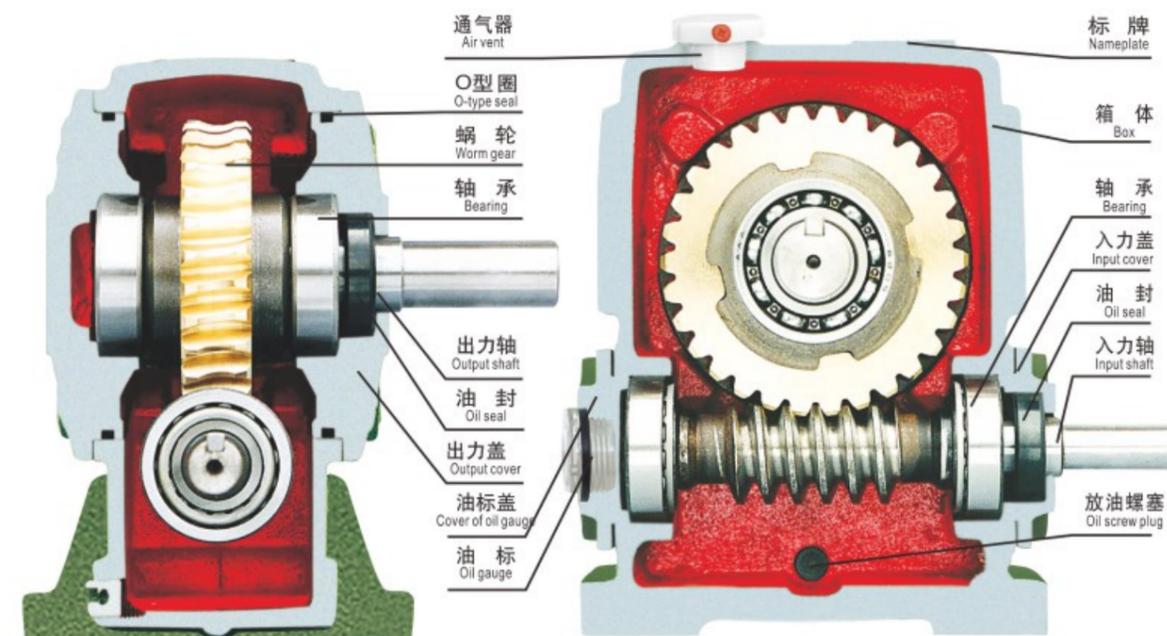
FC200 FC250



WP减速机系列  
WP Reducer series



## 产品结构图 Product structural drawing

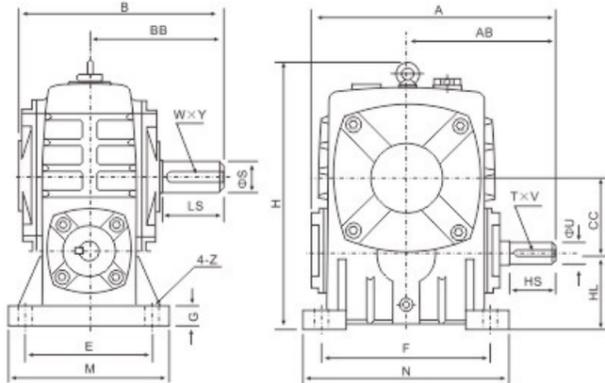


## 型号及表示法 Model and strure table

**W P W E D K A 40-250 — 1/10-1/900 — B**

<p>■ 产品代码 W—蜗轮减速机 Product code W-Worm gear Speed reducer</p>	<p>■ 箱体结构 P-整体 Box structure P-whole</p>	<p>■ 箱体形式 W-万能型 无代码-基本型 Box model W-universal Non-code-basic</p>	<p>■ 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</p>	<p>■ 联接方式 D-入轴带电机法兰 无代码-基本型 Connector of input shaft D-input shaft with motor frange Non-code-basic</p>
<p>■ 出轴结构 K-中孔出轴 无代码-基本型 Structure of input shaft K-Hollow Structure Non-code-basic</p>	<p>■ 箱体结构形式 A-入轴在下 S-入轴在上 O-出轴向上 X-出轴向下 T-入轴向上 V-入轴向下 无代码-基本型 Box structure Structure of input shaft A-Input shaft is below S-Input shaft is above O-Output shaft is upward X-Output shaft is downward T-Input shaft is upward V-Input shaft is downward Non-code-basic</p>	<p>■ 中心距 40-250 Center distance 40-250</p>	<p>■ 减速比 1/10-1/900 Ratio 1/10-1/900</p>	<p>■ 轴指向 B Output shaft direction B</p>

WPA 型



轴指向表示  
SHAFT DIRECTION

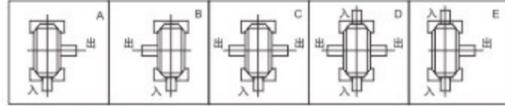
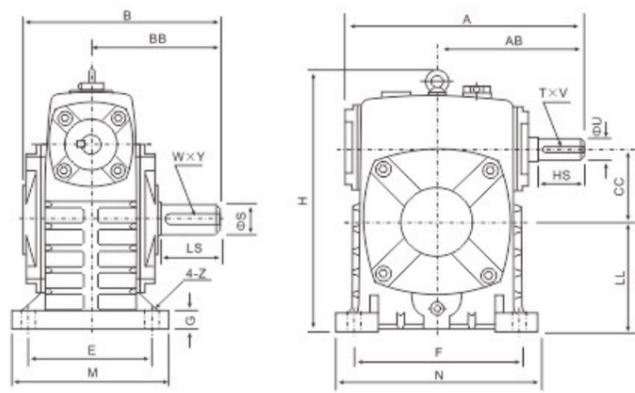


Table with columns: 型号 size, 减速比 ratio, A, AB, B, BB, CC, H, HL, M, N, E, F, G, Z, 输入轴input shaft (HS, U, T×V), 输出轴output shaft (LS, S, W×Y), 重量 weight(kg)

WPS 型



轴指向表示  
SHAFT DIRECTION

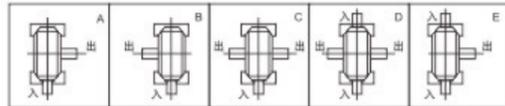
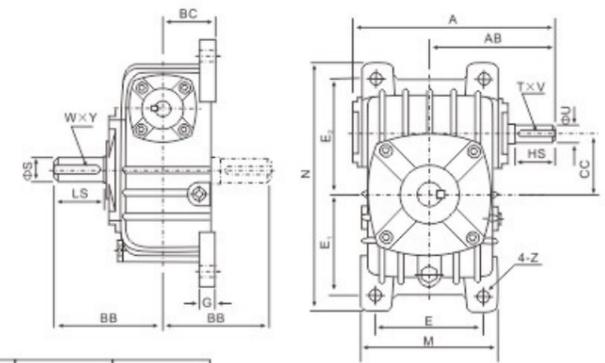


Table with columns: 型号 size, 减速比 ratio, A, AB, B, BB, CC, H, LL, M, N, E, F, G, Z, 输入轴input shaft (HS, U, T×V), 输出轴output shaft (LS, S, W×Y), 重量 weight(kg)

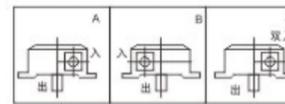
WPX 型



WPO 型



WPX轴指向表示  
SHAFT DIRECTION



WPO轴指向表示  
SHAFT DIRECTION

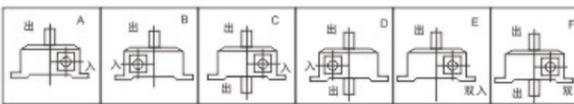
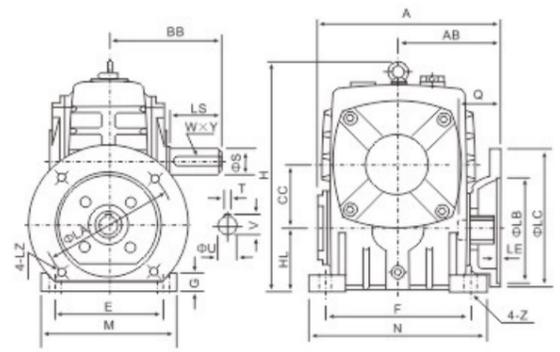


Table with columns: 型号 size, 减速比 ratio, A, AB, BB, BC, CC, M, N, E, E1, E2, G, Z, 输入轴input shaft (HS, U, T×V), 输出轴output shaft (LS, S, W×Y), 重量 weight(kg)

WPDA 型



轴指向表示  
SHAFT DIRECTION

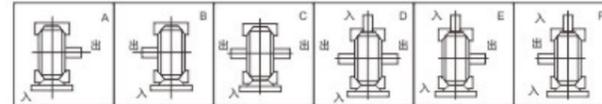
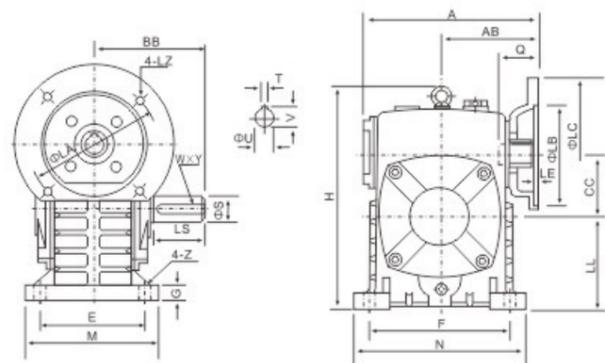


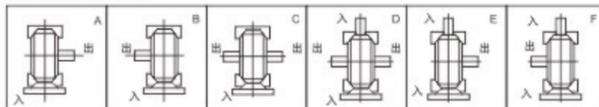
Table with columns: 型号 size, 输入功率 input(kW), 减速比 ratio, A, AB, BB, CC, H, HL, M, N, E, F, G, Z, 电机法兰flange (LA, LB, LC, LE, LZ, Q), 输入轴input hole (U, T×V), 输出轴output shaft (LS, S, W×Y), 重量 weight(kg)



**WPDS 型**

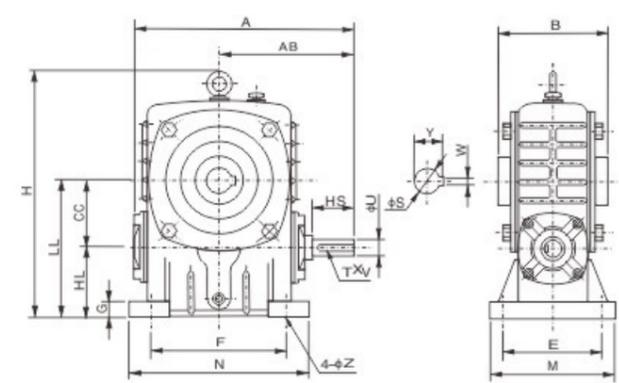


轴指向表示  
SHAFT DIRECTION

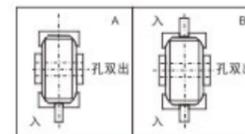


型号 size	输入功率 input(KW)	减速比 ratio	A	AB	BB	CC	H	LL	M	N	E	F	G	Z	电机法兰flange					输入孔input hole			出力轴output shaft			重量 weight(kg)
															LA	LB	LC	LE	LZ	Q	U	T×V	LS	S	W×Y	
50	0.18	1/10	151	83	97	50	176	80	120	140	95	110	15	12	115	95	140	4	M8	31	11	4×12.8	40	17	5×3	8
60	0.37		167	91	112	60	202	90	130	150	105	120	20	12	130	110	160	4	M8	33	14	5×16.3	50	22	6×3.5	11
70	0.37		200	109	131	70	238	105	150	190	115	150	20	15	130	110	160	4	M8	40	14	5×16.3	60	28	8×4	17
	0.75		202	111		165	130	200	4	M10	42	19	6×21.8													
80	0.75	1/15	225	125	142	80	273	120	170	220	135	180	20	15	165	130	200	4.5	M10	48	19	6×21.8	65	32	10×5	22
100	1.5		280	148	169	100	334	150	190	270	155	220	25	15	165	130	200	4.5	M10	52	24	8×27.3				
120	2.2	1/20	333	181	190	120	423	180	230	320	180	260	30	18	215	180	250	5	M12	63	28	8×31.3	85	45	14×5.5	64
135	3.0		375	202	210	135	482	215	250	350	200	290	30	18	215	180	250	5	M12	63	28	8×31.3				
147	3.0	1/40	380	204	212	147	495	203	250	350	200	280	32	18	215	180	250	5	M12	63	28	8×31.3	95	55	16×6	96
155	5.5		448	247	252	155	541	235	275	390	220	320	35	21	265	230	300	5	M12	83	38	10×41.3				
175	5.5	1/60	481	262	262	175	600	260	310	430	250	350	40	21	265	230	300	5	M12	83	38	10×41.3	110	65	18×7	165
200	11.0		543	285	305	200	677	290	360	480	290	390	40	24	300	250	350	6	M16	114	42	12×45.3				
250	11.0	615	330	360	250	824	350	460	560	380	480	45	28	300	250	350	6	M16	114	42	12×45.3	155	90	25×9	396	

**WPKA 型**



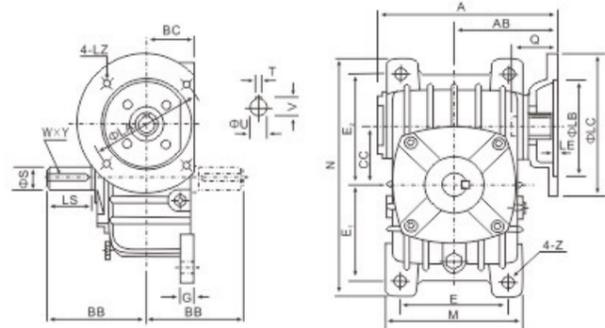
轴指向表示  
SHAFT DIRECTION



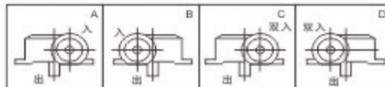
型号 size	传动比 ratio	A	AB	B	CC	E	F	G	H	HL	LL	M	N	Z	输入轴 input shaft			出力轴 output shaft		重量 (kg)
															HS	U	T×V	S	W×Y	
40	1/10	143	87	90	40	70	80	13	138	40	80	90	100	10	25	12	4×2.5	16	5×18.3	4
50		175	107	100	50	95	110	15	173	50	100	120	140	12	30	12	4×2.5	20	6×22.8	7
60		198	122	110	60	105	120	20	204	60	120	130	150	12	40	15	5×3	25	8×28.3	10.5
70		1/15	231	140	126	70	115	150	20	236	70	140	150	190	15	40	18	6×3.5	30	8×33.3
80	1/20	261	160	136	80	135	180	20	268	80	160	170	220	15	50	22	6×3.5	35	10×38.3	22
100	1/25	322	190	160	100	155	220	25	329	100	200	190	270	15	50	25	8×4	40	12×43.3	36
120	1/30	381	229	180	120	180	260	30	430	120	240	230	320	18	65	30	8×4	45	14×48.8	63
135	1/40	433	260	204	135	200	290	30	480	135	270	250	350	18	75	35	10×5	60	18×64.4	80
155	1/50	504	302	250	155	220	320	35	431	135	290	275	390	21	85	40	12×5	70	20×74.9	114
175	1/60	545	325	280	175	250	350	40	600	160	335	310	430	21	85	45	14×5.5	80	22×85.4	150
200		587	350	324	200	290	390	40	667	175	375	360	480	24	95	50	14×5.5	85	22×90.4	218
250	705	420	380	250	380	480	45	800	200	450	460	560	28	110	60	18×7	110	28×116.4	360	

**WPDX 型**

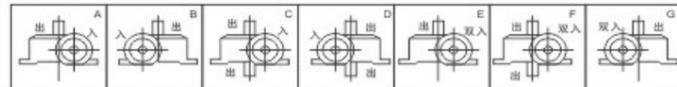
**WPDO 型**



WPDX轴指向表示  
SHAFT DIRECTION

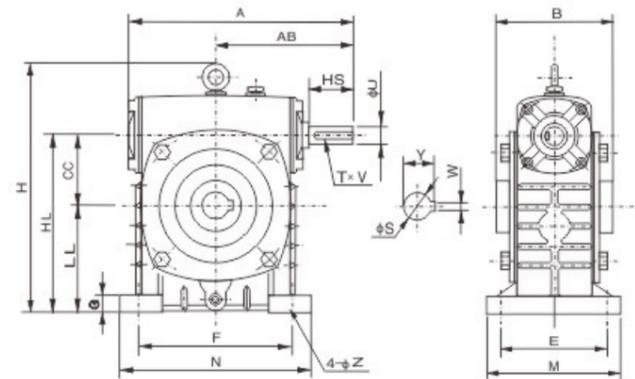


WPDO轴指向表示  
SHAFT DIRECTION

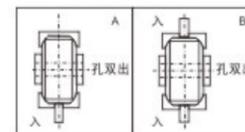


型号 size	输入功率 input(KW)	减速比 ratio	A	AB	BB	BC	CC	M	N	E	E <sub>1</sub>	E <sub>2</sub>	G	Z	电机法兰flange					输入孔input hole			出力轴output shaft			重量 weight(kg)
															LA	LB	LC	LE	LZ	Q	U	T×V	LS	S	W×Y	
50	0.18	1/10	151	83	97	50	50	116	220	90	93	102	15	12	115	95	140	4	M8	31	11	4×12.8	40	17	5×3	8
60	0.37		167	91	112	55	60	126	260	100	105	120	20	12	130	110	160	4	M8	33	14	5×16.3	50	22	6×3.5	11
70	0.37		200	109	131	65	70	156	295	120	120	135	20	15	130	110	160	4	M8	40	14	5×16.3	60	28	8×4	17
	0.75		202	111		165	130	200	4	M10	42	19	6×21.8													
80	0.75	1/15	225	125	142	70	80	175	320	140	130	150	20	15	165	130	200	4.5	M10	48	19	6×21.8	65	32	10×5	22
100	1.5		280	148	169	90	100	224	375	190	155	180	25	15	165	130	200	4.5	M10	52	24	8×27.3				
120	2.2	1/20	333	181	190	100	120	266	450	220	185	215	30	18	215	180	250	5	M12	63	28	8×31.3	85	45	14×5.5	54
135	3.0		375	202	210	110	135	306	495	260	210	235	30	18	215	180	250	5	M12	63	28	8×31.3				
147	3.0	1/40	380	204	212	113	147	310	556	250	254	254	32	18	215	180	250	5	M12	63	28	8×31.3	95	55	16×6	96
155	5.5		448	247	252	140	155	350	590	290	245	295	35	21	265	230	300	5	M12	83	38	10×41.3				
175	5.5	1/60	481	262	262	150	175	394	640	320	267	323	40	21	265	230	300	5	M12	83	38	10×41.3	110	65	18×7	154
200	11.0		543	285	305	175	200	440	710	370	290	360	40	24	300	250	350	6	M16	114	42	12×45.3				
250	11.0	615	330	360	200	250	510	860	440	350	440	45	28	300	250	350	6	M16	114	42	12×45.3	155	90	25×9	374	

**WPKS 型**

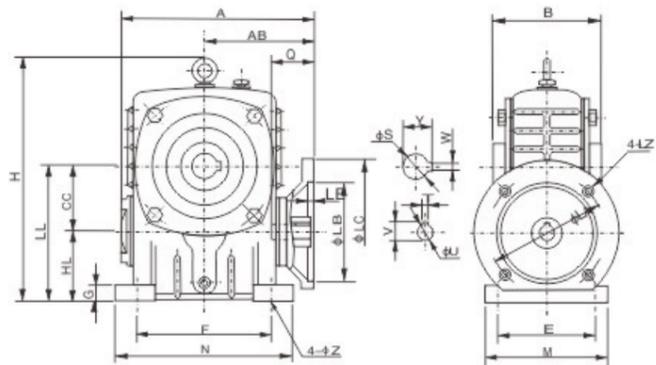


轴指向表示  
SHAFT DIRECTION

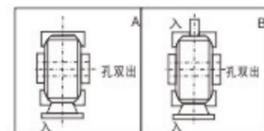


型号 size	传动比 ratio	A	AB	B	CC	E	F	G	H	HL	LL	M	N	Z	输入轴 input shaft			出力轴 output shaft		重量 (kg)
															HS	U	T×V	S	W×Y	
40	1/10	143	87	90	40	70	80	13	141	100	60	90	100	10	25	12	4×2.5	16	5×18.3	4
50		175	107	100	50	95	110	15	180	130	80	120	140	12	30	12	4×2.5	20	6×22.8	7
60		198	122	110	60	105	120	20	207	150	90	130	150	12	40	15	5×3	25	8×28.3	10.5
70		1/15	231	140	126	70	115	150	20	238	175	105	150	190	15	40	18	6×3.5	30	8×33.3
80	1/20	261	160	136	80	135	180	20	270	200	120	170	220	15	50	22	6×3.5	35	10×38.3	22
100	1/25	322	190	160	100	155	220	25	331	250	150	190	270	15	50	25	8×4	40	12×43.3	36
120	1/30	381	229	180	120	180	260	30	423	300	180	230	320	18	65	30	8×4	45	14×48.8	63
135	1/40	433	260	204	135	200	290	30	482	350	215									

WPDKA 型

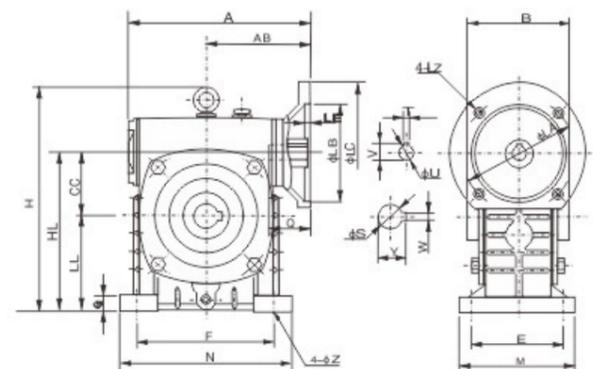


轴指向表示  
SHAFT DIRECTION

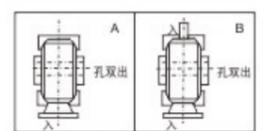


型号 size	输入功率 [kw]	传动比 ratio	A	AB	B	CC	E	F	G	H	HL	LL	M	N	Z	电机法兰flange					输入孔input hole			出力轴output shaft		重量 (kg)
																LA	LB	LC	LE	LZ	Q	U	T x V	S	W x Y	
50	0.18	1/10	151	83	100	50	95	110	15	176	50	100	120	140	12	115	95	140	4	M8	31	11	4 x 12.8	20	6 x 22.8	8
60	0.37		167	91	110	60	105	120	20	204	60	120	130	150	12	130	110	160	4	M8	33	14	5 x 16.3	25	8 x 28.3	10.5
70	0.75		200	109	126	70	115	150	20	236	70	140	150	190	15	130	110	160	4	M8	40	14	5 x 16.3	30	8 x 33.3	17
80	1.5	1/15	225	125	136	80	135	180	20	268	80	160	170	220	15	165	130	200	4.5	M10	48	19	6 x 21.8	35	10 x 38.3	26
100	1.5		280	148	160	100	155	220	25	336	100	200	190	270	15	165	130	200	4.5	M10	52	24	8 x 27.3	40	12 x 43.3	38
120	3.0	1/30	333	181	180	120	180	260	30	430	120	240	230	320	18	215	180	250	5	M12	63	28	8 x 31.3	45	14 x 48.8	60
135	4.0	1/50	375	202	204	135	200	290	30	480	135	270	250	350	18	215	180	250	5	M12	63	28	8 x 31.3	60	18 x 64.4	85
155	5.5		425	224	250	155	220	320	35	531	135	290	275	390	21	215	180	250	5	M12	63	28	8 x 31.3	70	20 x 74.9	120
175	7.5	448	247	250	155	220	320	35	531	135	290	275	390	21	215	180	250	5	M12	83	38	10 x 41.3	80	22 x 85.4	150	
175	7.5	481	262	280	175	250	350	40	600	160	335	310	430	21	265	230	300	5	M12	83	38	10 x 41.3	80	22 x 85.4	150	

WPDKS 型

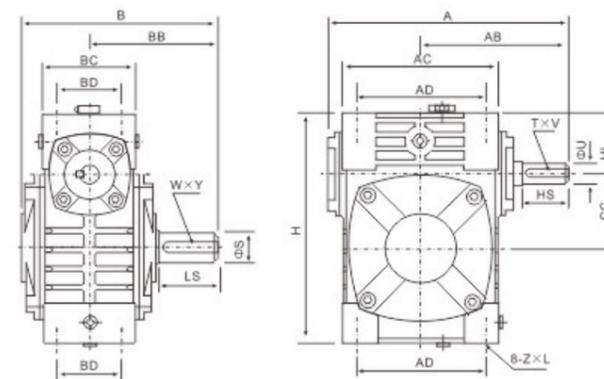


轴指向表示  
SHAFT DIRECTION

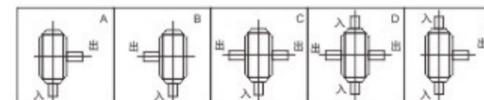


型号 size	输入功率 [kw]	传动比 ratio	A	AB	B	CC	E	F	G	H	HL	LL	M	N	Z	电机法兰flange					输入孔input hole			出力轴output shaft		重量 (kg)
																LA	LB	LC	LE	LZ	Q	U	T x V	S	W x Y	
50	0.18	1/10	151	83	100	50	95	110	15	176	130	80	120	140	12	115	95	140	4	M8	31	11	4 x 12.8	20	6 x 22.8	8
60	0.37		167	91	110	60	105	120	20	202	150	90	130	150	12	130	110	160	4	M8	33	14	5 x 16.3	25	8 x 28.3	10.5
70	0.75		200	109	126	70	115	150	20	238	175	105	150	190	15	130	110	160	4	M8	40	14	5 x 16.3	30	8 x 33.3	17
80	1.5	1/15	225	125	136	80	135	180	20	273	200	120	170	220	15	165	130	200	4.5	M10	48	19	6 x 21.8	35	10 x 38.3	26
100	1.5		280	148	160	100	155	220	25	334	250	150	190	270	15	165	130	200	4.5	M10	52	24	8 x 27.3	40	12 x 43.3	38
120	3.0	1/30	333	181	180	120	180	260	30	423	300	180	230	320	18	215	180	250	5	M12	63	28	8 x 31.3	45	14 x 48.8	60
135	4.0	1/50	375	202	204	135	200	290	30	482	350	215	250	350	18	215	180	250	5	M12	63	28	8 x 31.3	60	18 x 64.4	85
155	5.5		425	224	250	155	220	320	35	541	390	235	275	390	21	215	180	250	5	M12	63	28	8 x 31.3	70	20 x 74.9	120
175	7.5	448	247	250	155	220	320	35	541	390	235	275	390	21	215	180	250	5	M12	83	38	10 x 41.3	80	22 x 85.4	150	
175	7.5	481	262	280	175	250	350	40	600	435	260	310	430	21	265	230	300	5	M12	83	38	10 x 41.3	80	22 x 85.4	150	

WPW 型



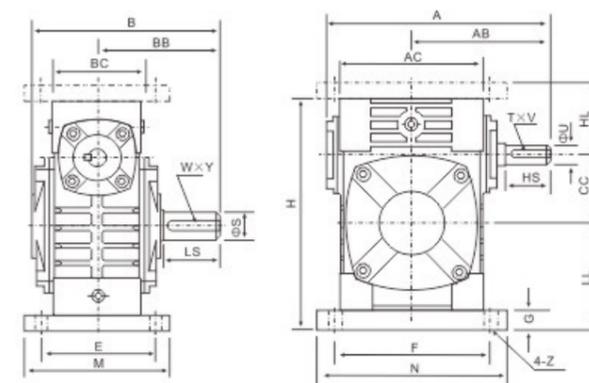
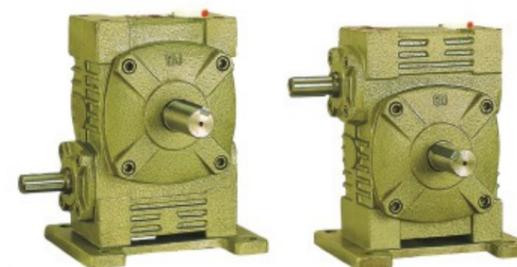
轴指向表示  
SHAFT DIRECTION



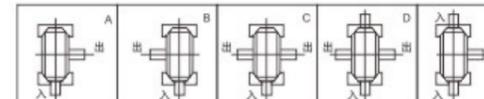
型号 size	减速比 ratio	A	AB	B	BB	AC	BC	AD	BD	CC	HL	H	Z x L	输入轴input shaft			出力轴output shaft			重量 (kg)
														HS	U	T x V	LS	S	W x Y	
40	1/10	149	89	124	79	95	61	78	42	40	35	125	M6 x 12	25	12	4 x 2.5	28	14	5 x 3	4
50		175	107	150	97	111	68	85	50	50	35	150	M6 x 18	30	12	4 x 2.5	40	17	5 x 3	6.5
60	1/15	198	122	168	112	127	76	105	55	60	42	177	M8 x 20	40	15	5 x 3	50	22	6 x 3.5	9
70		231	140	194	131	152	86	125	65	70	55	215	M10 x 25	40	18	6 x 3.5	60	28	8 x 4	13
80	1/20	261	160	214	142	169	102	140	70	80	65	250	M12 x 28	50	22	6 x 3.5	65	32	10 x 5	21
100	1/25	322	190	254	169	216	117	180	90	100	80	310	M12 x 30	50	25	8 x 4	75	38	10 x 5	34
120	1/30	381	229	282	190	256	124	220	100	120	95	370	M14 x 32	65	30	8 x 4	85	45	14 x 5.5	51
135	1/40	433	260	317	210	296	147	260	110	135	105	425	M16 x 35	75	35	10 x 5	95	55	16 x 6	78
155	1/50	504	302	382	252	345	185	280	120	155	103	461	M16 x 35	85	40	12 x 5	110	60	18 x 7	102
175	1/60	545	325	402	262	374	192	320	140	175	123	521	M16 x 35	85	45	14 x 5.5	110	65	18 x 7	142
200		587	350	467	305	412	230	360	150	200	130	575	M20 x 36	95	50	14 x 5.5	125	70	20 x 7.5	202
250		705	420	552	360	500	285	420	190	250	150	700	M24 x 42	110	60	18 x 7	155	90	25 x 9	340

WPWA 型

WPWS 型



轴指向表示  
SHAFT DIRECTION

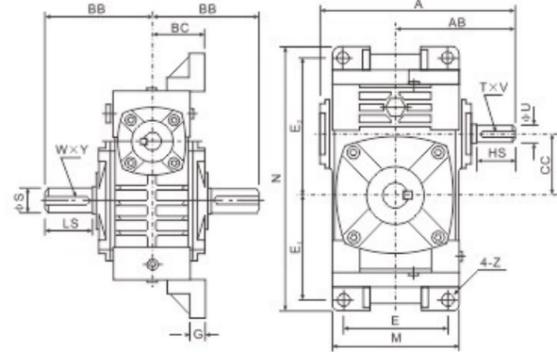


型号 size	减速比 ratio	A	AB	B	BB	AC	BC	CC	HL	LL	H	M	N	E	F	G	Z	输入轴input shaft			出力轴output shaft			重量 (kg)
																		HS	U	T x V	LS	S	W x Y	
40	1/10	149	89	124	79	95	61	40	45	60	135	100	130	80	110	10	10	25	12	4 x 2.5	28	14	5 x 3	4.5
50		175	107	150	97	111	68	50	50	80	165	120	140	95	110	15	12	30	12	4 x 2.5	40	17	5 x 3	7.5
60	1/15	198	122	168	112	127	76	60	60	93	195	130	150	105	120	18	12	40	15	5 x 3	50	22	6 x 3.5	11.5
70		231	140	194	131	152	86	70	73	108	233	150	190	115	150	18	15	40	18	6 x 3.5	60	28	8 x 4	15.5
80	1/20	261	160	214	142	169	102	80	83	123	268	170	220	135	180	18	15	50	22	6 x 3.5	65	32	10 x 5	24
100	1/25	322	190	254	169	216	117	100	100	150	330	190	270	155	220	20	15	50	25	8 x 4	75	38	10 x 5	39
120	1/30	381	229	282	190	256	124	120	120	180	395	230	320	180	260	25	18	65	30	8 x 4	85	45	14 x 5.5	57
135	1/40	433	260	317	210	296	147	135	135	215	455	250	350	200	290	30	18	75	35	10 x 5	95	55	16 x 6	85
155	1/50	504	302	382	252	345	185	155	135	235	493	280	380	220	320	32	21	85	40	12 x 5	110	60	18 x 7	110
175	1/60	545	325	402	262	374	192	175	160	260	558	310	410	250	350	37	21	85	45	14 x 5.5	110	65	18 x 7	152
200		587	350	467	305	412	230	200	175	290														

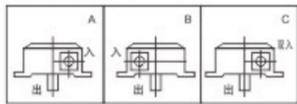
## WPWX 型



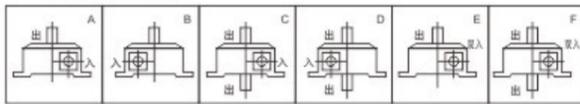
## WPWO 型



WPWX轴指向表示  
SHAFT DIRECTION



WPWO轴指向表示  
SHAFT DIRECTION

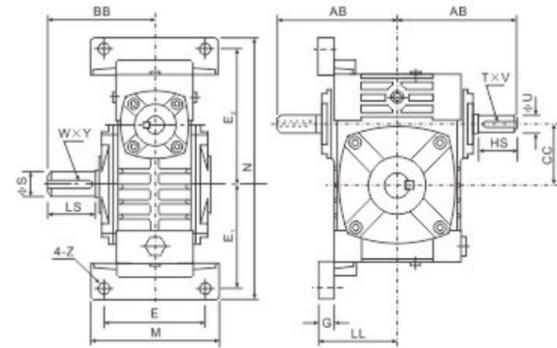


型号 size	减速比 ratio	输入轴input shaft										出力轴output shaft			重量 weight(kg)					
		A	AB	BB	BC	CC	M	N	E	E <sub>1</sub>	E <sub>2</sub>	G	Z	HS		U	T×V	LS	S	W×Y
40	0.12	149	89	79	45	40	95	187	70	72	97	12	10	25	12	4×2.5	28	14	5×3	5
50	0.18	175	107	97	50	50	111	226	90	90	110	14	12	30	12	4×2.5	40	17	5×3	8
60	0.37	198	122	112	55	60	127	257	100	102	129	15	12	40	15	5×3	50	22	6×3.5	11
70	0.37	231	140	131	65	70	152	305	120	120	155	20	15	40	18	6×3.5	60	28	8×4	15.5
80	0.75	261	160	142	70	80	174	350	140	140	180	20	15	50	22	6×3.5	65	32	10×5	24
100	1.5	322	190	169	90	100	224	410	190	165	215	22	15	50	25	8×4	75	38	10×5	38
120	3.0	381	229	190	100	120	264	494	220	195	255	25	18	65	30	8×4	85	45	14×5.5	56
135	4.0	433	260	210	110	135	304	559	260	230	285	30	18	75	35	10×5	95	55	16×6	84
155	5.5	504	302	252	140	155	345	605	290	250	305	35	21	85	40	12×5	110	60	18×7	129
175	7.5	545	325	262	150	175	374	675	320	273	348	40	21	85	45	14×5.5	110	65	18×7	157
200	11.0	587	350	305	175	200	424	749	370	305	390	40	24	95	50	14×5.5	125	70	20×7.5	224
250	15.0	705	420	352	200	250	510	920	440	375	475	45	28	110	60	18×7	155	90	25×9	374

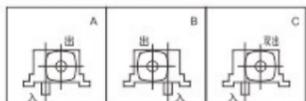
## WPWT 型



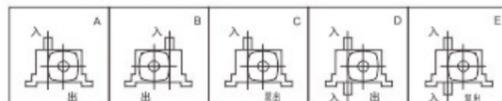
## WPWV 型



WPWV轴指向表示  
SHAFT DIRECTION

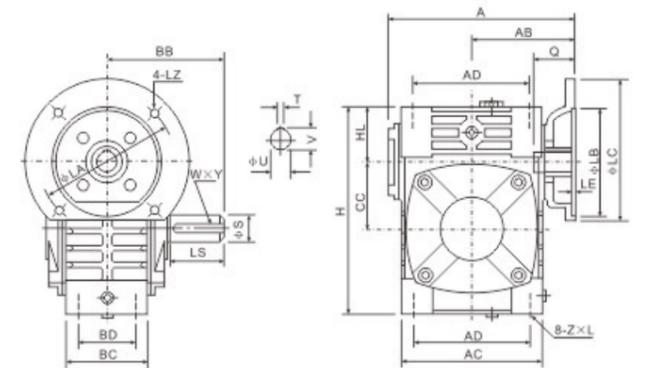


WPWT轴指向表示  
SHAFT DIRECTION

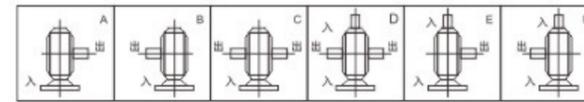


型号 size	减速比 ratio	输入轴input shaft										出力轴output shaft			重量 weight(kg)				
		AB	BB	CC	LL	M	N	E	E <sub>1</sub>	E <sub>2</sub>	G	Z	HS	U		T×V	LS	S	W×Y
40	0.12	87	79	40	63	90	187	70	72	97	12	10	25	12	4×2.5	28	14	5×3	5
50	0.18	107	97	50	70	120	226	95	90	110	14	12	30	12	4×2.5	40	17	5×3	8
60	0.37	122	112	60	80	130	257	105	102	129	15	12	40	15	5×3	50	22	6×3.5	11
70	0.37	140	131	70	95	150	305	115	120	155	20	15	40	18	6×3.5	60	28	8×4	15.5
80	0.75	160	142	80	105	170	350	135	140	180	20	15	50	22	6×3.5	65	32	10×5	24
100	1.5	190	169	100	135	190	410	155	165	215	22	15	50	25	8×4	75	38	10×5	38
120	3.0	229	190	120	160	230	494	180	195	255	25	18	65	30	8×4	85	45	14×5.5	56
135	4.0	260	210	135	185	250	559	200	230	285	30	18	75	35	10×5	95	55	16×6	84
155	5.5	302	252	155	220	275	605	220	250	305	35	21	85	40	12×5	110	60	18×7	129
175	7.5	325	262	175	240	310	675	250	273	348	40	21	85	45	14×5.5	110	65	18×7	157
200	11.0	350	305	200	280	360	749	290	305	390	40	24	95	50	14×5.5	125	70	20×7.5	224
250	15.0	420	352	250	315	460	920	380	375	475	45	28	110	60	18×7	155	90	25×9	374

## WPWD 型



轴指向表示  
SHAFT DIRECTION

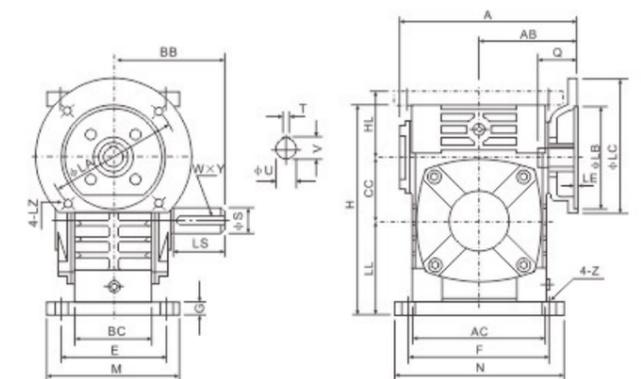


型号 size	输入功率 input(kW)	减速比 ratio	输入轴input shaft										出力轴output shaft			重量 weight(kg)									
			A	AB	BB	AC	BC	AD	BD	CC	HL	H	Z×L	LA	LB		LC	LE	LZ	Q	U	T×V	LS	S	W×Y
40	0.12	1/10	135	75	79	95	61	78	42	40	35	125	M6×12	115	95	140	4	M8	31	11	4×12.8	28	14	5×3	4
50	0.18		151	83	97	111	68	85	50	50	35	150	M6×18	115	95	140	4	M8	31	11	4×12.8	40	17	5×3	7
60	0.37		167	91	112	127	76	105	60	42	177	M8×20	130	110	160	4	M8	33	14	5×16.3	50	22	6×3.5	10	
70	0.37		200	109	131	152	86	125	65	70	55	215	M10×25	130	110	160	4	M8	40	14	5×16.3	60	28	8×4	14.5
80	0.75		202	111	131	152	86	125	65	70	55	215	M10×25	130	110	160	4	M10	42	19	6×21.8	60	28	8×4	14.5
80	1.5		225	125	142	169	102	140	70	80	65	250	M12×28	165	130	200	4.5	M10	48	19	6×21.8	65	32	10×5	23
100	1.5	1/20	280	148	169	216	117	180	90	100	80	310	M12×30	165	130	200	4.5	M10	52	24	8×27.3	75	38	10×5	36.5
120	2.2		333	181	190	256	124	220	100	120	95	370	M14×32	215	180	250	5	M12	63	28	8×31.3	85	45	14×5.5	54
135	3.0	1/40	375	202	210	296	147	260	110	135	105	425	M16×35	215	180	250	5	M12	63	28	8×31.3	95	55	16×6	83
155	5.5		448	247	252	345	185	280	120	155	103	461	M16×35	265	230	300	5	M12	83	38	10×41.3	110	60	18×7	110
175	7.5		481	262	262	374	192	320	140	175	123	521	M16×35	265	230	300	5	M12	83	38	10×41.3	110	65	18×7	156
200	11.0	1/60	543	285	305	412	230	360	150	200	130	575	M20×36	300	250	350	6	M16	114	42	12×45.3	125	70	20×7.5	222
250	15.0		615	330	360	500	285	420	190	250	150	700	M24×42	300	250	350	6	M16	114	42	12×45.3	155	90	25×9	376

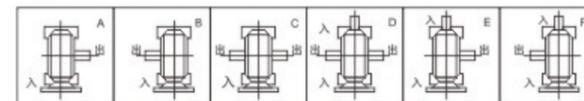
## WPWDA 型



## WPWDS 型



轴指向表示  
SHAFT DIRECTION

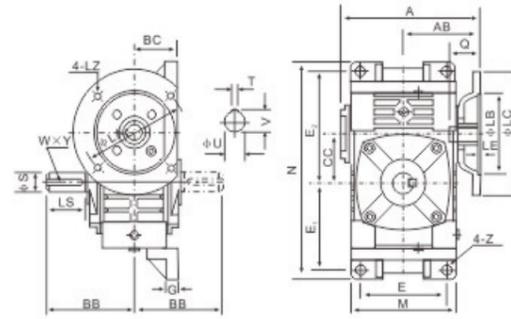


型号 size	输入功率 input(kW)	减速比 ratio	输入轴input shaft										出力轴output shaft			重量 weight(kg)													
			A	AB	BB	AC	BC	CC	HL	LL	H	M	N	E	F		G	Z	LA	LB	LC	LE	LZ	Q	U	T×V	LS	S	W×Y
40	0.12	1/10	135	75	79	95	61	40	45	60	135	100	130	80	110	10	10	115	95	140	4	M8	31	11	4×12.8	28	14	5×3	5
50	0.18		151	83	97	111	68	50	50	80	165	120	140	95	110	15	12	115	95	140	4	M8	31	11	4×12.8	40	17	5×3	8
60	0.37		167	91	112	127	76	60	60	93	195	130	150	105	120	18	12	130	110	160	4	M8	33	14	5×16.3	50	22	6×3.5	12.5
70	0.37		200	109	131	152	86	70	73	108	233	150	190	115	150	18	15	130	110	160	4	M8	40	14	5×16.3	60	28	8×4	17
80	0.75		202	111	131	152	86	70	73	108	233	150	190	115	150	18	15	165	130	200	4	M10	42	19	6×21.8	60	28	8×4	17
80	1.5		225	125	142	169	102	80	83	123	268	170	220	135	180	18	15	165	130	220	4.5	M10	48	19	6×21.8	65	32	10×5	26
100	1.5	1/20	280	148	169	216	117	100	100	150	330	190	270	155	220	20	15	165	130	220	4.5	M10	52	24	8×27.3	75	38	10×5	41.5
120	2.2		333	181	190	256	124	120	120	180	395	230	320	180	260	25	18	215	180	250	5	M12	63	28	8×31				

WPWDX 型

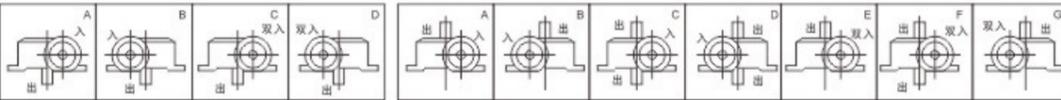


WPWDO 型



WPWDX轴指向表示  
SHAFT DIRECTION

WPWDO轴指向表示  
SHAFT DIRECTION

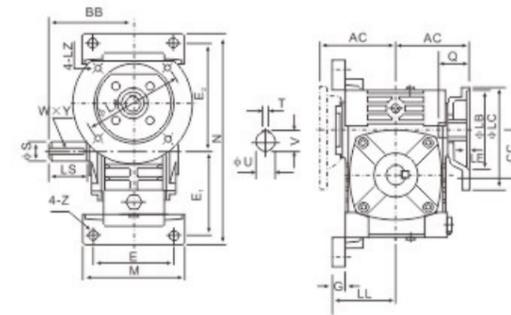


型号 size	输入功率 input(kW)	减速比 ratio	电机法兰flange										输入孔input hole				出力轴output shaft			重量 weight(kg)							
			A	AB	BB	BC	CC	M	N	E	E <sub>1</sub>	E <sub>2</sub>	G	Z	LA	LB	LC	LE	LZ		Q	U	T×V	LS	S	W×Y	
40	0.12	1/10 1/15 1/20 1/25 1/30 1/40 1/50 1/60	135	75	79	45	40	95	187	70	72	97	12	10	115	95	140	4	M8	31	11	4×12.8	28	14	5×3	5.4	
50	0.18		151	83	97	50	50	111	226	90	90	110	14	12	115	95	140	4	M8	31	11	4×12.8	40	17	5×3	8.5	
60	0.37		167	91	112	55	60	127	257	100	102	129	15	12	130	110	160	4	M8	33	14	5×16.3	50	22	6×3.5	12	
70	0.37		200	109	131	65	70	152	305	120	120	155	20	15	130	110	160	4	M8	40	14	5×16.3	60	28	8×4	17	
	0.75		202	111												165	130	200	4	M10	42	19	6×21.8				
80	0.75		225	125	142	70	80	174	350	140	140	180	20	15	165	130	200	4.5	M10	48	19	6×21.8	65	32	10×5	26	
	1.5															52	24				52	24	8×27.3				
100	1.5		1/20	280	148	169	90	100	224	410	190	165	215	22	15	165	130	200	4.5	M10	52	24	8×27.3	75	38	10×5	40.5
120	2.2		1/25	333	181	190	100	120	264	494	220	195	255	25	18	215	180	250	5	M12	63	28	8×31.3	85	45	14×5.5	59
	3.0		1/30																								
135	3.0		1/40	375	202	210	110	135	304	559	260	230	285	30	18	215	180	250	5	M12	63	28	8×31.3	95	55	16×6	89
	4.0		1/50																								
155	5.5		1/60	448	247	252	140	155	345	605	290	250	305	35	21	265	230	300	5	M12	83	38	10×41.3	110	60	18×7	138
	5.5																										
175	7.5		481	262	262	150	175	374	675	320	273	348	40	21	265	230	300	5	M12	83	38	10×41.3	110	65	18×7	172	
	11.0																										
200	11.0	543	285	305	175	200	424	749	370	305	390	40	21	300	250	350	6	M16	114	42	12×45.3	125	70	20×7.5	246		
	15.0																										
250		615	330	360	200	250	510	920	440	375	475	45	28	300	250	350	6	M16	114	42	12×45.3	155	90	25×9	410		

WPWDT 型

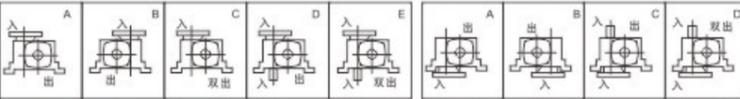


WPWDV 型



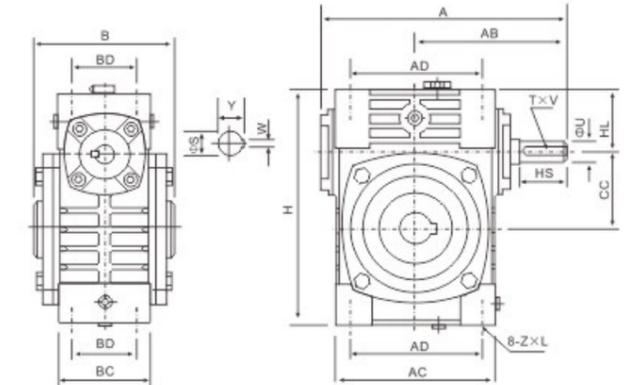
WPWDT轴指向表示  
SHAFT DIRECTION

WPWDV轴指向表示  
SHAFT DIRECTION

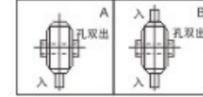


型号 size	输入功率 input(kW)	减速比 ratio	电机法兰flange										输入孔input hole				出力轴output shaft			重量 weight(kg)						
			AC	BB	CC	LL	M	N	E	E <sub>1</sub>	E <sub>2</sub>	G	Z	LA	LB	LC	LE	LZ	Q		U	T×V	LS	S	W×Y	
40	0.12	1/10 1/15 1/20 1/25 1/30 1/40 1/50 1/60	75	79	40	63	90	187	70	72	97	12	10	115	95	140	4	M8	31	11	4×12.8	28	14	5×3	5.4	
50	0.18		83	97	50	70	120	226	95	90	110	14	12	115	95	140	4	M8	31	11	4×12.8	40	17	5×3	8.5	
60	0.37		91	112	60	80	130	257	105	102	129	15	12	130	110	160	4	M8	33	14	5×16.3	50	22	6×3.5	12	
70	0.37		109	131	70	95	150	305	115	120	155	20	15	130	110	160	4	M8	40	14	5×16.3	60	28	8×4	17	
	0.75		111													165	130	200	4	M10	42	19	6×21.8			
80	0.75		125	142	80	105	170	350	135	140	180	20	15	165	130	200	4.5	M10	48	19	6×21.8	65	32	10×5	26	
	1.5															52	24				52	24	8×27.3			
100	1.5		1/20	148	169	100	135	190	410	155	165	215	22	15	165	130	200	4.5	M10	52	24	8×27.3	75	38	10×5	40.5
120	2.2		1/25	181	190	120	160	230	494	180	195	255	25	18	215	180	250	5	M12	63	28	8×31.3	85	45	14×5.5	59
	3.0		1/30																							
135	3.0		1/40	202	210	135	185	250	559	200	230	285	30	18	215	180	250	5	M12	63	28	8×31.3	95	55	16×6	89
	4.0		1/50																							
155	5.5		1/60	247	252	155	220	275	605	220	250	305	35	21	265	230	300	5	M12	83	38	10×41.3	110	60	18×7	138
	5.5																									
175	7.5		262	262	175	240	310	675	250	273	348	40	21	265	230	300	5	M12	83	38	10×41.3	110	65	18×7	172	
	11.0																									
200	11.0	285	305	200	280	360	749	290	305	390	40	24	300	250	350	6	M16	114	42	12×45.3	125	70	20×7.5	246		
	15.0																									
250		330	360	250	315	460	920	380	375	475	45	28	300	250	350	6	M16	114	42	12×45.3	155	90	25×9	410		

WPWK 型



轴指向表示  
SHAFT DIRECTION

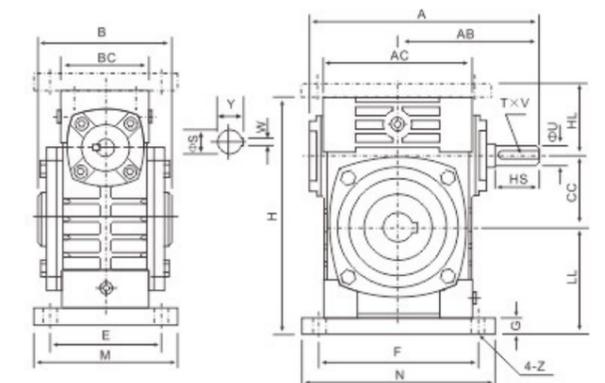


型号 size	减速比 ratio	A	AB	B	AC	BC	AD	BD	CC	HL	H	Z×L	输入轴input shaft			出力轴output shaft		重量 weight(kg)
													HS	U	T×V	S	W×Y	
40	1/10 1/15 1/20 1/25 1/30 1/40 1/50 1/60	149	89	90	95	61	78	42	40	35	125	M6×12	25	12	4×3	16	5×18.3	4
50		175	107	110	111	68	85	50	50	35	150	M6×18	30	12	4×2.5	20	6×22.8	6.5
60		198	122	120	127	76	105	55	60	42	177	M8×20	40	15	5×3	25	8×28.3	9
70		231	140	132	152	86	125	65	70	55	215	M10×25	40	18	6×3.5	30	8×33.3	13
80		261	160	150	169	102	140	70	80	65	250	M12×28	50	22	6×3.5	35	10×38.3	21
100		322	190	174	216	117	180	90	100	80	310	M12×30	50	25	8×4	40	12×43.3	34
120		381	229	180	256	124	220	100	120	95	370	M14×32	65	30	8×4	45	14×48.8	51
135		433	260	214	296	147	260	110	135	105	425	M16×35	75	35	10×5	60	18×64.4	78
155		504	302	256	345	185	280	120	155	103	461	M16×35	85	40	12×5	70	20×74.9	102
175		545	325	282	374	192	320	140	175	123	521	M16×35	85	45	14×5.5	80	22×85.4	142
200		587	350	324	412	230	360	150	200	130	575	M20×38	95	50	14×5.5	85	22×90.4	202
250		705	420	400	500	285	420	190	250	150	700	M24×42	110	60	18×7	110	28×116.4	340

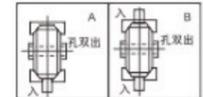
WPWKA 型



WPWKS 型

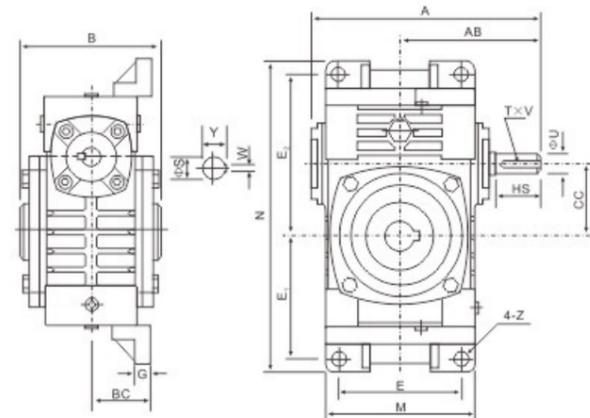


轴指向表示  
SHAFT DIRECTION

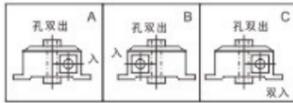


型号 size	减速比 ratio	A	AB	B	AC	BC	CC	HL	LL	H	M	N	E	F	G	Z	输入轴input shaft			出力轴output shaft		重量 weight(kg)
																	HS	U	T×V	S	W×Y	
40	1/10 1/15 1/20 1/25 1/30 1/40 1/50 1/60	149	89	90	95	61	40	45	60	135	100	130	80	110	10	10	25	12	4×2.5	16	5×18.3	4.5
50		175	107	110	111	68	50	50	80	165	120	140	95	110	15	12	30	12	4×2.5	20	6×22.8	7.5
60		198	122	120	127	76	60	60	93	195	130	150	105	120	18	12	40	15	5×3	25	8×28.3	11.5
70		231	140	132	152	86	70	73	108	233	150	190	115									

### WPWKO 型



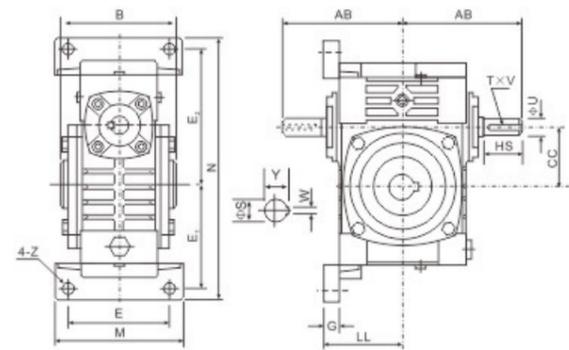
轴指向表示  
 SHAFT DIRECTION



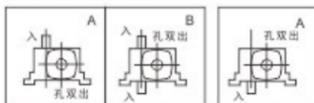
型号 size	减速比 ratio	输入轴input shaft											输出轴output shaft		重量 weight(kg)				
		A	AB	B	BC	CC	M	N	E	E <sub>1</sub>	E <sub>2</sub>	G	Z	HS		U	T×V	S	W×Y
40	1/10	149	89	90	45	40	95	187	70	72	97	12	10	25	12	4×2.5	16	5×18.3	5
50		175	107	110	50	50	111	226	90	90	110	14	12	30	12	4×2.5	20	6×22.8	8
60	1/15	198	122	120	55	60	127	257	100	102	129	15	12	40	15	5×3	25	8×28.3	11
70		231	140	132	65	70	152	305	120	120	155	20	15	40	18	6×3.5	30	8×33.3	15.5
80	1/20	261	160	150	70	80	174	350	140	140	180	20	15	50	22	6×3.5	35	10×38.3	24
100		322	190	174	90	100	224	410	190	165	215	22	15	50	25	8×4	40	12×43.3	38
120	1/30	381	229	180	100	120	264	494	220	195	255	25	18	65	30	8×4	45	14×48.8	56
135		433	260	214	110	135	304	559	260	230	285	30	18	75	35	10×5	60	18×64.4	84
155	1/50	504	302	256	140	155	345	605	290	250	305	35	21	85	40	12×5	70	20×74.9	129
175		645	325	282	150	175	374	675	320	273	348	40	21	85	45	14×5.5	80	22×85.4	157
200	1/60	587	350	324	175	200	424	749	370	305	390	40	24	95	50	14×5.5	85	22×90.4	224
250		705	420	400	200	250	510	920	440	375	475	45	28	110	60	18×7	110	28×116.4	374

### WPWK T 型

### WPWK V 型

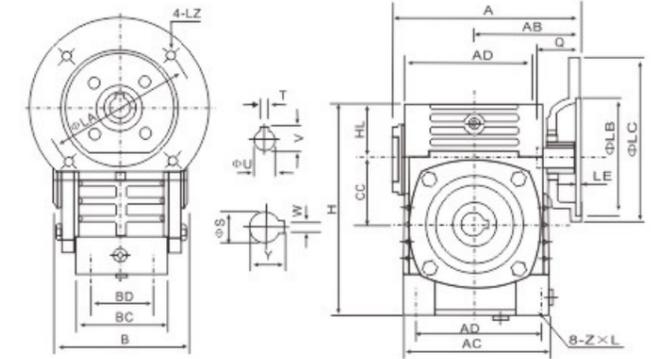


轴指向表示  
 SHAFT DIRECTION

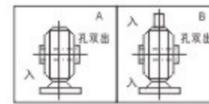


型号 size	减速比 ratio	输入轴input shaft											输出轴output shaft		重量 weight(kg)			
		A	AB	B	CC	LL	M	N	E	E <sub>1</sub>	E <sub>2</sub>	G	Z	HS		U	T×V	S
40	1/10	87	90	40	63	90	187	70	72	97	12	10	25	12	4×2.5	16	5×18.3	5
50		107	110	50	70	120	226	95	90	110	14	12	30	12	4×2.5	20	6×22.8	8
60	1/15	122	120	60	80	130	257	105	102	129	15	12	40	15	5×3	25	8×28.3	11
70		140	132	70	95	150	305	115	120	155	20	15	40	18	6×3.5	30	8×33.3	15.5
80	1/20	160	150	80	105	170	350	135	140	180	20	15	50	22	6×3.5	35	10×38.3	24
100		190	174	100	135	190	410	155	165	215	22	15	50	25	8×4	40	12×43.3	38
120	1/30	229	180	120	160	230	494	180	195	255	25	18	65	30	8×4	45	14×48.8	56
135		260	214	135	185	250	559	200	230	285	30	18	75	35	10×5	60	18×64.4	84
155	1/50	302	256	155	220	275	605	220	250	305	35	21	85	40	12×5	70	20×74.9	129
175		325	282	175	240	310	675	250	273	348	40	21	85	45	14×5.5	80	22×85.4	157
200	1/60	350	324	200	280	360	749	290	305	390	40	24	95	50	14×5.5	85	22×90.4	224
250		420	400	250	315	460	920	380	375	475	45	28	110	60	18×7	110	28×116.4	374

### WPWDK 型



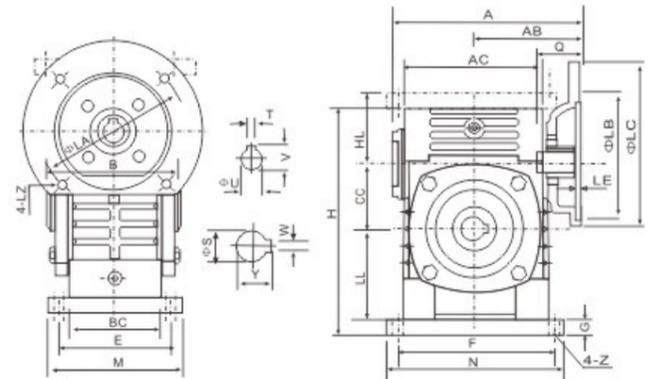
轴指向表示  
 SHAFT DIRECTION



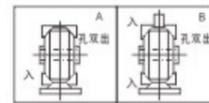
型号 size	入功率 input(KW)	减速比 ratio	输入轴input shaft											电机法兰flange		输入孔input hole			出力轴output shaft		重量 weight(kg)			
			A	AB	B	AC	BC	AD	BD	CC	HL	H	Z×L	LA	LB	LC	LE	LZ	Q	U		T×V	S	W×Y
40	0.12	1/10	135	75	90	95	61	78	42	40	35	125	M6×12	115	95	140	4	M8	31	11	4×12.8	16	5×18.3	4
50	0.18		151	83	110	111	68	85	50	50	35	150	M6×18	115	95	140	4	M8	31	11	4×12.8	20	6×22.8	7
60	0.37	1/15	167	91	120	127	76	105	55	60	42	177	M8×20	130	110	160	4	M8	33	14	5×16.3	25	8×28.3	10
70	0.75		200	109	132	152	86	125	65	70	55	215	M10×25	130	110	160	4	M8	40	14	5×16.3	30	8×33.3	14.5
80	1.5	1/20	225	125	150	169	102	140	70	80	65	250	M12×28	165	130	200	4.5	M10	48	19	6×21.8	35	10×38.3	23
100	3.0		280	148	174	216	117	180	90	100	80	310	M12×30	165	130	200	4.5	M10	52	24	8×27.3	40	12×43.3	36.5
120	4.5	1/25	333	181	180	256	124	220	100	120	95	370	M14×32	215	180	250	5	M12	63	28	8×31.3	45	14×48.8	54
135	7.5		375	202	214	296	147	260	110	135	105	425	M16×35	215	180	250	5	M12	63	28	8×31.3	60	18×64.4	83
155	15	1/50	448	247	256	345	185	280	120	155	103	481	M16×35	265	230	300	5	M12	83	38	10×41.3	70	20×74.9	110
175	30		481	262	282	374	192	320	140	175	123	521	M16×35	265	230	300	5	M12	83	38	10×41.3	80	22×85.4	156
200	60	1/60	543	285	324	412	230	360	150	200	130	575	M20×36	300	250	350	6	M16	114	42	12×45.3	85	22×90.4	222
250	150		615	330	400	500	285	420	190	250	150	700	M24×42	300	250	350	6	M16	114	42	12×45.3	110	28×116.4	376

### WPWDKA 型

### WPWDKS 型



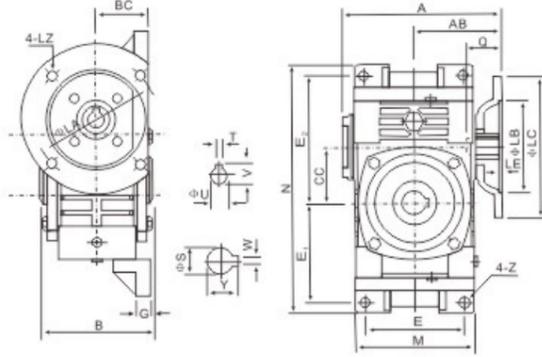
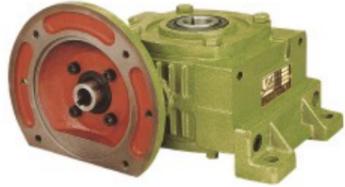
轴指向表示  
 SHAFT DIRECTION



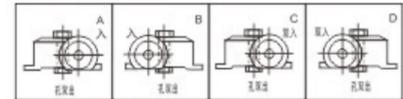
型号 size	入功率 input(KW)	减速比 ratio	输入轴input shaft											电机法兰flange		输入孔input hole			出力轴output shaft		重量 weight(kg)							
			A	AB	B	AC	BC	CC	HL	LL	H	M	N	E	F	G	Z	LA	LB	LC		LE	LZ	Q	U	T×V	S	W×Y
40	0.12	1/10	135	75	90	95	61	40	45	60	135	100	130	80	110	10	10	115	95	140	4	M8	31	11	4×12.8	16	5×18.3	5
50	0.18		151	83	110	111	68	50	50	80	165	120	140	95	110	15	12	115	95	140	4	M8	31	11	4×12.8	20	6×22.8	8
60	0.37	1/15	167	91	120	127	76	60	60	93	195	130	150	105	120	18	12	130	110	160	4	M8	33	14	5×16.3	25	8×28.3	12.5
70	0.75		200	109	132	152	86	70	73	108	233	150	190	115	150	18	15	130	110	160	4	M8	40	14	5×16.3	30	8×33.3	17
80	1.5	1/20	225	125	150	169	102	80	83	123	268	170	220	135	180	18	15	165	130	200	4.5	M10	48	19	6×21.8	35	10×38.3	26
100	3.0		280	148	174	216	117	100	100	150	330	190	270	155	220	20	15	165	130	200	4.5	M10	52	24	8×27.3	40	12×43.3	41.5
120	4.5	1/25	333	181	180	256	124	120	120	180	395	230	320	180	260	25	18	215	180	250	5	M12	63	28	8×31.3	45	14×48.8	60
135	7.5		375	202	214	296	147	135	135	215	455	250	350	200	290	30	18	215	180	250	5	M12	63	28	8×31.3	60	18×64.4	90
155	15	1/50	448	247	256	345	185	155	135	235	493	280	380	220	320	32	21	265	230	300	5	M12	83	38	10×41.3	70	20×74.9	118
175	30		481	262	282	374	192	175	160	260	558	310	410	250	350	37	21	265	230	300	5	M12	83	38	10×41.3	80	22×85.4	167
200	60	1/60	543	285	324	412	230	200	175	290	620	355	445	290	390	45	24	300	250	350	6	M16	114	42	12×45.3	85	22×90.4	237
250	150		615	330	400	500	285	250	200	350	750	460	560	380	480	50	28	300	250	350	6	M16	114	42	12×45.3	110	28×116.4	395



### WPWDKO 型



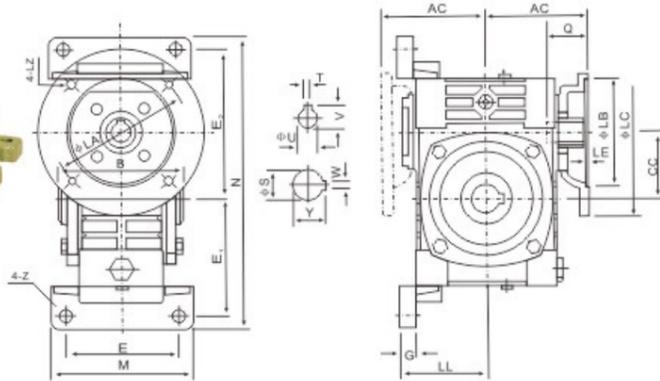
轴指向表示  
SHAFT DIRECTION



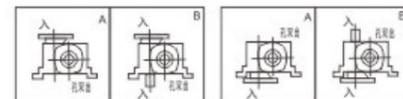
型号 size	入功率 input(KW)	减速比 ratio	A	AB	B	BC	CC	M	N	E	E <sub>1</sub>	E <sub>2</sub>	G	Z	电机法兰 flange				入力孔 input hole			出力轴 output shaft			重量 weight(kg)																				
															LA	LB	LC	LE	LZ	Q	U	T×V	S	W×Y																					
40	0.12	1/10	135	75	90	45	40	95	187	70	72	97	12	10	115	95	140	4	M8	31	11	4×12.8	16	5×18.3	5.4																				
50	0.18		151	83	110	50	50	111	226	90	90	110	14	12	115	95	140	4	M8	31	11	4×12.8	20	6×22.8	8.5																				
60	0.37		167	91	120	55	60	127	257	100	102	129	15	12	130	110	160	4	M8	33	14	5×16.3	25	8×28.3	12																				
70	0.37	1/15	200	109	132	65	70	152	305	120	120	155	20	15	130	110	160	4	M8	40	14	5×16.3	30	8×33.3	17																				
	0.75		202	111																																									
	1.5		225	125																						150	70	80	174	350	140	140	180	20	15	165	130	200	4.5	M10	48	19	6×21.8	35	10×38.3
100	1.5	1/20	280	148	174	90	100	224	410	190	185	215	22	15	165	130	200	4.5	M10	52	24	8×27.3	40	12×43.3	40.5																				
120	2.2	1/25	333	181	180	100	120	264	494	220	195	255	25	18	215	180	250	5	M12	63	28	8×31.3	45	14×48.8	59																				
	3.0																																												
	4.0																																												
135	3.0	1/40	375	202	214	110	135	304	559	260	230	285	30	18	215	180	250	5	M12	63	28	8×31.3	60	18×64.4	89																				
155	5.5	1/60	448	247	256	140	155	345	605	290	250	305	35	21	265	230	300	5	M12	83	38	10×41.3	70	20×74.9	138																				
	5.5																																												
	7.5																																												
175	7.5	1/50	481	262	282	150	175	374	675	320	273	348	40	21	265	230	300	5	M12	83	38	10×41.3	80	22×85.4	172																				
200	11.0		543	285	324	175	200	424	749	370	305	390	40	24	300	250	350	6	M16	114	42	12×45.3	85	22×90.4	246																				
250	11.0 15.0		615	330	400	200	250	510	920	440	375	475	45	28	300	250	350	6	M16	114	42	12×45.3	110	28×116.4	410																				

### WPWDKT 型

### WPWDKV 型

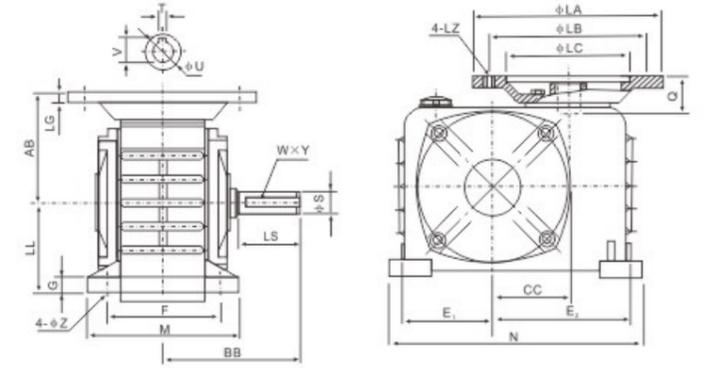


WPWDKT轴指向表示  
SHAFT DIRECTION

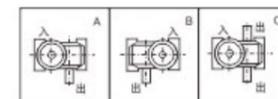


型号 size	入功率 input(KW)	减速比 ratio	AC	B	CC	LL	M	N	E	E <sub>1</sub>	E <sub>2</sub>	G	Z	电机法兰 flange				入力孔 input hole			出力轴 output shaft			重量 weight(kg)																			
														LA	LB	LC	LE	LZ	Q	U	T×V	S	W×Y																				
40	0.12	1/10	75	90	40	63	90	187	70	72	97	12	10	115	95	140	4	M8	31	11	4×12.8	16	5×18.3	5.4																			
50	0.18		83	110	50	70	120	226	95	90	110	14	12	115	95	140	4	M8	31	11	4×12.8	20	6×22.8	8.5																			
60	0.37		91	120	60	80	130	257	105	102	129	15	12	130	110	160	4	M8	33	14	5×16.3	25	8×28.3	12																			
70	0.37	1/15	109	132	70	95	150	305	115	120	155	20	15	130	110	160	4	M8	40	14	5×16.3	30	8×33.3	17																			
	0.75		111																																								
	1.5		125																						150	80	105	170	350	135	140	180	20	15	165	130	200	4.5	M10	48	19	6×21.8	35
100	1.5	1/20	148	174	100	135	190	410	155	165	215	22	15	165	130	200	4.5	M10	52	24	8×27.3	40	12×43.3	40.5																			
120	2.2	1/25	181	180	120	160	230	494	180	195	255	25	18	215	180	250	5	M12	63	28	8×31.3	45	14×48.8	59																			
	3.0																																										
	4.0																																										
135	3.0	1/40	202	214	135	185	250	559	200	230	285	30	18	215	180	250	5	M12	63	28	8×31.3	60	18×64.4	89																			
155	5.5	1/60	247	256	155	220	275	605	220	250	305	35	21	265	230	300	5	M12	83	38	10×41.3	70	20×74.9	138																			
175	7.5	1/50	262	282	175	240	310	675	250	273	348	40	21	265	230	300	5	M12	83	38	10×41.3	80	22×85.4	172																			
200	11.0		285	324	200	280	360	749	290	305	390	40	24	300	250	350	6	M16	114	42	12×45.3	85	22×90.4	246																			
250	11.0 15.0		330	400	250	315	460	920	380	375	475	45	28	300	250	350	6	M16	114	42	12×45.3	110	28×116.4	410																			

### WPDZ 型

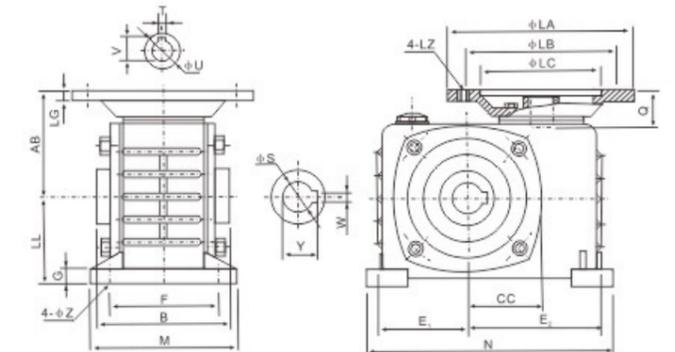


轴指向表示  
SHAFT DIRECTION



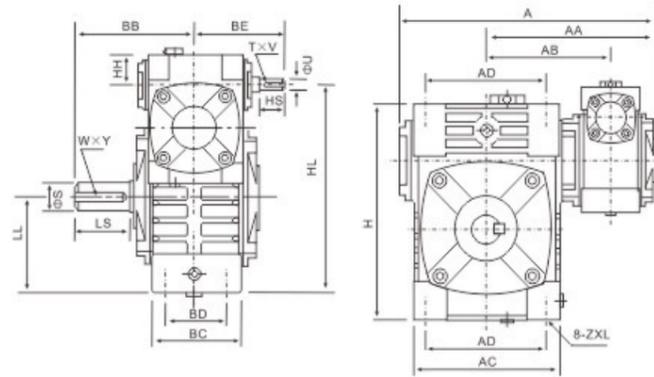
型号 size	入功率 input(KW)	减速比 ratio	AB	LL	BB	CC	E <sub>1</sub>	E <sub>2</sub>	F	G	N	M	Z	电机法兰 flange				入力孔 input hole			出力轴 output shaft			重量 weight(kg)																				
														LB	LC	LA	LG	LZ	Q	U	T×V	LS	S		W×Y																			
50	0.18	1/10	88	77	95	50	53	77	100	15	160	125	11	115	95	140	10	M8	26	11	4×12.8	40	17	5×3	8																			
60	0.18		92	82	110	60	68	92	100	15	190	130	11	115	95	140	10	M8	27	11	4×12.8	50	22	6×3.5	12.5																			
	0.37		108	95	130	70	75	115	120	20	230	155	15	130	110	160	10	M8	32	14	5×16.3	60	28	8×4	16																			
70	0.37	1/15	113	95	130	70	75	115	120	20	230	155	15	130	110	160	10	M8	42	19	6×21.8	60	28	8×4	16																			
	0.75		165																							130	200	10	M10	42	19	6×21.8	60	28	8×4									
	1.5		125																							100	140	80	96	144	125	20	265	160	15	165	130	200	12	M10	45	19	6×21.8	65
80	0.75	1/20	125	100	140	80	96	144	125	20	265	160	15	165	130	200	12	M10	45	19	6×21.8	65	32	10×5	23																			
100	1.5	1/30	149	135	155	100	100	150	155	22	310	195	15	165	130	200	15	M10	57	24	8×27.3	75	38	10×5	38																			
120	2.2	1/40	176	160	185	120	120	180	180	28	360	230	18	215	180	250	18	M12	70	28	8×31.3	85	45	14×5.5	60																			
	3.0																																											
	4.0	196																								170	210	135	130	200	200	30	390	250	18	215	180	250	20	M12	68	28	8×31.3	95

### WPDKZ 型

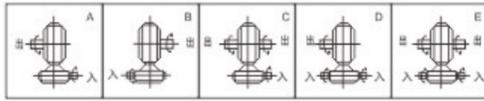


型号 size	入功率 input(KW)	减速比 ratio	AB	B	CC	E <sub>1</sub>	E <sub>2</sub>	F	G	LL	N	M	Z	电机法兰 flange				入力孔 input hole			出力轴 output shaft			重量 weight(kg)
														LB	LC	LA	LG	LZ	Q	U	T×V	S	W×Y	
50	0.18	1/10	88	107	50	53	77	100	15	76	160	125	11	115	95	140	10	M8	26	11	4×12.8	20	6×22.8	8
60	0.18		92	117																				

### WPWE 型

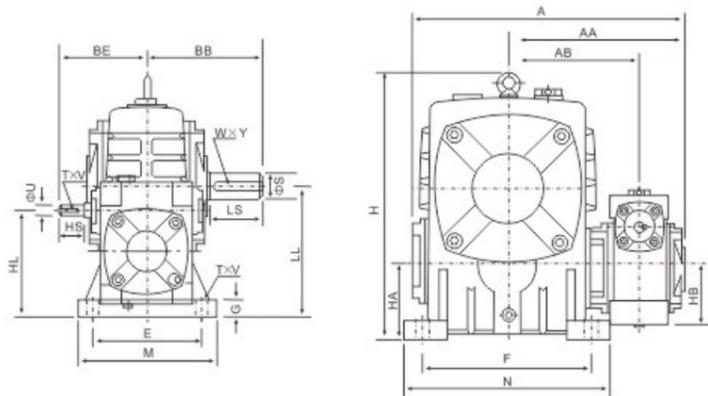


轴指向表示  
SHAFT DIRECTION

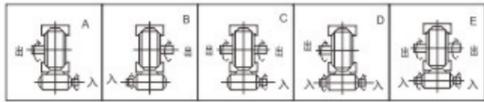


型号 size	减速比 ratio	A	AA	AB	BB	BE	AC	BC	AD	BD	HH	HL	LL	H	ZxL	输入轴input hole			出力轴output shaft			重量 weight(kg)
																HS	U	T×V	LS	S	W×Y	
40-70		262	171	126	131	89	152	86	125	65	35	200	90	215	M10 X25	25	12	4×2.5	60	28	8×4	17
50-80	1/200	297	197	144	142	107	169	102	140	70	35	235	105	250	M12X28	30	12	4×2.5	65	32	10×5	28
60-100	1/300	363	231	175	169	122	216	117	180	90	42	290	130	310	M12X30	40	15	5×3	75	38	10×5	43
70-120	1/400	408	256	193	190	140	256	124	220	100	55	345	155	370	M14X32	40	18	6×3.5	85	45	14×5.5	64
80-135	1/500	471	298	226	210	160	296	147	260	110	65	400	185	425	M16X35	50	22	6×3.5	95	55	16×6	99
100-155	1/600	555	354	269	252	190	345	185	280	120	80	458	203	461	M16X35	50	25	8×4	110	60	18×7	136
120-175	1/800	598	379	287	262	229	374	192	320	140	95	518	223	521	M16X35	65	30	8×4	110	65	18×7	193
135-200	1/900	662	425	318	305	260	412	230	360	150	105	580	245	575	M20X36	75	35	10×5	125	70	20×7.5	280
155-250		795	510	380	360	302	500	285	420	190	103	705	300	700	M24X42	85	40	12×5	155	90	25×9	442

### WPEA 型

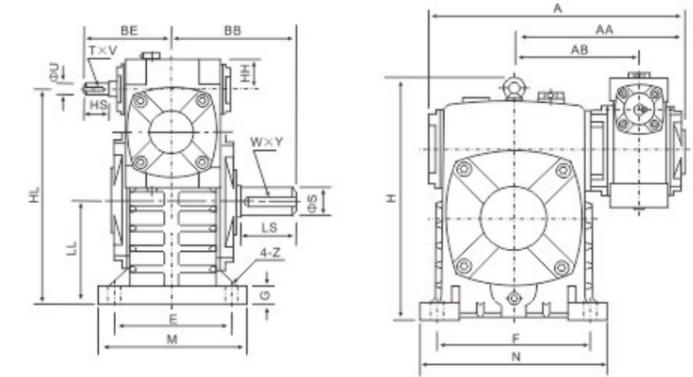


轴指向表示  
SHAFT DIRECTION

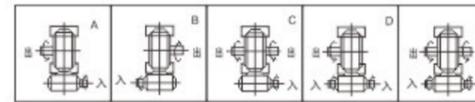


型号 size	减速比 ratio	A	AA	AB	BB	BE	HL	LL	H	HA	HB	M	N	E	F	G	Z	输入轴input hole			出力轴output shaft			重量 weight(kg)
																		HS	U	T×V	LS	S	W×Y	
40-70		262	171	126	131	89	110	140	236	70	50	150	190	115	150	20	15	25	12	4×2.5	60	28	8×4	20
50-80	1/200	297	197	144	142	107	130	160	268	80	65	170	220	135	180	20	15	30	12	4×2.5	65	32	10×5	27
60-100	1/300	363	231	175	169	122	160	200	336	100	75	190	270	155	220	25	15	40	15	5×3	75	38	10×5	44
70-120	1/400	408	256	193	190	140	190	240	430	120	90	230	320	180	260	30	18	40	18	6×3.5	85	45	14×5.5	73
80-135	1/500	471	298	226	210	160	215	270	480	135	105	250	350	200	290	30	18	50	22	6×3.5	95	55	16×6	101
100-155	1/600	555	354	269	252	190	203	270	501	123	105	250	350	200	280	32	18	50	22	6×3.5	95	55	16×6	112
120-175	1/800	598	379	287	262	229	235	290	531	135	130	275	390	220	320	35	21	50	25	8×4	110	60	18×7	144
135-200	1/900	662	425	318	305	260	310	375	666	175	185	360	480	290	390	40	24	75	35	10×5	125	70	20×7.5	293
155-250		795	510	380	360	302	355	450	800	200	203	460	560	380	480	45	28	85	40	12×5	155	90	25×9	462

### WPES 型



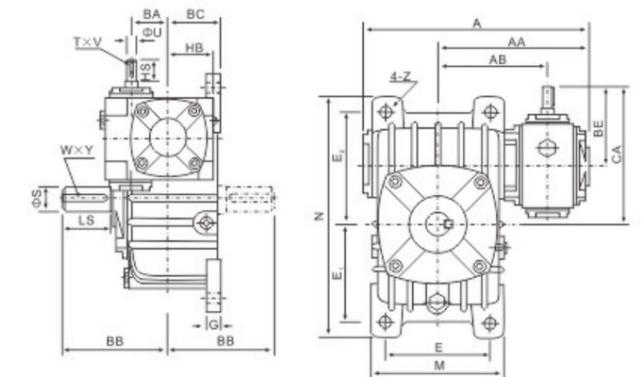
轴指向表示  
SHAFT DIRECTION



型号 size	减速比 ratio	A	AA	AB	BB	BE	HH	HL	LL	H	M	N	E	F	G	Z	输入轴input hole			出力轴output shaft			重量 weight(kg)
																	HS	U	T×V	LS	S	W×Y	
40-70		262	171	126	131	89	35	215	105	238	150	190	115	150	20	15	25	12	4×2.5	60	28	8×4	20
50-80	1/200	297	197	144	142	107	35	250	120	273	170	220	135	180	20	15	30	12	4×2.5	65	32	10×5	27
60-100	1/300	363	231	175	169	122	42	310	150	334	190	270	155	220	25	15	40	15	5×3	75	38	10×5	44
70-120	1/400	408	256	193	190	140	55	370	180	423	230	320	180	260	30	18	40	18	6×3.5	85	45	14×5.5	73
80-135	1/500	471	298	226	210	160	65	430	215	482	250	350	200	290	30	18	50	22	6×3.5	95	55	16×6	101
100-155	1/600	555	354	269	252	190	80	490	235	541	275	390	220	320	35	21	50	25	8×4	110	60	18×7	144
120-175	1/800	598	379	287	262	229	95	555	260	600	310	430	250	350	40	21	65	30	8×4	110	65	18×7	201
135-200	1/900	662	425	318	305	260	105	625	290	677	360	480	290	390	40	24	75	35	10×5	125	70	20×7.5	293
155-250		795	510	380	360	302	103	755	350	824	460	560	380	480	45	28	85	40	12×5	155	90	25×9	462

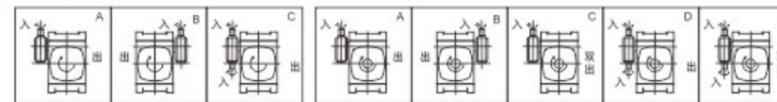
### WPEX 型

### WPEO 型



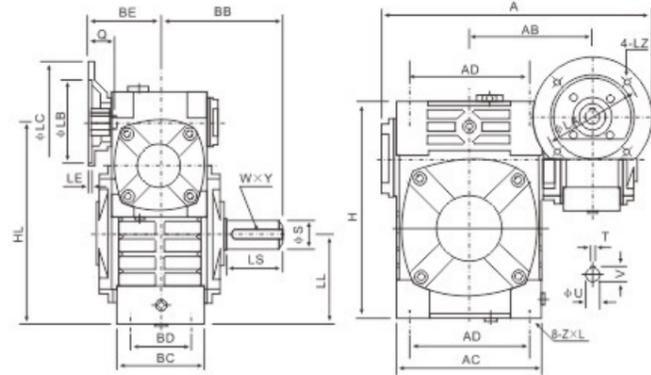
WPEX轴指向表示  
SHAFT DIRECTION

WPEO轴指向表示  
SHAFT DIRECTION

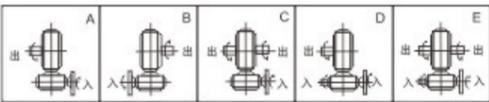


型号 size	减速比 ratio	A	AA	AB	BA	BB	BC	BE	HB	CA	M	N	E	E <sub>1</sub>	E <sub>2</sub>	G	Z	输入轴input hole			出力轴output shaft			重量 weight(kg)
																		HS	U	T×V	LS	S	W×Y	
40-70		262	171	126	40	131	65	89	50	159	156	295	120	120	135	20	15	25	12	4×2.5	60	28	8×4	19
50-80	1/200	297	197	144	50	142	70	107	65	187	175	320	140	130	150	20	15	30	12	4×2.5	65	32	10×5	27
60-100	1/300	363	231	175	60	169	90	122	75	222	224	375	190	155	180	26	15	40	15	5×3	75	38	10×5	44
70-120	1/400	408	256	193	70	190	100	140	90	260	266	450	220	185	215	30	18	40	18	6×3.5	85	45	14×5.5	63
80-135	1/500	471	298	226	80	210	110	160	105	295	306	495	260	210	235	30	18	50	22	6×3.5	95	55	16×6	96
100-155	1/600	555	354	269	100	252	140	190	130	345	350	590	290	245	295	35	21	50	25	8×4	110	60	18×7	149
120-175	1/800	598	379	287	120	262	150	229	155	404	394	640	320	267	323	40	21	65	30	8×4	110	65	18×7	191
135-200	1/900	662	425	318	135	305	175	260	185	460	440	710	370	290	360	40	24	75	35	10×5	125	70	20×7.5	278
155-250		795	510	380	155	360	200	302	203	552	510	860	440	350	440	45	28	85	40	12×5	155	90	25×9	462

## WPWED 型

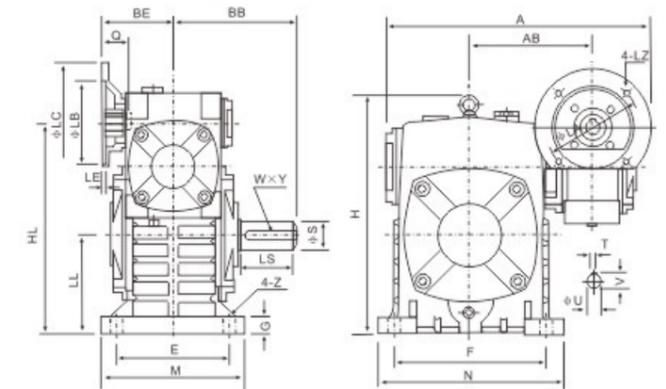


轴指向表示  
SHAFT DIRECTION

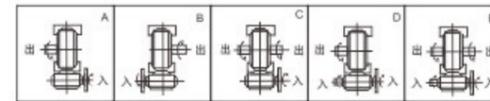


型号 size	输入功率 input(kW)	减速比 ratio	A	AB	BB	BE	AC	BC	AD	BD	HL	LL	H	ZxL	电机法兰flange				输入孔input hole			出力轴output shaft			重量 weight(kg)	
															LA	LB	LC	LE	LZ	Q	U	TxV	LS	S		WxY
40-70	0.12	1/200	287	126	131	75	152	86	125	65	200	90	215	M10 X25	115	95	140	4	M8	31	11	4x12.8	60	28	8x4	17
50-80	0.18		314	144	142	83	169	102	140	70	235	105	250	M12X28	115	95	140	4	M8	31	11	4x12.8	65	32	10x5	28
60-100	0.37	1/300	387	175	169	91	216	117	180	90	290	130	310	M12X30	130	110	160	4	M8	33	14	5x16.3	75	38	10x5	44
70-120	0.75		425	193	190	109	256	124	220	100	345	155	370	M14X32	130	110	160	4	M8	40	14	5x16.3	85	45	14x5.5	66
80-135	1.5	1/400	445	193	190	111	256	124	220	100	345	155	370	M14X32	165	130	200	4	M10	42	19	6x21.8	85	45	14x5.5	66
80-135	0.75		499	226	210	125	296	147	260	110	400	185	425	M16X35	165	130	200	4.5	M10	48	19	6x21.8	95	55	16x6	101
100-155	3.0	1/500	570	269	252	148	345	185	280	120	458	203	461	M16X35	165	130	200	4.5	M10	52	24	8x27.3	110	60	18x7	139
120-175	4.0		631	287	262	181	374	192	320	140	518	223	521	M16X35	215	180	250	5	M12	63	28	8x31.3	110	65	18x7	196
135-200	7.5	1/800	680	318	305	202	412	230	360	150	580	245	575	M20X36	215	180	250	5	M12	63	28	8x31.3	125	70	20x7.5	285
155-250	15.0		815	380	360	247	500	285	420	190	705	300	700	M24X42	265	230	300	5	M12	83	38	10x41.3	155	90	25x9	450

## WPEDS 型

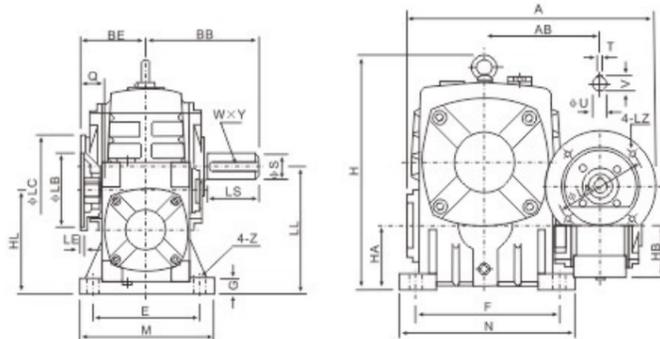


轴指向表示  
SHAFT DIRECTION

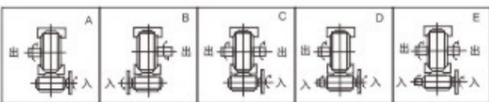


型号 size	输入功率 input(kW)	减速比 ratio	A	AB	BB	BE	HL	LL	H	M	N	E	F	G	Z	电机法兰flange				输入孔input hole			出力轴output shaft			重量 weight(kg)	
																LA	LB	LC	LE	LZ	Q	U	TxV	LS	S		WxY
40-70	0.12	1/200	287	126	131	75	215	105	238	150	190	115	150	20	15	115	95	140	4	M8	31	11	4x12.8	60	28	8x4	19
50-80	0.18		314	144	142	83	250	120	273	170	220	135	180	20	15	115	95	140	4	M8	31	11	4x12.8	65	32	10x5	27
60-100	0.37	1/300	387	175	169	91	310	150	334	190	270	155	220	25	15	130	110	160	4	M8	33	14	5x16.3	75	38	10x5	45
70-120	0.75		425	193	190	109	370	180	423	230	320	180	260	30	18	130	110	160	4	M8	40	14	5x16.3	85	45	14x5.5	75
80-135	1.5	1/400	445	193	190	111	370	180	423	230	320	180	260	30	18	165	130	200	4	M10	42	19	6x21.8	85	45	14x5.5	75
80-135	0.75		499	226	210	125	430	215	482	250	350	200	290	30	18	165	130	200	4.5	M10	48	19	6x21.8	95	55	16x6	103
100-155	3.0	1/500	570	269	252	148	490	235	541	275	390	220	320	35	21	165	130	200	4.5	M10	52	24	8x27.3	110	60	18x7	147
120-175	4.0		631	287	262	181	555	260	600	310	430	250	350	40	21	215	180	250	5	M12	63	28	8x31.3	110	65	18x7	204
135-200	7.5	1/800	680	318	305	202	625	290	677	360	480	290	390	40	24	215	180	250	5	M12	63	28	8x31.3	125	70	20x7.5	298
155-250	15.0		815	380	360	247	755	350	824	460	560	380	480	45	28	265	230	300	5	M12	83	38	10x41.3	155	90	25x9	470

## WPEDA 型



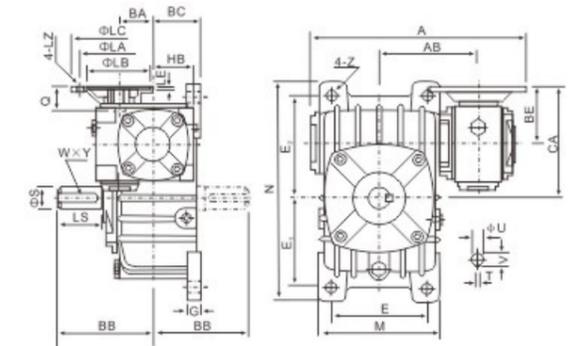
轴指向表示  
SHAFT DIRECTION



型号 size	输入功率 input(kW)	减速比 ratio	A	AB	BB	BE	HL	LL	H	HA	HB	M	N	E	F	G	Z	电机法兰flange				输入孔input hole			出力轴output shaft			重量 weight(kg)	
																		LA	LB	LC	LE	LZ	Q	U	TxV	LS	S		WxY
40-70	0.12	1/200	287	126	131	75	110	140	236	70	50	150	190	115	150	20	15	115	95	140	4	M8	31	11	4x12.8	60	28	8x4	19
50-80	0.18		314	144	142	83	130	160	268	80	65	170	220	135	180	20	15	115	95	140	4	M8	31	11	4x12.8	65	32	10x5	27
60-100	0.37	1/300	387	175	169	91	160	200	336	100	75	190	270	155	220	25	15	130	110	160	4	M8	33	14	5x16.3	75	38	10x5	45
70-120	0.75		425	193	190	109	190	240	430	120	90	230	320	180	260	30	18	130	110	160	4	M8	40	14	5x16.3	85	45	14x5.5	75
80-135	1.5	1/400	445	193	190	111	190	240	430	120	90	230	320	180	260	30	18	165	130	200	4	M10	42	19	6x21.8	85	45	14x5.5	75
80-135	0.75		499	226	210	125	215	270	480	135	105	250	350	200	290	30	18	165	130	200	4.5	M10	48	19	6x21.8	95	55	16x6	103
100-155	3.0	1/500	570	269	252	148	235	290	531	135	130	275	390	220	320	35	21	165	130	200	4.5	M10	52	24	8x27.3	110	60	18x7	147
120-175	4.0		631	287	262	181	280	335	600	160	155	310	430	250	350	40	21	215	180	250	5	M12	63	28	8x31.3	110	65	18x7	204
135-200	7.5	1/800	680	318	305	202	310	375	666	175	185	360	480	290	390	40	24	215	180	250	5	M12	63	28	8x31.3	125	70	20x7.5	298
155-250	15.0		815	380	360	247	355	450	800	200	203	460	560	380	480	45	28	265	230	300	5	M12	83	38	10x41.3	155	90	25x9	470

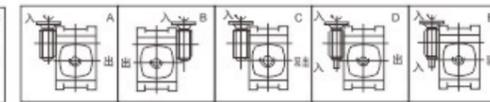
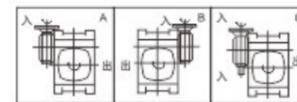
## WPEDX 型

## WPEDO 型



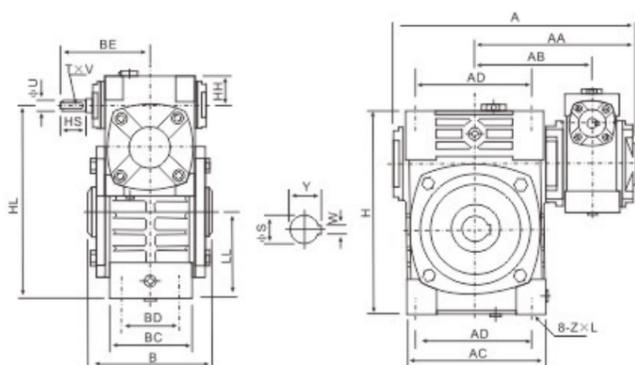
WPEDX轴指向表示  
SHAFT DIRECTION

WPEDO轴指向表示  
SHAFT DIRECTION

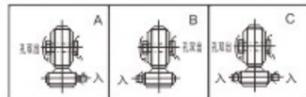


型号 size	输入功率 input(kW)	减速比 ratio	A	AB	BA	BB	BC	BE	HB	CA	M	N	E	E <sub>1</sub>	E <sub>2</sub>	G	Z	电机法兰flange				输入孔input hole			出力轴output shaft			重量 weight(kg)		
																		LA	LB	LC	LE	LZ	Q	U	TxV	LS	S		WxY	
40-70	0.12	1/200	287	126	40	131	65	75	50	145	156	295	120	120	135	20	15	115	95	140	4	M8	31	11	4x12.8	60	28	8x4	19	
50-80	0.18		314	144	50	142	70	83	65	163	175	320	140	130	150	20	15	115	95	140	4	M8	31	11	4x12.8	65	32	10x5	27	
60-100	0.37	1/300	387	175	60	169	90	91	75	191	224	375	190	155	180	26	15	130	110	160	4	M8	33	14	5x16.3	75	38	10x5	45	
70-120	0.75		425	193	70	190	100	111	90	229	231	266	450	220	185	215	30	18	130	110	160	4	M8	40	14	5x16.3	85	45	14x5.5	65
80-135	1.5	1/400	445	193	70	190	100	111	90	229	231	266	450	220	185	215	30	18	165	130	200	4	M10	42	19	6x21.8	85	45	14x5.5	65
80-135	0.75		499	226	80	210	110	125	105	260	306	495	260	210	235	30	18	165	130	200	4.5	M10	48	19	6x21.8	95	55	16x6	98	
100-155	3.0	1/500	570	269</																										

## WPWEK 型

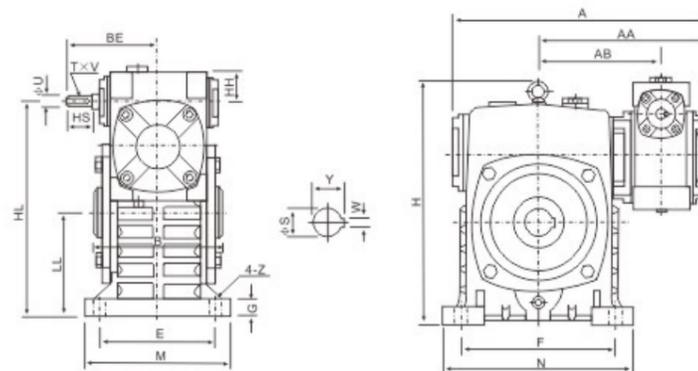


轴指向表示  
SHAFT DIRECTION

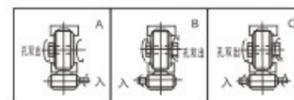


型号 size	减速比 ratio	A	AA	AB	B	BE	AC	BC	AD	BD	HH	HL	LL	H	ZxL	输入轴 input shaft			输出轴 output shaft		重量 weight(kg)
		HS	U	T×V	S	W×Y	HS	U	T×V	S	W×Y										
40-70		262	171	126	132	89	152	86	125	65	35	200	90	215	M10 X25	25	12	4×2.5	30	8×33.3	17
50-80		297	197	144	150	107	169	102	140	70	35	235	105	250	M12X28	30	12	4×2.5	35	10×38.3	28
60-100	1/200	363	231	175	174	122	216	117	180	90	42	290	130	310	M12X30	40	15	5×3	40	12×43.3	43
70-120	1/300	408	256	193	180	140	256	124	220	100	55	345	155	370	M14X32	40	18	6×3.5	45	14×48.8	64
80-135	1/400	471	298	226	214	160	296	147	260	110	65	400	185	425	M16X35	50	22	6×3.5	60	18×64.4	99
100-155	1/500	555	354	269	256	190	345	185	280	120	80	458	203	461	M16X35	50	25	8×4	70	20×74.9	136
120-175	1/600	598	379	287	282	229	374	192	320	140	95	518	223	521	M16X35	65	30	8×4	80	22×85.4	193
135-200	1/800	662	425	318	324	260	412	230	360	150	105	580	245	575	M20X36	75	35	10×5	85	22×90.4	280
155-250	1/900	795	510	380	400	302	500	285	420	190	103	705	300	700	M24X42	85	40	12×5	110	28×116.4	442

## WPEKS 型

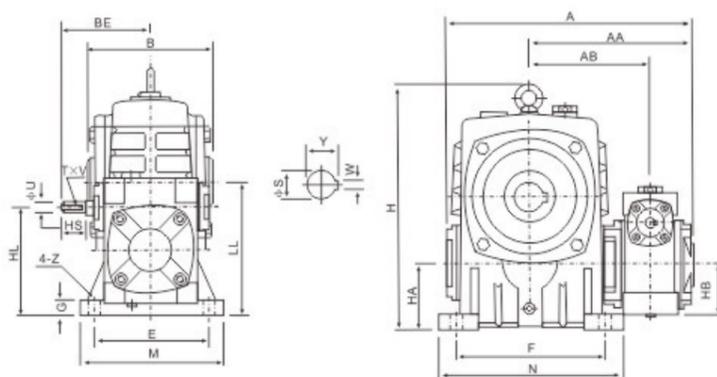


轴指向表示  
SHAFT DIRECTION

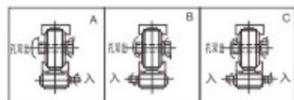


型号 size	减速比 ratio	A	AA	AB	B	BE	HH	HL	LL	H	M	N	E	F	G	Z	输入轴 input shaft			输出轴 output shaft		重量 weight(kg)
		HS	U	T×V	S	W×Y	HS	U	T×V	S	W×Y											
40-70		262	171	126	132	89	35	215	105	238	150	190	115	150	20	15	25	12	4×2.5	30	8×33.3	20
50-80	1/200	297	197	144	150	107	35	250	120	273	170	220	135	180	20	15	30	12	4×2.5	35	10×38.3	27
60-100	1/300	363	231	175	174	122	42	310	150	334	190	270	155	220	25	15	40	15	5×3	40	12×43.3	44
70-120	1/400	408	256	193	180	140	55	370	180	423	230	320	180	260	30	18	40	18	6×3.5	45	14×48.8	73
80-135	1/500	471	298	226	214	160	65	430	215	482	250	350	200	290	30	18	50	22	6×3.5	60	18×64.4	101
100-155	1/600	555	354	269	256	190	80	490	235	541	275	390	220	320	35	21	50	25	8×4	70	20×74.9	144
120-175	1/800	598	379	287	282	229	95	555	260	600	310	430	250	350	40	21	65	30	8×4	80	22×85.4	201
135-200	1/900	662	425	318	324	260	105	625	290	677	360	480	290	390	40	24	75	35	10×5	85	22×90.4	293
155-250		795	510	380	400	302	103	755	350	824	460	560	380	480	45	28	85	40	12×5	110	28×116.4	462

## WPEKA 型

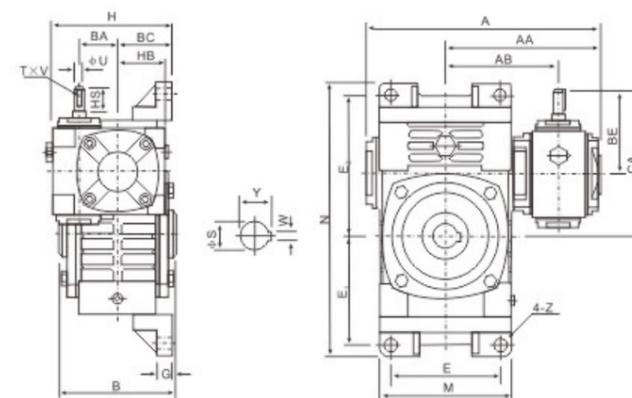


轴指向表示  
SHAFT DIRECTION

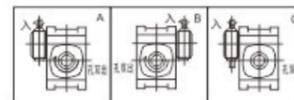


型号 size	减速比 ratio	A	AA	AB	B	BE	HL	LL	H	HA	HB	M	N	E	F	G	Z	输入轴 input shaft			输出轴 output shaft		重量 weight(kg)
		HS	U	T×V	S	W×Y	HS	U	T×V	S	W×Y												
40-70		262	171	126	132	89	110	140	236	70	50	150	190	115	150	20	15	25	12	4×2.5	30	8×33.3	20
50-80	1/200	297	197	144	150	107	130	160	268	80	65	170	220	135	180	20	15	30	12	4×2.5	35	10×38.3	27
60-100	1/300	363	231	175	174	122	160	200	336	100	75	190	270	155	220	25	15	40	15	5×3	40	12×43.3	44
70-120	1/400	408	256	193	180	140	190	240	430	120	90	230	320	180	260	30	18	40	18	6×3.5	45	14×48.8	73
80-135	1/500	471	298	226	214	160	215	270	480	135	105	250	350	200	290	30	18	50	22	6×3.5	60	18×64.4	101
100-155	1/600	555	354	269	256	190	235	290	531	135	130	275	390	220	320	35	21	50	25	8×4	70	20×74.9	144
120-175	1/800	598	379	287	282	229	280	335	600	160	155	310	430	250	350	40	21	65	30	8×4	80	22×85.4	201
135-200	1/900	662	425	318	324	260	310	375	666	175	185	360	480	290	390	40	24	75	35	10×5	85	22×90.4	293
155-250		795	510	380	400	302	355	450	800	200	203	460	560	380	480	45	28	85	40	12×5	110	28×116.4	462

## WPWEKO 型

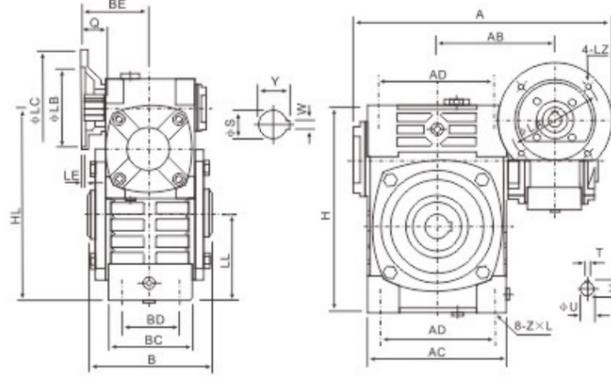


轴指向表示  
SHAFT DIRECTION

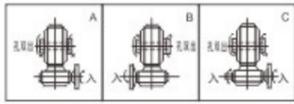


型号 size	减速比 ratio	A	AA	AB	B	BA	BC	BE	HB	CA	H	M	N	E	E <sub>1</sub>	E <sub>2</sub>	G	Z	输入轴 input shaft			输出轴 output shaft		重量 weight(kg)
		HS	U	T×V	S	W×Y	HS	U	T×V	S	W×Y													
40-70		262	171	126	132	40	65	89	50	159	140	152	305	120	120	155	20	15	25	12	4×2.5	30	8×33.3	19.5
50-80	1/200	297	197	144	150	50	70	107	65	187	155	174	350	140	140	180	20	15	30	12	4×2.5	35	10×38.3	30.5
60-100	1/300	363	231	175	174	60	90	122	76	222	192	224	410	190	165	215	22	15	40	15	5×3	40	12×43.3	47
70-120	1/400	408	256	193	180	70	100	140	90	260	225	264	494	220	195	255	25	18	40	18	6×3.5	45	14×48.8	69
80-135	1/500	471	298	226	214	80	110	160	105	295	255	304	559	260	230	285	30	18	50	22	6×3.5	60	18×64.4	105
100-155	1/600	555	354	269	256	100	140	190	130	345	320	345	605	290	250	305	35	21	50	25	8×4	70	20×74.9	163
120-175	1/800	598	379	287	282	120	150	229	155	404	365	374	675	320	273	348	40	21	65	30	8×4	80	22×85.4	208
135-200	1/900	662	425	318	324	135	175	260	185	460	415	424	749	370	305	390	40	24	75	35	10×5	85	22×90.4	302
155-250		795	510	380	400	155	200	302	203	552	458	510	920	440	375	475	45	28	85	40	12×5	110	28×116.4	476

WPWEDK 型

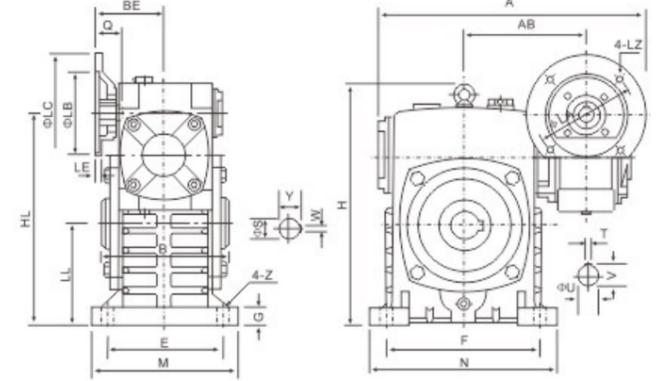


轴指向表示  
SHAFT DIRECTION

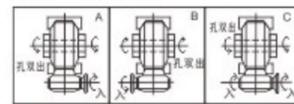


型号 size	入功率 input(kW)	减速比 ratio	A	AB	B	BE	AC	BC	AD	BD	HL	LL	H	ZxL	电机法兰 flange				入力孔 input hole			出力轴 output shaft		重量 weight(kg)	
															LA	LB	LC	LE	LZ	Q	U	T×V	S		W×Y
40-70	0.12		287	126	132	75	152	86	125	65	200	90	215	M10 X25	115	95	140	4	M8	31	11	4×12.8	30	8×33.3	17
50-80	0.18		314	144	150	83	169	102	140	70	235	105	250	M12X28	115	95	140	4	M8	31	11	4×12.8	35	10×38.3	28
60-100	0.37		387	175	174	91	216	117	180	90	290	130	310	M12X30	130	110	160	4	M8	33	14	5×16.3	40	12×43.3	44
		1/200	425	193	180	109	256	124	220	100	345	155	370	M14X32	130	110	160	4	M8	40	14	5×16.3	45	14×48.8	66
70-120	0.75		445	226	214	125	296	147	260	110	400	185	425	M16X35	165	130	200	4.5	M10	42	19	6×21.8	60	18×64.4	101
		1/300	499	226	214	125	296	147	260	110	400	185	425	M16X35	165	130	200	4.5	M10	52	24	8×27.3	70	20×74.9	139
80-135	1.5	1/500	570	269	256	148	345	185	280	120	458	203	461	M16X35	165	130	200	4.5	M10	52	24	8×27.3	70	20×74.9	139
100-155	2.2	1/800	631	287	282	181	374	192	320	140	518	223	521	M16X35	215	180	250	5	M12	63	28	8×31.3	80	22×85.4	196
		1/900	680	318	324	202	412	230	360	150	580	245	575	M20X36	215	180	250	5	M12	63	28	8×31.3	85	22×90.4	285
135-200	4.0		815	380	400	247	500	285	420	190	705	300	700	M24X42	265	230	300	5	M12	83	38	10×41.3	110	28×116.4	450

WPEDKS 型

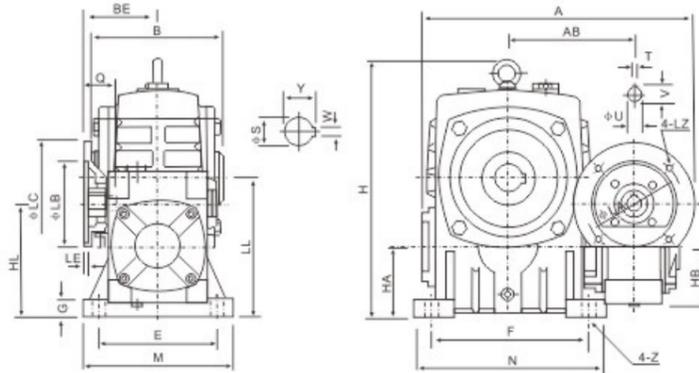


轴指向表示  
SHAFT DIRECTION

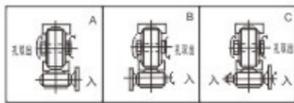


型号 size	入功率 input(kW)	减速比 ratio	A	AB	B	BE	HL	LL	H	M	N	E	F	G	Z	电机法兰 flange				入力孔 input hole			出力轴 output shaft		重量 weight(kg)	
																LA	LB	LC	LE	LZ	Q	U	T×V	S		W×Y
40-70	0.12		287	126	132	75	215	105	238	150	190	115	150	20	15	115	95	140	4	M8	31	11	4×12.8	30	8×33.3	19
50-80	0.18		314	144	150	83	250	120	273	170	220	135	180	20	15	115	95	140	4	M8	31	11	4×12.8	35	10×38.3	27
60-100	0.37		387	175	174	91	310	150	334	190	270	155	220	25	15	130	110	160	4	M8	33	14	5×16.3	40	12×43.3	45
		1/200	425	193	180	109	370	180	423	230	320	180	260	30	18	130	110	160	4	M8	40	14	5×16.3	45	14×48.8	75
70-120	0.75		445	226	214	125	430	215	482	250	350	200	290	30	18	165	130	200	4.5	M10	42	19	6×21.8	60	18×64.4	103
		1/300	499	226	214	125	430	215	482	250	350	200	290	30	18	165	130	200	4.5	M10	52	24	8×27.3	70	20×74.9	147
80-135	1.5	1/500	570	269	256	148	490	235	541	275	390	220	320	35	21	165	130	200	4.5	M10	52	24	8×27.3	70	20×74.9	147
100-155	2.2	1/800	631	287	282	181	555	260	600	310	430	250	350	40	21	215	180	250	5	M12	63	28	8×31.3	80	22×85.4	204
		1/900	680	318	324	202	625	290	677	360	480	290	390	40	24	215	180	250	5	M12	63	28	8×31.3	85	22×90.4	298
135-200	4.0		815	380	400	247	755	350	824	460	560	380	480	45	28	265	230	300	5	M12	83	38	10×41.3	110	28×116.4	470

WPEDKA 型

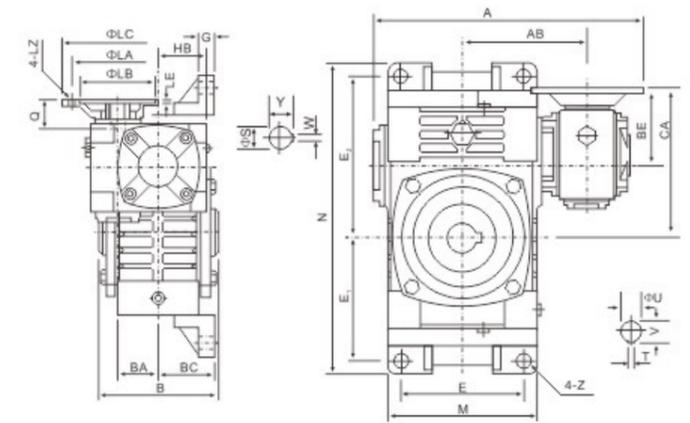


轴指向表示  
SHAFT DIRECTION

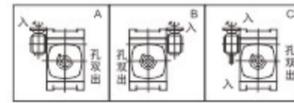


型号 size	入功率 input(kW)	减速比 ratio	A	AB	B	BE	HL	LL	H	HA	HB	M	N	E	F	G	Z	电机法兰 flange				入力孔 input hole			出力轴 output shaft		重量 weight(kg)	
																		LA	LB	LC	LE	LZ	Q	U	T×V	S		W×Y
40-70	0.12		287	126	132	75	110	140	236	70	50	150	190	115	150	20	15	115	95	140	4	M8	31	11	4×12.8	30	8×33.3	19
50-80	0.18		314	144	150	83	130	160	268	80	65	170	220	135	180	20	15	115	95	140	4	M8	31	11	4×12.8	35	10×38.3	27
60-100	0.37		387	175	174	91	160	200	336	100	75	190	270	155	220	25	15	130	110	160	4	M8	33	14	5×16.3	40	12×43.3	45
		1/200	425	193	180	109	190	240	430	120	90	230	320	180	260	30	18	130	110	160	4	M8	40	14	5×16.3	45	14×48.8	75
70-120	0.75		445	226	214	125	215	270	480	135	105	250	350	200	290	30	18	165	130	200	4.5	M10	42	19	6×21.8	60	18×64.4	103
		1/300	499	226	214	125	215	270	480	135	105	250	350	200	290	30	18	165	130	200	4.5	M10	52	24	8×27.3	70	20×74.9	147
80-135	1.5	1/500	570	269	256	148	235	290	531	135	130	275	390	220	320	35	21	165	130	200	4.5	M10	52	24	8×27.3	70	20×74.9	147
100-155	2.2	1/600	631	287	282	181	280	335	600	160	155	310	430	250	350	40	21	215	180	250	5	M12	63	28	8×31.3	80	22×85.4	204
		1/900	680	318	324	202	310	375	666	175	185	360	480	290	390	40	24	215	180	250	5	M12	63	28	8×31.3	85	22×90.4	298
135-200	4.0		815	380	400	247	355	450	800	200	203	460	560	380	480	45	28	265	230	300	5	M12	83	38	10×41.3	110	28×116.4	470

WPWEDKO 型



轴指向表示  
SHAFT DIRECTION



型号 size	入功率 input(kW)	减速比 ratio	A	AB	B	BA	BC	BE	HB	CA	M	N	E	E2	E3	G	Z	电机法兰 flange				入力孔 input hole			出力轴 output shaft		重量 weight(kg)	
																		LA	LB	LC	LE	LZ	Q	U	T×V	S		W×Y
40-70	0.12		287	126	132	40	65	75	50	145	152	305	120	120	155	20	15	115	95	140	4	M8	31	11	4×12.8	30	8×33.3	20
50-80	0.18		314	144	150	50	70	83	65	163	174	350	140	140	180	20	15	115	95	140	4	M8	31	11	4×12.8	35	10×38.3	31
60-100	0.37		387	175	174	60	90	91	75	191	224	410	190	165	215	22	15	130	110	160	4	M8	33	14	5×16.3	40	12×43.3	48
		1/200	425	193	180	70	100	109	90	229	231	264	494	220	195	255	25	18	130	110	160	4	M8	40	14	5×16.3	45	14×48.8
70-120	0.75		445	226	214	80	110	125	105	260	304	559	260	230	285	30	18	165	130	200	4.5	M10	42	19	6×21.8	60	18×64.4	107
		1/300	499	226	214	80	110	125	105	260	304	559	260	230	285	30	18	165	130	200	4.5	M10	52	24	8×27.3	70	20×74.9	166
80-135	1.5	1/500	570	269	256	100	140	148	130	303	345	605	290	250	305	35	21	165	130	200	4.5	M10	52	24	8×27.3	70	20×74.9	166
100-155	2.2	1/800	631	287	282	120	150	181	155	356	374	675																

## 减速机选型方法 Reducer Selection Methods

### 选型要素 Selection Methods

#### ★ 输入功率、输出转矩

输入功率和输出转矩的转换公式如下:

输入功率P(kW)=输出转矩T(N.m)×输出轴转速N<sub>2</sub>(r/min)/(9549×效率η)

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。

#### ★ Input power & output torque

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

Input power p(kw) = output torquet (n.m) x output Revolving speed n<sub>2</sub>(r/min)/(9549×efficiency η)

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.

#### ★ 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:

输出轴转速N<sub>2</sub>(r/min)=输入轴转速N<sub>1</sub>(r/min)/传动比i

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)。转速过高易使轴承加重磨擦而缩短寿命。

#### ★ Revolving speed of input shaft and output shaft

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

Output revolving speed N<sub>2</sub>(r/min)=inputRevolving speed N<sub>1</sub>(r/min)/ratio I

With belt-pulley, couplings or sprocket wheel Shaft transmisson, 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 ver-friction.

#### ★ 效率

效率计算公式如下:

效率η=(输出功率/输入功率)×100%

由于减速机运转时内部存在磨擦及振动, 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、轴承磨擦阻力及蜗轮副材质的磨擦系数等。每种规

格、传动比的减速机, 其效率数值各不相同, 下表列出效率的范围数值, 可供选型时参考:

#### ★ Efficiency

The efficiency calculation formula listed as follows:

Efficiency η=output power x 100%/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 Os 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%

#### ★ 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牙方向, 基本型蜗杆减速机均为右旋螺牙。以公司产品样本上WPA照片为依据, 面对输入轴、输出轴观看, 当输入轴顺时针方向旋转时, 输出轴旋转方向为顺时针; 以WPS照片为依据, 面对输入轴、输出轴观看, 当输入轴顺时针方向旋转时, 输出轴旋转方向为逆时针; 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牙方向制成左旋时, 情况正好相反。

#### ★ Revolving direction of input and output shaft

The revolving direction of output shaft relies on worm threadOs 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 clockwise; and according to the photograph of WPS, facing input shaft and output shaft, when input shaft is in clockwise, output shaft is in counterclockwise.

#### ★ 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:

修正输出转矩T<sub>2</sub>(N.m)=理论输出转矩T<sub>2</sub>(N.m)×工况系数K

### 工况系数K值表

Table of running condition 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 electro- motor	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一小时内达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 perhour is more than 10, the value k multiply 1.2

#### ★ Running Condition 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 them according to the following formula:

Revised output torque T<sub>2</sub>(N.m)=theoretic output torque t<sub>1</sub>(N.m)Xrunning condition factor K

## 选型实例 Selection example

### 基本情况 The basic condition

传动结构 transmission structur	相关数据 relative data
	<ul style="list-style-type: none"> <li>起吊物体重量 W=600kg</li> <li>weight of suspended object w=600kg</li> </ul>
	<ul style="list-style-type: none"> <li>起吊物体速度 V=12m/min</li> <li>speed of suspended object v=12m/min</li> </ul>
	<ul style="list-style-type: none"> <li>滚轮直径 D=0.4m</li> <li>roll-pulley diameter D=0.4m</li> </ul>
	<ul style="list-style-type: none"> <li>皮带轮传动效率 η<sub>1</sub>=0.92</li> <li>efficiency of belt-pulley η<sub>1</sub>=0.92</li> </ul>
	<ul style="list-style-type: none"> <li>减速机传动效率 η<sub>2</sub>=0.71</li> <li>efficiency of reducer η<sub>2</sub>=0.71</li> </ul>
	<ul style="list-style-type: none"> <li>运转时间 8小时/日</li> <li>Running time 8 hours per day</li> </ul>
	<ul style="list-style-type: none"> <li>启动次数 2次/小时, 较大冲击</li> <li>2 times per hour heavy shock</li> </ul>
	<ul style="list-style-type: none"> <li>使用电源 三相380V, 50Hz</li> <li>Electrical source three-phase 380v, 50Hz</li> </ul>

■ **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 $N_3$ $N_3 = \text{起吊速度}V / (\text{滚轮直径}D \times \pi)$ 2. 计算总传动比 $i$ $i = \text{输入轴转速}N_1 / \text{皮带轮转速}N_3$ 3. 计算减速机传动比 $i_1$ $i_1 = \text{总传动比}i / \text{皮带轮传动比}i_2$ Calculate the ratio according to input and output shaft revolving speed 1. get belt-pulley revolving speed $N_3$ $N_3 = \text{speed of suspended object } V / (\text{roll-pulley diameter } D \times \pi)$ 2. calculate general ratio $i$ $i = \text{input revolving speed } N_1 / \text{belt-pulley revolving speed } N_3$ 3. Calculate reducer ratio $i_1$ $i_1 = \text{general ratio } i / \text{belt-pulley ratio } i_2$	1. $N_3 = 12 / (0.4 \times 3.142) = 9.6 \text{ r/min}$ 2. $i = 1440 / 9.6 = 150$ 3. 设定 $i_2 = 5$ , 则 $i_1 = 150 / 5 = 30$ 1. $N_3 = 12 / (0.4 \times 3.142) = 9.6 \text{ r/min}$ 2. $i = 1440 / 9.6 = 150$ 3. Assume $i_2 = 5$ , then $i_1 = 150 / 5 = 30$
2	计算输出转矩 Calculate output torque	计算减速机输出转矩 $T$ $T = \text{物体重量}W \times 10 \times \text{滚轮半径}(D/2) / (\text{皮带轮传动传动比}i_2 \times \text{皮带轮传动效率} \eta_1)$ Calculate reducer output torque $T$ $T = \text{weight of suspended object } W \times 10 \times \text{roll-pulley radius}(D/2) / (\text{belt-pulley ratio } i_2 \times \text{belt-pulley transmission efficiency } \eta_1)$	$T = 600 \times 10 \times (0.4/2) / (0.92 \times 5) = 260.9 \text{ N.m}$
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 $T_1$ $T_1 = \text{输出转矩}T \times K$ According to using condition: operation 8 hours a day, heavy shock, running condition factor $K=1.5$ calculate revised torque $T_1$ $T_1 = \text{output torque } T \times k$	$T_1 = 260.9 \times 1.5 = 326 \text{ N.m}$
4	计算输入功率 Calculate input power	换算功率 $P$ $P = \text{修正输出转矩}T_1 \times \text{输出转速}N_2 / (9549 \times \text{减速机传动效率} \eta_2)$ Calculate input shaft power $P$ $P = \text{revised output torque } T_1 \times \text{output revolving speed } N_2 / (9549 \times \text{reducer transmission efficiency } \eta_2)$	$P = 326 \times (1440/30) / (9549 \times 0.71) = 2.3 \text{ kW}$
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	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

■ **承载能力表 Dynamical Capacity Table**

⊙ **WP.WPK.WPW.WPWK(A.S.X.O.T.V)** 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

功率及转矩 传动比 ratio 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	258	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	7.85	6.00	5.50	5.00	3.69	2.89	2.30	540	622	619	696	707	667	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	3.61	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	2266	2310	2579	2745	2674	2357	2371

注: 型号147暂无WPW(A.S.X.O.T.V)及WPWK(A.S.O.T.V)

⊙ **WPD.WPK.WPWD.WPWK(A.S.X.O.T.V)** 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 ( 配用AO2或Y系列电机 Matching electric motor series AO2 or Y)

功率及转矩 传动比 ratio 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	68	70
80	1.5				0.75				77	112	142	174	189	117	136	146
100	1.5								80	115	149	181	198	260	307	344
120	3				2.2				151	232	310	372	413	392	480	521
135	4				3				219	321	413	509	565	542	649	690
147	4				3				219	321	413	509	565	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暂无WPW(A.S.X.O.T.V)及WPWK(A.S.O.T.V)

⊛ **WPE.WPEK.WPEW.WPWEK  
 WPED.WPEDK.WPWD.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.WPEW.WPWEK							WPED.WPEDK.WPWD.WPWEDK						
		传动比 ratio							传动比 ratio						
		200	300	400	500	600	800	900	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
	输出轴转矩 (N.m)	250	250	250	250	250	250	250	63	88	107	120	130	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
	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
	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	692	750	486	536	887
80-135	输入轴功率 (kw)	2.50	1075	1.39	1.19	1.08	0.98	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)	3.69	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
	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暂无WPWE(A.S.X.O)及WPWEK(A.S.O)

■ **安装与使用(必读) Installation & Usage**

⊛ **安装注意事项 Notices Of Installation**

- ⊙ 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。
- ⊙ 动力设备—减速机—工作机的各联接处, 安装后调整, 使三轴线同轴。
- ⊙ 减速机输入端轴伸外径公差尺寸均按j6制作, 减速机输出端轴伸外径公差尺寸均按js6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。
- ⊙ 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。
- ⊙ 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。
- ⊙ 订购使用各类WPD减速机时, 若电机重量偏大, 应设支撑装置。

- ⊙ The base-plate must be plane and stoutness, and the base-bolts must be screwed down and Shockproof.
- ⊙ The connecting shafts of prime mover, reducer and operation device must be coaxial after Installation.
- ⊙ The outside diameter tolerance of input shaft of speed reductor is according to j6 and the output shaft is according to js6. The internal hole tolerance of coupling, pulley and sprocket must be suitable, which is neither too tight nor too loose, to avoid damaging bearing or affecting normal power transmission.
- ⊙ Driers such as sprocket wheel and gear must be fitted close to bearings in order to reduce bending stress of hanging shaft.
- ⊙ While assembling motor for 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.
- ⊙ When ordering or using all kinds of WPD type, if the motor weight is bigger than the Common, supporting set is required.

⊛ **使用注意事项 Notices Of usage**

- ⊙ 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、输入轴输出轴轴指向和回转方向等是否符合使用要求。
- ⊙ 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, 拔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, 控制适宜的油量, 按规定要求及时换油, 尤其要重视首次使用100小时后及时的更换新油。
- ⊙ 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)。

- ⊙ 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.
- ⊙ 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.
- ⊙ When abnormal circumstances occur, please stop and check reducer per “solutions and reasons for faults of reducer” (allowable highest oil temperature is 95℃, under this temperature limit, if oil temperature no more goes up, please let reducer continue running).

## ■ 润滑油的选择使用 Choice of Lubricant

蜗杆减速机使用前应注入N220~N320(环境温度-30℃~40℃)或N320~N460(环境温度40℃~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 operating worm gear speed reducer, add N220~N230(ambient temperature-30℃~40℃), N320~N460(ambient temperature 40℃~65℃) lubrication oil upto 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 new lubrication oil in it, Do so nereafter every 2500 hours of operation.

## ■ 故障原因及解决办法

### Reasons and solutions for the faults of reducer

故障情况 Fault description	故障原因 Reasons	解决办法 Solutions
过热 Overheating	a) 原动机、减速机、工作机连接不当 Improper Connection Among Prime, Reducer And The Operation Device	调整安装位置,使相连三者同轴 Adjust installation position to make them coaxial
	b) 超负荷运转 Overloading	调整负荷或更换合适型号减速机 Adjust load or replace suitable type of reducer
	c) 油封过度摩擦 Over Friction Of Oil Seals	在油封唇口处滴润滑油 Drop lubricant at oil seal
	d) 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
	e) 润滑油杂质多或润滑油性能差 Much Impurity In Oil Or Inferior Oil	更换合适新油 Refill proper oil
振动 Vibration	a) 原动机、减速机、工作机固定不良 Prime Move, Reducer And The Operation Device Mount Badly	查出固定不良部位,正确紧固 Find out the bad place, tighten it
	b) 蜗轮齿面磨损或损伤 Tooth Surface Of Worm Gear Sets Worn-out Or Damaged	更换蜗轮副(需要时本公司配合) Replace worm gear sets (we will cooperate with you when necessary)
	c) 轴承磨损 Bearing Worn-out	更换轴承 Replace bearing
	d) 螺栓松动 Bolt Loose	拧紧固定螺栓 Tighten screw
杂音 Noise	a) 轴承损伤或间隙过大 Bearing Damaged Or Too Large Clearance	更换轴承 Replace bearing
	b) 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)
	c) 润滑油(脂)不足 Lubricant Oil (grease) Shortage	按油标指示点补充加润滑油(脂) Add lube oil (grease) according to oil leveler
	d) 机体内有异物 Foreign Object In Box	倒净润滑油(脂)带出异物,重加清洁的润滑油(脂) Drain out dirty lube oil (grease) and add clean lube oil (grease)
漏油 oil leakage	a) 油封唇口磨损 Oil Seal Lip Worn-out	更换油封 Replace oil seal
	b) 油封档轴颈磨损 Shaft Of Oil Seal Area Worn-out	更换输出轴或输入轴 Replace input or output shaft
	c) 油(脂)量过多 Too Much Oil (grease)	按油标指示点调整油(脂)量 Adjust the oil (grease) capacity according to oil leveler
	d) 放油螺塞未旋紧 Oil Screw Plug Loose	取下螺塞,螺纹处加密封胶,旋紧 Fetch out screw plug, coat sealant and fasten it
	e) 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	a) 超负荷运转 Overloading	调整负荷或更换合适型号减速机 Adjust load or replace suitable type of reducer
	b) 润滑油(脂)不符合要求 Lube oil (grease) does not conform to standard	更换合适润滑油(脂) Replace suitable lube oil (grease)
	c) 润滑油(脂)不足 Lubricant Oil (grease) Shortage	按油标指示点加足润滑油(脂) Add lube oil (grease) according to oil leveler
	d) 未按规定适时换油(脂),润滑油(脂)劣化 Renew oil (grease) not according to requirement, lube oil (grease) becomes bad	按规定要求适时换油(脂) Replace oil (grease) according to requirement
	e) 运转温度过高 Overheating While Running	1. 按“过热”故障处理; 2. 采取合适措施,降低环境温度 1. Deal with it sa overheating 2. Adopting proper measures to make environment temperature fall
SWL系列丝杆副磨损过快	a) 超负荷运转 Overloading	调整负荷或更换合适型号减速机 Adjust load or replace suitable type of reducer
	b) 丝杆上的润滑油干涸或变质 Lubricating grease on screw becomes dry or bad	去污擦净,重新加润滑油 Wipe out dirt and renew clean lube oil
	c) 有横向载荷 Transverse load is available	加导向装置 Install guiding device

注:磨合过程(运转24小时)油封唇口有少量油(脂)是正常的。  
Remarks: it is normal that there is a little oil (grease) on the lip of oil seal after running for 24 hours.

## ☆ 附表 Attached table

附表1: 圆柱蜗杆减速机(WP系列)油量表(L)  
Attached table 1: oil capacity (L) of cylindrical worm reducer (WP series)

机型号 Model	WP(D\K)A	WP(D\K)S	WP(D\K)X/O	WPW(D)
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	16.7
250	22	33.9	48.9	30

附表2: RV多式蜗杆减速机油量表(L)  
Attached table 2: oil capacity (L) of RV worm reducer

规格 Size	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								2.5	3.5	5.4
B8								2.2	3.3	5.1
V5								3	4.5	7
V6								2.2	3.3	5.1

附表3: SWL蜗轮丝杆升降机油量表(L)  
Attached table 3: oil capacity (L) of SWL worm elevator

规格 Size	35	40	50	60	60B	70	100	120	130	150
注油量	0.06	0.1	0.2	0.35	0.4	0.5	1.5	2.2	3.5	4.0

注: 1. 本注油量为建议值,根据减速机级数和速比的不同,相应加油量也有所不同。请注意油标作为加油量多少的指示。表四、表六列出了润滑油注油量建议值。  
2. 升降机在使用前,除在箱体内部加润滑油(脂)之外,丝杆轴表面必须涂上润滑油。

Remarks: 1. The above oil capacity is for reference. For different stage and different ratio reducer, its oil capacity may be also different. Pay attention the indication on oil leveler. The reference value of lubricating oil is listed in table 4 and 6.  
2. Before operating elevator, must apply lube oil (grease) inside the housing and lubricating grease on the surface of screw shaft.

附表4: WP系列油品选择 Attached table 4: WP series oil selection

周围温度 Ambient temperature	负荷 Load	ISO VG	GB3141-82	Shell	Mobil	AGMA	中国石化
-30℃~ -5℃	普通 common	VG-100	N100	Shell Omala 100	Gear 627	5	HD-100
	重 heavy-duty	VG-150	N150	Shell Omala 150	Gear 629	7	HD-150
-15℃~ -5℃	普通 common	VG-150	N150	Shell Omala 150	Gear 629	7	HD-150
	重 heavy-duty	VG-220	N220	Shell Omala 220	Gear 630	7EP	HD-220
5℃~25℃	普通 common	VG-220	N220	Shell Omala 220	Gear 630	7EP	HD-220
	重 heavy-duty	VG-320	N320	Shell Omala 320	Gear 632	6	HD-320
25℃~40℃	普通 common	VG-320	N320	Shell Omala 320	Gear 632	6	HD-320
	重 heavy-duty	VG-460	N460	Shell Omala 460	Gear 634	8	HD-460
40℃~65℃	普通 common	VG-460	N460	Shell Omala 460	Gear 634	8	HD-460
	重 heavy-duty	VG-680	N680	Shell Omala 680	Gear 636	8EP	HD-680

附表5: RV多式蜗杆减速机油品选择 Attached table 5: RV worm reducer oil selection

减速机规格 Model of reducer	25~90	110~150	
	润滑油类型 Type of lube oil	合成润滑油 Syntholube	矿物润滑油 Mineral lubricant
环境温度 Ambient temperature °C	-25~+50	-5~+40	-5~+40
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

附表6: SWL系列油品选择 Attached table 6: SWL series oil selection

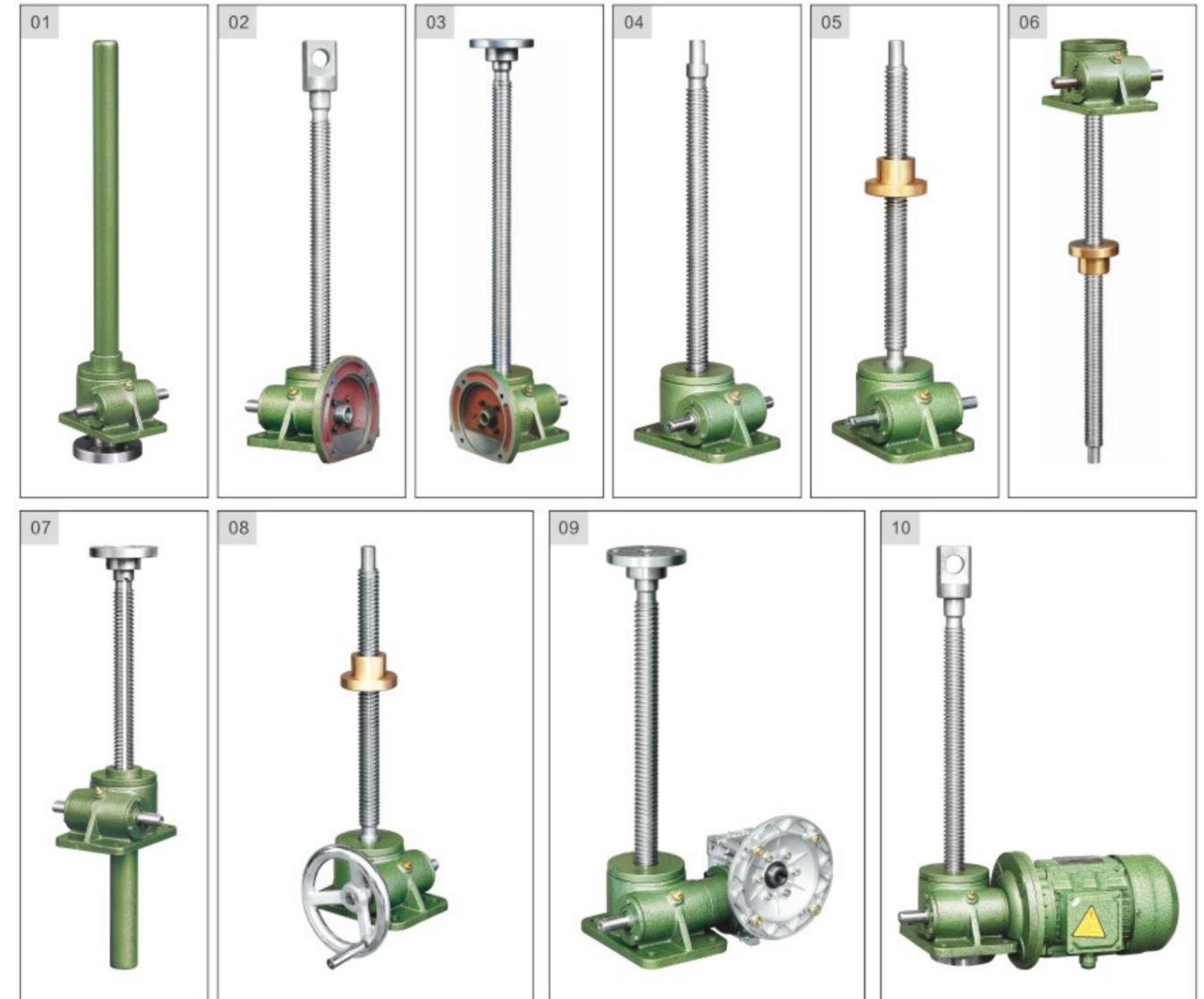
蜗杆转速 Speed of worm (r/min)	润滑油(脂)类型 Type of lube oil (grease)
1500~1800	ISOVG680
300~1500	ZNG-1 / ZNG-2

YUSHEN  
SPEED  
REDUCER

SWL/YRSS蜗轮丝杆升降机系列  
SWL/YRSS worm screw mandrel elevator series



SWL 系列蜗轮丝杆升降机  
PRODEUCT PICTURES OF SWL SERIES



## 概述 An overview of the

SWL系列蜗杆丝杆是一种基础升降设备, 该产品广泛应用于机械、冶金、化工、医药、建筑、水利、文化等行业, 具有起升、下降及借助辅件推进、翻转及多种高、降位置调整等诸多功能。具有结构紧凑、体积小、重量轻、动力源广泛、无噪音、安装方便、使用灵活、功能多、配套形式多、可靠性强、使用寿命长等许多特点。可以单台或多台组合使用, 能按一定程序准确地控制调整提升或推进的高度, 可以用电动或其他动力, 也可以手动。有不同的结构型式和装配型式, 提升高度按用户的要求定制。

## 型式、规格及表示方法

### ★结构型式

- 1型——丝杆作轴向移动
- 2型——丝杆作旋转运动、螺母作轴向移动

### ★装配型式

- A型——丝杆 (或螺母) 向上移动;
- B型——丝杆 (或螺母) 向下移动。

### ★丝杆头部型式

- 1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)、IV型 (扁头型) 四种型式。
- 2型结构型式的丝杆头部分为I型 (圆柱型)、III型 (螺纹型) 二种型式。

### ★传动化

- 普通速比 (P)、慢速比 (M)
- 提升承载能力
- 0.5, 1, 2.5, 5, 10, 15, 20, 25, 35, 50, 75, 100 十二种

### ★丝杆的防护

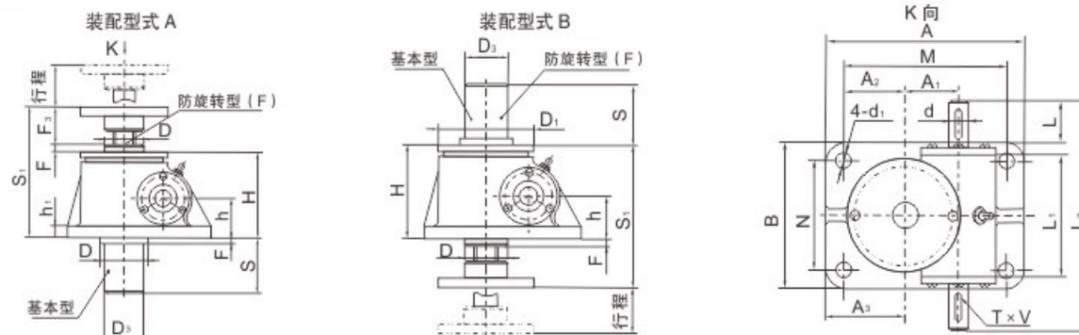
- 1型结构有基本型、防旋转型 (F) 和带防护罩型 (Z);
- 2型结构有基本型和带防护罩型 (Z)。

### ★表示方法



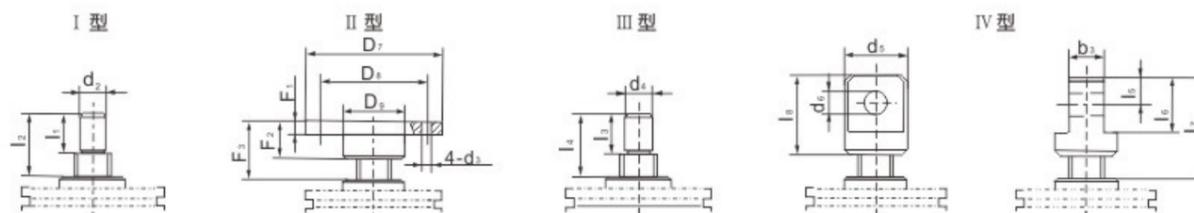
## 外形尺寸 Overall Dimensions

### ★1型结构型式



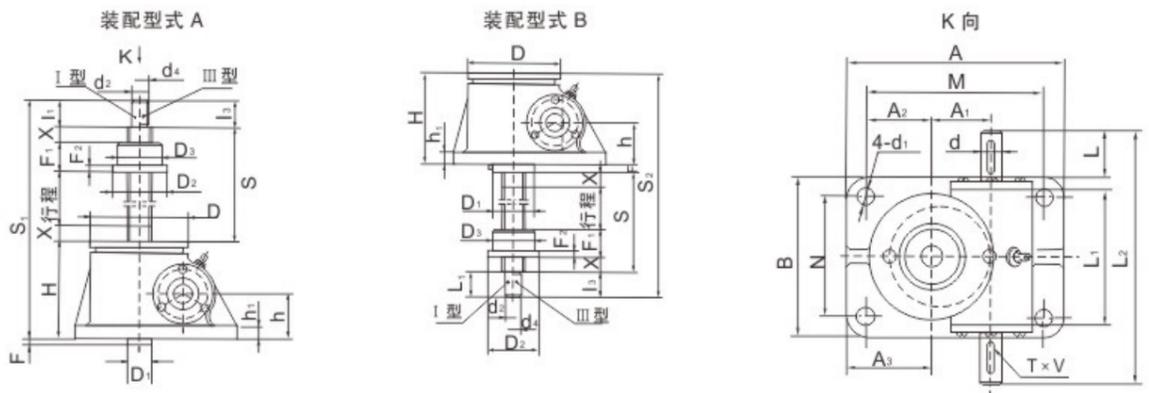
型号	S	S <sub>1</sub>	A	B	M	N	H	h	h <sub>1</sub>	d	d <sub>1</sub>	键	L	L <sub>1</sub>	L <sub>2</sub>	D	D <sub>1</sub>	A <sub>1</sub>	A <sub>2</sub>	A <sub>3</sub>	F	D <sub>2</sub>
SWL0.5	行程+20	100	98	67	80	50	62	28	8	10	7	4×4×16	20	72	132	-	60	25	29	37	-	27
SWL1	行程+20	100	120	105	95	85	84	40	10	14	9	5×5×25	28	85	161	-	80	31.2	34.5	47	-	33
SWL2.5	行程+20	150	172	127	135	90	97	45	12	16	14	5×5×32	36	100	190	55	98	45.2	50	70	11	42
SWL5	行程+20	190	222	155	168	114	130	61.5	14	20	17	6×6×35	40	116	228	65	120	56.2	58	82	12	48
SWL10	行程+30	230	240	205	190	155	150	70	16	25	21	8×7×45	50	150	285	-	150	66.8	63.5	86	-	75
SWL15																						
SWL20	行程+35	260	300	220	240	160	190	87	20	28	28	8×7×45	50	192	322	-	185	72.5	95	123	-	75
SWL25	行程+40	310	350	260	280	190	217	102	25	32	35	10×8×50	58	210	368	130	210	97	95	130	10	114
SWL35	行程+40	350	430	280	360	210	240	115	30	38	35	10×8×70	80	266	466	150	260	120	135	170	10	114
SWL50	行程+40	410	550	470	457	380	280	121	32	38	45	10×8×90	105	308	558	170	310	135	203	254	16	140
SWL75	行程+50	450	475	540	365	460	325	155	50	52	45	16×10×100	110	354	585	200	357	160	125	160	20	160
SWL100	行程+50	540	530	610	410	510	400	150	38	55	45	16×10×100	110	358	620	190	410	192	140	200	35	160

### ★丝杆头部型式



型号	丝杆头部型式																			
	d2(k6)	I1	I2	D7	D8	D9	d3	F1	F2	F3	d4	I3	I4	d5	d6(H8)	b3	I5	I6	I7	I8
SWL0.5	10	20	30	49	38	25	7	8	20	30	M12×1.5-6g	20	30	24	12	16	12.5	25	50	40
SWL1	17	20	30	85	65	40	10	8	25	30	M16×1.5-6g	25	30	45	20	25	20	45	70	65
SWL2.5	20	30	45	98	75	40	14	12	30	45	M22×1.5-6g	30	45	50	25	30	25	50	85	70
SWL5	25	40	51	122	85	50	17	18	40	51	M30×2-6g	39	51	65	35	42	37.5	75	117	105
SWL10	40	50	73.5	150	105	65	21	20	50	73.5	M42×2-6g	50	73.5	90	50	60	50	100	153.5	130
SWL15																				
SWL20	50	60	80	185	140	90	26	20	60	80	M48×2-6g	60	80	110	60	75	60	120	170	150
SWL25	70	63	92	205	155	100	27	25	63	92	M70×3-6g	63	92	130	70	90	70	140	204	175
SWL35	80	80	100	260	200	130	33	30	80	100	M80×3-6g	80	100	150	80	105	80	160	240	220
SWL50	95	90	120	300	225	150	39	35	90	120	M95×3-6g	90	120	180	80	120	80	160	270	240
SWL100	130	120	150	370	280	200	48	75	120	150	M130×4-6g	120	150	220	90	160	90	180	330	300

★ 2型结构型式

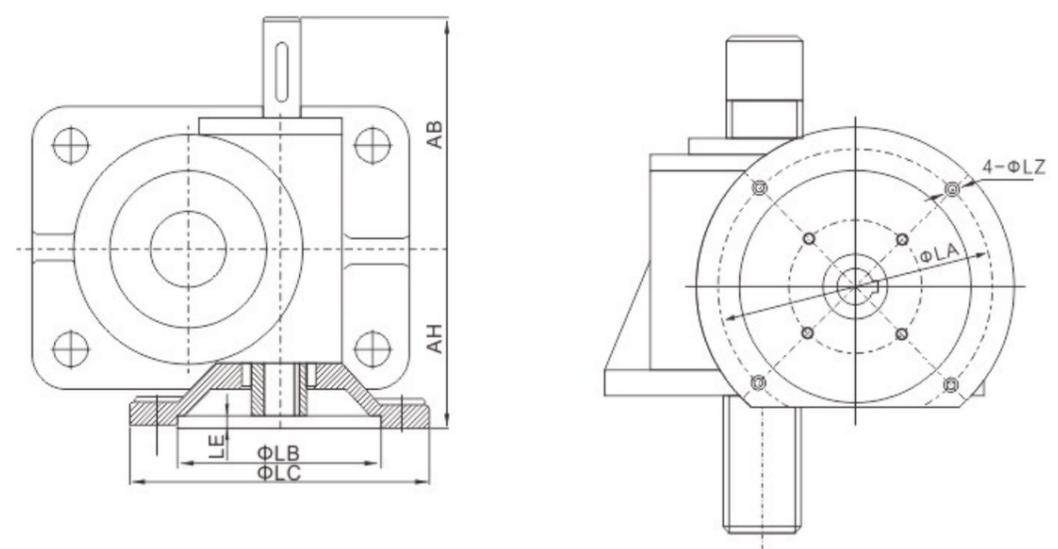


型号	S	S <sub>1</sub>	S <sub>2</sub>	A	B	M	N	H	h	h <sub>1</sub>	d	d <sub>1</sub>	键	L	L <sub>1</sub>	L <sub>2</sub>	D	D <sub>1</sub>	A <sub>1</sub>	A <sub>2</sub>	A <sub>3</sub>	F	安全裕度 X
SWL0.5	行程+70	行程+160	行程+205	98	67	80	50	62	28	8	10	7	4x4x16	20	72	132	60	-	25	29	37	-	27
SWL1	行程+50	行程+190	行程+238	120	105	95	85	84	40	10	14	9	5x5x25	28	85	161	80	-	31.2	34.5	47	-	25
SWL2.5	行程+85	行程+215	行程+238	172	127	135	90	97	45	12	16	14	5x5x32	36	100	190	98	55	45.2	50	70	11	20
SWL5	行程+100	行程+270	行程+300	222	155	168	114	130	61.5	14	20	17	6x6x35	40	116	228	120	65	56.2	58	82	12	25
SWL10	行程+125	行程+335	行程+359	240	205	190	155	150	70	16	25	21	8x7x45	50	150	285	150	-	66.8	63.5	86	-	25
SWL15	行程+150	行程+404	行程+430	300	220	240	160	190	87	20	28	28	8x7x45	50	192	322	185	-	72.5	95	123	-	25
SWL20	行程+170	行程+476	行程+513	350	260	280	190	217	102	25	32	35	10x8x50	58	210	368	210	130	97	95	130	10	25
SWL25	行程+205	行程+535	行程+580	430	280	360	210	240	115	30	38	35	10x8x70	80	266	466	260	150	120	135	170	10	30
SWL50	行程+250	行程+603	行程+685	550	470	457	380	280	121	32	38	45	10x8x90	105	308	558	310	170	135	203	254	16	40
SWL100	行程+320	行程+815	行程+880	530	610	410	510	400	150	38	55	45	16x10x100	110	358	620	410	190	192	140	200	35	50

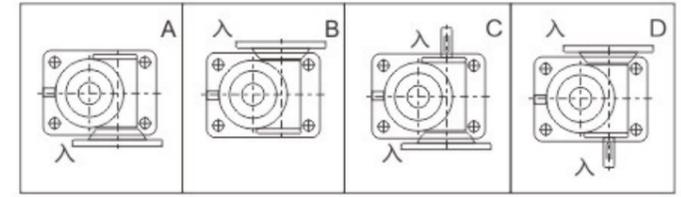
★ 丝杆头部型式及螺母尺寸



型号	活动螺母尺寸				丝杆头部型式			
					I		III	
	D2	D3(h9)	F1	F2	D2(k6)	L4	d4	l3
SWL0.5	40	25	30	10	10	20	M12x1.5-6g	20
SWL1	60	40	40	10	17	25	M16x1.5-6g	25
SWL2.5	80	50	45	15	20	30	M22x1.5-6g	30
SWL5	87	70	60	18	25	40	M30x2-6g	39
SWL10	110	90	75	25	40	50	M42x2-6g	50
SWL15								
SWL20	120	90	100	30	50	60	M48x2-6g	60
SWL25	155	130	120	35	70	63	M70x3-6g	63
SWL35	190	150	145	35	80	80	M80x3-6g	80
SWL50	220	180	170	50	95	90	M95x3-6g	90
SWL100	300	240	220	70	130	120	M130x4-6g	120



轴指向表示 SHAFT DIRECTION



型号规格 Model size	入功率 (kw)	法兰 代号	AB	AH	LA	LB	LC	LE	LZ	D	T×V	电机 长度
SWLD1T	0.18	63B5	83	83	115	95	140	4	M8	Φ11	4×12.8	207
SWLD2.5T	0.37	71B5	95	77	130	110	160	5	M8	Φ14	5×16.3	225
SWLD5T	0.75	80B5	114	101	165	130	200	5	M10	Φ19	6×21.8	255
	1.5	80B5		Φ24	8×27.3	290						
SWLD10T/15T	1.5	80B5	140	113	165	130	200	5	M10	Φ24	8×27.3	290
	2.2	100B5 112B5		155	215	180	250	5		M12	Φ28	8×31.3
SWLD20T	2.2	100B5	161	148	215	180	250	5	M12	Φ28	8×31.3	340
	3	112B5										
SWLD25T	4	100B5 112B5	177.5	157	215	180	250	5	M12	Φ28	8×31.3	430
	5.5	132B5		184	193	265	230	300		5	M12	

### 升降机的主要性能参数表 Capacity and Model Selection

型号	SWL0.5	SWL1	SWL2.5	SWL5	SWL10	SWL15	SWL20	SWL25	SWL35	SWL50	
最大起升力(kN)	5	20	25	50	100	150	200	250	350	500	
丝杆螺纹尺寸	Tr16×4	Tr22×4	Tr30×6	Tr40×7	Tr58×12	Tr65×12	Tr90×16	Tr100×20	Tr120×20		
最大拉力(kN)	5	20	25	50	99	166	250	350	500		
蜗轮蜗杆传动化	P	1/11	1/6	1/6	1/8	3/23	1/8	3/32	3/32	1/11	
	M	1/22	1/24	1/24	1/24	1/24	1/24	1/32	1/32	1/32	
蜗杆每转行程(mm)	P	0.36	0.66	1.0	0.875	1.565	1.56	1.5	1.875	1.818	
	M	0.18	0.17	0.250	0.292	0.5	0.5	0.5	0.625	0.625	
拉力负荷时丝杆的最大伸长(mm)	600	1300	1500	2000	2500	3000	3500	4000	5500		
最大压力负荷时的最大提升高度(mm)	丝杆头部无导向	110	220	250	385	500	400	490	850	900	
	丝杆头部导向	150	300	400	770	1000	800	980	1700	1640	1900
满载时蜗杆扭矩(N·m)	P	7.5	15	18	39.5	119	179	240	366	464	650
	M	4	8.30	8.86	19.8	60	90	122	217	253	350
效率(%)	P	18	20	22	23	20.5	19.5	16	18	20	
	M	7	9	11	11.5	13	12.8	9	11	15	
功率(KW)	$P=T \times n / 9550$ (T: 扭矩(N·m); n: 转速(r/min))										
不加行程的重量(Kg)	3.5	6.3	7.3	16.2	25	36	70.5	87	95		
丝杆每100mm的重量(Kg)	0.15	0.35	0.45	0.82	1.67	2.15	4.15	5.20	6.35		
润滑剂	合成钙钠基润滑脂ZGN-1或ZGN-2(-20℃~+100℃)										
润滑脂量(Kg)	0.03	0.08	0.1	0.3	0.5	0.75	1.1	1.9	2.2		

### 提升力和提升速度表

型号	提升力(kN)	提升速度m/min(普通)	蜗杆转速r/min	提升速度m/min(慢速)	蜗杆转速r/min	型号	提升力(kN)	提升速度R/min(普通)	蜗杆转速r/min	提升速度R/min(慢速)	蜗杆转速r/min
SWL2.5	25			0.0125	50	SWL20	200	0.15	100	0.10	200
	20			0.15	600		160	0.15	100	0.15	300
	15			0.188	750		120	0.30	200	0.15	300
	10			0.25	1000		100	0.30	200	0.25	500
	5			0.45	1800		75	0.45	300	0.375	750
SWL5	50	0.044	50	0.0146	50	50	0.75	500	0.50	1000	
	40	0.264	300	0.175	600	25	1.50	1000	0.90	1800	
	30	0.264	300	0.219	750	250	0.075	50	0.025	50	
	20	0.526	600	0.292	1000	200	0.15	100	0.10	200	
	10	0.876	1000	0.525	1800	160	0.15	100	0.15	300	
SWL10	5	1.575	1800	0.525	1800	130	0.30	200	0.15	300	
	100	0.288	200	0.15	300	100	0.45	300	0.25	500	
	75	0.432	300	0.25	500	75	0.45	300	0.30	600	
	50	0.432	300	0.375	750	50	0.90	600	0.50	1000	
	35	0.864	600	0.90	1800	350	0.094	50	0.0313	50	
SWL15	20	1.44	1000	0.90	1800	300	0.104	100	0.125	200	
	10	2.592	1800	0.90	1800	250	0.208	100	0.188	300	
	150	0.072	50	0.025	50	200	0.416	200	0.188	300	
	100	0.288	200	0.15	300	150	0.624	300	0.313	500	
	80	0.288	200	0.25	500	100	0.624	300	0.47	750	
SWL25	60	0.432	300	0.30	600	50	1.248	600	0.626	1000	
	40	0.720	500	0.50	1000						
	20	1.44	1000	0.90	1800						
	10	2.592	1800	0.90	1800						

注：表中参数是在环境温度20℃，工作持续率每小时20%或每分钟40%情况下得出的；当转速超过表中数值时，提升元件会因过热而出现早期磨损，使用时，应严加注意。

### 丝杆长度与极限负荷的关系

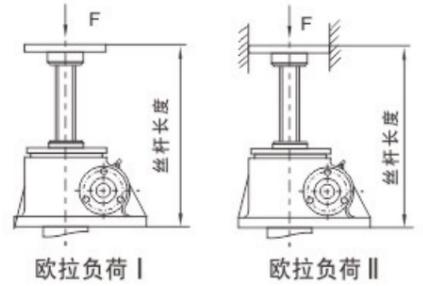
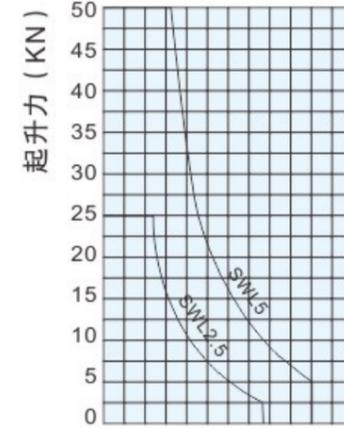


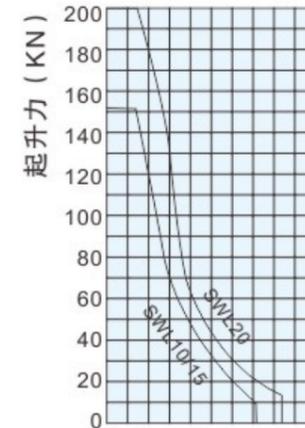
图1



欧拉荷载 I 0 300 600 900 1200

欧拉荷载 II 0 600 1200 1800 2400

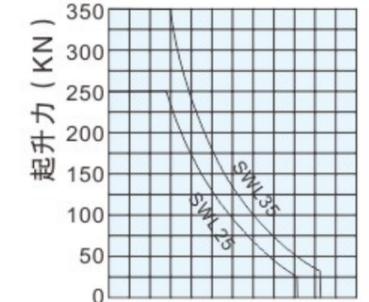
图2 丝杆长度 (mm)



欧拉荷载 I 0 400 800 1200 1600 2000

欧拉荷载 II 0 1000 2000 3000 4000

图3 丝杆长度 (mm)



欧拉荷载 I 0 0.5 1 1.5 2 2.5 3

欧拉荷载 II 0 1 2 3 4 5 6

图4 丝杆长度 (mm)

### 升降机的选型说明 Elevator Selection

根据丝杆行程和提升负荷查图1~图4，找出所需升降机的型号，再查提升力和提升速度表，校核提升速度是否满足要求。

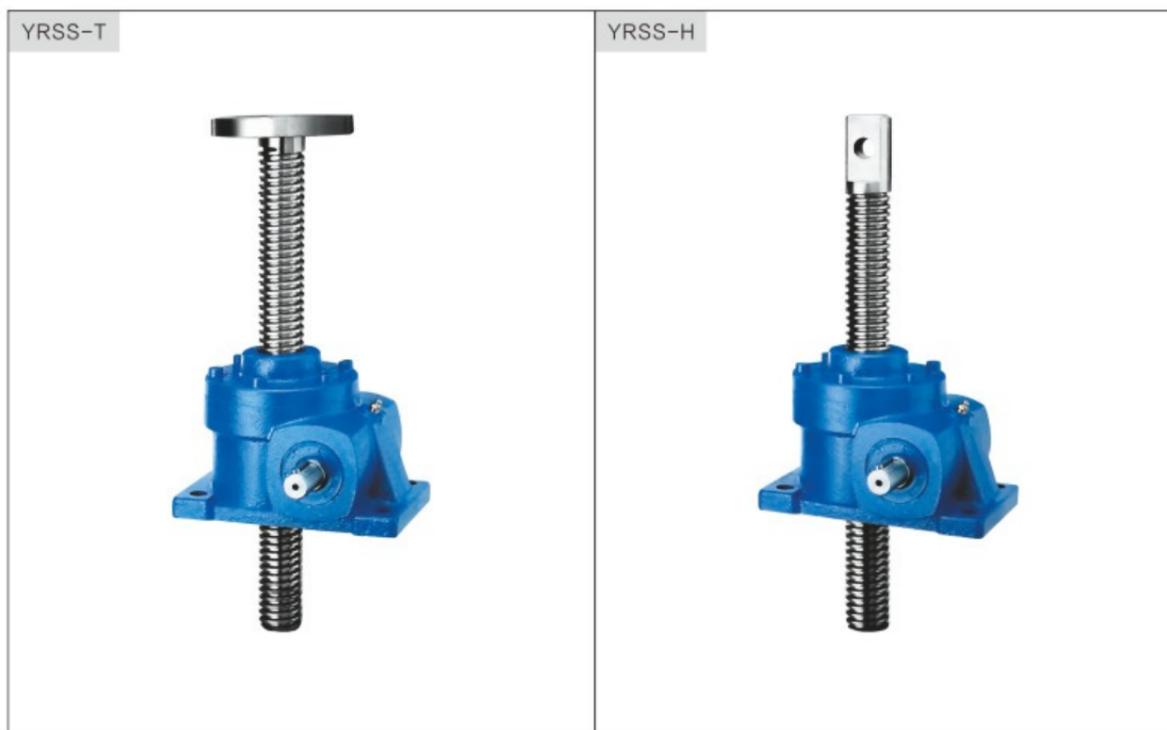
例：已知提升负荷为F=20kN，丝杆行程=400mm，提升速度V=0.65m/min，试求所需的升降机。

根据F=20kN，丝杆行程=400mm查图2，选择SWL5升降机。再查提升力和提升速度表核对SWL5升降机在25kN负荷下只允许0.526m/min的速度，只有重选大型号的升降机。再查提升力和提升速度表得知SWL10在20kN负荷下允许提升速度为1.44m/min而满足要求。

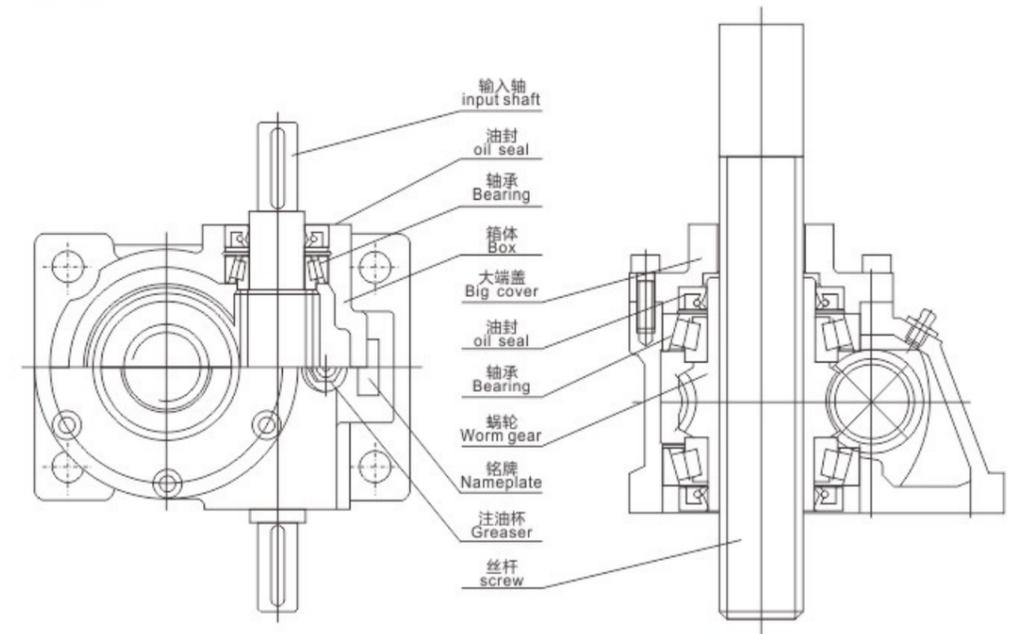
### 说明

- ★1) 当压力负荷减小时，提升高度可随之增大（两者具体关系详见图2~图4）；
- ★2) 在提升不同的负荷时，所允许的扭矩、功率、转速也不同，且不同工作持续率的最大功率也不同；
- ★3) 1型结构采用油脂润滑，随着温度的升高应及时补充润滑剂；
- ★4) 表中的效率为用油脂润滑条件下的参数；
- ★5) 工作期间应及时更换润滑剂；
- ★6) 工作环境温度：-20℃~+80℃；
- ★7) 在静止状态一般可以自锁。

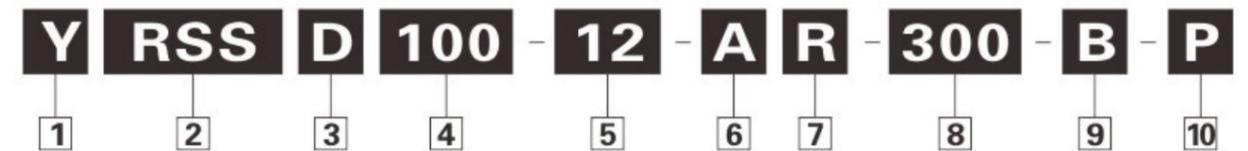
**YRSS 系列蜗轮丝杆升降机**  
 PRODEUCT PICTURES OF YRSS SERIES



**产品结构**  
 Product Structure



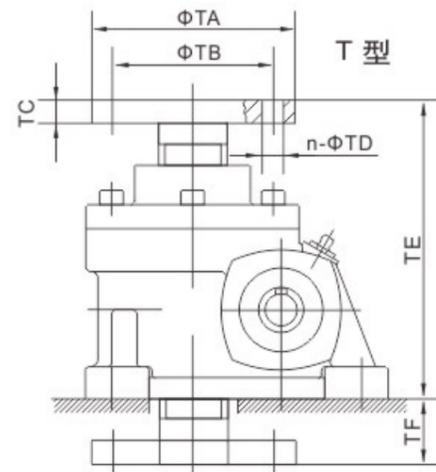
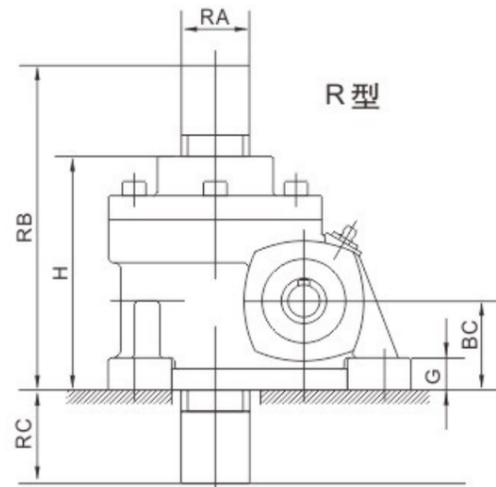
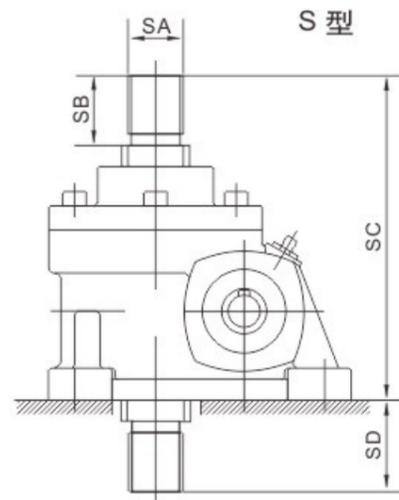
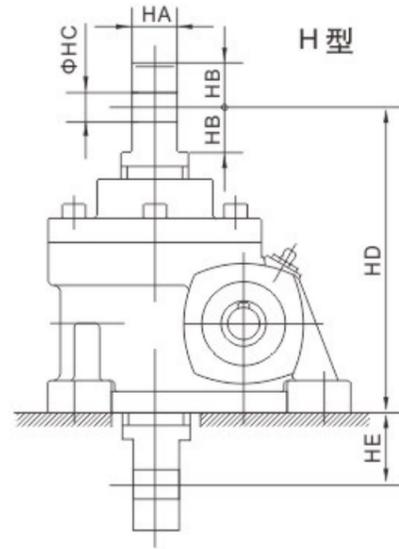
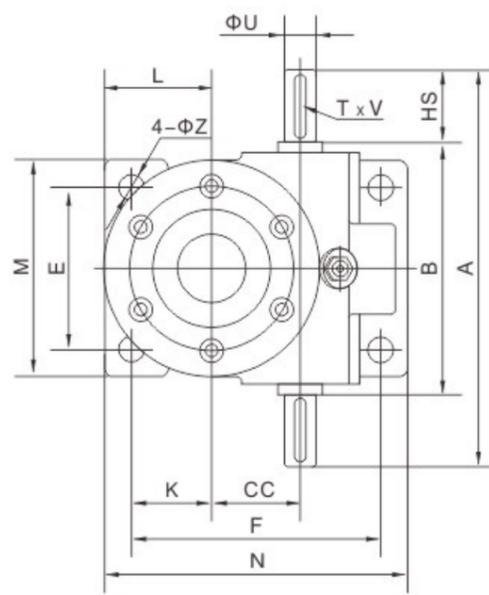
**型号说明**  
 Model Introduction



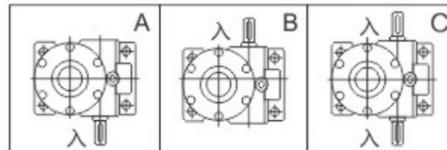
<p><b>1</b></p> <p>企业代码 Y--禹神减速机 Enterprise code Y--YUSHEN</p>	<p><b>2</b></p> <p>产品代码 RSS--蜗轮丝杆升降机 Products code RSS--worm gear linear actuator</p>	<p><b>3</b></p> <p>输入轴联接方式 D--带电机法兰无代码--基本型 Connector of input shaft D--with motor flange Non-code-basic</p>	<p><b>4</b></p> <p>规格用蜗轮副中心距表示100 Specification Expressed by the center distance of a pair of Worm gear 100</p>	<p><b>5</b></p> <p>传动比 12 Ratio 12</p>
<p><b>6</b></p> <p>安装方式代码 Mounting Option code A、B--基本型 C、D--止旋构造型 E、F--活动螺母构造型 详见“4.3安装方式” A、B--Basic Model C、D--Screw fluctuate without rotation E、F--Screw rotate without fluctuation more information from 4.3 Mounting option</p>	<p><b>7</b></p> <p>丝杆头部型式代码 Code of screw head R型(圆柱式) R-Column type H型(栓孔式) H-Bolt hole type S型(螺紋式) S-Screw type T型(顶板式) T-Coping type 详见“产品图片” 注:安装方式E、F时无此代码 Notes: Non-code-E、F mounting option</p>	<p><b>8</b></p> <p>丝杆行程 300mm Stroke of screw 300mm 共有100、200、300、400、500、600、800、1000mm 8种规格, 根据使用情况选择, 如需要其它长度行程, 也可以定做 Total 8 species model 100, 200, 300, 400, 500, 600, 800, 1000mm, choose according to using situation, if other model needed, can be made to order</p>	<p><b>9</b></p> <p>轴指向 shaft direction YRSS系列共有A、B、C四种 YRSSD系列共有A、B、C、D四种 详见“轴指向表示” YRSS series have A、B and C three species YRSSD series have A、B、C and D four species</p>	<p><b>10</b></p> <p>护管 safeguard pipe P--带护管 P--With safeguard pipe 无代码--不带护管 Non-code-without safeguard pipe 注: 安装方式E、F时无此代码 Notes: Non-code-E、F mounting option</p>

**YRSS 安装尺寸**

Installation Dimensions of YRSS

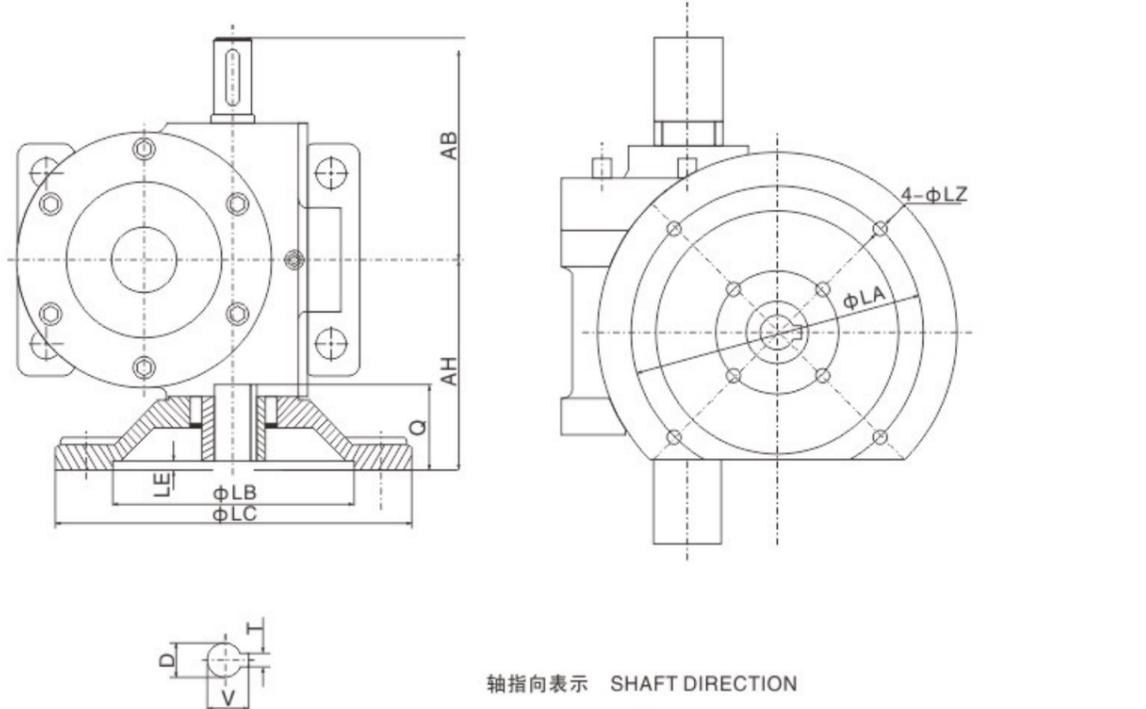


轴指向表示 SHAFT DIRECTION

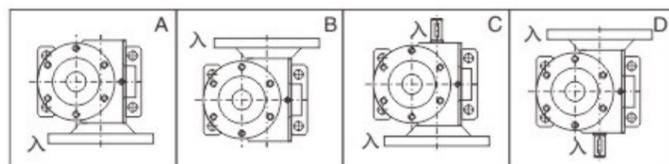


型号 规格 Model size	A	E	BC	CC	Tr	L	U	丝杆头部型式 Type of screw head							
								R型		H型		S型		T型	
								RA	HA	HB	HD	SA	SB	TA	n-φTD
YRSS35	170	66	40	35	Tr26×5	50	15 5×3	26	16	165	M16×1.5	28	88	4-φ10	
	110	111	15	38		90		20	55			150	70		135
	30	12	110			135		12	55			40	10		25
YRSS40	220	80	50	40	Tr32×6	57	18 6×3.5	32	20	195	M22×1.5	32	98	4-φ10	
	140	125	18	42		110		25	65			180	80		160
	40	12	130			155		14	65			50	13		30
YRSS50	220	90	50	50	Tr38×6	60	18 6×3.5	38	25	195	M30×1.5	35	114	4-φ12	
	140	140	18	45		120		25	65			180	90		160
	40	14	130			170		16	65			50	13		30
YRSS60	256	100	60	60	Tr46×8	90	25 8×4	46	32	255	M33×1.5	40	138	4-φ14	
	176	190	20	70		140		32	95			220	100		200
	40	18	160			230		20	95			60	16		40
YRSS60B	264	110	60	60	Tr52×8	90	25 8×4	52	36	255	M39×1.5	45	148	4-φ18	
	184	190	20	70		150		32	95			220	110		210
	40	18	160			230		24	95			60	20		50
YRSS70	316	140	70	70	Tr65×10	95	28 8×4	65	44	295	M45×1.5	55	178	4-φ21	
	216	210	25	75		180		35	115			260	125		235
	50	18	180			250		26	115			80	25		55
YRSS100	390	190	85	100	Tr75×12	110	32 10×5	75	56	355	M60×2	65	188	4-φ21	
	260	260	30	85		230		44	135			300	140		285
	65	22	220			310		35	135			80	28		65
YRSS120	420	210	100	120	Tr80×12	130	35 10×5	80	60	410	M64×2	70	218	4-φ25	
	290	305	30	105		260		54	150			360	170		330
	65	22	260			355		38	150			100	30		70
YRSS130	480	240	120	130	Tr90×14	160	45 14×5.5	90	70	480	M76×2	75	248	4-φ27	
	340	355	30	130		300		64	165			435	200		390
	70	22	315			415		45	165			120	32		75
YRSS150	550	250	125	150	Tr100×16	170	50 14×5.5	100	80	545	M90×2	100	358	6-φ27	
	360	385	35	135		320		70	200			495	280		445
	95	27	345			455		55	200			150	35		100

## YRSSD安装尺寸 Installation Dimensions of YRSSD



轴指向表示 SHAFT DIRECTION



型号规格 Model size	入功率 (kw)	法兰 代号	AB	AH	LA	LB	LC	LE	LZ	D	Q	T×V	电机 长度
YRSSD40	0.37	71B5	110	93	130	110	160	4	M8	φ14	33	5×16.3	225
YRSSD50	0.37	71B5	110	85	130	110	160	4	M8	φ14	33	5×16.3	225
YRSSD60	0.75	80B5	128	120	165	130	200	4.5	M10	φ19	43	6×21.8	225
	1.5	90B5								φ24	53	8×27.3	290
YRSSD60B	0.75	80B5	132	120	165	130	200	4.5	M10	φ19	43	6×21.8	255
	1.5	90B5								φ24	53	8×27.3	290
YRSSD70	1.5	90B5	158	140	165	130	200	4.5	M10	φ24	53	8×27.3	290

## 选型方法 Methods for Model Chosen

### 选型要素

总当量载荷计算

$$W_s = W_{max} \times f_s$$

$W_s$ --当量载荷  $W_{max}$ --最大载荷  $f_s$ --使用系数(详见附表1)

表1 使用系数 $f_s$  Table 1 using coefficient( $f_s$ )

使用工况 using situation	平稳载荷, 负荷惯性小 Smooth load; light load inertia	轻微冲击载荷, 负荷惯性中等 light shock load; mid load inertia	强冲击负荷, 负荷惯性大 strong shock load; heavy load inertia
使用系数 using coefficient	1.0~1.3	1.3~1.5	1.5~3.0

#### 4.1.2 单台升降机当量载荷的计算

$$W = W_s / (S \times f_d)$$

$W$ --单台当量载荷  $W_s$ --当量载荷  $S$ --联动台数  $f_d$ --联动系数(详见附表2)

表2 联动系数 $f_d$  Table 2 linkage coefficient( $f_d$ )

联动台数 Linkage quantity	1	2	3	4	5-8
使用系数 Using coefficient	1	0.9	0.9	0.8	0.7

### 暂定升降机型号

根据载重、升降速度、行程、驱动源后暂时选定升降机型号(详情可参考“5、选型参数”)。

### 丝杆行程选定

在充分考虑丝杆运动惯性、各种顶端输出部件等各种情况下, 选择有充分余量的丝杆行程。

丝杆计算(详见表3, 丝杆行程用L表示, 单位(unit):mm)

表3 丝杆计算 Table 3 screw calculate

型号 Model	丝杆直径 Screw dia	护管长 length of protect pipe	丝杆头部S型 "S" type screw end		丝杆头部H型 "H" type screw end		丝杆头部R型 "R" type screw end		丝杆头部T型 "T" type screw end	
			总长=L+SC	牙长=总长-SD	总长=L+HB+HD	牙长=总长+HB+HE	总长=L+PB	牙长=总长-RC	总长=L+TE	牙长=总长-TF
YRSS35	Tr26×5	L+55	L+150	总长-40	L+20+165	总长-20-55	L+165	总长-55	L+135	总长-25
YRSS40	Tr32×6	L+60	L+180	总长-50	L+25+195	总长-25-65	L+195	总长-65	L+160	总长-30
YRSS50	Tr38×6	L+60	L+180	总长-50	L+25+195	总长-25-65	L+195	总长-65	L+160	总长-30
YRSS60	Tr46×8	L+65	L+220	总长-60	L+32+255	总长-32-95	L+225	总长-65	L+200	总长-40
YRSS60B	Tr52×8	L+65	L+220	总长-60	L+32+255	总长-32-95	L+225	总长-65	L+210	总长-50
YRSS70	Tr65×10	L+75	L+260	总长-80	L+35+295	总长-35-115	L+250	总长-70	L+235	总长-55
YRSS100	Tr75×12	L+85	L+300	总长-80	L+44+355	总长-44-135	L+295	总长-75	L+285	总长-65
YRSS120	Tr80×12		L+360	总长-100	L+54+410	总长-54-150	L+355	总长-95	L+330	总长-70
YRSS130	Tr90×14		L+435	总长-120	L+64+480	总长-64-165	L+430	总长-115	L+390	总长-75
YRSS150	Tr100×16		L+495	总长-150	L+70+545	总长-70-200	L+485	总长-140	L+445	总长-100

### 丝杆稳定性校核

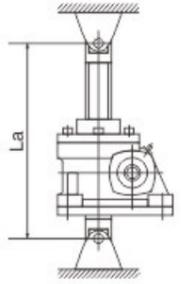
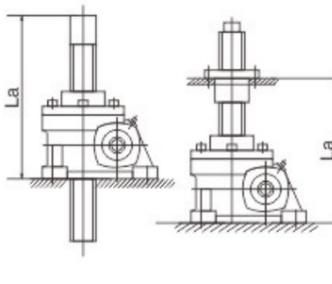
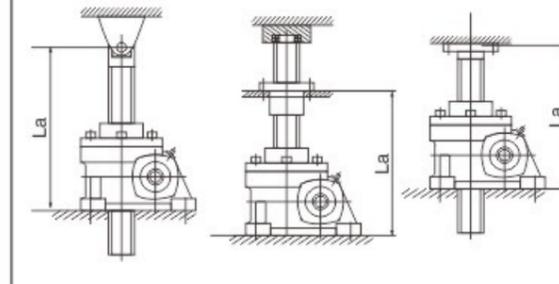
$$P_{cr} = f_m \times (d^2/La)^2$$

应确保  $P_{cr} > W \times Sf$  (一般  $Sf=4$ )

$P_{cr}$ --丝杆临界载荷(N)  $f_m$ --长度系数(详见附表4)  $d$ --丝杆底径(mm)(详见附表5)

$La$ --作用点间距离(mm)  $W$ --单台升降机当量载荷(N)  $Sf$ --安全系数(一般取4)

表4长度系数(fm) Table 4 Length coefficient

		
两端支撑fm=10 x 10 <sup>4</sup> Two ends sustained	底座固定, 轴端自由fm=2.5 x 10 <sup>4</sup> Baseplate fixed, shaft end free	底座固定, 轴端支撑或固定fm=20 x 10 <sup>4</sup> Baseplate fixed, shaft end sustained or fixed

### 丝杆转速校核

$$n_c = 96 \times 10^6 \times f_n \times 6 / L_b^2$$

应确保  $n_c > n_1/i$

$n_c$ --丝杆临界转速(r/min)  $f_n$ --支撑系数(详见附表6)  $d$ --丝杆底径(mm)(详见附表5)  
 $L_b$ --支撑间距离(mm)  $n_1$ --输入转速(r/min)  $i$ --减速比

### 输入功率校核

$$p = n_1 \times p_1 \times w / (9549 \times 2 \pi \times i \times \eta)$$

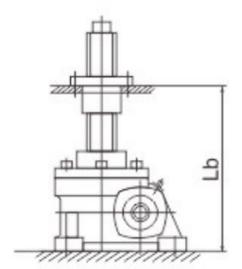
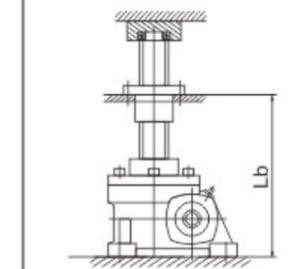
应确保  $P < P_{\text{额}}$

$p$ --所需输入功率(kW)  $n_1$ --输入转速(r/min)  $p_1$ --丝杆螺距(mm)  
 $w$ --单台升降机当量载荷(kN)  $\pi$ --圆周率  $i$ --减速比  $\eta$ --综合效率

表5 丝杆底径d Table 5 Diameter of screw bottom

型号 Model	YRSS35	YRSS40	YRSS50	YRSS60	YRSS60B	YRSS70	YRSS100	YRSS120	YRSS130	YRSS150
丝杆底径 Diameter of screwing bottom	20.5	25	31	37	43	54	62	67	74	82

表6 丝杆系数fn Table 6 Sustain coefficient(fn)

	
轴端自由fn=0.36 Shaft end free	轴端支撑fn=1.56 Shaft end fixed

### Methods for model chosen

Selection points

Calculate total current load

$$W_s = W_{\text{max}} \times f_s$$

$W_s$ --current load  $W_{\text{max}}$ --max load  $f_s$ --using coefficient (more information from table 1)

Calculate current load of unit screw lifter

$$W = W_s / (S \times f_a)$$

$W$ --unit current load  $W_s$ --current load  $S$ --linkage quantity

$f_a$ --linkage coefficient (more information from table 2)

Choose screw model

Choose screw model according to capacity, lifting speed, stroke and drive fountainhead.

Option stroke of screw

Choose adequate stroke of screw with concerning enough screw movement inertia.

Calculate screw (more information from table 3)

Check screw stability

$$P_{cr} = f_m \times (d^2 / L_a)^2 \text{ Should insure } P_{cr} > W \times S_i \text{ (usual } S_i = 4)$$

$P_{cr}$ --Screw critical loading(N)  $f_m$ --Length coefficient (more information from table 4)

$d$ --diameter of screw bottom(mm) (more information from table 5)  $L_a$ --working length(mm)

$W$ --Current load of unit screw lifter(N)  $S_i$ --security coefficient (usual  $S_i = 4$ )

Check screw speed

$$n_c = 96 \times 10^6 \times f_n \times d / L_b^2$$

should insure  $n_c > n_1/i$

$n_c$ --Permissible rotation speed of screw (r/min);  $f_n$ --Sustain coefficient (more information from table 6);

$d$ --diameter of screw bottom(mm) (more information from table 5);

$L_b$ --the distance between sustain(mm).  $n_1$ --input speed(r/min);  $i$ --ratio;

Check input power

$$p = n_1 \times p_1 \times w / (9549 \times 2 \pi \times i \times \eta)$$

should insure  $P < P_{\text{rated}}$

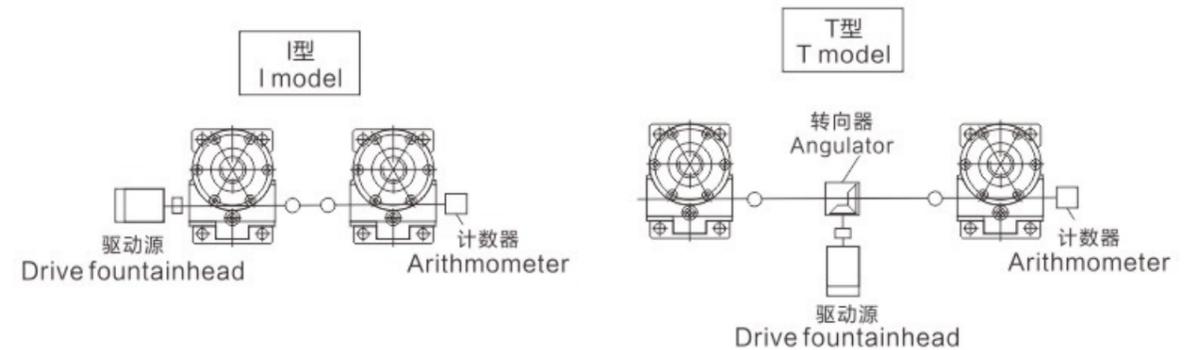
$P$ --needed input power(kW);  $n_1$ --input shaft screwing speed(r/min);  $p_1$ --axial pitch distance(mm)

$w$ --current load(kN);  $\pi$ --pi  $i$ --ratio  $\eta$ --general efficiency

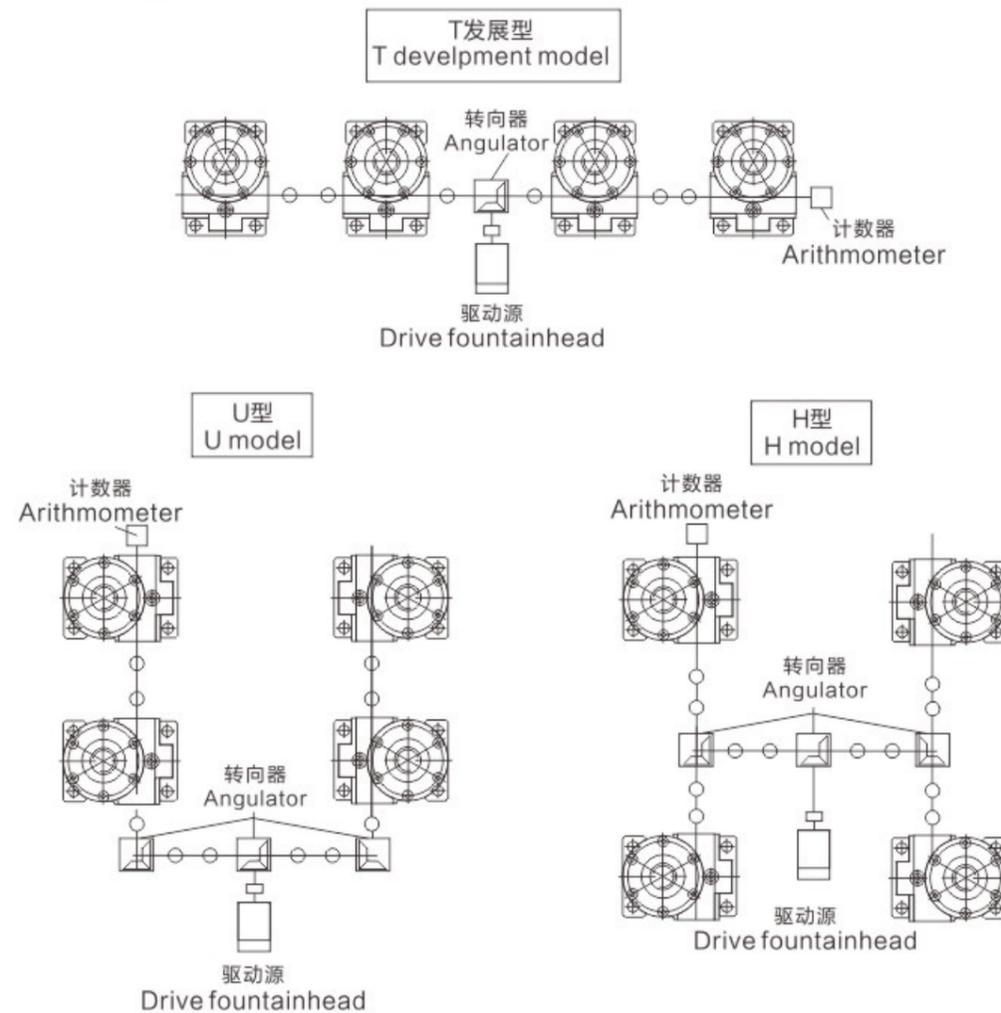
选型示例

Selection example

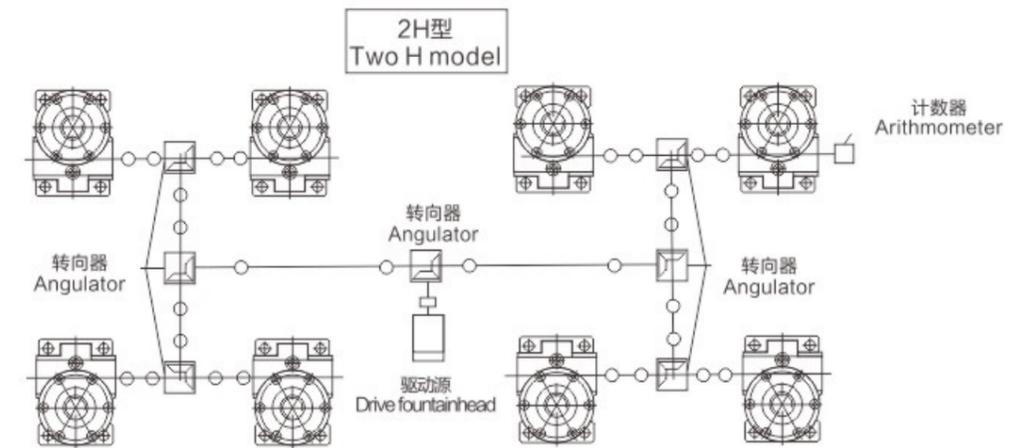
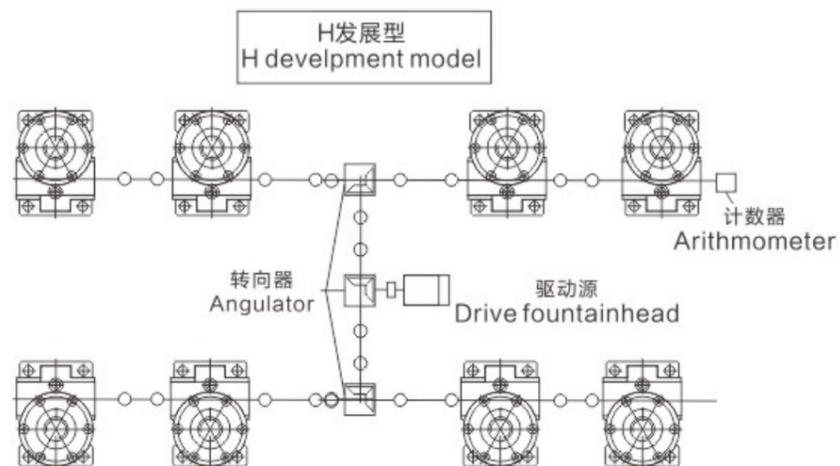
两台联动 Two sets linkage



四台联 Four sets linkage



八台联动 Eight sets linkage



安装方式  
Mounting Option

基本型 Basic Model	止旋构造型 Screw fluctuate without rotation	活动螺母构造型 Screw rotate without fluctuation

说明:

- 1、基本形式：螺母(蜗轮)转动丝杆上下移动，此为普通型升降机安装方式：  
※注意：丝杆在升降时，会产生旋转力，所以必须做好防止旋转的措施。
- 2、止旋构造型：适用于顶端无连接下运转等各种不能实现防止旋转的场合。
- 3、若想有限的空间增长行程，可选用活动螺母(由用户自行设计制造配丝杆)构造型。此构造为丝杆旋转，活动螺母移动。若行程较长时，轴端应采用支撑方式，可得到很好的传动效果。

Explanation:

- 1、Basic Model: Screw fluctuate with rotation. This is the installation for basic screw lifter.  
※Notice: There will be rotation force when screw is ascending and descending. So it's need to prevent rotation.
- 2、Screw fluctuate without rotation: work under the situation (without connection on the top, etc.) Which can't prevent from rotating.
- 3、Screw rotate with travelling nut: This type is suitable for narrow space. If it has long stroke, shaft end should be supported for better transmission.

选型参数  
Capacity and Model Selection

型号规格 Model size	传动比 Ratio	输入轴转速 1800r/min Input shaft revolution speed 1800r/min			输入轴转速 1500r/min Input shaft revolution speed 1500r/min			输入轴转速 1200r/min Input shaft revolution speed 1200r/min			输入轴转速 900r/min Input shaft revolution speed 900r/min			输入轴转速 600r/min Input shaft revolution speed 600r/min			输入轴转速 300r/min Input shaft revolution speed 300r/min		
		输入功率 (kW) Input power (kW)	起升力 (kg) Lifter force (kg)	起升速度 (m/min) Hoist speed (m/min)	输入功率 (kW) Input power (kW)	起升力 (kg) Lifter force (kg)	起升速度 (m/min) Hoist speed (m/min)	输入功率 (kW) Input power (kW)	起升力 (kg) Lifter force (kg)	起升速度 (m/min) Hoist speed (m/min)	输入功率 (kW) Input power (kW)	起升力 (kg) Lifter force (kg)	起升速度 (m/min) Hoist speed (m/min)	输入功率 (kW) Input power (kW)	起升力 (kg) Lifter force (kg)	起升速度 (m/min) Hoist speed (m/min)	输入功率 (kW) Input power (kW)	起升力 (kg) Lifter force (kg)	起升速度 (m/min) Hoist speed (m/min)
YRSS35	1/5	0.69	500	1.80	0.64	550	1.50	0.65	700	1.20	0.63	900	0.90	0.46	1000	0.60	0.37	1000	0.30
	1/10	0.37	500	0.90	0.37	550	0.75	0.37	700	0.60	0.37	950	0.45	0.37	1000	0.30	0.19	1350	0.15
	1/20	0.37	600	0.45	0.37	700	0.38	0.37	900	0.30	0.37	1200	0.23	0.19	1350	0.15	0.19	1350	0.08
YRSS40	1/6	0.98	700	1.80	0.93	800	1.50	0.88	950	1.20	0.91	1300	0.90	0.84	1800	0.60	0.42	1800	0.30
	1/12	0.66	950	0.90	0.64	1100	0.75	0.61	1300	0.60	0.57	1650	0.45	0.46	2000	0.30	0.37	2000	0.15
	1/24	0.37	950	0.45	0.37	1100	0.38	0.37	1300	0.30	0.37	1650	0.23	0.37	2000	0.15	0.19	2000	0.08
YRSS50	1/6	1.39	900	1.80	1.28	1000	1.50	1.24	1200	1.20	1.16	1500	0.90	0.87	1700	0.60	0.54	2100	0.30
	1/12	1.10	1350	0.90	1.01	1500	0.75	0.98	1800	0.60	0.87	2150	0.45	0.58	2150	0.30	0.37	2500	0.15
	1/24	0.78	1800	0.45	0.72	2000	0.38	0.69	2400	0.30	0.55	2550	0.23	0.42	2900	0.15	0.37	2850	0.08
YRSS60	1/8	2.12	1300	1.80	1.97	1450	1.50	1.85	1700	1.20	1.72	2100	0.90	1.66	3050	0.60	1.31	4800	0.30
	1/16	1.12	1300	0.90	1.04	1450	0.75	0.98	1700	0.60	0.95	2200	0.45	0.87	3050	0.30	0.69	4800	0.15
	1/32	0.80	1750	0.45	0.75	1950	0.38	0.69	2250	0.30	0.64	2800	0.23	0.63	4100	0.15	0.48	6400	0.08
YRSS60B	1/8	2.00	1300	1.80	1.86	1450	1.50	1.75	1700	1.20	1.62	2100	0.90	1.57	3050	0.60	1.24	4800	0.30
	1/16	1.06	1300	0.90	0.98	1450	0.75	0.93	1700	0.60	0.89	2200	0.45	0.83	3050	0.30	0.65	4800	0.15
	1/32	0.75	1750	0.45	0.70	1950	0.38	0.65	2250	0.30	0.61	2800	0.23	0.59	4100	0.15	0.46	6400	0.08
YRSS70	1/10	2.66	1400	1.80	2.42	1850	1.50	2.25	1950	1.20	2.12	2450	0.90	1.93	3350	0.60	1.41	4900	0.30
	1/20	1.42	1600	0.90	1.47	1850	0.75	1.37	2250	0.60	1.28	2800	0.45	1.18	3850	0.30	0.86	5600	0.15
	1/40	1.14	2400	0.45	1.17	2800	0.38	1.09	3350	0.30	1.07	4400	0.23	0.93	5750	0.15	0.69	8400	0.08
YRSS100	1/12	3.62	1850	1.80	3.51	2150	1.50	3.39	2600	1.20	3.18	3250	0.90	2.94	4500	0.60	2.09	6400	0.30
	1/18	2.65	1900	1.20	2.68	2300	1.00	2.57	2750	0.80	2.45	3500	0.60	2.19	4700	0.40	1.56	6700	0.20
	1/36	1.66	2200	0.60	1.63	2600	0.50	1.60	3200	0.40	1.47	3900	0.30	1.36	5400	0.20	1.20	9600	0.10
YRSS120	1/12	4.15	1975	1.80	4.02	2300	1.50	3.81	2725	1.20	3.80	3625	0.90	3.48	4975	0.60	2.48	7050	0.30
	1/18	3.20	2125	1.20	3.20	2550	1.00	3.04	3025	0.80	3.03	4025	0.60	2.74	5450	0.40	1.94	7725	0.20
YRSS130	1/36	2.14	2625	0.60	2.07	3050	0.50	1.98	3650	0.40	1.99	4875	0.30	1.80	6600	0.20	1.40	10300	0.10
	1/7	9.47	2100	3.60	9.17	2450	3.00	9.02	2850	2.40	8.58	4000	1.80	8.20	5450	1.20	5.84	7750	0.60
	1/14	5.76	2350	1.80	5.71	2800	1.50	5.57	3300	1.20	5.39	4550	0.90	5.06	6200	0.60	3.57	8750	0.30
YRSS150	1/28	4.07	3050	0.90	3.89	3500	0.75	3.91	4100	0.60	3.65	5850	0.45	3.48	7800	0.30	2.45	11000	0.15
	1/8	16.3	3500	3.60	16.1	4000	3.00	15.8	5400	2.40	15.1	7100	1.80	14.8	9850	1.20	9.70	12950	0.60
	1/16	11.7	4300	1.80	11.6	5400	1.50	10.5	7200	1.20	11.00	9450	0.90	9.62	11800	0.60	7.08	17350	0.30
1/32	8.65	5500	0.90	9.55	6800	0.75	7.35	10000	0.60	7.53	14300	0.45	7.02	15750	0.30	5.80	26050	0.15	

使用说明 Directions For Use

产品说明

YRSS系列蜗轮丝杆升降机 (又名千斤顶);  
 具有结构紧凑、体积小等特点;  
 安装方便、形式多;  
 可靠性高、寿命长;  
 具有起升、下降及借助辅件推进、翻转等多种功能;  
 可单台使用,也可多台组成使用;  
 动力源广泛,可用电动机或其它动力直接带动,也可以用手动;  
 通常用于低速重载的场合。广泛应用于冶金、机械、建筑、水利、医疗、化工等各个行业。

使用注意事项

请严格按承载能力表选择合适的速比和与之对应的具有充分裕度的载荷的升降机;  
 升降机工作时应控制减速机表面和升降螺母表面温度在-15℃~80℃;  
 升降机不得连续运转,单台升降机的负荷时间率(T%)以30分钟为单位计算,不得超过20%;

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

必须保证有充足的驱动源动力;  
 升降机理论上有自锁功能,但在振动冲击较大的场合会造成自锁功能失灵,请务必加制动装置;  
 升降机使用环境:

使用环境 Using situation	室内无雨水侵入的场所 No rain and water
周围空气 Ambient air	灰尘为一般工厂状况 Dust: usual condition for mill
环境温度 Ambient temperature	-15℃~40℃
相对湿度 Comparative humidity	85%以下 Below 85%

升降机工作时一般不允许有横向载荷,若有横向载荷时,请加导向装置。

Operating instructions

Product Introduction

YRSS series worm gear screw lifter (other name is Jack);  
 Compact structure, small size;  
 Easy mounting, varied types;  
 High reliability. Long service life;  
 With the function of ascending, descending, thrusting, overturning;  
 Can be applied in one unit or multiple units;  
 Wide motivity. It can be driven by electrical motor and manual force;  
 It is usually used in low speed situation, widely used in the fields of metallurgy, mechanical, construction, chemical, irrigation works, medical treatment.



**Notices of usage**

Select the model with proper ratio and load.

The surface temperature of speed reducer and nut should be controlled in-15°C-80°Cwhen the screw lifter is working.

The screw lifter cannot work all the time .The unit is thirty mins for duty ratio of unit one and can not exceed 20%.

$$\text{Duty ratio ( T\% )} = \frac{\text{Time under working/cycle}}{\text{Time under working/cycle+ interval/cycle}} \times 100\%$$

Insure adequate drive fountainhead.

Theoretically screw has self-lock function, but the self-lock function may no workin heavy shock condition; Using situation for screw lifter.

Transverse load is not allowed when screw lifter is working .If transverse load occurred, please add direction setting.

**油品润滑**

**Lubricant**

润滑油（脂）选用表

Lubricants for reducer used in can be chosen as the table below

蜗杆转速(r/min) Worm shaft speed(r/min)	润滑油（脂）类型 Lubricant
1500~1800	ISO VG680
300~1500	ZNG-1或ZNG-2

注：合成钙钠基润滑脂温度范围-20°C-100°C

Note: The temperature range of synthetic lime-sode basic lubricant grease ZNG-1or ZNG-2 is -20°C-100°C

润滑油（脂）注油量(1)

Lubricants capacity(1)

规格 Size	型号 Type	YRSS35	YRSS40	YRSS50	YRSS60	YRSS60B	YRSS70B	YRSS100	YRSS120	YRSS130	YRSS150
注油量 Lubricant capacity		0.06	0.1	0.2	0.35	0.4	0.5	1.5	2.2	3.5	4.0

**故障分析 Maifunctions Analysis**

故障情况 Fault Description	故障原因 Reasons	解决办法 Solutions
振动 Vibration	原动机与升降机连接不当 Improper connection among prime mover and lifter	调整至适当位置, 重新正确固紧 Adjust to proper position
	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
	螺栓松脱 Bolt loose	紧固螺栓 Tighten screw
杂音 Noise	轴承损伤或间隙过大 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 (脂) 过少 Lubricant shortage	补加润滑油(脂) Fill in adequate oil as indication
漏油 Oil leakage	油封唇口磨损 Oil seal lip worn-out	更换油封 Replace oil seal
	油封档轴颈磨损 Shaft of oil seal area worn-out	更换输入轴或蜗轮 Replace input or worm gear
蜗轮副齿面 磨损过快 Tooth surface of worm gear set abrade extra-quickly	超负荷运转 Over load	调整至适当负荷 Adjudt to proper loading
	润滑油 (脂) 不符合要求 Lubricant oil not according with requirement	按油品润滑更换润滑油 (脂) Replace proper lubricant oil
	润滑油 (脂) 过少 Lubricant shortage	补加润滑油 (脂) Fill adequate oil as indication
	未按规定适时换油, 润滑油劣化 Not replacing lubricant oil in time according to requirement, oil deteriorates	按规定要求适时换油 Replacing oil in time according to requirement
丝杆副齿面 磨损过快 Screw surface of worm gear sets abrade extra-quickly	运转温度过高 Overheating while running	采取合适措施, 降低环境温度 Adopt in proper measures to make environment temperature fall
	超负荷运转 Over loading	调整至适当负荷 Adjust to proper loading
	润滑油干枯或变质 Lubricant shortage or gone bad	去污擦净, 重新加润滑油 Washover dirty oil and refill proper lubricant
	有横向载荷 There is transverse load	加导向装置 Add direction setting

注：如果发生其他故障无法解决时，请随时与我们联系，以便提供咨询服务。

Note: if other faults not listed above occur, please contact to us at any moment. We will supply thorough consultation and service.

