

杭州兴达机械有限公司
Hangzhou Xingda Machinery Co., Ltd.

工厂地址: 中国浙江省杭州市萧山区新湾工业园区
Factory Add: Xiwang Industry Xiaoshan Hangzhou Zhejiang China
公司地址: 中国浙江省杭州市萧山区绿都商业广场1-1809室
Office Add: 1-1809, Taifu Plaza, Xiaoshan Hangzhou Zhejiang China

T: +86 571 56166162
F: +86 571 22800650
E: Jane@xmdmade.com



www.xmdmade.com

www.xmdmade.com

WP SERIES WORM GEAR REDUCER



杭州兴达机械有限公司

杭州兴达机械有限公司成立于1984年，总部设立于杭州，是一家集研发、生产、销售为一体，专业提供减速机、齿轮马达等动力传动解决方案的综合性企业。公司自行生产的XDWP、XDRV、XDVF、XDUDL系列蜗杆蜗轮减速机，XDR、XDS、XDK、XDF型齿轮减速机，XDGM系列蜗轮马达及为客户需求定制的专用非标减速机等在同行中处于领先地位。

兴达机械把握生产过程中的每个细节，全部通过ISO9001:2008质量管理体系认证，SGS认证，拥有3项发明专利、11项实用新型专利，是浙江省科技企业，国家高新技术企业。公司拥有高级工程师20余人，高级技工300人，大专及以上学历30%以上。

公司占地面积50亩，拥有现代化车间面积40,000平方米，拥有世界领先CNC加工中心，磨齿机等生产设备和多项检测装备共计300多台，年产量20万台减速机。

公司的销售网络遍布122个国家及地区，226个城市，广泛的服务于钢铁行业、冶金行业、石油机械、食品机械、包装机械、陶瓷机械、纺织机械、印刷机械、木工机械、玻璃机械、化工机械、起重设备、船舶工业、造纸行业、高压开关及健身器材等各种领域。

兴达机械秉承“诚信经营，质量第一，开拓创新，与时俱进”的宗旨，以精湛的技术，优质的产品，完善的服务，朝着管理规范化、市场国际化、产品优质化的方向发展。我们的目标是制造高性价比的减速机，把兴达自主品牌减速机EED打造成高端动力传动解决方案的全球供应商。

Hangzhou Xingda Machinery Co., Ltd. established in 1984, headquartered in HANGZHOU, CHINA, is a comprehensive enterprise that specializes in the research, production and sales of speed reducers. Our products XDWP, XDRV, XDVF, XDUDL series of worm gear speed reducers, XDR, XDS, XDK, XDF series of helical gear speed reducers, XDGM series of geared motors and the special customized of reducers are leading in the power gearbox manufacturing industries.

Xingda focus on the detail in the manufacturing process, passed the ISO9001:2008 certificate, SGS certificate, assures the high quality of our products. Our company has 3 inventive patents, 11 new practical patents, and awarded the Science and technology enterprises in Zhejiang Province, the national high-tech enterprises. We have more than 20 Senior Engineers, more than 200 Technical workers. The Tertiary and higher education accounted for more than 30%.

Xingda covers an area of 50 acres, with modern workshop area of 40,000 square meters. It has a total of more than 300 sets of the world's leading CNC machining centers, grinding machine centers and other production equipment and testing equipment. The annual output is 200,000 units.

We have the distribution of regional service centers, sales and service department across the 122 countries and zone, 226 cities, services to the steel industries, metallurgical industries, petroleum machinery, food machinery, packaging machinery, ceramic machinery, textile machinery, printing machinery, woodworking machinery, glass machinery, chemical machinery, lifting equipment, shipbuilding industry, cleaning industry, high-voltage switch and fitness equipment ect.

Xingda adheres to the "Honesty, Quality, Innovation, Advancing". By superb technology, quality products, perfect service, we are developing standardized management, the international market, and the super quality products. Our goal is to create the most high Efficient & Economic speed reducers, making EED a global supplier of advancing power transmission solutions Expert.

Xingda Machinery

EED
TRANSMISSION



工欲善其事，必先利其器

A workman must first sharpen his tools
if he is to do his work well.



Machining equipment

加工设备

国内一流自动化加工设备为零件加工精度的稳定性提供最稳固的基础。

The first-rate automatic equipments have provided solid foundation for machining accuracy.



CONTENTS 目录

■ 产品图片	01
Product picture	
■ WP产品结构图	04
Product structural drawing	
■ WP型号及表示法	04
Model and struretable	
■ 单级WP系列	05
Single WP Series	
■ 单级WPW系列	10
Single WPW Series	
■ 双级WPE系列	19
Double WPE Series	
■ 减速机选型方法	27
Reducer Selection Methods	
■ 承载能力表	30
Dynamical Capacity Table	
■ 安装与使用	32
Installation & Usage	
■ 润滑油的选择使用	33
Choice of Lubricant	
■ 故障原因及解决办法	33
Reasons and solutions for the faults of reducer	

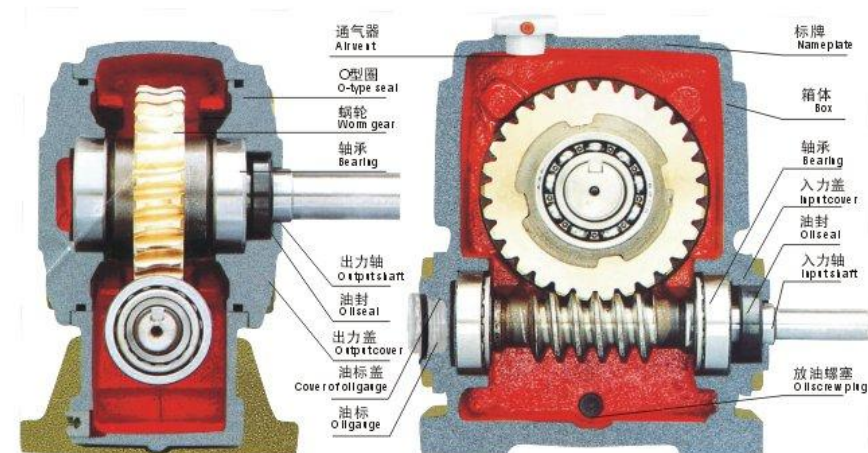


产品图片 Product picture





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

产品代码
W-蜗轮减速机
Product code
W-Worm gear
Speed reducer

箱体结构
P-整体
Box structure
P-whole

箱体形式
W-万能型
无代码-基本型
Box model
W-universal
Non-code-basic

整机结构
E-双极
EE-多级
无代码-基本型
Unit structure
E-Double
EE-Multistage
Non-code-basic

连接方式
D-入轴带电机法兰
无代码-基本型
Conncof input
shaft
D-input shaft with
motor frange
Non-code-basic

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

箱体结构形式
A-入轴在下 S-入轴在上
O-出轴向下 X-出轴向上
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 downward
X-Output shaft is upward
T-Input shaft is upward
V-Input shaft is downward
Non-code-basic

中心距
40-250
Center distance
40-250

减速比
1/10-1/900
Ratio
1/10-1/900

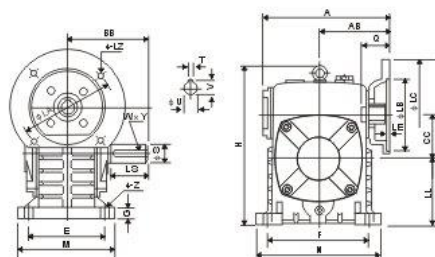
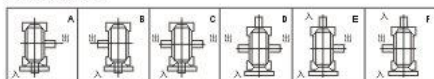
轴指向
B
Output shaft
directio
B



WPDS 型



轴指向表示
SHAFT DIRECTION

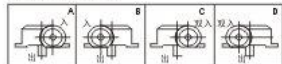


型号 size	输入功率 input power (kw)	减速比 ratio	输入轴 input shaft													输出轴 output shaft													重量 weight(kg)
			A	AB	BB	CC	H	LL	M	N	E	F	G	Z	LA	LB	LC	LE	LZ	Q	U	T	V	LS	LS	LS	Y		
50	0.18		151	83	97	80	176	90	120	140	95	110	15	12	115	95	140	4	M8	31	11	4x12.5	40	17	5x3	8			
60	0.37		167	91	112	90	202	90	130	150	105	120	20	12	130	110	160	4	M8	33	14	5x16.3	50	22	6x3.2	11			
70	0.75		200	109	131	70	238	105	150	190	115	150	20	15	130	110	200	4	M8	40	19	5x16.3	60	28	8x4	17			
80	1.5	1/10	202	111											165	130	200	4	M10	42	19	6x21.8							
100	1.5	1/15	225	125	142	80	273	120	170	220	135	180	20	15	165	130	200	4.5	M10	48	19	6x21.8	65	32	10x5	22			
120	2.2	1/20	280	148	169	100	334	190	270	270	155	220	25	15	165	130	200	4.5	M10	52	24	8x27.3	75	38	10x5	38			
130	3.0	1/25	333	181	190	120	423	180	230	320	180	250	30	18	215	180	250	5	M12	63	28	8x31.3	85	45	14x5.5	64			
135	4.0	1/30	375	202	210	135	482	215	250	350	200	290	30	18	215	180	250	5	M12	63	28	8x31.3	95	55	16x6	85			
147	5.0	1/40	380	204	212	147	495	203	250	350	200	280	32	18	215	180	250	5	M12	63	28	8x31.3	95	55	16x6	96			
155	5.5	1/50	448	247	252	155	541	235	275	360	220	320	35	21	265	230	300	5	M12	83	38	10x41.3	110	60	18x7	118			
175	7.5		481	262	262	175	600	260	310	430	250	350	40	21	265	230	300	5	M12	83	38	10x41.3	110	65	18x7	165			
200	11.0		543	285	305	200	677	290	360	480	290	390	40	24	300	250	350	6	M16	114	42	12x45.3	125	70	20x7.5	236			
250	15.0		615	330	360	250	824	350	450	560	380	480	45	28	300	250	350	6	M16	114	42	12x45.3	155	90	25x9	396			

WPDx 型



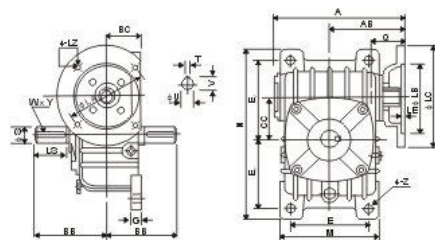
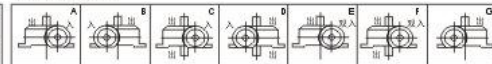
WPDx轴指向表示
SHAFT DIRECTION



WPDO 型



WPDO轴指向表示
SHAFT DIRECTION

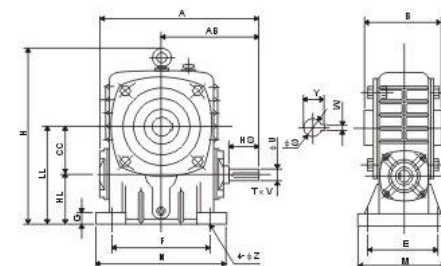
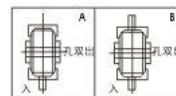


型号 size	输入功率 input power	减速比 ratio	电机法兰 flange												输入轴 input shaft		输出轴 output shaft		重量 weight(kg)							
			A	AB	BB	BC	CC	M	N	E	E	E	G	Z	LA	LE	LC	LE		LZ	Q	T	U	V	LS	S
50	0.18		151	83	97	50	50	116	220	90	93	102	15	12	115	95	140	4	M8	31	11	4x12.8	40	17	5x3	8
60	0.37		167	91	112	55	60	125	260	100	105	120	20	12	130	110	160	4	M8	33	14	5x16.3	50	22	6x3.2	11
70	0.75		200	109	131	65	70	156	295	120	120	135	20	15	130	110	160	4	M8	40	14	5x16.3	60	28	8x4	17
	0.75		202	111											165	130	200	4	M10	42	19	6x21.8				
80	1.5	1/10	225	125	142	70	80	175	320	140	130	150	20	15	165	130	200	4.5	M10	48	19	6x21.8	65	32	10x5	22
100	1.5	1/15	280	148	169	90	100	224	375	190	155	180	25	15	165	130	200	4.5	M10	52	24	8x27.3	75	38	10x5	38
120	2.2	1/20	333	181	190	100	120	266	450	220	185	215	30	18	215	180	250	5	M12	63	28	8x31.3	85	45	14x5.5	64
	3.0	1/30																								
135	4.0	1/30	375	202	210	110	135	306	495	260	210	235	30	18	215	180	250	5	M12	63	28	8x31.3	95	55	16x6	80
	3.0	1/40																								
147	4.0	1/40	380	204	212	113	147	310	556	230	254	254	32	18	215	180	250	5	M12	63	28	8x31.3	95	55	16x6	96
	5.5	1/60																								
155	5.5	1/60	448	247	252	140	155	350	590	290	245	295	35	21	265	230	300	5	M12	83	38	10x41.3	110	60	18x7	122
	5.5																									
175	5.5	1/60	481	262	262	150	175	394	640	320	267	323	40	21	265	230	300	5	M12	83	38	10x41.3	110	65	18x7	154
	7.5																									
200	11.0		543	285	305	175	200	440	710	370	290	350	40	24	300	250	350	6	M16	114	42	12x45.3	125	70	20x7.5	220
	11.0																									
250	15.0		615	330	360	200	250	510	860	440	350	440	45	28	300	250	350	6	M16	114	42	12x45.3	155	90	25x9	374

WPKA 型



轴指向表示
SHAFT DIRECTION

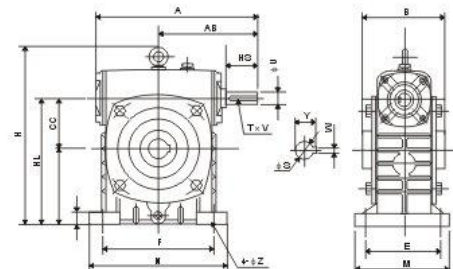
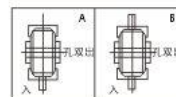


型号 size	减速比 ratio	A	AB	B	CC	E	F	G	H	HL	LL	M	N	Z	入力軸 input shaft			出力軸 output shaft			重量 weight(kg)
		HS	U	T	S	W	X	Y	4												
40		143	87	90	40	70	80	13	138	40	80	90	100	10	25	12	4x2.5	16	8x18.3	4	
50		175	107	100	50	95	110	15	173	50	100	120	140	12	30	12	4x2.5	20	8x22.8	7	
60	1/10	198	122	110	60	105	120	20	204	60	120	130	150	12	40	15	6x3	25	8x28.3	10.5	
70	1/15	231	140	126	70	115	150	20	236	70	140	150	190	15	40	18	6x3.5	30	8x33.3	14.5	
80	1/20	261	160	136	80	135	180	20	268	80	160	170	220	15	50	22	6x3.5	35	10x38.3	22	
100	1/25	322	190	160	100	155	220	25	329	100	200	190	270	15	50	25	8x4	40	12x43.3	36	
120	1/30	361	229	180	120	180	260	30	430	120	240	230	320	18	65	30	8x4	45	14x48.8	63	
135	1/40	433	260	204	135	200	290	30	480	135	270	250	350	18	75	35	10x5	60	18x64.4	80	
155	1/60	504	302	250	155	220	320	35	541	155	290	275	390	21	85	40	12x5	70	20x74.9	114	
175	1/60	545	325	280	175	250	350	40	600	160	335	310	430	21	85	45	14x5.5	80	22x85.4	150	
200		587	350	324	200	290	390	40	667	175	375	360	490	24	95	50	14x5.5	85	22x90.4	218	
250		705	420	360	250	380	490	45	800	200	450	450	590	28	110	60	18x7	110	25x116.4	360	

WPKS 型



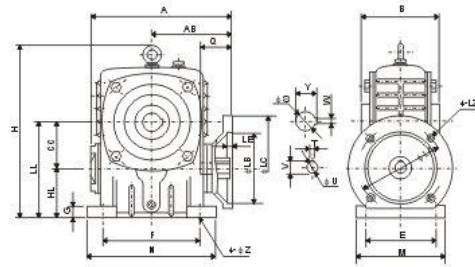
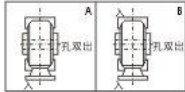
轴指向表示
SHAFT DIRECTION



型号 size	减速比 ratio	A	AB	B	CC	E	F	G	H	HL	LL	M	N	Z	入力軸 input shaft			出力軸 output shaft			重量 kg
															H5	U	T x V	S	W x Y	Q	
40		143	87	90	40	70	80	13	141	100	60	90	100	10	25	12	4x2.5	16	8x18.3	4	
50		175	107	100	50	95	110	15	180	130	90	120	140	12	30	12	4x2.5	20	8x22.8	7	
60	1/10	198	122	110	60	105	120	20	207	150	90	130	150	12	40	15	5x3	25	8x28.3	10.5	
70		231	140	126	70	115	150	20	238	175	105	150	190	15	40	18	6x3.5	30	8x33.3	14.5	
80		261	160	136	80	135	180	20	270	200	120	170	220	15	50	22	6x3.5	35	10x38.3	22	
100		322	190	160	100	155	220	25	331	250	180	190	270	15	50	25	8x4	40	12x43.3	36	
120	1/30	361	229	180	120	180	260	30	423	300	180	230	320	18	65	30	8x4	45	14x48.8	63	
135	1/40	433	260	204	135	200	290	30	482	350	215	250	350	18	75	35	10x5	60	18x64.4	80	
155	1/60	504	302	250	155	220	320	35	541	390	235	275	390	21	85	40	12x5	70	20x74.9	114	
175		545	325	280	175	250	350	40	594	435	260	310	430	21	85	45	14x5.5	80	22x85.4	150	
200		587	350	324	200	290	390	40	671	490	290	360	490	24	95	50	14x5.5	85	22x90.4	218	
250		705	420	360	250	380	490	45	800	600	350	450	590	28	110	60	18x7	110	25x116.4	360	

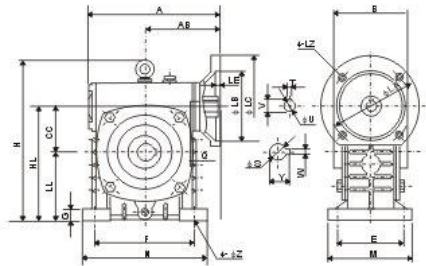
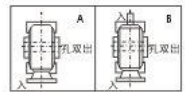


WPDKA 型

轴指向表示
SHAFT DIRECTION

型号 size	输入 功率 (kW)	传动 ratio	电 机 法 兰 flange													入 力 孔 input hole			出力轴output shaft		重量 weight (kg)						
			A	AB	B	CC	E	F	G	H	HL	LL	M	N	Z	LA	LB	LC	LE	LZ		Q	U	T × V	S	W × Y	
50	0.18		151	83	100	50	95	110	15	176	50	100	120	140	12	115	95	140	4	M8	31	11	4x12.8	20	6x22.8	8	
60	0.37		167	91	110	60	105	120	20	204	60	120	130	150	12	130	110	160	4	M8	33	14	5x16.3	25	8x26.3	10.5	
70	0.37		200	109		125	70	115	150	20	236	70	140	150	15	130	110	160		M8	40	14	5x16.3	30	8x33.3	17	
	0.75	1/10	202	111												165	130	200		M10	42	19	6x21.8				
80	0.75	1/15	225	125	136	80	135	180	20	268	80	160	170	220	15	165	130	200	4.5	M10	48	19	6x21.8	35	10x38.3	26	
	1.5															52	24	8x27.3			52	24	8x27.3				
100	1.5	1/25	280	148	160	100	155	220	25	336	100	200	190	270	15	165	130	200	4.5	M10	52	24	8x27.3	40	12x43.3	38	
120	2.2	1/30	333	181	180	120	180	250	30	430	120	240	230	320	18	215	180	250	5	M12	63	28	8x31.3	45	14x48.8	60	
	3.0																										
135	3.0	1/40	375	202	204	135	200	290	30	480	135	270	250	350	18	215	180	250	5	M12	63	28	8x31.3	60	18x64.4	85	
	4.0	1/60																									
	4.0		425	224		250	155	220	320	35	531	135	290	275	390	21	215	180	250		M12	63	28	8x31.3			
155	4.0		448	247												265	230	300		M12	83	38	10x41.3	70	20x74.9	120	
	5.5																										
175	5.5		481	262	280	175	250	350	40	600	160	335	310	430	21	265	230	300	5	M12	83	38	10x41.3	80	22x85.4	150	
	7.5																										

WPDKS 型

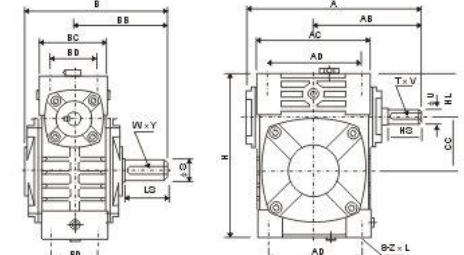
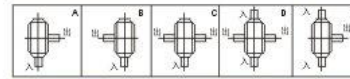
轴指向表示
SHAFT DIRECTION

型号 size	输入功率 input power (kW)	传动比 ratio	A	AB	B	CC	E	F	G	H	HL	LL	M	N	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	O	U	V	W	X	Y	
50	0.18		151	83	100	50	95	110	15	176	130	80	120	140	12	115	130	110	160	4	M8	31	11	4x12.8	20	6x22.8	8
60	0.37		167	91	110	60	105	120	20	202	150	90	130	150	12	130	110	160	4	M8	33	14	5x16.3	25	8x26.3	10.5	
70	0.37		200	109		126	70	115	150	20	238	175	105	150	15	165	130	200	4	M10	42	19	6x21.8	30	8x33.3	17	
80	0.75	1/10	225	125	136	80	135	180	20	273	200	120	170	220	15	165	130	200	4.5	M10	48	19	6x21.8	35	10x38.3	26	
	1.5	1/15																									52
100	1.5	1/25	280	148	160	100	155	220	25	334	250	150	190	270	15	165	130	200	4.5	M10	52	24	8x27.3	40	12x43.3	38	
120	2.2	1/30	333	181	180	120	180	250	30	423	300	180	230	320	18	215	180	250	5	M12	63	28	8x31.3	45	14x48.8	60	
135	3.0	1/40	375	202	204	135	200	290	30	482	350	215	250	350	18	215	180	250	5	M12	63	28	8x31.3	60	18x64.4	85	
155	4.0	1/60	425	224	250	155	220	320	35	541	390	235	275	390	21	215	180	250	5	M12	63	28	8x31.3	70	20x74.9	120	
	5.5	1/80																									83
175	5.5		448	247												265	230	300			83	38	10x41.3	80	22x85.4	150	
175	7.5		481	262	280	175	250	350	40	600	435	260	310	430	21	265	230	300	5	M12	83	38	10x41.3	80	22x85.4	150	



单级WPW系列 SINGLE WPW SERIES

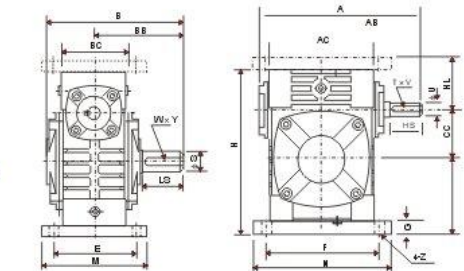
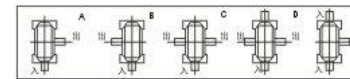
WPW 型

轴指向表示
SHAFT DIRECTION

型号 size	传动比 ratio	A	AB	B	BB	AC	BC	AD	BD	CC	HL	H	Z	HS	U	T×V	LS	S	W×Y	重量 weight (kg)
40		140	80	124	70	95	61	78	42	40	35	125	M6x12	25	12	4x2.5	28	14	5x3	4
50		175	107	150	97	111	68	85	50	50	35	150	M6x18	30	12	4x2.5	40	17	5x3	6.5
60		198	122	168	112	127	76	105	55	60	42	177	M8x20	40	15	5x3	50	22	6x3.5	9
70	1/15	231	140	194	131	152	86	125	65	70	55	215	M10x25	40	18	6x3.5	60	28	8x4	13
80	1/20	261	160	214	142	169	102	140	70	80	65	260	M12x28	50	22	6x3.5	65	32	10x5	21
100	1/25	322	190	254	169	216	117	180	90	100	80	310	M12x30	50	25	8x4	75	38	10x5	34
120	1/30	381	229	282	190	256	124	220	100	120	95	370	M14x32	65	30	8x4	85	45	14x5.5	51
135	1/40	433	260	317	210	296	147	260	110	135	105	425	M16x35	75	35	10x5	95	55	16x6	78
155	1/60	504	302	362	252	345	185	280	120	155	103	461	M16x35	85	40	12x5	110	60	18x7	102
175		545	325	402	262	374	192	320	140	175	123	521	M16x35	85	45	14x5.5	110	65	18x7	142
200		587	350	467	305	412	230	360	150	200	130	575	M20x38	95	50	14x5.5	125	70	20x7.5	202
250		705	420	552	360	500	285	420	180	250	150	700	M24x42	110	60	18x7	155	90	25x8	340

WPWA 型

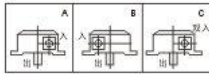
WPWS 型

轴指向表示
SHAFT DIRECTION

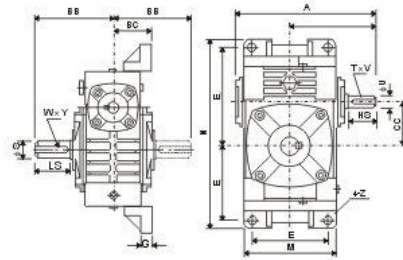
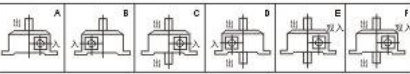
型号 size	速比 ratio	A	AB	B	BB	AC	BC	CC	HL	LL	H	M	N	E	F	G	Z	入力轴 input shaft			出力轴 output shaft			重量 weight(kg)
																		HS	U	T x V	LS	S	W x Y	
40		149	89	124	79	95	61	40	45	80	135	100	130	80	110	10	10	25	12	4x2.5	28	14	9x3	4.5
50		175	107	150	97	111	68	50	60	80	165	120	140	95	110	15	12	30	12	4x2.5	40	17	5x3	7.5
60	1/10	198	122	168	112	127	76	60	60	93	195	130	150	105	120	18	12	40	15	5x3	50	22	6x3.5	11.5
70	1/15	231	140	194	131	152	86	70	73	108	233	150	190	115	150	18	15	40	18	6x3.5	60	28	8x4	15.5
80	1/20	261	160	214	142	169	102	80	83	123	268	170	220	135	180	18	15	50	22	6x3.5	65	32	10x5	24
100	1/25	322	190	254	169	216	117	100	100	150	330	190	270	155	220	20	15	50	25	8x4	75	38	10x5	39
120	1/30	381	229	282	190	256	124	120	120	180	395	230	320	180	260	25	18	65	30	8x4	85	45	14x5.5	57
135	1/40	433	260	317	210	296	147	135	135	215	455	250	350	200	290	30	18	75	35	10x5	95	55	16x6	85
155	1/60	504	302	362	252	345	185	155	135	235	493	280	380	220	320	32	21	85	40	12x5	110	60	18x7	110
175	1/60	545	325	402	262	374	192	175	160	260	558	310	410	250	350	37	21	85	45	14x5.5	110	65	18x7	152
200		587	350	467	305	412	230	200	175	290	620	355	445	290	390	45	24	95	60	14x5.5	125	70	20x7.5	216
250		705	420	552	360	500	285	250	200	350	750	460	560	380	480	50	28	110	60	18x7	155	90	25x8	350



WPWX 型

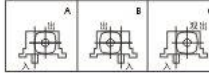
WPWX轴指向表示
SHAFT DIRECTION

WPWO 型

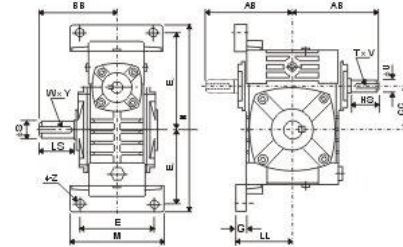
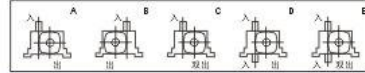
WPWO轴指向表示
SHAFT DIRECTION

型号 size	减速比 ratio	A	AB	BB	BC	CC	M	N	E	E1	G	Z	输入轴 input shaft	输出轴 output shaft	重量 weight(kg)
40		140	80	70	45	40	95	187	70	72	97	12	HS U T x V	LS S W x Y	5
50		175	107	97	50	50	111	228	90	90	110	14	12	30 12	4x2.5 40 17 5x3 8
60		189	122	112	55	60	127	257	100	102	129	15	12	40 15	5x3 50 22 6x3.5 11
70	1/10	231	140	131	65	70	152	305	120	120	155	20	15	40 18	6x3.5 60 28 8x4 15.5
80	1/12	261	160	142	70	80	174	350	140	140	180	20	15	50 22	6x3.5 65 32 10x5 24
100	1/25	322	190	169	90	100	224	410	190	165	215	22	15	50 25	8x4 75 38 10x5 38
120	1/30	381	229	190	100	120	264	464	220	195	255	25	18	65 30	8x4 85 45 14x5.5 56
135	1/40	433	260	210	110	135	304	558	260	230	285	30	18	75 35	10x5 95 55 16x8 84
155	1/50	504	302	252	140	155	345	605	290	250	305	35	21	85 40	12x5 110 60 18x7 129
175	1/60	545	325	282	150	175	374	675	320	273	348	40	21	85 45	14x5.5 110 65 18x7 157
200		587	350	305	175	200	424	749	374	305	390	40	24	95 50	14x5.5 125 70 20x7.5 224
250		705	420	352	200	250	510	920	440	375	475	45	28	110 60	18x7 155 90 25x9 374

WPWT 型

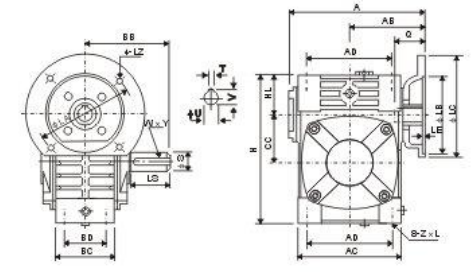
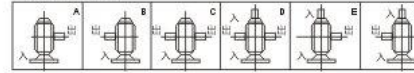
WPWT轴指向表示
SHAFT DIRECTION

WPWV 型

WPWV轴指向表示
SHAFT DIRECTION

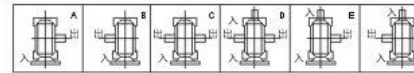
型号 size	减速比 ratio	AB	BB	BC	LL	M	N	E	E1	G	Z	输入轴 input shaft	输出轴 output shaft	重量 weight(kg)
40		87	79	40	63	90	187	70	72	97	12	10	25 12	4x2.5 28 14 5x3 5
50		107	97	50	70	120	228	95	90	110	14	12	30 12	4x2.5 40 17 5x3 8
60		122	112	60	80	130	257	105	102	129	15	12	40 15	5x3 50 22 6x3.5 11
70	1/10	140	131	70	95	150	305	115	120	155	20	15	40 18	6x3.5 60 28 8x4 15.5
80	1/12	160	142	80	105	170	350	135	140	180	20	15	50 22	6x3.5 65 32 10x5 24
100	1/25	190	169	100	135	190	410	155	165	215	22	15	50 25	8x4 75 38 10x5 38
120	1/30	229	190	120	160	230	464	180	195	255	25	18	65 30	8x4 85 45 14x5.5 56
135	1/40	260	210	135	185	250	558	200	230	285	30	18	75 35	10x5 95 55 16x8 84
155	1/50	302	252	155	220	275	605	220	250	305	35	21	85 40	12x5 110 60 18x7 129
175	1/60	325	282	175	240	310	675	250	273	348	40	21	85 45	14x5.5 110 65 18x7 157
200		350	305	200	280	360	749	290	305	390	40	24	95 50	14x5.5 125 70 20x7.5 224
250		420	352	250	315	460	920	380	375	475	45	28	110 60	18x7 155 90 25x9 374

WPWD 型

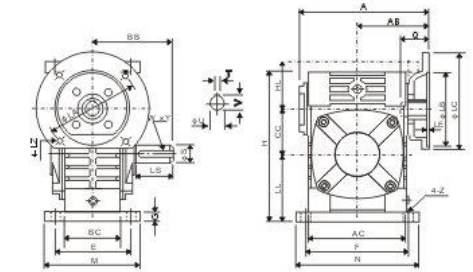
轴指向表示
SHAFT DIRECTION

型号 size	输入功率 input(kW)	减速比 ratio	A	A8	BB	AC	BC	AD	BD	CC	HL	H	ZxL	电机法兰 flange				输入孔 input hole				输出轴 output shaft		重量 weight(kg)	
														LA	LB	LC	LE	LZ	Q	U	T	V	W		X
40	0.12		135	75	79	95	61	78	42	40	35	125	M6x12	115	95	140	4	M8	31	11	4x12.8	28	14	5x3	4
50	0.18		151	83	97	111	68	85	50	50	35	150	M6x18	115	95	140	4	M8	31	11	4x12.8	40	17	5x3	7
60	0.37		167	91	112	127	76	105	52	60	42	177	M8x20	130	110	160	4	M8	33	14	5x16.3	50	22	6x3.5	10
70	0.75	1/10	200	109	131	152	86	125	65	70	55	215	M10x25	130	110	160	4	M8	40	14	5x16.3	60	28	8x4	14.5
80	0.75	1/15	202	111	131	152	86	125	65	70	55	215		165	130	200	4	M10	42	19	6x21.8				
100	1.5	1/20	225	125	142	169	102	140	70	80	65	250	M12x28	165	130	200	4.5	M10	48	19	6x21.8	65	32	10x5	23
120	2.2	1/25	280	148	169	216	117	190	90	100	80	310	M12x30	165	130	200	4.5	M10	52	24	8x27.3	75	38	10x5	36.5
135	3.0	1/30	333	181	190	256	124	220	100	120	95	370	M14x32	215	180	250	5	M12	63	28	8x31.3	85	45	14x5.5	54
155	5.5	1/50	375	202	210	296	147	260	110	135	105	425	M16x35	215	180	250	5	M12	63	28	8x31.3	95	55	16x6	83
175	7.5	1/60	448	247	252	345	185	290	120	155	103	461	M16x35	265	230	300	5	M12	83	38	10x41.3	110	60	18x7	110
200	11.0		481	262	262	374	192	320	140	175	123	521	M16x35	265	230	300	5	M12	83	38	10x41.3	110	65	18x7	156
250	15.0		543	285	305	412	230	360	180	200	130	575	M20x36	300	250	350	6	M16	114	42	12x45.3	125	70	20x7.5	222
			615	330	360	500	285	420	190	250	150	700	M24x42	300	250	350	6	M16	114	42	12x45.3	155	90	25x9	376

WPWDA 型

轴指向表示
SHAFT DIRECTION

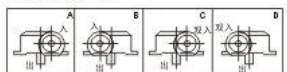
WPWDS 型



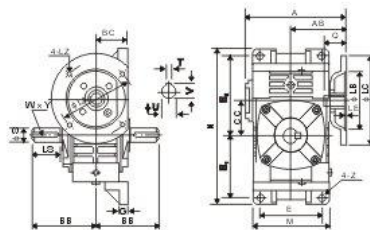
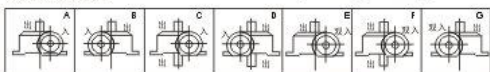
型号 size	输入功率 input(kW)	减速比 ratio	A	AB	BB	AC	BC	CC	HL	LL	H	M	N	E	F	G	Z	电机法兰 flange	输入孔 input hole	输出轴 output shaft	重量 weight(kg)
40	0.12		135	75	79	95	61	40	45	60	135	100	130	80	110	10	10	115 95 140	4 M8 31 11	4x12.8 28 14 5x3 5	
50	0.18		151	83	97	111	68	50	50	60	165	120	140	95	110	15	12	115 95 140	4 M8 31 11	4x12.8 40 17 5x3 8	
60	0.37		167	91	112	127	76	60	60	60	185	130	150	105	120	18	12	130 110 160	4 M8 33 14	5x16.3 50 22 6x3.5 12.5	
70	0.75	1/10	200	109	131	152	86	70	73	108	233	190	190	115	150	18	15	130 110 160	4 M8 40 14	5x16.3 60 28 8x4 17	
80	0.75	1/15	225	125	142	169	102	80	83	123	268	170	220	135	180	18	15	165 130 200	4.5 M10 42 19	6x21.8 65 32 10x5 26	
100	1.5	1/20	280	148	169	216	117	100	100	130	300	190	270	155	220	20	15	165 130 200	4.5 M10 52 24	8x27.3 75 38 10x5 41.5	
120	2.2	1/25	333	181	190	256	124	120	120	180	395	230	320	180	250	25	18	215 180 250	5 M12 63 28	8x31.3 85 45 14x5.5 60	
135	3.0	1/30	375	202	210	296	147	135	135	215	455	290	390	200	290	30	18	215 180 250	5 M12 63 28	8x31.3 95 55 16x6 90	
155	5.5	1/50	448	247	252	345	185	155	135	235	493	290	390	220	320	32	21	265 230 300	5 M12 83 38	10x41.3 110 60 18x7 118	
175	7.5	1/60	481	262	262	374	192	175	160	260	598	310	410	250	350	37	21	265 230 300	5 M12 83 38	10x41.3 110 65 18x7 167	
200	11.0		543	285	305	412	230	200	175	290	620	355	445	290	390	45	24	300 250 350	6 M16 114 42	12x45.3 125 70 20x7.5 237	
250	15.0		615	330	360	500	285	250	200	300	750	480	560	380	480	50	28	300 250 350	6 M16 114 42	12x45.3 155 90 25x9 395	



WPWDX 型

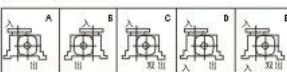
WPWDX轴指向表示
SHAFT DIRECTION

WPWDO 型

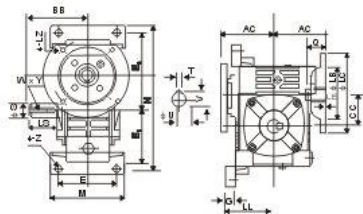
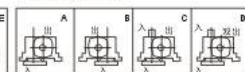
WPWDO轴指向表示
SHAFT DIRECTION

型号 size	输入功率 (input kW)	减速比 ratio	A	AB	BB	BC	CC	M	N	E	E	E	G	Z	电机规格 (motor)					输入轴 input shaft					输出轴 output shaft					重量 weight(kg)
40	0.12		135	75	79	45	40	95	187	70	72	97	12	10	115	95	140	4	M8	31	11	4x12.8	28	14	5x3	5.4				
50	0.18		151	83	97	50	50	111	235	90	90	110	14	12	115	95	140	4	M8	31	11	4x12.8	40	17	5x3	8.5				
60	0.37		167	91	112	55	60	127	257	100	102	129	15	12	130	110	160	4	M8	33	14	5x16.3	50	22	6x3.5	12				
70	0.75		200	109		131	65	70	152	305	120	120	155	20	15	130	110	160	4	M8	40	14	5x16.3	60	28	8x4	17			
80	1.5	1/10	202	111	31	60	70	152	305	120	120	155	20	15	165	130	200	4	M10	42	19	6x21.8	65	32	10x5	26				
100	1.5	1/15	225	125	142	70	80	174	350	140	140	180	20	15	165	130	200	4.5	M10	48	24	8x27.3	75	38	10x5	40.5				
120	2.2	1/25	280	148	169	90	100	224	410	190	165	215	22	15	165	130	200	4.5	M10	52	24	8x27.3	75	38	10x5	40.5				
135	3.0	1/30	333	181	190	100	120	254	494	220	195	255	25	18	215	180	250	5	M12	63	28	8x31.3	85	45	14x5.5	59				
155	4.5	1/40	375	202	210	110	135	304	599	250	230	295	30	18	215	180	250	5	M12	63	28	8x31.3	95	55	16x6	89				
175	5.5	1/50	448	247	252	140	155	345	605	290	250	305	35	21	265	230	300	5	M12	83	38	10x41.3	110	60	18x7	138				
200	11.0	1/60	481	262	262	150	175	374	675	320	273	348	40	21	265	230	300	5	M12	83	38	10x41.3	110	60	18x7	172				
250	15.0		543	285	305	175	200	424	749	320	305	390	40	21	300	250	350	6	M16	114	42	12x45.3	125	70	20x7.5	246				
250	15.0		615	330	360	200	250	510	920	440	375	475	45	28	300	250	350	6	M16	114	42	12x45.3	155	90	25x9	410				

WPWDT 型

WPWDT轴指向表示
SHAFT DIRECTION

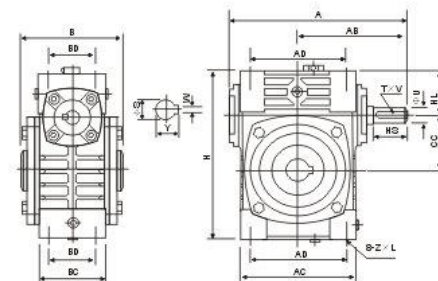
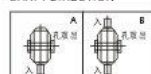
WPWDV 型

WPWDV轴指向表示
SHAFT DIRECTION

型号 size	输入功率 (input kW)	减速比 ratio	A	AB	CC	LL	M	N	E	E	E	G	Z	LA	LB	LC	LE	LZ	Q	U	T×V	LS	S	W×Y	重量 weight(kg)
40	0.12		75	79	40	63	90	187	70	72	97	12	10	115	95	140	4	M8	31	11	4x12.8	28	14	51.3	5.4
50	0.18		83	97	50	70	120	226	95	90	110	14	12	115	95	140	4	M8	31	11	4x12.8	40	17	51.3	8.5
60	0.37		91	112	60	80	130	257	105	102	129	15	12	130	110	160	4	M8	33	14	5x16.3	50	22	61.3.5	12
70	0.75		102	131	70	95	150	305	115	120	155	20	15	165	130	200	4	M10	42	19	6x21.8	60	28	8x4	17
80	1.5	1/10	125	142	80	105	170	350	135	140	180	20	15	165	130	200	4.5	M10	48	19	6x21.8	65	32	10x5	26
100	1.5	1/15	148	169	100	135	190	410	155	165	215	22	15	165	130	200	4.5	M10	52	24	8x27.3	75	38	10x5	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	8x31.3	85	45	14x5.5	59
135	3.0	1/30	202	210	135	185	250	599	200	230	295	30	18	215	180	250	5	M12	63	28	8x31.3	95	55	16x6	89
155	4.5	1/40	247	252	155	220	275	605	220	250	305	35	21	265	230	300	5	M12	83	38	10x41.3	110	60	18x7	138
175	5.5	1/50	262	262	175	240	310	675	250	273	348	40	21	265	230	300	5	M12	83	38	10x41.3	110	60	18x7	172
200	11.0		285	305	200	280	360	749	290	305	390	40	21	300	250	350	6	M16	114	42	12x45.3	125	70	20x7.5	246
250	15.0		330	360	250	315	460	920	380	375	475	45	28	300	250	350	6	M16	114	42	12x45.3	155	90	25x9	410

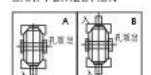


WPWK 型

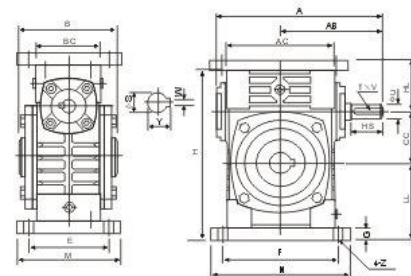
轴指向表示
SHAFT DIRECTION

型号 size	减速比 ratio	A	AB	B	AC	BC	AD	BD	CC	HL	H	Z×L	输入轴input shaft HS U T×V	输出轴output shaft S W×Y	重量 weight(kg)
40		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	75	105	55	60	42	177	M8×30	40 15 5×3	25 8×28.3	9
70	1/10	231	140	132	152	86	125	65	70	55	215	M10×25	40 18 6×3.5	30 8×33.3	13
80	1/15	251	160	150	169	102	140	70	80	65	250	M12×28	50 22 6×3.5	35 10×38.3	21
100	1/25	322	190	174	216	117	180	90	100	80	310	M12×30	50 25 8×4	40 12×43.3	34
120	1/30	361	229	180	256	124	220	100	120	95	370	M14×32	65 30 8×4	45 18×48.8	51
135	1/40	433	260	214	296	147	260	110	135	105	425	M16×35	75 35 10×5	60 18×64.4	78
155	1/50	504	302	256	345	165	280	120	155	103	461	M16×35	85 40 12×5	70 20×74.9	102
175	1/60	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	M20×36	95 80 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

轴指向表示
SHAFT DIRECTION

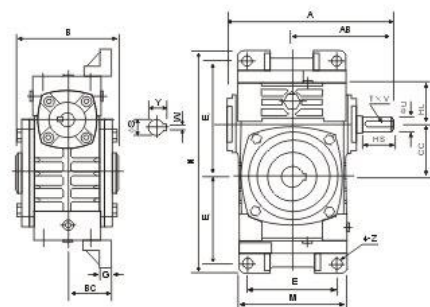
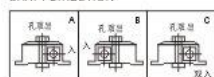
WPWKS 型



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 HS U T×V	输出轴output shaft S W×Y	重量 weight(kg)
40		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	1/10	198	122	120	127	75	60	60	93	195	130	150	105	120	18	12	40 15 5×3	25 8×28.3	11.5
70	1/15	231	140	132	152	86	70	73	108	233	150	190	115	160	18	15	40 18 6×3.5	30 8×33.3	15.5
80	1/20	261	160	150	169	102	80	83	123	268	170	220	135	180	18	15	50 22 6×3.5	35 10×38.3	24
100	1/25	322	190	174	216	117	100	120	180	330	190	270	155	220	20	15	60 25 8×4	40 12×43.3	39
120	1/30	361	229	180	256	124	120	120	180	395	230	320	180	260	25	18	65 30 8×4	45 18×48.8	57
135	1/40	433	260	214	296	147	135	135	215	455	250	350	200	290	30	18	75 35 10×5	60 18×64.4	85
155	1/50	504	302	256	345	165	155	135	235	493	280	380	220	320	32	21	85 40 12×5	70 20×74.9	110
175	1/60	545	325	282	374	192	175	160	260	558	310	410	250	350	37	21	85 45 14×5.5	80 22×85.4	152
200		587	350	324	412	230	200	175	290	620	355	445	290	390	45	24	95 80 14×5.5	85 22×90.4	216
250		705	420	400	500	285	250	200	350	750	460	560	380	480	50	28	110 60 18×7	110 28×116.4	350



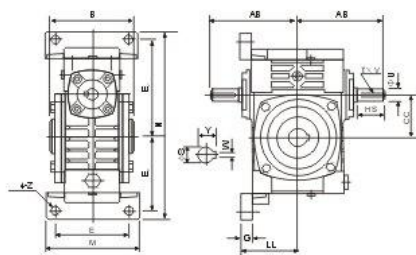
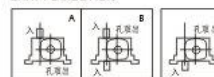
WPWKO 型

轴指向表示
SHAFT DIRECTION

型号 Size	减速比 ratio	A	AB	B	BC	CC	M	N	E	E	E	G	Z	输入轴input shaft				出力轴output shaft				重量 Weight
40		149	89	90	45	40	95	187	78	72	97	12	10	HS	U	T×V	S	W×Y				5
50		175	107	110	50	50	111	226	90	90	110	14	12	30	12	4×2.5	16	5×18.3				8
60	1/10	198	122	120	55	60	127	251	100	102	129	15	12	40	15	5×3	25	8×28.3				11
70	1/15	231	140	132	65	70	152	305	120	120	155	20	16	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	1/25	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	1/40	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	1/60	545	325	282	150	175	374	675	320	273	348	40	21	85	45	14×5.5	80	22×85.4				157
200		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

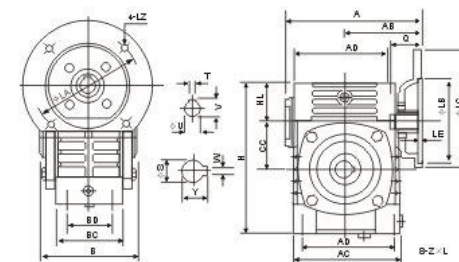
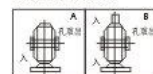
WPWKT 型

WPWKV 型

轴指向表示
SHAFT DIRECTION

型号 Size	减速比 ratio	AB	B	CC	LL	M	N	E	E	E	G	Z	输入轴input shaft				出力轴output shaft				重量 Weight
40		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	1/10	122	120	60	80	130	257	105	102	129	15	12	40	15	5×3	25	8×28.3				11
70	1/15	140	132	70	95	190	305	115	120	155	20	16	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	1/25	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	1/40	260	214	135	185	290	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	1/60	325	282	175	240	310	675	250	273	348	40	21	85	45	14×5.5	80	22×85.4				157
200		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

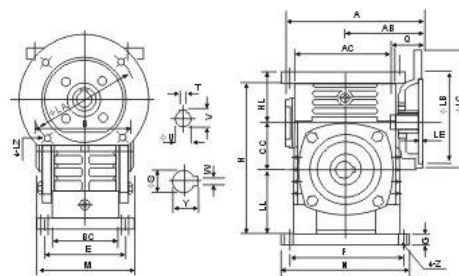
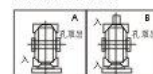
WPWDK 型

轴指向表示
SHAFT DIRECTION

规格 Size	输入轴 Input shaft	减速比 ratio	A	AB	B	AC	BC	AD	BD	CC	HL	H	Z×L	前轴连轴器type				输入轴input shaft				出力轴output shaft				重量 Weight
														LA	LB	LC	LE	LZ	U	V	W	W1	W2	W3	W4	
40	0.12		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		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	1/10	202	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	0.75	1/10	202	111	132	152	86	125	65	70	55	215	M10×25	130	110	160	4	M10	42	19	6×21.8	35	10×38.3	23		
100	1.5	1/15	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		
120	3.0	1/20	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		
135	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		
155	6.0	1/30	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		
175	7.5	1/40	418	247	256	345	185	260	120	155	103	461	M16×35	265	230	300	5	M12	83	38	10×41.3	70	20×74.9	110		
200	11.0	1/50	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		
250	15.0	1/60	543	285	324	412	230	360	190	200	130	575	M20×36	300	250	350	6	M16	114	42	12×45.3	85	22×90.4	222		
			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

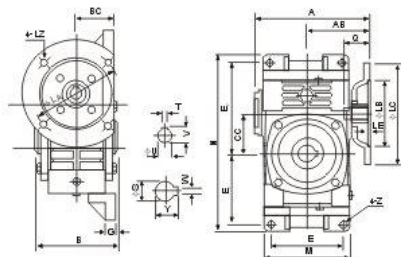
WPWDKS 型

轴指向表示
SHAFT DIRECTION

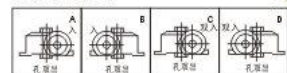
型号 Size	输入轴 Input shaft	减速比 ratio	输入轴input shaft																出力轴output shaft										重量 Weight
			A	AB	B	AC	BC	CC	HL	LL	H	M	N	E	F	G	Z	LA	LB	LC	LE	LZ	W	U	V	W	X	Y	
40	0.12		135	75	90	95	61	40	45	60	135	100	130	80	110	10	10	115	95	140	4	M8	31	11	4×12.8	16	5×18.3	5	
50	0.18		151	83	110	111	68	50	60	80	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		167	91	120	127	75	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	1/10	202	111	132	152	86	70	73	108	233	150	190	115	150	18	15	165	130	200	4	M10	42	19	6×21.8	30	8×33.3	17	
80	1.5	1/15	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	1/20	220	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	6.0	1/30	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	7.5	1/40	418	247	256	345	185	155	155	235	493	280	380	220	320	32	21	265	230	300	5	M12	83	38	10×41.3	70	20×74.9	118	
175	10.0	1/50	481	262	282	374	192	175	160	260	598	310	410	290	350	37	21	265	230	300	5	M12	83	38	10×41.3	80	22×85.4	167	
200	11.0		543	285	324	412	230	200	175	290	620	355	445	290	380	45	24	300	250	350	6	M16	114	42	12×45.3	85	22×90.4	237	
250	15.0		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



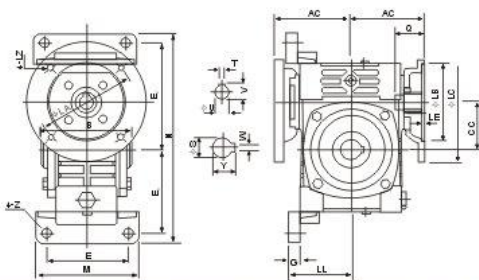
轴指向表示
SHAFT DIRECTION



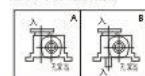
号数 No.	入排率 Input rate	減速比 Ratio	A	AB	B	BC	CC	M	N	E	E ₁	G	Z	車路配置表 Layout configuration								入力 Input	出力 Output	出力係數 Output shift	重量 Weight		
														L	A	B	C	D	I	Z	V	T	S	W	Y		
40	0.12		135	75	90	45	40	95	187	70	72	97	12	115	95	140	4	M8	31	11	4	12.8	16	5	18.3	5.4	
50	0.18		151	83	110	50	50	111	226	90	90	110	14	12	115	95	140	4	M8	31	11	4	12.8	20	6.2.8	8.5	
60	0.37		167	91	120	55	60	127	237	100	102	129	15	12	130	110	160	4	M8	33	14	5	16.3	25	8	23.3	12
70	0.57		173	101	132	65	70	152	305	120	120	155	20	15	165	130	200	4	M8	40	16	6	16.3	30	8	28.2	17
80	0.75	1/10	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	26
	1.5	1/20	280	148	174	90	100	224	410	190	165	215	22	15	165	130	200	4.5	M10	52	24	8	27.3	40	12	43.3	40.5
100	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
120	3.0	1/30	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
135	4.0	1/50	448	247	256	140	155	365	605	290	250	305	35	21	265	230	300	5	M12	83	38	10	41.3	70	22	74.9	138
155	5.5	1/60	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
175	7.5		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
200	11.0		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
250	15.0																										

WPWDKT 型

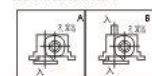
WPWDKV 型



WPWDKT轴指向表示
SHAFT DIRECTION



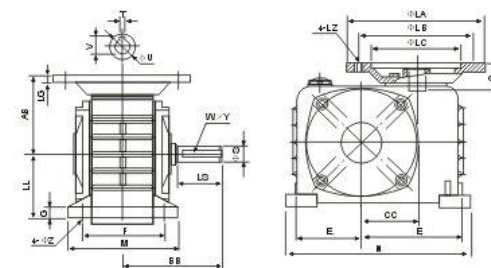
WPWDKV轴指向表示
SHAFT DIRECTION



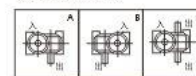
型号	输入速率 k B/s	测试速率 ratio	A	C	B	C	L	M	N	E	E	E	G	Z	测试速率 ratio										输入速率 k B/s										测试速率 ratio
号	率														L	A	B	C	L	E	I	Z	O	U	T	V	X	Y	S	W	Y				
40	0.12		75	90	40	63	90	187	70	72	97	12	10	115	95	140	4	M8	31	11	4	x	12.8	16	5	18.3	5.4								
50	0.18		83	110	50	70	120	226	95	90	110	14	12	116	95	140	4	M8	31	11	4	x	12.8	20	6	22.8	8.5								
60	0.31		91	120	60	80	130	257	105	102	129	15	12	130	110	160	4	M8	33	14	5	x	16.3	25	8	28.3	12								
70	0.75	1/10	109	132	70	95	160	305	115	120	165	20	15	165	130	200	4	M10	42	19	6	x	21.8	30	8	33.3	17								
80	1.5	1/15	125	150	80	105	170	350	135	140	180	20	15	165	130	200	4.5	M10	48	19	6	x	21.8	35	10	x	36.3	26							
90	0.75	1/20	148	174	100	135	190	410	155	165	215	22	15	165	130	200	4.5	M10	52	24	8	x	27.3	40	12	x	43.3	40.5							
120	3.0	1/25	181	180	120	160	230	494	180	195	255	25	18	215	180	250	5	M12	63	28	8	x	31.3	45	14	x	48.8	59							
135	3.0	1/40	202	214	135	185	250	559	200	230	285	30	18	215	180	250	5	M12	63	28	8	x	31.3	60	18	x	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	x	41.3	70	20	x	74.9	138							
175	5.5	1/60	262	282	175	240	310	675	250	273	348	40	21	265	230	300	5	M12	83	38	10	x	41.3	80	22	x	85.4	172							
200	11.0	1/10	285	324	200	280	360	749	290	305	390	45	24	300	260	350	6	M16	114	42	12	x	45.3	85	22	x	90.4	246							
250	15.0	1/10	330	400	250	315	460	920	380	375	475	45	28	300	260	350	6	M16	114	42	12	x	45.3	110	28	x	116.4	410							



WPDZ 型

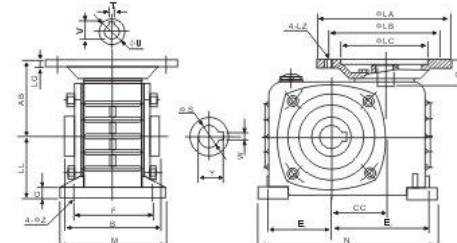


轴指向表示
SHAFT DIRECTION



规格 尺寸	输入功率 kW	额定转速 r/min	电动机额定功率											电动机额定转矩										重量 kg	
			AB	LL	BB	CC	E	E ₁	F	G	N	M	Z	L _B	L _C	L _A	L _U	L _Z	Q	U	T ₁ ×V	L _S	S		W×Y
50	0.18		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
70	0.37	1/10	108	95	130	70	75	115	120	20	230	155	15	130	110	160	10	M8	32	14	5×16.3	60	28	6×3.5	16
70	0.75	1/15	113	95	130	70	75	115	120	20	230	155	15	165	130	200	10	M10	42	19	6×21.8	65	32	10×5	23
80	0.75	1/25	125	100	140	80	96	144	125	20	265	160	15	165	130	200	12	M10	45	19	6×21.8	75	38	10×5	28
80	1.5	1/30	129	100	140	80	96	144	125	20	265	160	15	165	130	200	15	M10	60	24	8×27.3	75	38	10×5	38
100	2.2	1/40	149	135	155	100	100	150	155	22	310	195	15	215	180	250	15	M12	70	28	8×31.3	85	45	14×5.5	60
100	2.2	1/50	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
120	3.0	1/60	196	170	210	135	130	200	200	30	390	250	18	215	180	250	20	M12	68	28	8×31.3	95	55	16×6	80
135	3.0	1/40																							

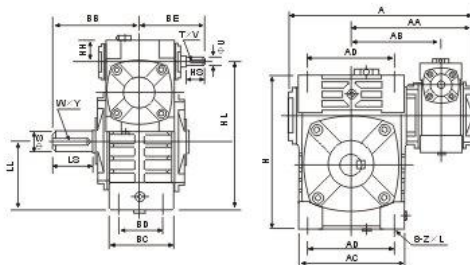
WPDKZ 型

[illegible]

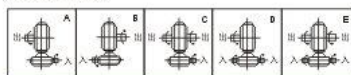


双级WPE系列 DOUBLE WPE SERIES

WPWE 型

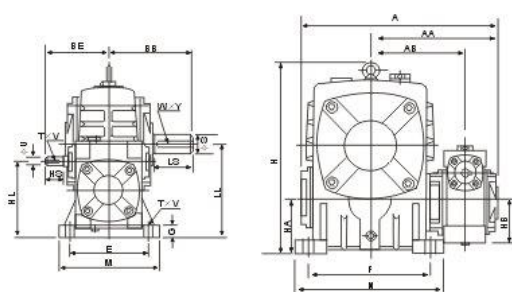


轴指向表示
SHAFT DIRECTION

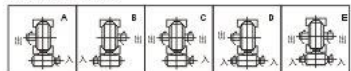


型号 size	减速比 ratio	A	AA	AB	BB	BE	AC	BC	AD	BD	HH	HL	LL	H	Z×L	输入轴input shaft	输出轴output shaft	重量 weight(kg)
40-70		262	171	126	131	89	152	86	125	65	35	200	90	215	M10×25	25 12 4×2.5	60 28 8×4	17
50-80	1/200	297	197	144	142	107	169	102	140	70	35	235	105	250	M12×28	30 12 4×2.5	65 32 10×5	28
60-100	1/300	363	231	175	169	122	216	117	180	90	42	290	130	310	M12×30	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	M14×32	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	M16×35	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	M16×35	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	M16×35	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	M20×36	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	M24×42	85 40 12×5	155 90 25×9	442

WPEA 型



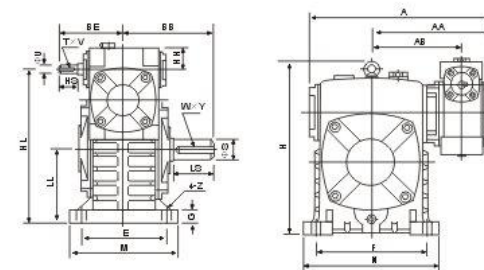
轴指向表示
SHAFT DIRECTION



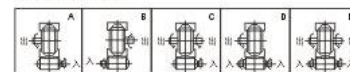
型号 size	减速比 ratio	A	AA	AB	BB	BE	HL	LL	H	HA	HB	M	N	E	F	G	Z	输入轴input shaft	输出轴output shaft	重量 weight(kg)
40-70		262	171	126	131	89	110	140	236	70	50	150	190	115	150	20	15	25 12 4×2.5	60 28 8×4	20
50-80	1/200	297	197	144	142	107	130	160	268	80	65	170	220	135	180	20	15	30 12 4×2.5	65 32 10×5	27
60-100	1/300	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	360	200	290	30	18	50 22 6×3.5	95 55 16×6	101
100-155	1/600	476	301	229	212	160	203	270	501	123	105	250	360	200	280	32	18	50 22 6×3.5	95 55 16×6	112
120-175	1/800	555	354	269	252	190	235	290	531	135	130	275	390	220	320	35	21	50 25 8×4	110 60 18×7	144
135-200	1/900	598	379	287	262	229	280	335	600	160	155	310	430	250	350	40	21	65 30 8×4	110 65 18×7	201
155-250		662	425	318	305	260	210	375	665	175	185	360	480	290	390	40	24	75 35 10×5	125 70 20×7.5	293
		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

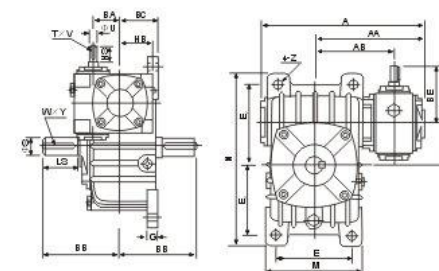


型号 size	减速比 ratio	A	AA	AB	BB	BE	HH	HL	LL	H	M	N	E	F	G	Z	输入轴input hole	输出轴output shaft	重量 weight(kg)
40-70		262	171	126	131	89	35	215	105	238	150	190	115	150	20	15	25 12 4×2.5	60 28 8×4	20
50-80	1/200	297	197	144	142	107	35	250	120	273	170	220	135	180	20	15	30 12 4×2.5	65 32 10×5	27
60-100	1/300	363	231	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	476	301	229	212	160	65	430	203	495	250	350	200	280	32	18	50 22 6×3.5	95 55 16×6	112
120-175	1/800	555	354	269	252	190	80	490	235	541	275	390	220	320	35	21	50 25 8×4	110 60 18×7	144
135-200	1/900	598	379	287	262	229	95	555	260	600	310	430	250	350	40	21	65 30 8×4	110 65 18×7	201
155-250		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
		795	510	380	360	302	103	755	350	824	460	560	380	480	45	28	85 40 12×5	155 90 25×9	462

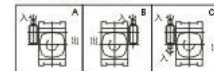
WPEX 型



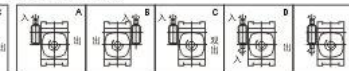
WPEO 型



WPEX轴指向表示
SHAFT DIRECTION



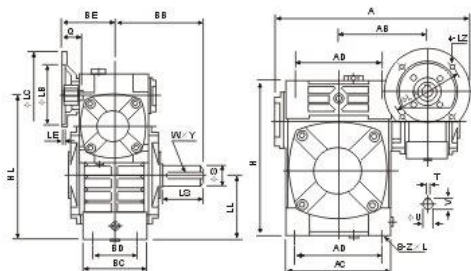
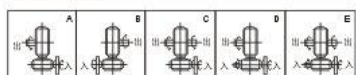
WPEO轴指向表示
SHAFT DIRECTION



型号 size	减速比 ratio	A	AA	AB	BA	BB	BC	BE	HB	CA	M	N	E	E	E	G	Z	输入轴input hole	输出轴output shaft	重量 weight(kg)
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	476	301	229	80	212	113	160	105	307	310	556	260	254	254	32	18	50 22 6×3.5	95 55 16×6	112
120-175	1/800	555	354	269	100	262	140	190	130	345	350	590	290	245	295	35	21	50 25 8×4	110 60 18×7	149
135-200	1/900	598	379	287	120	262	150	225	155	404	394	640	320	267	323	40	21	65 30 8×4	110 65 18×7	191
155-250		662	425	318	135	305	175	250	185	460	440	710	370	290	360	40	24	75 35 10×5	125 70 20×7.5	278
		795	510	380	155	360	200	302	203	552	510	860	440	350	440	45	28	85 40 12×5	155 90 25×9	442

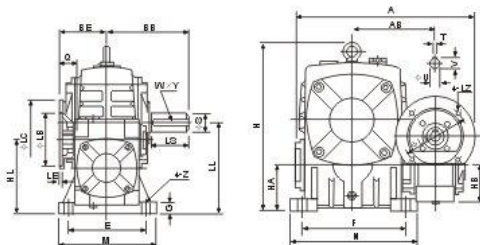
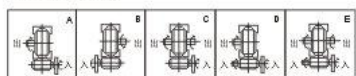


WPWED 型

轴指向表示
SHAFT DIRECTION

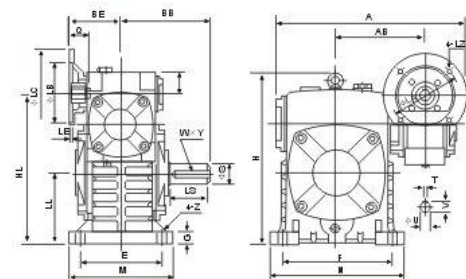
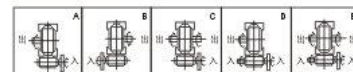
型号 size	输入功率 input power	减速比 ratio	A	AB	BB	BE	AC	BC	AD	BD	HL	LL	H	Z×L	电机法兰flange	输入孔input hole	出力轴output shaft	重量 weight
40-70	0.12		287	126	131	75	152	86	125	65	200	90	215	M10×28	115 95 140 4	M8 31 11 4×12.8	60 28 8×4	19
50-80	0.18		314	144	142	83	169	102	140	70	235	105	250	M12×28	115 95 140 4	M8 31 11 4×12.8	65 32 10×5	27
60-100	0.37		387	175	169	91	216	117	180	90	290	130	310	M12×30	130 110 160 4	M8 33 14 5×16.3	75 38 10×5	45
70-120	0.37	1/200	425	193	190	109	256	124	220	100	345	155	370	M14×32	130 110 160 4	M8 40 14 5×16.3	85 45 14×5.5	66
80-135	0.75	1/300	445	193	190	111	256	124	220	100	345	155	370	M14×32	165 130 200 4	M10 42 19 6×21.8	95 55 16×6	101
100-155	1.5	1/500	499	226	210	125	296	147	260	110	400	185	425	M16×35	165 130 200 4.5	M10 52 24 8×27.3	95 55 16×6	139
120-175	3.0	1/900	631	287	262	181	374	192	320	140	518	223	521	M16×35	215 180 250 5	M12 63 28 8×31.3	110 65 18×7	196
135-200	4.0		680	318	305	202	412	230	360	150	580	245	575	M20×36	215 180 250 5	M12 63 28 8×31.3	125 70 20×7.5	285
155-250	5.5		815	380	360	247	500	285	420	190	705	300	700	M24×42	265 230 300 5	M12 83 38 10×41.3	155 90 25×9	450

WPEDA 型

轴指向表示
SHAFT DIRECTION

型号 size	输入功率 input power	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
40-70	0.12		287	126	131	75	110	140	236	70	50	180	190	115	150	20	15	115 95 140 4	M8 31 11 4×12.8	60 28 8×4	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 4×12.8	65 32 10×5	27
60-100	0.37		387	175	169	91	160	200	336	100	75	190	270	155	220	25	15	130 110 160 4	M8 33 14 5×16.3	75 38 10×5	45
70-120	0.37	1/200	425	193	190	109	190	240	430	120	90	230	320	180	260	30	18	130 110 160 4	M8 40 14 5×16.3	85 45 14×5.5	75
80-135	0.75	1/300	445	193	190	111	190	240	430	120	90	230	320	180	260	30	18	165 130 200 4	M10 42 19 6×21.8	95 55 16×6	103
100-155	1.5	1/500	499	226	210	125	215	270	480	135	105	250	350	200	290	30	18	165 130 200 4.5	M10 52 24 8×27.3	95 55 16×6	139
120-175	3.0	1/900	631	287	262	181	280	335	600	160	155	310	430	250	350	40	21	165 130 200 4.5	M10 52 24 8×27.3	110 60 18×7	147
135-200	4.0		680	318	305	202	310	375	666	175	185	360	480	290	390	40	24	215 180 250 5	M12 63 28 8×31.3	125 70 20×7.5	298
155-250	5.5		815	380	360	247	355	450	800	200	203	460	560	380	480	45	28	265 230 300 5	M12 83 38 10×41.3	155 90 25×9	470

WPEDS 型

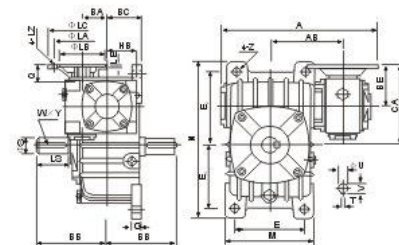
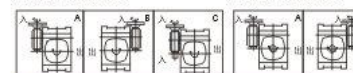
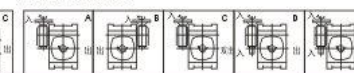
轴指向表示
SHAFT DIRECTION

型号 size	输入功率 input power	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
40-70	0.12		287	126	131	75	215	105	238	150	190	115	150	20	15	115 95 140 4	M8 31 11 4×12.8	60 28 8×4	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 4×12.8	65 32 10×5	27
60-100	0.37		387	175	169	91	310	150	334	190	270	155	230	25	15	130 110 160 4	M8 33 14 5×16.3	75 38 10×5	45
70-120	0.37	1/200	425	193	190	109	370	180	423	230	320	180	260	30	18	130 110 160 4	M8 40 14 5×16.3	85 45 14×5.5	75
80-135	0.75	1/300	445	193	190	111	370	180	423	230	320	180	260	30	18	165 130 200 4.5	M10 42 19 6×21.8	95 55 16×6	103
100-155	1.5	1/500	499	226	210	125	430	215	482	250	350	200	290	30	18	165 130 200 4.5	M10 52 24 8×27.3	95 55 16×6	139
120-175	3.0	1/900	631	287	262	181	555	250	600	310	430	250	350	40	21	215 180 250 5	M12 63 28 8×31.3	110 65 18×7	204
135-200	4.0		680	318	305	202	625	290	677	360	480	290	390	40	24	215 180 250 5	M12 63 28 8×31.3	125 70 20×7.5	298
155-250	5.5		815	380	360	247	755	350	824	460	560	380	480	45	28	265 230 300 5	M12 83 38 10×41.3	155 90 25×9	470

WPEDX 型



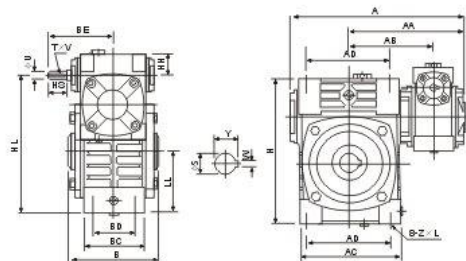
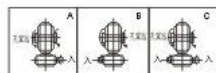
WPEDO 型

WPEDX轴指向表示
SHAFT DIRECTIONWPEDO轴指向表示
SHAFT DIRECTION

型号 size	输入功率 input power	减速比 ratio	A	AB	BA	BB	BC	BE	HB	CA	M	N	E	E	E	G	Z	电机法兰flange	输入孔input hole	出力轴output shaft	重量 weight	
40-70	0.12		287	126	131	75	50	145	156	295	120	120	135	20	15	115	95 140	4	M8 31 11 4×12.8	60 28 8×4	19	
50-80	0.18		314	144	50	132	70	85	65	163	175	320	140	130	150	20	115	95 140	4	M8 31 11 4×12.8	65 32 10×5	27
60-100	0.37		387	175	60	169	90	91	75	191	224	375	190	155	180	25	130	110 160	4	M8 33 14 5×16.3	75 38 10×5	45
70-120	0.37	1/200	425	193	70	190	100	109	90	229	266	450	220	185	215	30	18	130 110 160	4	M8 40 14 5×16.3	85 45 14×5.5	65
80-135	0.75	1/300	445	193	70	190	100	111	90	231	266	450	220	185	215	30	18	165 130 200	4	M10 42 19 6×21.8	95 55 16×6	98
100-155	1.5	1/500	499	226	80	210	113	125	105	260	306	495	260	210	235	30	18	165 130 200	4.5	M10 48 19 6×21.8	95 55 16×6	139
120-175	3.0	1/900	570	226	80	212	113	125	105	272	310	556	250	254	254	32	18	165 130 200	4.5	M10 52 24 8×27.3	95 55 16×6	114
150-155	1.5	1/600	570	269	100	252	140	148	130	303	350	590	290	245	295	35	21	165 130 200	4.5	M10 52 24 8×27.3	110 60 18×7	152
120-175	2.2	1/900	631	287	120	262	150	181	155	356	394	640	320	267	323	40	21	215 180 250	5	M12 63 28 8×31.3	110 65 18×7	194
135-200	3.0		680	318	135	305	175	202	185	402	440	710	370	290	360	40	24	215 180 250	5	M12 63 28 8×31.3	125 70 20×7.5	283
155-250	5.5		815	380	155	360	200	243	203	497	510	860	440	350	440	45	28	265 230 300	5	M12 83 38 10×41.3	155 90 25×9	450

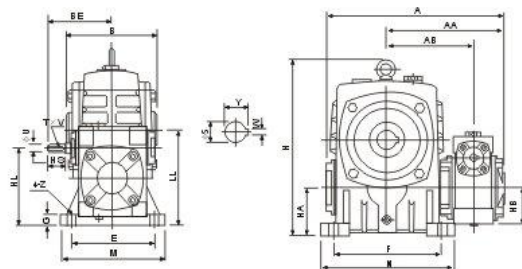
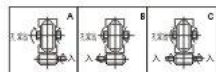


WPWEK 型

轴指向表示
SHAFT DIRECTION

型号 size	減速比 ratio	A	AA	AB	B	BE	AC	BC	AD	BD	HH	HL	LL	H	Z×L	入力軸input shaft			出力軸output shaft			重量 weight(g)
																HS	U	T×V	S	W×Y	weight(g)	
40-70		262	171	126	132	89	152	86	125	65	35	200	90	215	M10×25	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	M12×28	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	M12×30	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	M14×32	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	M16×35	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	M16×35	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	M16×35	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	M20×36	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	M24×42	85	40	12×5	110	28×116.4	442	

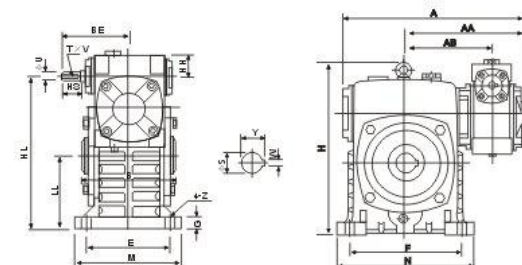
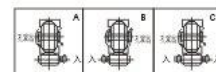
WPEKA 型

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	
			HS	U	T×V	S	W×Y																
40-70	1/200	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	1/250	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	185	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	210	375	666	175	185	360	480	290	390	40	24	75	35	10×5	85	22×90.4	293
155-250	1/1000	795	510	380	400	302	365	450	800	200	203	460	560	380	480	45	28	85	40	12×5	110	28×116.4	462

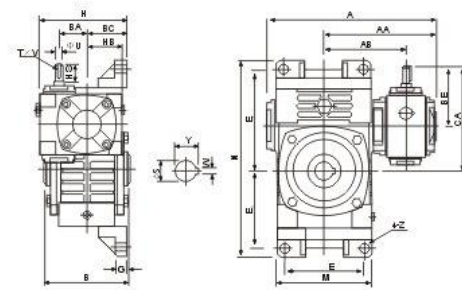
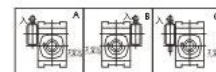


WPEKS 型

轴指向表示
SHAFT DIRECTION

型号 size	减速比 ratio	A	AA	AB	B	BE	HL	LL	H	M	N	E	F	G	Z	输入轴input shaft HS U T×V	输出轴output shaft S W×Y	重量 weight(g)
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		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	210	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

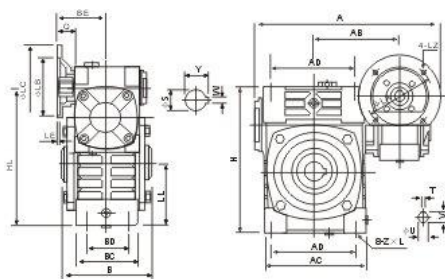
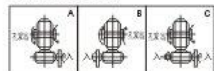
WPWEKO 型

轴指向表示
SHAFT DIRECTION

型号 size	减速比 ratio	A	AA	AB	B	BA	BC	BE	HL	HB	CA	H	M	N	E	E	E	G	Z	输入轴input shaft HS U T×V	输出轴output shaft S W×Y	重量 weight(g)
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

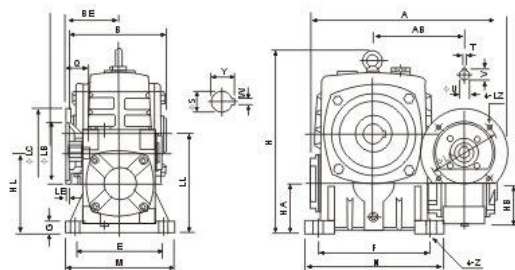
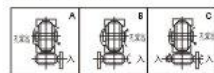


WPWEDK 型

轴指向表示
SHAFT DIRECTION

型号 size	输入功率 input(kW)	减速比 ratio	A	AB	B	BE	AC	BC	AD	BD	HL	LL	H	Z	电枢法兰 flange	输入孔 input hole	出力轴 output shaft	重量 weight(kg)
40-70	0.12		287	126	132	75	152	86	125	65	200	90	215	M10×25	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	M12×28	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	M12×30	130 110 160 4	M8 33 14 5×16.3 40	12×43.3	44
70-120	0.75	1/200	425	193	180	109	256	124	220	100	345	155	370	M14×32	130 110 160 4	M8 40 14 5×16.3 45	14×48.8	66
80-135	1.5	1/400	499	226	214	125	296	147	260	110	400	185	425	M16×35	165 130 200 4.5	M10 48 19 6×21.8 50	18×64.4	101
100-155	2.2	1/600	570	269	256	148	345	165	280	120	450	203	461	M16×35	165 130 200 4.5	M10 52 24 8×27.3 70	20×74.9	139
120-175	3.0	1/800	631	287	282	181	374	192	320	140	518	223	521	M16×35	215 180 250 5	M12 63 28 8×31.3 80	22×85.4	196
135-200	4.0	1/900	680	318	324	202	412	230	360	150	580	245	575	M20×36	215 180 250 5	M12 63 28 8×31.3 85	22×90.4	285
155-250	5.5		815	380	400	247	500	285	420	190	705	300	700	M24×42	265 230 300 5	M12 83 38 10×41.3 110	28×116.4	450

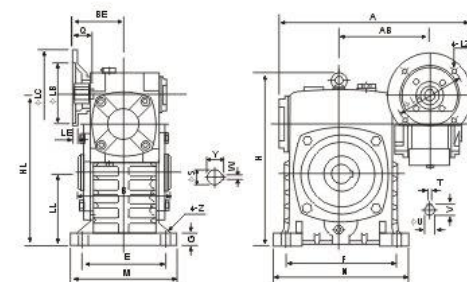
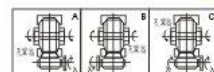
WPEDKA 型

轴指向表示
SHAFT DIRECTION

型号 size	输入功率 input(kW)	减速比 ratio	A	AB	B	BE	HL	LL	H	HA	HB	M	N	E	F	G	Z	电枢法兰 flange	输入孔 input hole	出力轴 output shaft	重量 weight(kg)
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	258	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	48
70-120	0.75	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
80-135	1.5	1/400	499	226	214	125	215	270	480	135	105	250	350	200	290	30	18	165 130 200 4.5	M10 48 19 6×21.8 50	18×64.4	103
100-155	2.2	1/600	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
120-175	3.0	1/800	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
135-200	4.0	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
155-250	5.5		815	380	400	247	355	450	800	200	203	450	560	380	480	45	28	265 230 300 5	M12 83 38 10×41.3 110	28×116.4	470

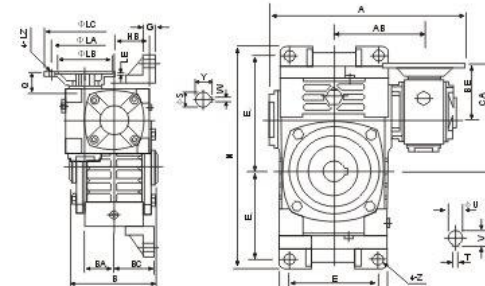
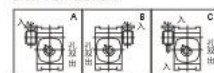


WPEDKS 型

轴指向表示
SHAFT DIRECTION

型号 size	输入功率 input(kW)	减速比 ratio	A	AB	B	BE	HL	LL	H	M	N	E	F	G	Z	电枢法兰 flange	输入孔 input hole	出力轴 output shaft	重量 weight(kg)
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
70-120	0.75	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
80-135	1.5	1/400	499	226	214	125	430	215	482	250	350	200	290	30	18	165 130 200 4.5	M10 48 19 6×21.8 50	18×64.4	103
100-155	2.2	1/600	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
120-175	3.0	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
135-200	4.0	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
155-250	5.5		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

WPWEDKO 型

轴指向表示
SHAFT DIRECTION

型号 size	输入功率 input(kW)	减速比 ratio	电枢法兰 flange																输入孔 input hole		出力轴 output shaft		重量 weight(kg)					
			A	AB	B	BE	HL	LL	H	HA	HB	CA	M	N	E	F	G	Z	LA	LB	LC	LE		LZ	Q	U	T	U ₁
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	171	435	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
70-120	0.75	1/200	425	193	180	70	100	109	90	229	231	494	220	195	255	25	18	130	110	160	4	M8	40	14	5×16.3	45	14×48.8	71
	1.5	1/300	449	193	180	70	100	111	111	231	264	494	220	195	255	25	18	165	130	200	4	M10	42	19	6×21.8	50	18×64.4	107
80-135	0.75	1/400	495	226	214	80	110	125	105	260	304	559	250	230	285	30	18	165	130	200	4.5	M10	48	19	6×21.8	60	18×64.4	107
100-155	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
	2.2	1/800	631	287	282	120	160	181	155	356	374	675	320	273	348	40	21	215	180	250	5	M12	63	28	8×31.3	80	22×85.4	211
120-175	3.0	1/900	680	318	324	135	175	202	185	402	424	749	370	305	390	40	21	215	180	250	5	M12	63	28	8×31.3	85	22×90.4	307
135-200	4.0		815	384	400	155	200	247	203	497	510	920	440	375	475	45	28	265	230	300	5	M12	83	38	10×41.3	110	28×116.4	484
155-250	5.5																											



■ 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 $N_2(r/min)$ /(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 torque $(n.m)$ x output Revolving speed $n_2(r/min)$ /(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 $N_2(r/min)$ =输入轴转速 $N_1(r/min)$ /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摩擦而缩短寿命。

★ Revolving speed of input shaft and output shaft

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

Output revolving speed $N_2(r/min)$ =input revolving speed $N_1(r/min)$ /ratio i

With belt-pulley, couplings or sprocket wheel Shaft transmission, the input speed should not exceed 2000(r/min); the general range is 600~1800RPM. If the revolving speed is too high, the bearing will have less life due to 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摩擦及振动, 部分输入能量将转化为热能等非工作消耗, 效率就是减速机输入能量的利用率, 效率的高低取决于蜗杆头数、蜗杆转速、润滑油粘度、轴承摩擦阻力及蜗轮副材质的摩擦系数等。每种规

格、传动比的减速机, 其效率数值各不相同, 下列表出效率的范围数值, 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%	62~82%	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。以本公司产品样本上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 thread Os 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改:

修正输入转矩 $T_1(N.m)$ =理论输出转矩 $T_2(N.m)$ ×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达10次以上时, 上表K值还应乘以1.2
Annotate: when the times of start-up, stop or obverse per hour is more than 10, the value k 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 $T_2(N.m)$ =theoretic output torque $T_1(N.m)$ x running 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
皮带轮 belt-pulley 滚轮 roll-pulley	- 起吊物体重量 W=600kg - weight of suspended object W=600kg
	- 起吊物体速度 V=12m/min - speed of suspended object V=12m/min
	- 滚轮直径 D=0.4m - roll-pulley diameter D=0.4m
	- 皮带轮传动效率 $\eta_1=0.92$ - efficiency of belt-pulley $\eta_1=0.92$
	- 减速机传动效率 $\eta_2=0.71$ - efficiency of reducer $\eta_2=0.71$
	- 运转时间 8小时/日 - Running time 8 hours per day
	- 启动次数 2次/小时, 较大冲击 2 times per hours heavy shock
	- 使用电源 三相380V, 50Hz - Electrical source three-phase 380v, 50Hz

■ 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。 $N_1 = \text{起吊速度} \sqrt{(\text{滚轮直径} D \times \pi)}$ 2. 计算总传动比 $i = \text{输入轴转速} N_1 / \text{皮带轮转速} N_2$ 3. 计算减速机传动比。 $i = \text{总传动比} / \text{皮带轮传动比}。$ Calculate the ratio according to input and output shaft revolving speed 1. get belt-pulley revolving speed N ₁ $N_1 = \text{speed of suspended object} \sqrt{(\text{roll-pulley diameter } D \times \pi)}$ 2. calculate general ratio i $i = \text{input revolving speed } N_1 / \text{belt-pulley revolving speed } N_2$ 3. Calculate reducer ratio i $i = \text{general ratio } i / \text{belt-pulley ratio } i_1$	$1. N_1 = 12 / (0.4 \times 3.142)$ $= 9.8 \text{ r/min}$ $2. i_1 = 1440 / 9.8$ $= 150$ 3. 设定 $i_1 = 5$, 则 $i = 150 / 5$ $= 30$ $1. N_1 = 12 / (0.4 \times 3.142)$ $= 9.8 \text{ r/min}$ $2. i_1 = 1440 / 9.8$ $= 150$ 3. Assume $i_1 = 5$, then $i = 150 / 5$ $= 30$
2	计算输出转矩 Calculate output torque	计算减速机输出转矩T $T = \text{物体重量} W \times 10 \times \text{滚轮半径} (D/2) / (\text{皮带轮传动传动比} i_1 \times \text{皮带轮传动效率 } \eta_1)$ Calculate reducer output torque T $T = \text{weight of suspended object } W \times 10 \times \text{roll-pulley radius } (D/2) / (\text{belt-pulley ratio } i_1 \times \text{belt-pulley transmission efficiency } \eta_1)$	$T = 600 \times 10 \times (0.4/2) / (0.92 \times 5)$ $= 260.9 \text{ N.m}$
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 ₂ $T_2 = \text{输出转矩} T \times K$ According to using condition: operatio 8 hours a day, heavy shock ,running condition factor K=1.5 calculate revised torque T ₂ $T_2 = \text{output torque } T \times K$	$T_2 = 260.9 \times 1.25$ $= 326 \text{ N.m}$
4	计算输入功率 Calculate input power	换算功率P $P = \text{修正输出转矩} T_2 \times \text{输出轴转速} N_2 / (9549 \times \text{减速机传动效率 } \eta_2)$ Calculate input shaft power P $P = \text{revised output torque } T_2 \times \text{output revolving speed } N_2 / (9549 \times \text{reducer transmission efficiency } \eta_2)$	$P = 326 \times (1440/30) / (9549 \times 0.71)$ $= 2.3 \text{ kW}$
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 According to product manual, the selection is, model 120, ratio 1/30, rating input power 3kw, output torque 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

输入轴功率 input shaft power 传动比 1000	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
型号 size	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	148
100	3.60	3.10	2.60	2.35	2.10	1.68	1.30	1.00	193	237	288	284	277	291	267	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	1445
250	33.20	27.40	21.60	20.00	18.43	14.00	10.43	8.62	1881	2266	2310	2579	2745	2674	2357	2203

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

★ WPD、WPK、WPD、WPK(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AQ2或Y系列电机 Matching electric motor series AQ2 or Y)

功率系数 power factor 有功比	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	
型号 size											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	25	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	250	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, WPWED, WPWEDK(A.S.X.O)型
输入轴功率及输出轴转矩表 input and output
输入轴转速: speed of input shaft: 1500r/min

型号 size	功率及转矩 power and torque	WPE, WPEK, WPEW, WPWEK							WPED, WPEDK, WPWED, 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	280	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	390	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	1.075	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	2665	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

- ① 减速机须安装在平整坚固的底座上, 底脚螺栓必须紧固、防震。
- ② 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。
- ③ 减速机输入端轴伸外径公差尺寸均按js6制作, 减速机输出端轴伸径公差尺寸均按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。
- ④ 链轮、齿轮等传动件装上轴伸时, 应尽量靠近轴承, 以减少轴弯曲应力。
- ⑤ WPD型减速机装配电机时, 应在蜗杆头部内孔孔壁及键槽处涂抹黄油, 避免装配过紧, 防止轴孔日久生锈。
- ⑥ 订购使用各类WPD减速机时, 若电机重量偏大, 应设支撑装置。

- ① The base-plate must be plane and stoutness, and the base-bolts, must be screwed down and shockproof.
- ② The connecting shafts of prime mover, reducer and operation device must be coaxial after installation.
- ③ The outside diameter tolerance of input shaft of speed reducer is according to js6 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.
- ④ Parts such as sprocket wheel and gear must be fitted close to bearings in order to reduce bending stress of hanging shaft.
- ⑤ While assembling motor of WPD reducer, it is necessary that proper amount of butter applies to the worm shaft input hole and keyway, avoiding assembling too tightly and rusting after using for a long time.
- ⑥ 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

- ① 使用前应注意检查减速机形式结构、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。
- ② 按照样本上“润滑油的选择使用”中所规定的要求, 注入合适的品牌号润滑油。加油后, 旋紧顶部的通气器, 按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。
- ③ 使用过程中发生不正常情况时, 应及时停机检查, 可参照“故障原因及解决办法”表处理。(减速机的油温最高允许达到90℃, 在此温度界限下, 只要油温不再上升, 可以放心使用)。

- ① Before using, please check carefully whether the reducer model, distance, ratio, input connecting method, output shaft structure, input and output shaft direction and revolving direction accord with requirement.
- ② According to the requirement of “selecting lubricant oil” in the product manual, please fill proper category and brand lubricant. And then screw on the vent-plug, uncork the small cone-plug of vent-plug. Only after doing these, reducer is ready for starting up running. The proper brand and adequate lubricant oil is required; replacing oil in time conforming to the request of product manual is also necessary, especially after using first 100 hours, it is required refilling new oil.
- ③ 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 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, and N220~N320(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 hereafter 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) 油封过紧或磨损 Over-tight orificed oil seals	在油封唇口处涂润滑油 Drop lubricant oil 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, 正确固定 Find out the bad place, tighten it
	b) 蜗轮副齿面磨损或损伤 Tooth surface of worm gear set is worn-out or damaged	更换蜗轮副 (需要时本公司配合) Replace worm gear set (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) 蜗轮副齿面不良 Worm gear set 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 set (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 lub oil/grease according to oil level
	d) 机体内存异物 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) 油封结构损坏 Shaft or oil seal structure 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 exactly according to oil level
	d) 放油螺塞未拧紧 Oil screw cap loose	取下螺塞, 擦拭处加密封胶, 拧紧 Fetch out screw cap, coat sealant and tighten it
	e) 油标损坏 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 is 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 level
	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 become bad	按规定要求适时换油 (脂) Replace oil/grease according to requirement
	e) 运转速度过高 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 as overheating 2. adopt proper measures to make environment temperature fall

注: 磨合过程 (运转24小时) 油封唇口有少量油 (脂) 属正常。
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(DK)A	WP(DK)S	WP(DK)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	2.8
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		Mobil	AGMA	中国石油
-30℃~-5℃	普通 common	VG-100	N100	Shell Omala 100	Gear 027	5	HD-100
	重 heavy-duty	VG-150	N150	Shell Omala 150	Gear 029	7	HD-150
-15℃~-5℃	普通 common	VG-150	N150	Shell Omala 150	Gear 029	7	HD-150
	重 heavy-duty	VG-220	N220	Shell Omala 220	Gear 030	7 EP	HD-220
5℃~25℃	普通 common	VG-220	N220	Shell Omala 220	Gear 030	7 EP	HD-220
	重 heavy-duty	VG-320	N320	Shell Omala 320	Gear 032	8	HD-320
25℃~40℃	普通 common	VG-320	N320	Shell Omala 320	Gear 032	8	HD-320
	重 heavy-duty	VG-460	N460	Shell Omala 460	Gear 034	8	HD-460
40℃~65℃	普通 common	VG-460	N460	Shell Omala 460	Gear 034	8	HD-460
	重 heavy-duty	VG-680	N680	Shell Omala 680	Gear 036	8 EP	HD-680