



中国名牌产品 CHINA TOP BRAND



中国驰名商标 CHINA WELL-KNOWN TRADEMARK



国家大型企业 NATIONAL LARGE ENTERPRISE

T A I L O N G



中国驰名商标
CHINA WELL-KNOWN
TRADEMARK

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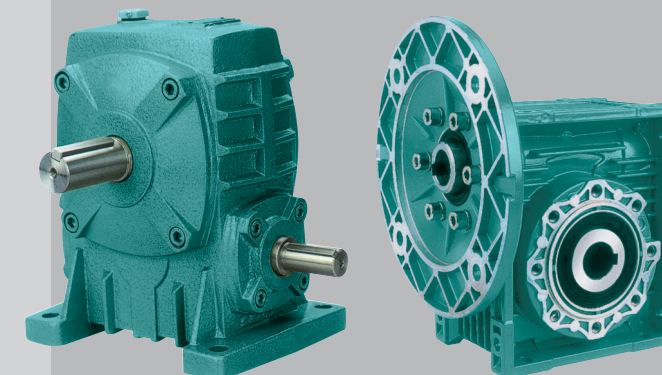
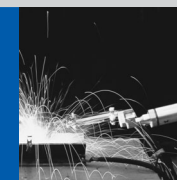
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模块化蜗杆减速机

江苏泰隆机械集团
JIANGSU TAILONG MACHINERY GROUP COMPANY
江苏泰隆减速机股份有限公司
JIANGSU TAILONG DECELERATOR MACHINERY CO.,LTD.

2008版

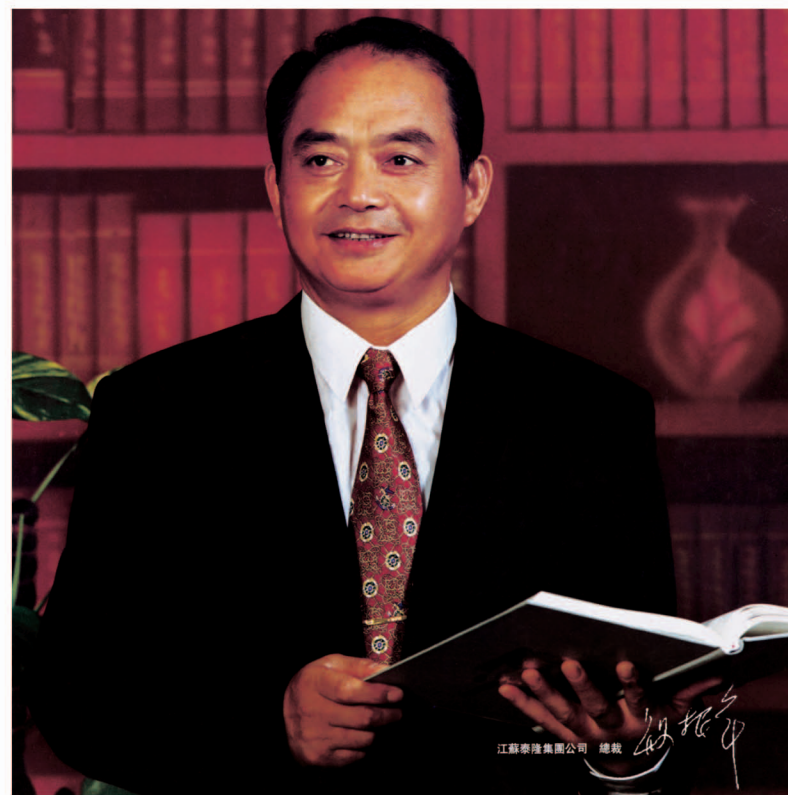
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公司简介

泰隆集团地处扬子江畔的泰兴市区，是泰兴人引以为豪的国家大型企业。集团在全国优秀企业家、江苏省劳动模范董事长殷根章的领导下，经过20多年的悉心经营，昂首迈进了中国机械工业500强，成为全国减变行业龙头老大。

集团现拥有总资产5.8亿元，固定资产3.6亿元，占地面积60万平方米，员工近2612人，专业工程技术人员896人，年销售额15亿元。从美国、德国、日本、俄罗斯等国家引进的大型数控磨齿机、蜗杆磨床、加工中心、碳氮共渗炉等一批高精尖的生产设备和检测设备占48%。建立了全国同行业中检测功能最全、检测功率最大、仪器最先进的测试中心，创建了省级工程技术中心。公司产品在原有的平面二次包络蜗杆减速机、9000系列摆线针轮减速机、圆柱齿轮减速机、行星齿轮减速器等十几个系列，几十万种规格的基础上，采用先进的模块化、点线等技术开发出了TL模块化齿轮减速电机；TPB行星模块化减速器、重载模块式减速器、点线啮合减速器。多年来，起重机用硬齿面、中硬齿面减速器一直在为用户提供最佳的传动方案，在风力发电、水力发电领域捷足先登，做出了不菲的业绩。重载齿轮箱在建材行业、冶金行业成功得到了应用，开发出了建材行业的立式磨机及边缘传动磨机齿轮箱，冶金行业的开卷、卷取齿轮箱、三环减速器、星轮减速器。另外公司还为用户提供榨糖机齿轮箱、螺杆升降机、电动滚筒及各类非标齿轮箱。公司荣获“中国名牌”，“全国首批守合同重信用企业”，“全国重点高新技术企业”，“全国机械工业质量效益型先进企业”，“全国机械工业质量管理奖”，“全国用户满意服务”等殊荣，泰隆商标被评为“中国驰名商标”，在同行业中率先通过质量、环境、安全三位一体认证及ISO10012计量体系确认。

泰隆人将遵循自己一贯的质量承诺、服务承诺和信誉承诺，把顾客满意当作我们的最高追求！

Company Brief

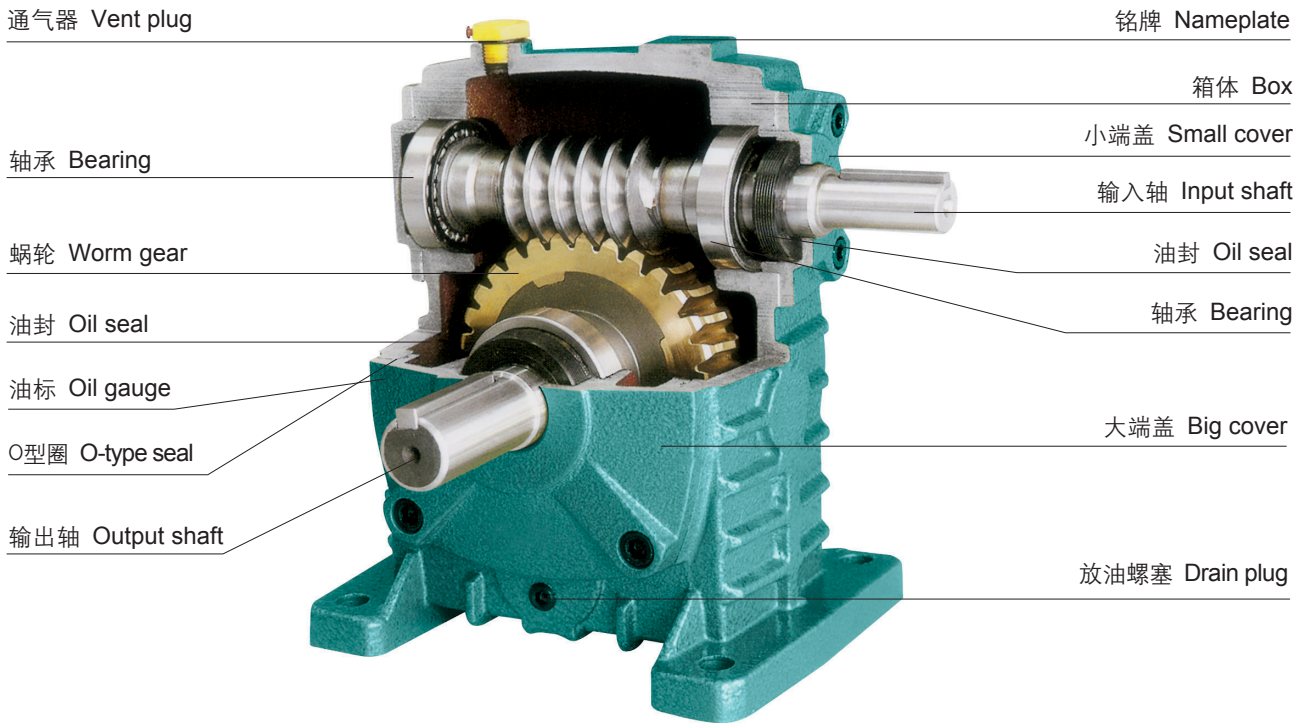
Tailong Group is located in Taixing urban area at the border of Yangtse River and it is a state-owned large-sized enterprise boasted by Taixing people. Under the leadership of Mr. Yin genzhang, a nation-wide excellent entrepreneur and a model worker of Jiangsu Province, after more than twenty years of operation with concentrated efforts, has proudly marched into the Top 500 enterprises in Chinese Mechanical Industry and has become the industry leader.

At present, the group owns a total assets of RMB 580m, and fixed of RMB 360m, and it covers an area of 600,000 square meters and owns almost 2,612 employees, including 896 technicians, the annual turnover surpasses 1b RMB. The introduced large-sized numerical controlled gear grinding machine, worm grinder, machining center and carbonitriding kiln and etc. advanced, precise and leading manufacturing facilities and inspection apparatus from USA, Germany, Japan and Russia has taken part 48% share in all. At the same time, the group has established a test center with the most complete test functions, the biggest test power, the most advanced instrument and the provincial science & technology park. At the basis of the primary secondary envelope, 9000 series cycloid pinwheel reducer, cylindrical gear, planetary reducer and so on, more than ten series, and several ten thousands specifications, adopting the advanced modularization, point-line technique, ultimately develop TL modular reducer, TPB planetary modular reducer, heavy load modular and point-line meshing decelerator. Along many years, harden-faced reducer for crane, moderate rigid reducer provide the best transmission project for customer all the times; On the other hand, at the wind and water power area, we have taken the swift-footed arrive first, and taken out outstanding success. The heavy load gearboxes has successfully applied in architecture, metallurgy industry, and developed vertical grinder, marginal transmission grinder gearbox which fit for architecture industry, open, convolute gearbox, three-ring, star reducer which special for metallurgy. In addition, the company also supply sugar mill gearbox, worm lifter, electrical roller and various non-standard gearboxes.

The company has been awarded successively with such honorable titles as“China top brand”, “National first batch of enterprise honoring contracts and keeping promises”, “National key new & hi-tech enterprise”, “National mechanical industry quality & benefit type enterprise”, “National mechanical industry QC award” and “National customer satisfaction service”. Tailong brand is recognized as “the Chinese famous brand” by national industrial and commercial bureau. It has taken the lead in passing the quality, environment and security three in one system certification and ISO10012 metering system certification.

Tailong people will keep to its persistent quality guarantee, service guarantee and credit, satisfying customer as our topmost pursuit.

1.产品结构图 1.Product structural view



2.型号结构表 2.Model and structure table

W	P	W	D	K	A	80	25	B
1	2	3	4	5	6	7	8	9

1

产品代码
W-蜗杆减速机
W-wanji corp

2

箱体结构
P-整体
Box structure
P-whole

3

箱体型式
W-万能型
无代码-基本型
Box Model
W-universal
Non-code-basic

4

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 frange
Non-code-basic

5

输出轴结构
K-中空输出轴
无代码-基本型
Structure of
output shaft
K-hollow
Non-code-basic

6

输出、输入轴置式
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-万能型
Arrangement of input or output shaft
A-input shaft is below
S-input shaft is above
O-output shaft is downward
T-input shaft is downward
Non-code-universal

7

中心距
80
Center
disance
80

8

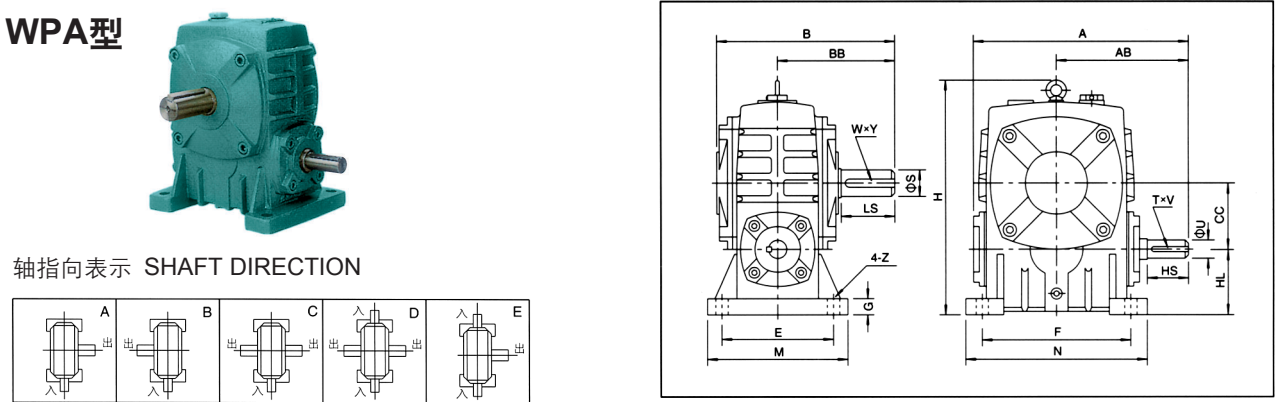
传动比
25
Ratio
25

9

轴指向
B
Shaft Direction
B

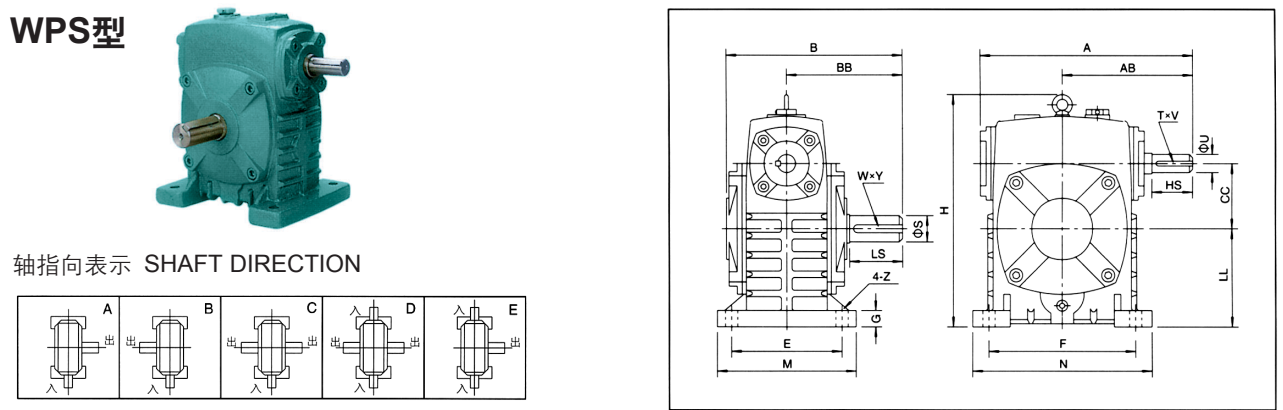
3.外形、安装及联接尺寸 3.Dimensions of outline installation and connection

WPA型



型号 size	传动比 ratio	A	AB	B	BB	CC	H	HL	M	N	E	F	G	Z	输入轴 input shaft			输出轴 output shaft			重量 weight(kg)
															HS	U	TXV	LS	S	WXY	
40		143	87	114	74	40	138	40	90	100	70	80	13	10	25	12	4x2.5	28	14	5x3	4
50		175	107	150	97	50	173	50	120	140	95	110	15	12	30	12	4x2.5	40	17	5x3	7
60	10	198	122	168	112	60	204	60	130	150	105	120	15	12	40	15	5x3	50	22	6x3.5	10
70	15	231	140	194	131	70	236	70	150	190	115	150	20	15	40	18	6x3.5	60	28	8x4	15
80	20	261	160	214	142	80	268	80	170	220	135	180	20	15	50	22	6x3.5	65	32	10x5	20
100	25	322	190	254	169	100	329	100	190	270	155	220	25	15	50	25	8x4	75	38	10x5	35
120	30	381	229	282	190	120	430	120	230	320	180	260	30	18	65	30	8x4	85	45	14x5.5	60
135	40	433	260	317	210	135	480	135	250	350	200	290	30	18	75	35	10x5	95	55	16x6	80
147	50	439	264	324	212	147	501	123	250	350	200	280	32	18	80	35	10x5	95	55	16x6	90
155	60	504	302	382	252	155	531	135	275	390	220	320	35	21	85	40	12x5	110	60	18x7	110
175		545	325	402	262	175	600	160	310	430	250	350	40	21	85	45	14x5.5	110	65	18x7	150
200		587	350	467	305	200	667	175	360	480	290	390	40	24	95	50	14x5.5	125	70	20x7.5	215
250		705	420	552	360	250	800	200	460	560	380	480	45	28	110	60	18x7	155	90	25x9	360

WPS型



型号 size	传动比 ratio	A	AB	B	BB	CC	H	LL	M	N	E	F	G	Z	输入轴 input shaft			输出轴 output shaft			重量 weight(kg)
															HS	U	TXV	LS	S	WXY	
40		143	87	114	74	40	141	60	90	100	70	80	13	10	25	12	4x2.5	28	14	5x3	4
50		175	107	150	97	50	180	80	120	140	95	110	15	12	30	12	4x2.5	40	17	5x3	7
60	10	198	122	168	112	60	207	90	130	150	105	120	15	12	40	15	5x3	50	22	6x3.5	10
70	15	231	140	194	131	70	238	105	150	190	115	150	20	15	40	18	6x3.5	60	28	8x4	15
80	20	261	160	214	142	80	270	120	170	220	135	180	20	15	50	22	6x3.5	65	32	10x5	20
100	25	322	190	254	169	100	331	150	190	270	155	220	25	15	50	25	8x4	75	38	10x5	35
120	30	381	229	282	190	120	423	180	230	320	180	260	30	18	65	30	8x4	85	45	14x5.5	60
135	40	433	260	317	210	135	482	215	250	350	200	290	30	18	75	35	10x5	95	55	16x6	80
147	50	439	264	324	212	147	495	203	250	350	200	280	32	18	80	35	10x5	95	55	16x6	90
155	60	504	302	382	252	155	541	235	275	390	220	320	35	21	85	40	12x5	110	60	18x7	110
175		545	325	402	262	175	594	260	310	430	250	350	40	21	85	45	14x5.5	110	65	18x7	150
200		587	350	467	305	200	677	290	360	480	290	390	40	24	95	50	14x5.5	125	70	20x7.5	215
250		705	420	552	360	250	824	350	460	560	380	480	45	28	110	60	18x7	155	90	25x9	360

Technical drawing of a 4-ported hydraulic valve, showing front and side views with dimension labels.

Front View Dimensions:

- A:** Overall width
- AB:** Distance between mounting holes
- CC:** Mounting hole diameter
- E:** Port diameter
- E₁:** Port center-to-center distance
- E₂:** Port outer diameter
- M:** Port mounting hole diameter
- N:** Port mounting hole center-to-center distance
- HS:** Port mounting hole diameter
- T = V:** Port mounting hole diameter
- 4-Z:** Port mounting hole diameter

Side View Dimensions:

- BC:** Overall height
- BB:** Distance between mounting holes
- BB₁:** Mounting hole diameter
- LS:** Port mounting hole diameter
- W = V:** Port mounting hole diameter
- OS:** Port mounting hole diameter

Technical drawings of the 4LZ series pump, showing front and side views with dimension labels.

Front View (Left):

- BB: Overall width.
- LS: Lubrication system inlet.
- W×Y: Lubrication system inlet dimensions.
- QS: Lubrication system outlet.
- HL: Height from base to top of pump body.
- CC: Height from base to center of pump body.
- 4LZ: Label for the pump body.
- E: Width of the pump body.
- M: Width of the base.
- G: Height of the base.
- Q: Discharge port.
- QUB: Discharge port diameter.
- QUC: Discharge port diameter.
- 4-Z: Label for the discharge port.

Side View (Right):

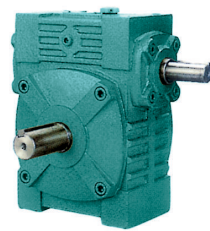
- A: Overall height.
- AB: Overall width.
- Q: Discharge port.
- QUB: Discharge port diameter.
- QUC: Discharge port diameter.
- 4-Z: Label for the discharge port.

型号 size	入功率 input(kw)	传动比 ratio	A	AB	BB	CC	H	LL	M	N	E	F	G	Z	电机法兰 flange				入力孔 input hole				输出轴 output shaft			重量 weight (kg)
															LA	LB	LC	LE	LZ	Q	U	TVX	LS	S	WXY	
50	0.18	10 15 20 25 30 40 50 60	151	83	97	50	180	80	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	60	207	90	130	150	105	120	15	12	130	110	160	4	M8	33	14	5x16.3	50	22	6x3.5	11
70	0.37 0.75		200 202	109 111	131	70	238	105	150	190	115	150	20	15	130 165	110 130	160 200	4 M8	M10	42 19	14 19	5x16.3 6x21.8	60	28	8x4	17
80	0.75 1.5		225	125	142	80	273	120	170	220	135	180	20	15	165	130	200	4.5	M10	48 52	19 24	6x21.8 8x27.3	65	32	10x5	22
100	1.5		280	148	169	100	334	150	190	270	155	220	25	15	165	130	200	4.5	M10	52	24	8x27.3	75	38	10x5	38
120	2.2 3.0		333	181	190	120	423	180	230	320	180	260	30	18	215	180	250	5	M12	63	28	8x31.3	85	45	14x5.5	64
135	3.0 4.0		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	3.0 4.0		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	4.0 5.5		425 448	224 247	252	155	541	235	275	390	220	320	35	21	215 265	180 230	250 300	5 5	M12 M12	63 83	28 38	8x31.3 10x41.3	110	60	18x7	118
175	5.5 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	7.5 11.0	516 543	258 285	305	200	677	290	360	480	290	390	40	24	265 300	230 250	300 350	5 6	M12 M16	83 114	38 42	10x41.3 12x45.3	125	70	20x7.5	236	
250	11.0 15.0	615	330	360	250	824	350	460	560	380	480	45	28	300	250	350	6	M16	114	42	12x45.3	155	90	25x9	396	

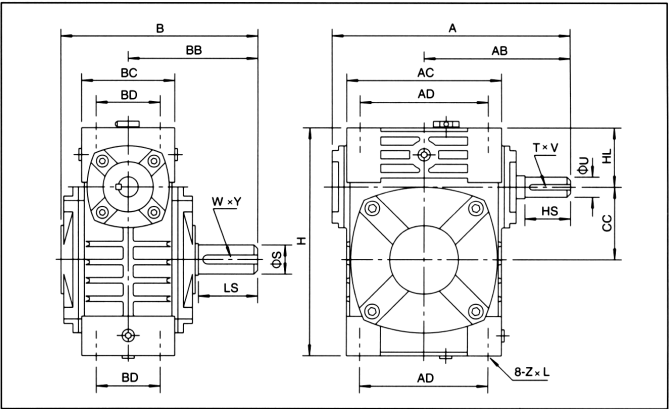
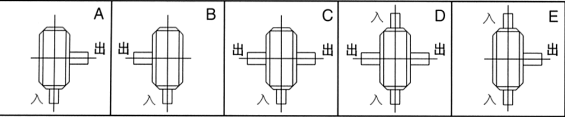
WPDO 轴指向表示
SHAFT DIRECTION

[illegible]

WPW型

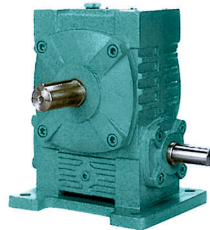


轴指向表示
SHAFT DIRECTION

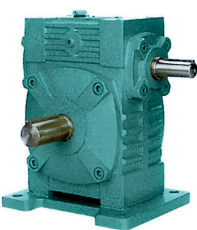


型号 size	传动比 ratio	A	AB	B	BB	AC	BC	AD	BD	CC	HL	H	ZXL	输入轴 input shaft			输出轴 output shaft			重量 weight(kg)
														HS	U	TXV	LS	S	WXY	
40	10	149	89	124	79	95	61	78	42	40	35	125	M6x12	25	12	4x2.5	28	14	5x3	4
50		175	107	150	97	111	68	85	50	50	35	150	M6x18	30	12	4x2.5	40	17	5x3	6.5
60		198	122	168	112	127	76	105	55	60	42	177	M8x20	40	15	5x3	50	22	6x3.5	9
70		231	140	194	131	152	86	125	65	70	55	215	M10x25	40	18	6x3.5	60	28	8x4	13
80		261	160	214	142	169	102	140	70	80	65	250	M12x28	50	22	6x3.5	65	32	10x5	21
100		322	190	254	169	216	117	180	90	100	80	310	M12x30	50	25	8x4	75	38	10x5	34
120		381	229	282	190	256	124	220	100	120	95	370	M14x32	65	30	8x4	85	45	14x5.5	51
135		433	260	317	210	296	147	260	110	135	105	425	M16x35	75	35	10x5	95	55	16x6	78
155		504	302	382	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	60	587	350	467	305	412	230	360	150	200	130	575	M20x36	95	50	14x5.5	125	70	20x7.5	202
250		705	420	552	360	500	285	420	190	250	150	700	M24x42	110	60	18x7	155	90	25x9	340

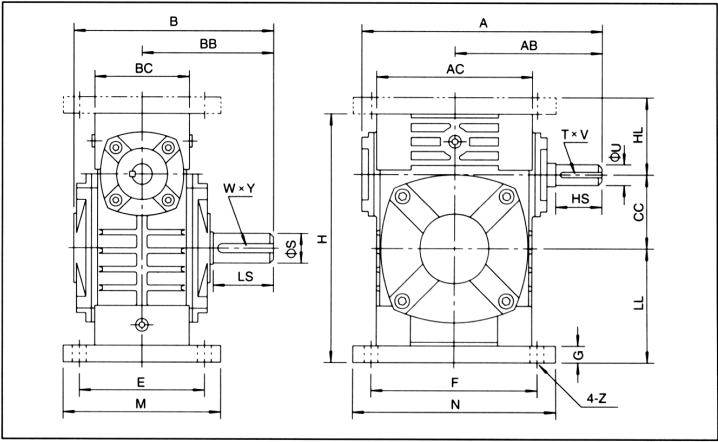
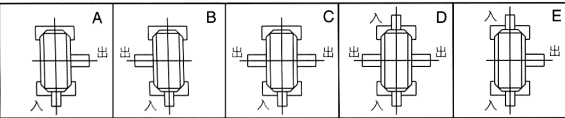
WPWA型



WPWS型

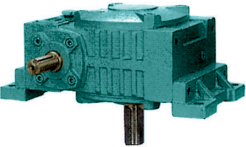


轴指向表示 SHAFT DIRECTION

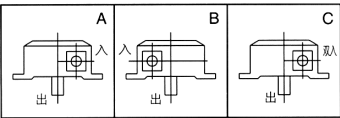


型号 size	传动比 ratio	A	AB	B	BB	AC	BC	CC	HL	LL	H	M	N	E	F	G	Z	输入轴 input shaft			输出轴 output shaft			重量 weight (kg)
																		HS	U	TXV	LS	S	WXY	
40	10	149	89	124	79	95	61	40	45	60	135	100	130	80	110	10	10	25	12	4x2.5	28	14	5x3	4.5
50		175	107	150	97	111	68	50	50	80	165	120	140	95	110	15	12	30	12	4x2.5	40	17	5x3	7.5
60		198	122	168	112	127	76	60	60	93	195	130	150	105	120	15	12	40	15	5x3	50	22	6x3.5	11.5
70		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		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		322	190	254	169	216	117	100	100	150	330	190	270	155	220	20	15	50	25	8x4	75	38	10x5	39
120		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		433	260	317	210	296	147	135	135	215	455	250	350	200	290	30	18	75	35	10x5	95	55	16x6	85
155		504	302	382	252	345	185	155	135	235	493	280	380	220	320	32	21	85	40	12x5	110	60	18x7	110
175		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	60	587	350	467	305	412	230	200	175	290	620	355	445	290	390	45	24	95	50	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	25x9	350

WPWX型

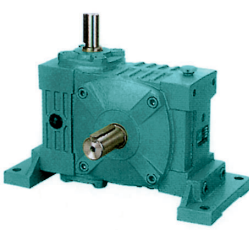


WPWX 轴指向表示
SHAFT DIRECTION

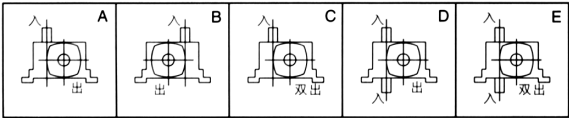


型号 size	传动比 ratio	A	AB	BB	BC	CC	M	N	E	E ₁	E ₂	G	Z	输入轴 input shaft			输出轴 output shaft			重量 weight(kg)
														HS	U	TXV	LS	S	WXY	
40	10	149	89	79	45	40	95	187	70	72	97	12	10	25	12	4x2.5	28	14	5x3	5
50		175	107	97	50	50	111	226	90	90	110	14	12	30	12	4x2.5	40	17	5x3	8
60		198	122	112	55	60	127	257	100	102	129	15	12	40	15	5x3	50	22	6x3.5	11
70		231	140	131	65	70	152	305	120	120	155	20	15	40	18	6x3.5	60	28	8x4	15.5
80		261	160	142	70	80	174	350	140	140	180	20	15	50	22	6x3.5	65	32	10x5	24
100		322	190	169	90	100	224	410	190	165	215	22	15	50	25	8x4	75	38	10x5	38
120		381	229	190	100	120	264	494	220	195	255	25	18	65	30	8x4	85	45	14x5.5	56
135		433	260	210	110	135	304	559	260	230	285	30	18	75	35	10x5	95	55	16x6	84
155		504	302	252	140	155	345	605	290	250	305	35	21	85	40	12x5	110	60	18x7	129
175		545	325	262	150	175	374	675	320	273	348	40	21	85	45	14x5.5	110	65	18x7	157
200	60	587	350	305	175	200	424	749	370	305	390	40	24	95	50	14x5.5	125	70	20x7.5	224
250		705	420	552	200	250	510	920	440	375	475	45	28	110	60	18x7	155	90	25x9	374

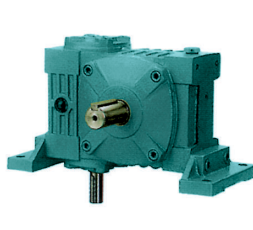
WPWT型



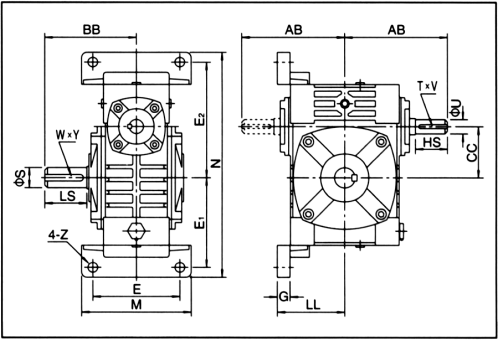
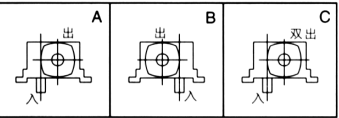
WPWT 轴指向表示
SHAFT DIRECTION



WPWV型

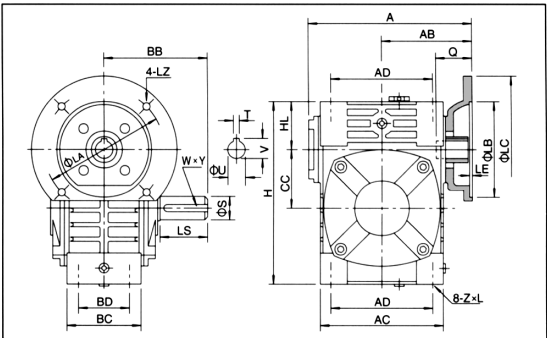
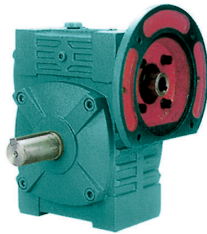


WPWV 轴指向表示
SHAFT DIRECTION

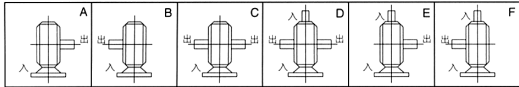


型号 size	传动比 ratio	AB	BB	CC	LL	M	N	E	E ₁	E ₂	G	Z	输入轴 input shaft			输出轴 output shaft			重量 weight(kg)
													HS	U	TXV	LS	S	WXY	
40	10	87	79	40	63	90	187	70	72	97	12	10	25	12	4x2.5	28	14	5x3	5
50		107	97	50	70	120	226	95	90	110	14	12	30	12	4x2.5	40	17	5x3	8
60		122	112	60	80	130	257	105	102	129	15	12	40	15	5x3	50	22	6x3.5	11
70		140	131	70	95	150	305	115	120	155	20	15	40	18	6x3.5	60	28	8x4	15.5
80		160	142	80	105	170	350	135	140	180	20	15	50	22	6x3.5	65	32	10x5	24
100		190	169	100	135	190	410	155	165	215	22	15	50	25	8x4	75	38	10x5	38
120		229	190	120	160	230	494	180	195	255	25	18	65	30	8x4	85	45	14x5.5	56
135		260	210	135	185	250	559	200	230	285	30	18	75	35	10x5	95	55	16x6	84
155		302	252	155	220	275	605	220	250	305	35	21	85	40	12x5	110	60	18x7	129
175		325	262	175	240	310	675	250	273	348	40	21	85	45	14x5.5	110	65	18x7	157
200	60	350	305	200	280	360	749	290	305	390	40	24	95	50	14x5.5	125	70	20x7.5	224
250		420	552	250	315	460	920	380	375	475	45	28	110	60	18x7	155	90	25x9	374

WPWD型



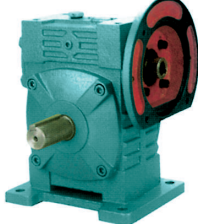
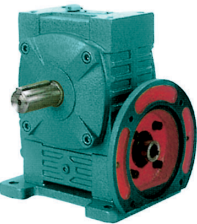
轴指向表示 SHAFT DIRECTION



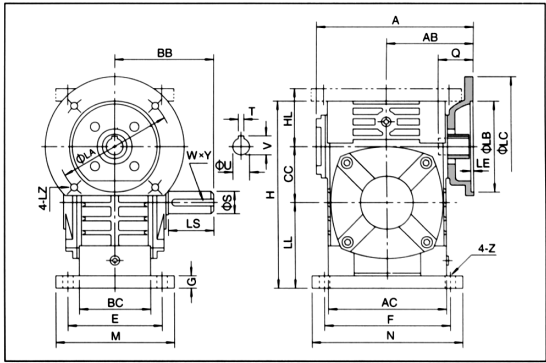
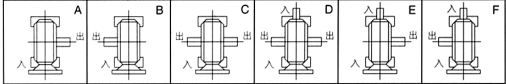
型号 size	入功率 input(kw)	传动比 ratio	A	AB	BB	AC	BC	AD	BD	CC	HL	H	ZXL	电机法兰 flange					入力孔 input hole				输出轴 output shaft			重量 weight (kg)
														LA	LB	LC	LE	LZ	Q	U	TXV	LS	S	WXY		
40	0.12	10	135	75	79	95	61	78	42	40	35	125	M6x12	115	95	140	4	M8	31	11	4x12.8	28	14	5x3	4	
50	0.18		151	83	97	111	68	85	50	50	35	150	M6x8	115	95	140	4	M8	31	11	4x12.8	40	17	5x3	7	
60	0.37		167	91	112	127	76	105	55	60	42	177	M8x20	130	110	160	4	M8	33	14	5x16.3	50	22	6x3.5	10	
70	0.37		200	109										130	110	160		M8	40	14	5x16.3					
70	0.75		202	111	131	152	86	125	65	70	55	215	M10x25	165	130	200	4	M10	42	19	6x21.8	60	28	8x4	14.5	
80	0.75	15	225	125	142	169	102	140	70	80	65	250	M12x30	165	130	200	4.5	M10	48	19	6x21.8	65	32	10x5	23	
100	1.5		280	148	169	216	117	180	90	100	80	310	M12x30	165	130	200	4.5	M10	52	24	8x27.3	75	38	10x5	36.5	
120	2.2	25	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	
	3.0	30																								
135	3.0	40	375	202	210	296	147	260	110	135	105	425	M16x35	215	180	250	5	M12	63	28	8x31.3	95	55	16x6	83	
	4.0	50	425	224										215	180	250	5	M12	63	28	8x31.3					
155	5.5		448	247	252	345	185	280	120	155	103	461	M16x35	265	230	300	5	M12	83	38	10x41.3	110	60	18x7	110	
	5.5	60																								
175	7.5		481	262	262	374	192	320	140	175	123	521	M16x35	265	230	300	5	M12	83	38	10x41.3	110	65	18x7	156	
	7.5	11.0	516	258										265	230	300	6	M12	83	38	10x41.3					
200	11.0		543	285	305	412	230	360	150	200	130	575	M20x36	300	250	350	6	M16	114	42	12x45.3	125	70	20x7.5	222	
	11.0	15.0																								
250	15.0		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

WPWDS型



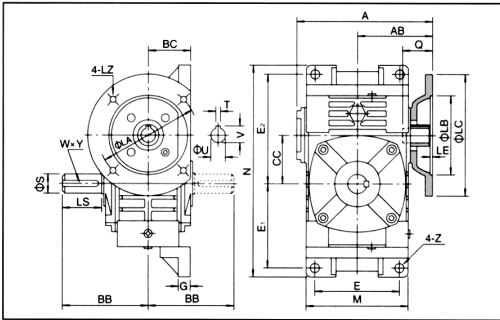
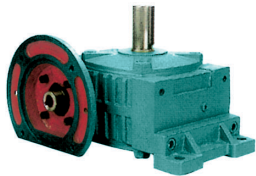
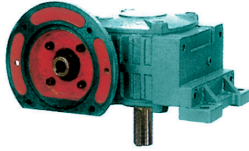
轴指向表示 SHAFT DIRECTION



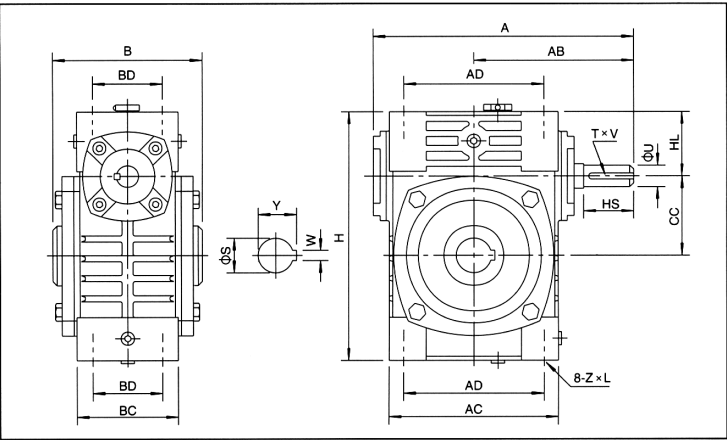
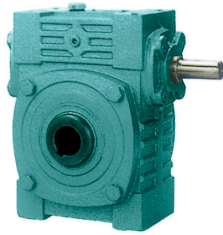
型号 size	入功率 input(kw)	传动比 ratio	A	AB	BB	AC	BC	CC	HL	LL	H	M	N	E	F	G	Z	电机法兰 flange					入力孔 input hole				输出轴 output shaft			重量 weight (kg)
																		LA	LB	LC	LE	LZ	Q	U	TXV	LS	S	WXY		
40	0.12	10	135	75	79	95	61	40	45	60	135	100	130	80	110	10	10	115	95	140	4	M8	31	11	4x12.8	28	14	5x3	5	
50	0.18		151	83	97	111	68	50	50	80	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	93	195	130	150	105	120	15	12	130	110	160	4	M8	33	14	5x16.3	50	22	6x3.5	12.5	
70	0.37		200	109														130	110	160		M8	40	14	5x16.3					
70	0.75		202	111	131	152	86	70	73	108	233	150	190	115	150	18	15	165	130	200	4	M10	42	19	6x21.8	60	28	8x4	17	
80	0.75	15	225	125	142	169	102	80	83	123	268	170	220	135	180	18	15	165	130	200	4.5	M10	48	19	6x21.8	65	32	10x5	26	
100	1.5		280	148	169	216	117	100	100	150	330	190	270	155	220	20	15	165	130	200	4.5	M10	52	24	8x27.3	75	38	10x5	41.5	
120	2.2	25	333	181	190	256	124	120	120	180	395	230	320	180	260	25	18	215	180	250	5	M12	63	28	8x31.3	85	45	14x5.5	60	
135	3.0		375	202	210	296	147	135	135	215	455	250	350	200	290	30	18	215	180	250	5	M12	63	28	8x31.3	95	55	16x6	90	
155	4.0	40	425	224														215	180	250	5	M12	63	28	8x31.3					
155	5.5		448	247	252	345	185	155	135	235	493	280	380	220	320	32	21	265	230	330	5	M12	83	38	10x41.3	110	60	18x7	118	
175	5.5	50	481	262	262	374	192	175	160	260	558	310	410	250	350	37	21	265	230	300	5	M12	83	38	10x41.3	110	65	18x7	167	
175	7.5		516	258														300	250	300	6	M12	83	38	10x41.3	125	70	20x7.5	237	
200	7.5	60	543	285	305	412	230	200	175	290	620	355	445	290	390	45	24	300	250	350	6	M16	114	42	12x45.3					
200	11.0		615	330	360	500	285	250	200	350	750	460	560	380	480	50	28	300	250	350	6	M16	114	42	12x45.3	155	90	25x9	395	
250	11.0																													
250	15.0																													

WPWDX型

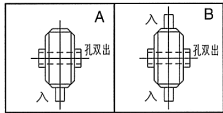
WPWDO型



WPWK型

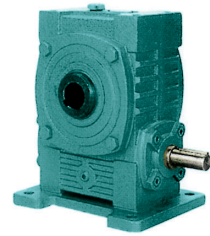


轴指向表示 SHAFT DIRECTION

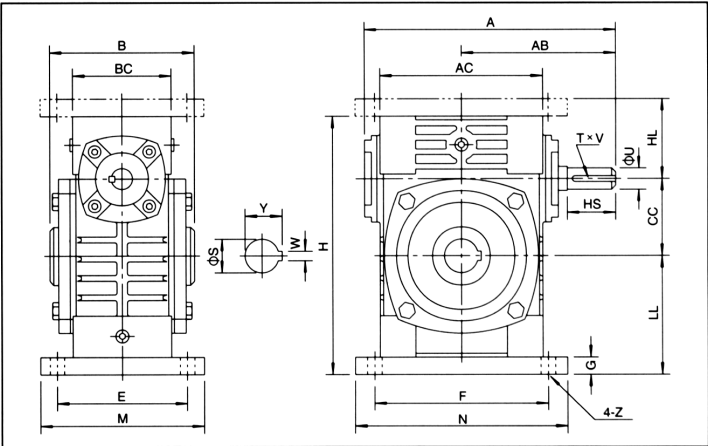
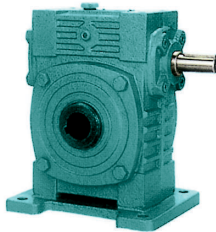


型号 size	传动比 ratio	A	AB	B	AC	BC	AD	BD	CC	HL	H	ZXL	输入轴 input shaft			输出轴 output shaft		重量 weight(kg)
													HS	U	TXV	S	WXY	
40	10	149	89	90	95	61	78	42	40	35	125	M6x12	25	12	4x2.5	16	5x18.3	4
50		175	107	110	111	68	85	50	50	35	150	M6x18	30	12	4x2.5	20	6x22.8	6.5
60		198	122	120	127	76	105	55	60	42	177	M8x15	40	15	5x3	25	8x28.3	9
70		231	140	132	152	86	125	65	70	55	215	M10x25	40	18	6x3.5	30	8x33.3	13
80		261	160	150	169	102	140	70	80	65	250	M12x28	50	22	6x3.5	35	10x38.3	21
100	25	322	190	174	216	117	180	90	100	80	310	M12x30	50	25	8x4	40	12x43.3	34
120	30	381	229	180	256	124	220	100	120	95	370	M14x32	65	30	8x4	45	14x48.8	51
135	40	433	260	214	296	147	260	110	135	105	425	M16x35	75	35	10x5	60	18x64.4	78
155	60	504	302	256	345	185	280	120	155	103	461	M16x35	85	40	12x5	70	20x74.9	102
175		545	325	282	374	192	320	140	175	123	521	M16x35	85	45	14x5.5	80	22x85.4	142
200		587	350	324	412	230	360	150	200	130	575	M20x36	95	50	14x5.5	85	22x90.4	202
250		705	420	400	500	285	420	190	250	150	700	M24x42	110	60	18x7	110	28x116.4	340

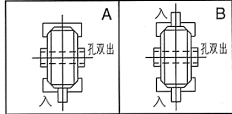
WPWKA型



WPWKS型

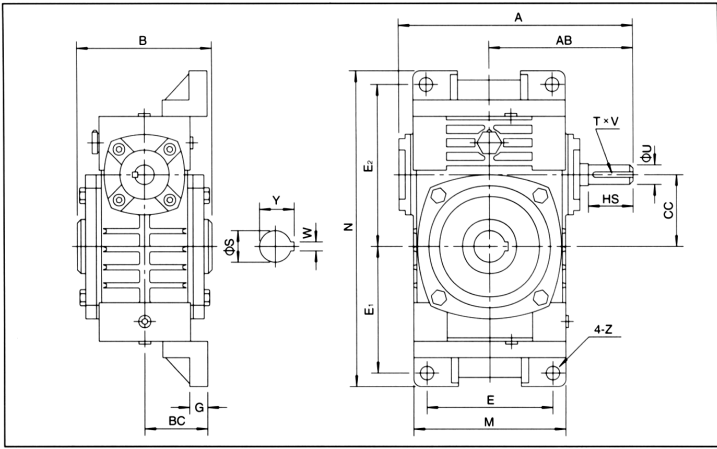
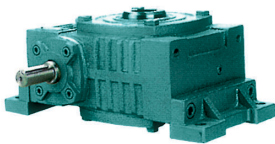


轴指向表示 SHAFT DIRECTION

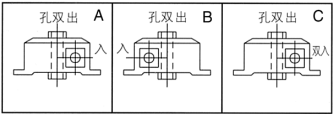


型号 size	传动比 ratio	A	AB	B	AC	BC	CC	HL	LL	H	M	N	E	F	G	Z	输入轴 input shaft			输出轴 output shaft		重量 weight (kg)	
																	HS	U	TXV	S	WXY		
40	10	149	89	90	95	61	40	45	60	135	100	130	80	110	10	10	25	12	4x2.5	16	5x18.3	4.5	
50		175	107	110	111	68	50	50	80	165	120	140	95	110	15	12	30	12	4x2.5	20	6x22.8	7.5	
60		198	122	120	127	76	60	60	93	195	130	150	105	120	15	12	40	15	5x3	25	8x28.3	11.5	
70		15	231	140	132	152	86	70	73	108	233	150	190	115	150	18	15	40	18	6x3.5	30	8x33.3	15.5
80		20	261	160	150	169	102	80	83	123	268	170	220	135	180	18	15	50	22	6x3.5	35	10x38.3	24
100	25	322	190	174	216	117	100	100	150	330	190	270	155	220	20	15	50	25	8x4	40	12x43.3	39	
120	30	381	229	180	256	124	120	120	180	395	230	320	180	260	25	18	65	30	8x4	45	14x48.8	57	
135	40	433	260	214	296	147	135	135	215	455	250	350	200	290	30	18	75	35	10x5	60	18x64.4	85	
155	50	504	302	256	345	185	155	135	235	493	280	380	220	320	32	21	85	40	12x5	70	20x74.9	110	
175		545	325	282	374	192	175	160	260	558	310	410	250	350	37	21	85	45	14x5.5	80	22x85.4	152	
200		587	350	324	412	230	200	175	290	620	355	445	290	390	45	24	95	50	14x5.5	85	22x90.4	216	
250		705	420	400	500	285	250	200	350	750	460	560	380	480	50	28	110	60	18x7	110	28x116.4	350	

WPWKO型

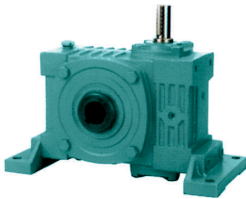


轴指向表示 SHAFT DIRECTION

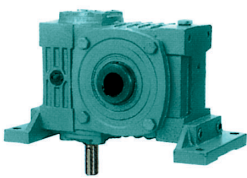


型号 size	传动比 ratio	A	AB	B	BC	CC	M	N	E	E ₁	E ₂	G	Z	输入轴 input shaft			输出轴 output shaft		重量 weight(kg)
														HS	U	TXV	S	WXY	
40	10	149	89	90	45	40	95	187	70	72	97	12	10	25	12	4x2.5	16	5x18.3	5
50		175	107	110	50	50	111	226	90	90	110	14	12	30	12	4x2.5	20	6x22.8	8
60		198	122	120	55	60	127	257	100	102	129	15	12	40	15	5x3	25	8x28.3	11
70		231	140	132	65	70	152	305	120	120	155	20	15	40	18	6x3.5	30	8x33.3	15.5
80		261	160	150	70	80	174	350	140	140	180	20	15	50	22	6x3.5	35	10x38.3	24
100	25	322	190	174	90	100	224	410	190	165	215	22	15	50	25	8x4	40	12x43.3	38
120	30	381	229	180	100	120	264	494	220	195	255	25	18	65	30	8x4	45	14x48.8	56
135	40	433	260	214	110	135	304	559	260	230	285	30	18	75	35	10x5	60	18x64.4	84
155	60	504	302	256	140	155	345	605	290	250	305	35	21	85	40	12x5	70	20x74.9	129
175		545	325	282	150	175	374	675	320	273	348	40	21	85	45	14x5.5	80	22x85.4	157
200		587	350	324	175	200	424	749	370	305	390	40	24	95	50	14x5.5	85	22x90.4	224
250		705	420	400	200	250	510	920	440	375	475	45	28	110	60	18x7	110	28x116.4	374

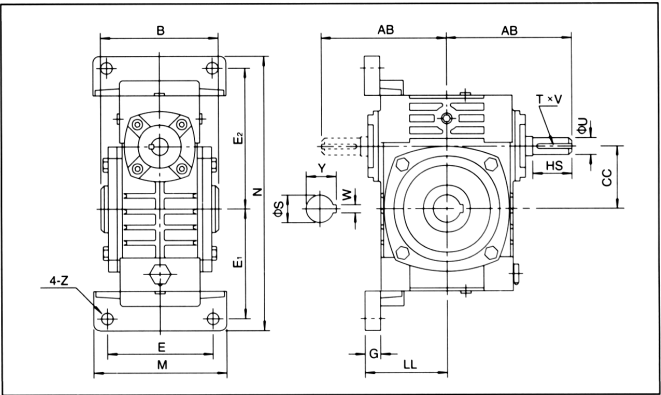
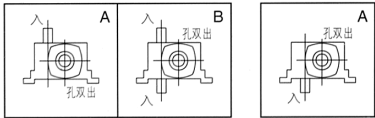
WPWKT型



WPWKV型

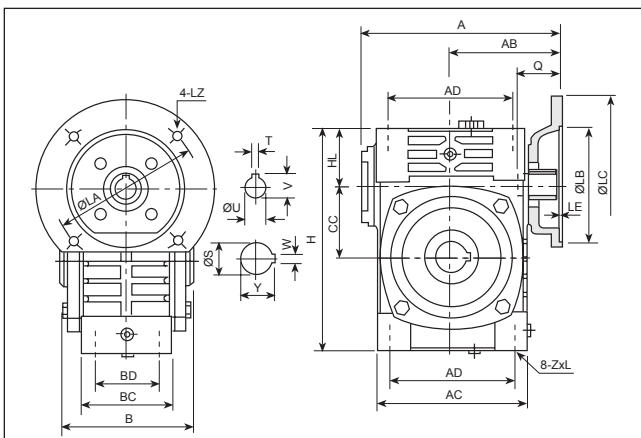


轴指向表示 SHAFT DIRECTION

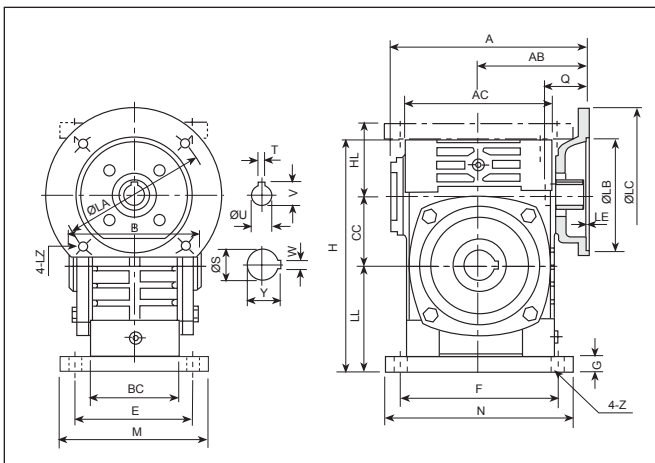
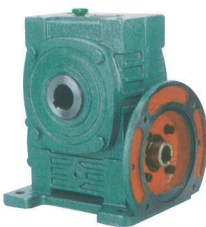


型号 size	传动比 ratio	AB	B	CC	LL	M	N	E	E ₁	E ₂	G	Z	输入轴 input shaft			输出轴 output shaft		重量 weight (kg)
													HS	U	TXV	S	WXY	
40	10	87	90	40	63	90	187	70	72	97	12	10	25	12	4x2.5	16	5x18.3	5
50		107	110	50	70	120	226	95	90	110	14	12	30	12	4x2.5	20	6x22.8	8
60		122	120	60	80	130	257	105	102	129	15	12	40	15	5x3	25	8x28.3	11
70		140	132	70	95	150	305	115	120	155	20	15	40	18	6x3.5	30	8x33.3	15.5
80		160	150	80	105	170	350	135	140	180	20	15	50	22	6x3.5	35	10x38.3	24
100	25	190	174	100	135	190	410	155	165	215	22	15	50	25	8x4	40	12x43.3	38
120	30	229	180	120	160	230	494	180	195	255	25	18	65	30	8x4	45	14x48.8	56
135	40	260	214	135	185	250	559	200	230	285	30	18	75	35	10x5	60	18x64.4	84
155	60	302	256	155	220	275	605	220	250	305	35	21	85	40	12x5	70	20x74.9	129
175		325	282	175	240	310	675	250	273	348	40	21	85	45	14x5.5	80	22x85.4	157
200		350	324	200	280	360	749	290	305	390	40	24	95	50	14x5.5	85	22x90.4	224
250		420	400	250	315	460	920	380	375	475	45	28	110	60	18x7	110	28x116.4	374

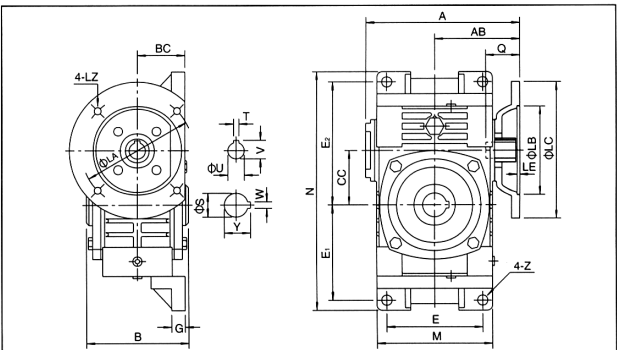
TAILONG MACHINERY

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WPWDKS型

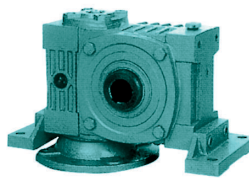
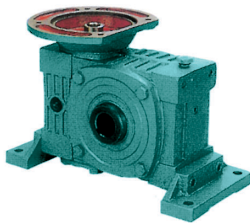


型号 size	输入功率 input(kw)	传动比 ratio	A	AB	B	AC	BC	CC	HL	LL	H	M	N	E	F	G	Z	电机法兰 flange				入力孔 input hole				输出轴 output shaft		重量 weight (kg)
			LA	LB	LC	LE	LZ	Q	U	T	X	V	S	W	X	Y												
40	0.12	1/10	135	75	90	95	61	40	45	60	135	100	130	80	110	10	10	115	95	140	4	M8	31	11	4x12.8	16	5x18.3	5
50	0.18		151	83	110	111	68	50	50	80	165	120	140	95	110	15	12	115	95	140	4	M8	31	11	4x12.8	20	6x22.8	8
60	0.37		167	91	120	127	76	60	60	93	195	130	150	105	120	15	12	130	110	160	4	M8	33	14	5x16.3	25	8x28.3	12.5
70	0.37		200	109	132	152	86	70	73	108	233	150	190	115	150	18	15	130	110	160	4	M8	40	14	5x16.3	30	8x33.3	17
	0.75		202	111														165	130	200	4	M10	42	19	6x21.8			
80	0.75		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	6x21.8	35	10x38.3
100	1.5	1/20	280	148	174	216	117	100	100	150	330	190	270	155	220	20	15	165	130	200	4.5	M10	52	24	8x27.3	40	12x43.3	41.5
	2.2	1/25	333	181	180	256	124	120	120	180	395	230	320	180	260	25	18	215	180	250	5	M12	63	28	8x31.3	45	14x48.8	60
120	3.0	1/35																										
135	3.0	1/40	375	202	214	296	147	135	135	215	455	250	350	200	290	30	18	215	180	250	5	M12	63	28	8x31.3	60	18x64.4	90
	4.0																											
155	5.5	1/50	448	247	256	345	185	155	135	235	493	280	380	220	320	32	21	265	230	300	5	M12	83	38	10x41.3	70	20x74.9	118
175	5.5	1/60	481	262	282	374	192	175	160	260	558	310	410	250	350	37	21	265	230	300	5	M12	83	38	10x41.3	80	22x85.4	167
200	7.5																											
	11.0		543	285	324	412	230	200	175	290	620	355	445	290	390	45	24	300	250	350	6	M16	114	42	12x45.3	85	22x90.4	237
250	11.0																											
	15.0		636	351	400	500	285	250	200	350	750	460	560	380	480	50	28	300	250	350	6	M16	114	42	12x45.3	110	28x116.4	395

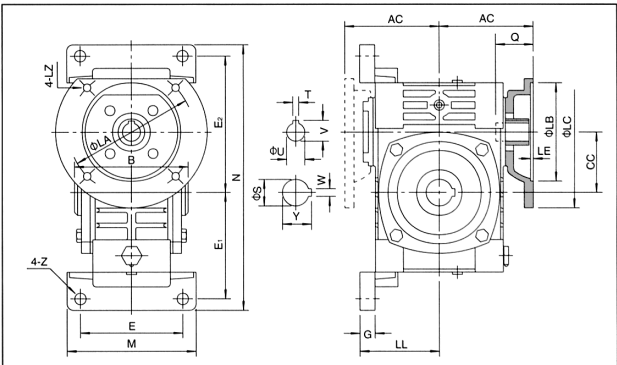


型号 size	入功率 input(kw)	传动比 ratio	A	AB	B	BC	CC	M	N	E	E ₁	E ₂	G	Z	电机法兰 flange					入力孔 input hole			输出轴 output shaft		重量 weight (kg)	
															LA	LB	LC	LE	LZ	Q	U	TXV	S	WXY		
40	0.12	10	135	75	90	45	40	95	187	70	72	97	12	10	115	95	140	4	M8	31	11	4x12.8	16	5x18.3	5.4	
50	0.18		151	83	110	50	50	111	226	90	90	110	14	12	115	95	140	4	M8	31	11	4x12.8	20	6x22.8	8.5	
60	0.37		167	91	120	55	60	127	257	100	102	129	15	12	130	110	160	4	M8	33	14	5x16.3	25	8x28.3	12	
70	0.37		200	109	132	65	70	152	305	120	120	155	20	15	130	110	160	4	M8	40	14	5x16.3	30	8x33.3	17	
	0.75		202	111																						165
80	0.75		15	225	125	150	70	80	174	350	140	140	180	20	15	165	130	200	4.5	M10	48	19	6x21.8	35	10x38.3	26
	1.5																									
100	1.5		20	280	148	174	90	100	224	410	190	165	215	22	15	165	130	200	4.5	M10	52	24	8x27.3	40	12x43.3	40.5
120	2.2		25	333	181	180	100	120	264	494	220	195	225	25	18	215	180	250	4	M12	63	28	8x31.3	45	14x48.8	59
135	3.0		30	375	202	214	110	135	304	559	260	230	285	30	18	215	180	250	5	M12	63	28	8x31.3	60	18x64.4	89
	4.0	40																								
155	4.0	50	425	224	256	140	155	345	605	290	250	305	35	21	215	180	250	5	M12	63	28	8x31.3	70	20x74.9	138	
	5.5	448	247	265																						230
175	5.5	60	481	262	282	150	175	374	675	320	273	348	40	21	265	230	300	5	M12	83	38	10x41.3	80	22x85.4	172	
200	7.5		516	258	324	175	200	424	749	370	305	390	40	24	265	230	300	6	M12	83	38	10x41.3	85	22x90.4	246	
	11.0																									543
250	11.0	15.0	615	330	400	200	250	510	920	440	375	475	45	28	300	250	350	6	M16	114	42	12x45.3	110	28x116.4	410	

WPWDKV型



WPWDKV 轴指向表示
SHAFT DIRECTION



型号 size	输入功率 input(kw)	传动比 ratio	AC	B	CC	LL	M	N	E	E ₁	E ₂	G	Z	电机法兰 flange				入力孔 input hole			输出轴 output shaft		重量 weight (kg)		
														LA	LB	LC	LE	LZ	Q	U	TXV	S		WXY	
40	0.12	10	75	90	40	63	90	187	70	72	97	12	10	115	95	140	4	M8	31	11	4x12.8	16	5x18.3	5.4	
50	0.18		83	110	50	70	120	226	95	90	110	14	12	115	95	140	4	M8	31	11	4x12.8	20	6x22.8	8.5	
60	0.37		91	120	60	80	130	257	105	102	129	15	12	130	110	160	4	M8	33	14	5x16.3	25	8x28.3	12	
	0.37		109												130	110	160	M8	40	14	5x16.3				
70	0.75	15	111	132	70	95	150	305	115	120	155	20	15	165	130	200	4	M10	42	19	6x21.8	30	8x33.3	17	
	0.75																		48	19	6x21.8				
80	1.5		125	150	80	105	170	350	135	140	180	20	15	165	130	200	4.5	M10	52	24	8x27.3	35	10x38.3	26	
	1.5																		52	24	8x27.3				
100	2.2	20	148	174	100	135	190	410	155	165	215	22	15	165	130	200	4.5	M10	52	24	8x27.3	40	12x43.3	40.5	
	3.0																								
120	3.0		181	180	120	160	230	494	180	195	255	25	18	215	180	250	5	M12	63	28	8x31.3	45	14x48.8	59	
	4.0																								
135	4.0	30	202	214	135	185	250	559	200	230	285	30	18	215	180	250	5	M12	63	28	8x31.3	60	18x64.4	89	
	4.0																								
	5.5																								
	7.5																								
155	5.5	50	224																						
	5.5		247	256	155	220	275	605	220	250	305	35	21	215	180	250	5	M12	63	28	8x31.3				
	7.5																								
	7.5																								
175	7.5	60	262	282	175	240	310	675	250	273	348	40	21	265	230	300	5	M12	83	38	10x41.3	80	22x85.4	172	
	7.5																								
	11.0																								
	11.0																								
200	11.0	250	258	324	200	280	360	749	290	305	390	40	24	265	230	300	5	M12	83	38	10x41.3				
	15.0		285												300	250	350	6	M16	114	42	12x45.3	85	22x90.4	246
250	11.0		330	400	250	315	460	920	380	375	475	45	28	300	250	350	6	M16	114	42	12x45.3	110	28x116.4	400	

4.选型方法 4.Selection methods

4.1 选型要素

4.1.1输入功率、输出转矩

输入功率和输出转矩的转换公式如下:

输入功率P(kW)=输出转矩 T(N.m) × 输出轴转速 Nz(r/min) / (9549x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。

4.1.2输入轴转速、输出轴转速

输入轴和输出轴转速的转换公式如下:

输出轴转速Nz(r / min)=输入轴转速Ni(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。

4.1.3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，下表列出效率的一般范围数值，可供选型时参考:

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

4.1.4输入轴、输出轴回转方向

蜗杆减速机输出轴回转方向取决于蜗杆螺牙方向，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，输出轴旋转方向为逆时针；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，输出轴旋转方向为顺时针；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。

4.1.5工况系数

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

修正输出转矩Tz(N.m) = 理论输出转矩Ti(N.m) × 工况系数K

工况系数K值表

原动机	载荷状况	每日运转时间 (小时)			
		0.5~2	2~6	6~10	10~24
电动机	平稳载荷	0.80	0.90	1.00	1.25
	中等冲击	0.90	1.00	1.25	1.50
	较大冲击	1.00	1.25	1.50	1.75
注：当正反转或停开次数1小时内达10次以上时，上表K值还应乘以1.2					

4.1 Selection points

4.1.1 Input power & output torque

The formula of transforming input power to output torque listed as follows:
input power P(kW)= output torqueT(N.m)xoutput revolving speed Nz(r/min)/(9549xefficiency η)
Input power denotes the dynamical capacity of a reducer, and output torque denotes the maximum reducer allows, which are both listed in power and torque tables in order to serving selection.

4.1.2 Revolving speed of input shaft and output shaft

The formula of transforming input revolving speed to output listed as follows:
Output revolving speed Nz(r/min)= input revolving speed N.(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 overfriction.

4.1.3 Efficiencies

The efficiency calculation formula listed as follows:
Efficiency n =output power x100%/input power
Due to the internal vibration and wear, partial input energy will be transformed to be heat energy and fade away, Efficiency is the utilization ratios of input energy. The efficiency depends on worm's tooth number, revolving speed, lubricant oil viscosity, bearing friction and worm gear's material friction factor, Reducers with vary model or ratio have vary efficiency. The following table lists the range of the efficiency value.

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

4.1.4 Revolving direction of input and output shaft

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

4.1.5 Service Factor

When reducer is designed, the input load capacity and allowed intensity are calculated per a continual operation of 8 hours a day and per the ideal conditions of a uniform load design. However, the on-site use(e.g, repetitive start-up,stop or obverse ans reverse rotation,use time more or less than 8 hours a day,different value and characteristics

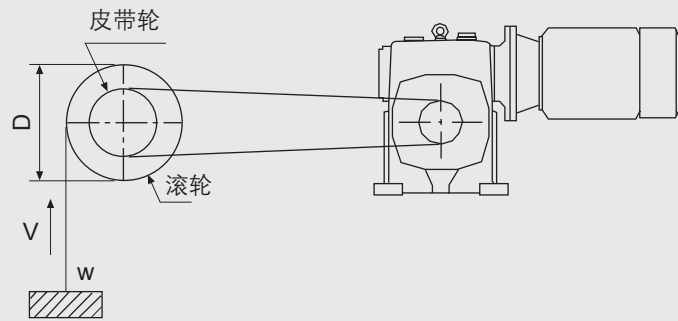
of impact load from standard conditions and so on)may be different from ideal use which should be taken into account. While selecting reducer input power or output torque, revise them according to the following formula:
Revised output torque $T_2(N.m)$ =theoretic output torque $T_1(N.m)$ Xrunning condition factor K

Table of service factor K

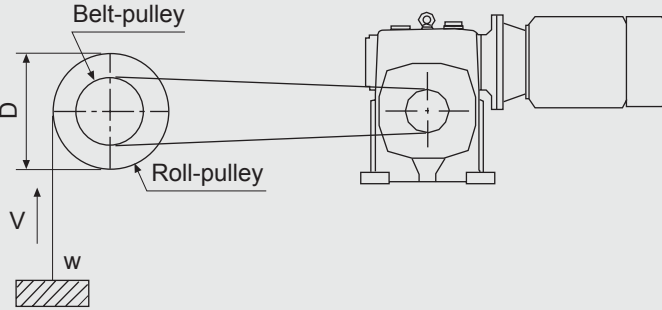
Prime mover	Load	Operation time per (hour)			
		0.5~2	2~6	6~10	10~24
Electromotor	Uniform	0.80	0.90	1.00	1.25
	Medium shock	0.90	1.00	1.25	1.50
	Heavy shock	1.00	1.25	1.50	1.75

Annotate:when the times of start-up,stop or obverse per hour is more than 10,the value K must multiply 1.2.

4.2选型实例
基本情况

传动结构	相关数据
	●起吊物体重量 W=600kg ●起吊物体速度 V=12m / min ●滚轮直径 D=0.4m ●皮带轮传动效率η_1=0.92 ●减速机传动效率η_2=0.71 ●运转时间 8小时 / 日 ●启动次数 2次 / 小时。较大冲击 ●使用电源 三相380V , 50Hz

4.2 Selection example
The basic condition

Transmission structure	relative data
	● weight of suspended object W=600kg ● speed of suspended object V=12m/min ● roll-pulley diameter D=0.4m ● efficiency of belt-pulley η_1=0.92 ● efficiency of reducer η_2=0.71 ● running time 8 hours per day ● 2 times per hour heavy shock ● electrical source three-phase 380V, 50Hz

选型步骤

序号	内容	计算公式	计算示例
1	定传动比	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 =起吊速度V / (滚轮直径Dx π) 2. 计算总传动比i i =输入轴转速 N_1 / 皮带轮转速 N_3 3. 计算减速机传动比 i_1 i_1 =总传动比i / 皮带轮传动传动比 i_2	1. $N_3=12/(0.4 \times 3.142)$ =9.6r/min 2. $i=1440/9.6$ =150 3.设定 $i_2=5$,则 $i_1=150/5$ =30
2	计算输出转矩	计算减速机输出转矩T T =物体重量Wx10x滚轮半径(D / 2) / (皮带轮传动传动比 i_2 x 皮带轮传动效率 η_1)	$T=600 \times 10 \times (0.4/2)/(0.92 \times 5)$ =260.9N.m
3	修正输出转矩	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 =输出转矩TxK	$T_1=260.9 \times 1.5$ =391.35N.m
4	计算输入功率	换算功率P P =修正输出转矩Tx输出轴转速 N_2 / (9549x减速机传动效率 η_2)	$P=391.35 \times (1440/30)/(9549 \times 0.71)$ =2.77kW
5	选型号规格	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	

Selection steps

Number	Contents	Formula	Example
1	Calculate ratio	calculate the ratio according to input and output shaft revolving speed 1. get belt-pulley revolving speed N_3 N_3 =speed of suspended object V/(roll-pulley diameter D x π) 2.Calculate general ratio i i =Input revolving speed N_1 /belt-pulley revolving speed N_3 3.Calculate reducer ratio i_1 i_1 =generai ratio i/belt-pulley ratio i_2	1. $N_3=12/(0.4 \times 3.142)$ =9.6r/min 2. $i=1440/9.6$ =150 3.assumei $i_2=5$,then $i_1=150/5$ =30
2	Calculate output torque	Calculate reducer output torque T T =weight of suspended object Wx10xroll-pulley radius(D/2) / (belt-pulley ratio i_2 x belt-pulley transmission efficiency η_1)	$T=600 \times 10 \times (0.4/2)/(0.92 \times 5)$ =260.9N.m
3	Revise output torque	according to using condition: operation 8 hours a day, heavy shock, running condition factor K=1.5 calculate revised torque T_1 T_1 =output torque TXk	$T_1=260.9 \times 12.5$ =391N.m
4	Calculate input power	Calculate input shaft power P P = revised output torque T :output revolving speed N_2 / (9549xreducer transmission efficiency η_2)	$P=391 \times (1440/30)/(9549 \times 0.71)$ =2.77kW
5	Select model	According to product manual, the selection is, Model 120, ratio 1/30, rating input power 3kW, output torque 413N.m	

5.承载能力表 5.Dynamical Capacity Table

WP.WPK.WPW.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

型号 size	传动比 ratio	功率及转矩 Power and moment								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	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.X.O.T.V)

WPD.WPKD.WPWD.WPWKD(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)

型号 size	传动比 ratio	功率及转矩 Power and moment								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	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.X.O.T.V)

6. 安装与使用

6.1安装注意事项

- 6.1.1 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。
- 6.1.2 原动机——减速机——工作机的各联接轴伸，安装后必须互相准确对准轴线。
- 6.1.3 减速机输入端及输出端轴伸外径公差尺寸均按轴伸标准，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。
- 6.1.4 链轮、齿轮等传动件装上轴伸时，应尽量靠近轴承，以减少轴伸弯曲应力。
- 6.1.5 WPD型减速机装配电机时，应在蜗杆头部内孔孔壁及键槽处涂抹黄油，避免装配过紧，防止轴孔日久生锈。
- 6.1.6 订购使用各类WPD减速机时，若电机重量偏大，应设支撑装置。

6.2使用注意事项

- 6.2.1 使用前应注意检查减速机型式结构、中心距规格、传动比、输入轴连接方式、输出轴结构、输入轴输出轴轴指向和回转方向等是否符合使用要求。
- 6.2.2 按照样本上“润滑油的选择使用”中所规定的要求，注入合适的品种牌号润滑油。加油后，旋紧顶部的通气器，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，必须控制适宜的加油量，必须按规定要求及时换油，尤其要重视首次使用100小时后的更换新油。
- 6.2.3使用过程中发生不正常情况时，应及时停机检查，可参照“故障原因及解决办法”表处理。（减速机的油温最高允许达到95℃，在此温度界限下，只要油温不再上升，可以放心使用）。

6. Installation & Usage

6.1 Notices of installation

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

6.2 Notices of usage

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

7.润滑油的选择使用
7.Selection 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25℃~65℃)润滑油至油标中心点之上，并取掉通气器上之小锥塞。首次使用100小时后，洗净内部换上新油，以后每2500小时换油一次。

Before operation,input N220~N320(Ambient temperature -30℃~40℃), N320~N460(Ambient temperature 25℃~65℃) lubrication oil up to the center line of the oil gauge. In the meanwhile, remove the small screw of the air-vent. After working for 100 hours in the first time, clear the inside and add new lubrication oil in it, then renew the lubricant oil per 2500 hours.

减速机在使用时，可按下表选用润滑油。
Lubricants for a reducer are optional in foreign as the below table.

Worm shaft seed(r/min)		Lubricant	Operating position worm shaft,upper worm shaft vertical	Operating position worm shaft,lower output shaft vertical
over	up to			
1000	3000	Synthetic oils	PG460	PG220
	1000			PG460
2000	3000	Mineral oils	ISO VG460	ISO VG200
750	2000			ISO VG320
250	750			ISO VG460
	250		ISO VG680	ISO VG680

周围温度 Ambient temp	负荷 Load	ISO VG	GB3141-82		Mobil	AGMA	中国石油
-30℃~-15℃	普通 Commonly	VG-100	N100	Shell Omala 100	Gear 672	5	HD-100
	重 Weight	VG-150	N150	Shell Omala 150	Gear 629	7	HD-150
-15℃~5℃	普通 Commonly	VG-150	N150	Shell Omala 150	Gear629	7	HD-150
	重 Weight	VG-220	N220	Shell Omala 220	Gear 630	7EP	HD-220
5℃~25℃	普通 Commonly	VG-220	N220	Shell Omala 220	Gear 630	7EP	HD-220
	重 Weight	VG-320	N320	Shell Omala 320	Gear 632	6	HD-320
25℃~40℃	普通 Commonly	VG-320	N320	Shell Omala 320	Gear 632	6	HD-320
	重 Weight	VG-460	N460	Shell Omala 460	Gear 634	8	HD-460
40℃~65℃	普通 Commonly	VG-460	N460	Shell Omala 460	Gear 634	8	HD-460
	重 Weight	VG-680	N680	Shell Omala 680	Gear 636	8EP	HD-680

After the first 100 hours of operation:
Drain unit ans flush with light oil.refill

Every 2500 hours of operation
Drain ;flush and refill

8.故障原因及解决方法

故障情况	故障原因	解决办法
过热	原动机、减速机、工作机连接不当	调整至适当位置，使三者相联轴线同轴
	超负荷运转	适当调整负荷
	油封过度磨擦	在油封唇口处滴润滑油
	润滑油过少或过多	按油标指示点调整油量
	润滑油杂质多或润滑性差	更换合适新油
振动	原动机、减速机、工作机固定不良	查出固定不良部位，正确固紧
	蜗轮副齿部磨耗或损伤	更换蜗轮副(需要时本公司配合)
	轴承磨损	更换轴承
	螺栓松脱	固紧螺栓
杂音	轴承损伤或间隙过大	更换轴承
	蜗轮副啮合不良	修整齿面或更换蜗轮副(请与本公司联系)
	润滑油不足	按油标指示点补加润滑油
	机体内有异物	倒净润滑油带出异物，重加清洁润滑油
漏油	油封唇口磨损	更换油封
	油封档轴颈磨损	更换输出轴或输入轴
	油量过多	按油标指示点调整油量
	放油螺塞未旋紧	螺纹处加密封胶，旋紧螺塞
	油标破损	更换油标
蜗轮副齿面磨损过快	超负荷运转	调整至适当负荷
	润滑油不符合要求	更换合适的润滑油
	润滑油不足	按油标指示点加足润滑油
	未按规定适时换油，润滑油劣化	按规定要求适时换油
	运转温度过高	1. 按“过热”故障处理 2. 采取合适措施，降低环境温度

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。

Fault Description	Reasons	Solutions
Overheating	Improper connection among prime mover, reducer and the operation device	Adjust to proper position
	Overloading	Adjust to proper load
	Over friction of oil seals	Drop lubricant at oil seal
	Lubricant oil overmuch or shortage	Adjust to proper oil quantity as indication
	Much impurity in oil or inferior oil	Refill proper oil
Vibration	Prime mover, reducer and the operation device mount badly	Find out the bad place, tighten it
	Tooth surface of worm gear sets worn-out or damaged	Replace worm gear sets(we will cooperate with you when necessary)
	Bearing worn-out	Replace Bearing
	Bolt loose	Tighten Screw
Noise	Bearing damaged or too large clearance	Replace Bearing
	Worm gear sets mesh badly	Mend tooth surface or replace worm gear sets (please contact to us)
	Lubricant oil shortage	Fill in adequate oil as indication
	Foreign object in box	Discharge all the oil in order to put out foreign object, and refill clean oil
Oil leakage	Oil seal lip worn-out	Replace oil seal
	Shaft of oil seal area worn-out	Replace input or output shaft
	Too much oil	Discharge adequate oil as indication
	Oil screw plug loose	Tighten oil screw plug
	Oil gauge damaged	Replace oil gauge
Tooth surface of worm gear sets abrade extra-quickly	Overload	Adjust to proper loading
	Lubricant oil not according with requirement	Replace proper lubricant oil
	Lubricant oil shortage	Fill adequate oil as indication
	Not replacing lubricant oil in time according to requirement, oil deteriorates	Replacing oil in time according to requirement
	Overheating while running	1. Deal with it as "Overheating" 2. Adopting proper measures to make environment temperature fall

Annotate: If other faults not listed above occur, Please contact with us at any moment, Our company will supply thorough consultation and service.

TRV系列蜗杆减速机

1. 产品说明

- 1.1单级蜗杆减速机
- 1.1.1采用优质铝合金压铸箱体，外形轻巧美观,结构紧凑，体积小，重量轻，节省安装空间，不易锈蚀。

1.1.2散热性能好，安全可靠，效率高。

1.1.3承载超载能力强，传动平稳，振动小，噪声低。

1.1.4具有动力输入及转矩输出的多种联接结构，满足各种联接需要；箱体外形设计及底脚孔设置布局适应多种安装方式，通用性强，

1.1.5中小型箱体为全封闭结构，密封性强，箱体内润滑油不易损耗变质，不需更换，便于维护保养。
- 1.2双级蜗杆减速机
- 1.2.1由单级蜗杆减速机组合而成，具有单级蜗杆减速机的一切优点，可获得特大的传动比。

1.2.2常用双级组合机型共17种，用户有特殊要求时，可根据实际需要选择25、30、40、50、63、75、90 110、130、150作为组合单元另行组合。

1.Products Introduction

- 1.1 Single Step Worm Gear Reducer
- 1.1.1 Made of Aluminum alloy die-casting box, good looking in appearance, compact in structure and small volume to save mounting space and prevent from easy rust-eaten

1.1.2 Good radiating characteristic leads safe and reliability and high efficiency for using.

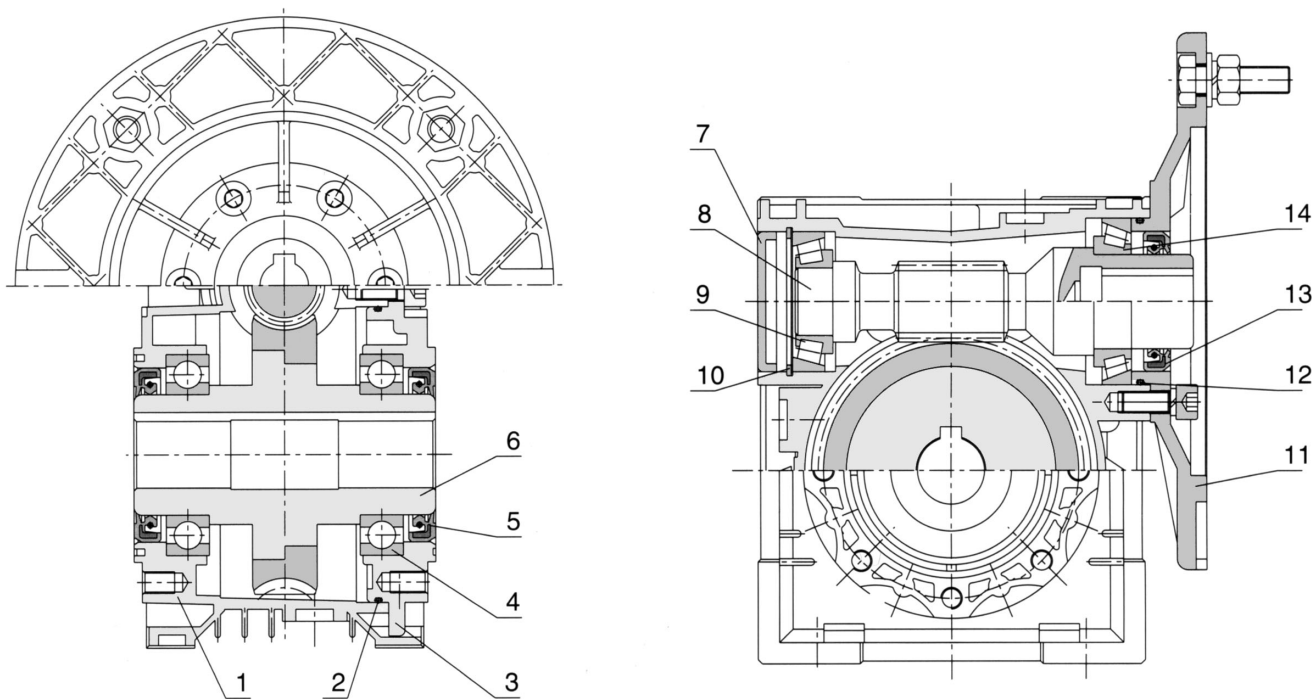
1.1.3 The strong capacity of loading and overload gives stable transmission, make it reduce vibration and noise.

1.1.4 Varies of linking structure for power input and torque output meet varies of linking requirement; the outline design of box and the set of foot mount with high common to others apply to many kinds of mounting methods.

1.1.5 Beside big cases, no gap structure of box means a maintenance-free that is hermetically sealed. It prevents the lubricant from easily lossing and going bad, and exchanging.
- 1.2 Double Step Worm Gear Reducer
- 1.2.1 It is combined by two single step reducers and has all the virtues of them. And you can get the biggest ratio with it.

1.2.2 Totally have 17 models of regular lombination series. You can choose 25, 30, 40, 50, 63, 75, 90, 110, 130, 150 as combination unit to combine according to the fact of your special needs.

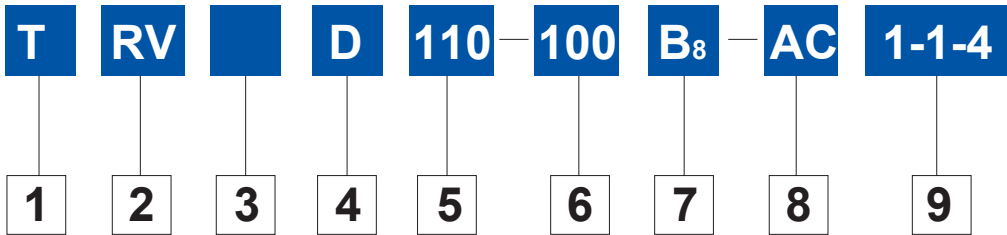
2.产品结构
2.Product structure



- 1.箱体 Box
- 2."O"型圈 "O" ring
- 3.透盖 Puncturable cover
- 4.轴承 Bearing
- 5.油封 Oil seal
- 6.蜗轮 Worm gear
- 7.小端盖 Small cover
- 8.蜗杆 Worm shaft
- 9.轴承 Bearing
- 10.挡圈 Block ring
- 11.输入法兰 Input flange
- 12."O"型圈 "O" ring
- 13.油封 Oil seal
- 14.轴承 Bearing

3.型号说明
3.Model Introduction

3.1.型号结构表 Model and Structure Table



1 品牌代码 T—泰隆 Brand Code T-tailong	2 产品代码 RV—多置式蜗杆减速机 Product code RV-Universal installation worm gear reducer	3 整机结构 无代码—单级 E—双级 Unitary structure No.code-one step E-double step	4 入轴联接方式 无代码—单轴伸输入 B—双轴伸输入 DB—1端轴伸输入, 1端带电机法兰 D—带电机法兰 Connector of input shaft No code-shaft extend input B-Double shaft extend input DB-shaft extend input with motor flange D-with motor flange	5 产品规格 单级以蜗轮副中心距表示110 双级以两对蜗轮副中心距表示, 如: 63/110 Product specifications single step is expressed by the center distance of 110 Double stepexpressed with the center distance of two pair of worm gear 63/110
6 传动比 100 Ratio 100	7 安装型式 单级B3. B6. B7. B8. V5. V6共六种, 双级AS1. AS2. BS1. BS2. VS1. VS2. PS1. PS2共8种. 按产品样本安装形式选定 One step B3. B6. B7. B8. V5. V6 Double step AS1. AS2. BS1. BS2. VS1. VS2. PS1. PS2 in whole. selected according to this manual	8 附件 A——单出轴 B——双出轴 C——基座 D——防护罩 E——转矩臂 F——输出法兰 Accessories A-single output shaft B-double output shaft C-Baseplate D-Protective cover E-Torque arm F-Output flange	9 电机型号、功率、极数 1.1-4表示功率1.1kW、极数4(选配Y系列或AO2系列电机时免注电机型号) Model power&poles of motor 1.1-4-Denoting motor power is 1.1kW&pole are 4	

3.2 型号对照表 comparative table of model

泰隆企业 TAILONG GROUP	TRV025	TRVD30	TRVD40	TRVD50	TRVD63	TRVD75	TRVD90	TRVD110	TRVD130	TRVD150
		TRV30	TRV40	TRV50	TRV63	TRV75	TRV90	TRV110	TRV130	TRV150
其他企业 OTHER GROUP	NMRV025	NMRV030	NMRV040	NMRV050	NMRV063	NMRV075	NMRV090	NMRV110	NMRV130	NMRV150
		NRV030	NRV040	NRV050	NRV063	NRV075	NRV090	NRV110	NRV130	NRV150
		WJ30	WJ40	WJ50	WJ63	WJ75	WJ90	WJ110	WJ130	
	WWJK25	WWJK30	WWJK40	WWJK50	WWJK63	WWJK75	WWJK90	WWJK110	WWJK130	
		WWJZ30	WWJZ40	WWJZ50	WWJZ63	WWJZ75	WWJZ90	WWJZ110	WWJZ130	
	JRST025	JRSTD30	JRSTD40	JRSTD50	JRSTD63	JRSTD75	JRSTD90	JRSTD110	JRSTD130	JRSTD150
		JRST30	JRST40	JRST50	JRST63	JRST75	JRST90	JRST110	JRST130	JRST150

4.4 Examples for model chosen

Ex 1 Common convey band (uniform load)

Torque: 19N.m Turning time: 8hours/day
Turning speed: About 55 r/min Start frequency:16times/hour
Ratio:25 Environment temperature: Indoor 25℃
Connect with motor directly

- To choose load typt table I No shock uniform load, choose A.
- Through the cross of 16 times/hour frequency on line A from diagram 1.Get coefficient K1 value is 1 that turning time is 8 hour/day.
- Get the coefficient K2 which is 1 according to table 2.
- So the torque value is19 N.m,you can select the model that torque value most approach 19 N.m.

Selected result: TRVD30-25
Input power is 0.18KW, output speed is 56r/m,output torque is 21N.m.

Ex 2 Convey band

Torque: 70N.m Turning time: 16hours/day
Turning speed: About 21 r/min Start frequency:100times/hour
Ratio: 60 Environment temperature: Indoor 35℃
Connect with motor directly

- Choosing B according to load type is light shock load from the table 1.
- Through the cross of 100 times per hour frequency on line B from diagram 1.Get coefficient K1 value is 1.68 that turning time is 16 hour/day.
- Get the coefficient K2 is 1.15 according to table 2.
- So torque value is 70, you can select the model that torqae value most approach 133N.m

Selected result: TRVD75 - 60
Input power is 0.55KW, output speed is 23.3r/m,output torque is 146N.m.

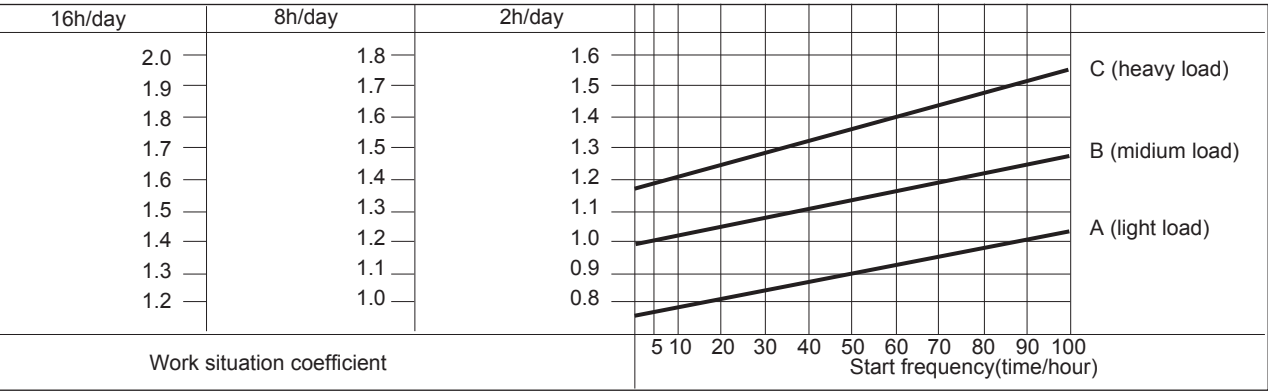
Table 1 Machinery load types chose

Using situation	Example	Load type
Uniform load without shocking	Convey band (uniform conveying)	A (light load)
Light shock load	Speed changed convey	B (mid load)
Strong shock load	Compressor, pulverizer, etc.	C (heavy load)

Table 2 Work situation revise coefficient K2

Environment temperature	Work situation coefficient K2 chosen
-10℃—30℃	1
30℃ ~ 40℃	1.1—1.2

Diagram 1 work situation coefficient K1



5.选型参数

5.The parameter for Model chosen

5.1单级减速机（轴伸输入，输入转速1400r/min）/（配4极电机）
5.1Single step reducer(shaft extend input,input speed is 1400r/min)/(matched with 4 poles motor)

输出转速 Output speed r/min	传动比 Transmission ratio i	输出转矩 Output torque N.m	输出轴径向力 Output radial force kN	机型代号 Model code	输出转速 Output speed r/min	传动比 Transmission ratio i	输出转矩 Output torque N.m	输出轴径向力 Output radial force kN	机型代号 Model code	
0.06kW					56	25	14	1.02	TRV40/TRVD40	
186.7	7.5	2.6	0.5	46.7	30	16	1.08			
140	10	3.4	0.55	35	40	17	1.19			
93.3	15	4.9	0.63	28	50	18	1.28			
70	20	6.1	0.69	46.7	30	17	2.08			
46.7	30	8.2	0.79	35	40	21	2.29			
35	40	10	0.87	28	50	25	2.47			
28	50	10	0.94	23.3	60	28	2.63			
23.3	60	9	1	17.5	80	34	2.89			
186.7	7.5	2.6	0.68	23.3	60	29	3.61	TRV50/TRVD50		
140	10	3.4	0.75	17.5	80	35	3.97			
93.3	15	4.7	0.86	14	100	40	4.28			
70	20	6	0.94	0.18kW					TRV30/TRVD30	
56	25	7	1.02	186.7	7.5	7	0.68			
46.7	30	8	1.08	140	10	10	0.75			
35	40	9.7	1.19	93.3	15	14	0.86			
28	50	11	1.28	70	20	18	0.94			
23.3	60	13	1.36	56	25	21	1.02			
17.5	80	12	1.5	46.7	30	19	1.08			
0.09kW					70	20	19	1.82		TRV40/TRVD40
186.7	7.5	3	0.5	56	25	23	1.96			
140	10	5	0.5	46.7	30	26	2.08			
93.3	15	7	0.63	35	40	32	2.29			
70	20	9	0.69	28	50	38	2.47	TRV50/TRVD50		
46.7	30	12	0.79	23.3	60	34	2.63			
35	40	13	0.87	35	40	32	3.15			
186.7	7.5	3	0.68	28	50	39	3.39			
140	10	5	0.75	23.3	60	43	3.61			
93.3	15	7	0.86	17.5	80	52	3.97	TRV40/TRVD40		
70	20	9	0.94	14	100	54	4.28			
56	25	10	1.02	0.25kW						
46.7	30	12	1.08	186.7	7.5	11	1.31			
35	40	14	1.19	140	10	14	1.44			
28	50	17	1.28	93.3	15	21	1.65	TRV50/TRVD50		
23.3	60	17	1.36	70	20	27	1.82			
28	50	19	2.47	56	25	32	1.96			
23.3	60	21	2.63	46.7	30	36	2.08			
17.5	80	26	2.89	35	40	39	2.29			
14	100	29	3.11	28	50	37	2.47	TRV40/TRVD40		
0.12kW					70	20	26		2.5	TRV50/TRVD50
186.7	7.5	5	0.68	56	25	32	2.69			
140	10	6	0.75	46.7	30	37	2.86			
93.3	15	9	0.86							
70	20	12	0.94							

输出转速 Output speed r/min	传动比 Transmission ratio i	输出转矩 Output torque N.m	输出轴径向力 Output radial force kN	机型代号 Model code	输出转速 Output speed r/min	传动比 Transmission ratio i	输出转矩 Output torque N.m	输出轴径向力 Output radial force kN	机型代号 Model code
35	40	46	3.15	TRV63/TRVD63	23.3	60	126	4.71	TRV75/TRVD75
28	50	54	3.39		35	40	108	4.86	
23.3	60	60	3.61		28	50	129	5.24	
17.5	80	64	3.97		23.3	60	146	5.56	
28	50	56	4.44		17.5	80	180	6.13	
23.3	60	63	4.71		14	100	185	6.6	
17.5	80	78	5.19		17.5	80	189	6.78	
14	100	87	5.59		14	100	221	7.3	
17.5	80	81	6.13	TRV75/TRVD75	17.5	80	201	8.57	TRV110/TRVD110
14	100	94	6.6		14	100	236	9.23	
0.37kW				TRV40/TRVD40	0.75kW				TRV50/TRVD50
186.7	7.5	16	1.31		186.7	7.5	34	1.8	
140	10	21	1.44		140	10	44	1.98	
93.3	15	31	1.65		93.3	15	63	2.27	
70	20	39	1.82		70	20	72	2.5	
56	25	37	1.96		93.3	15	63	2.27	
46.7	30	42	2.08		70	20	72	2.5	
140	10	21	1.98	TRV50/TRVD50	93.3	15	63	2.97	TRV63/TRVD63
93.3	15	31	2.27		70	20	83	3.27	
70	20	40	2.5		56	25	100	3.52	
56	25	48	2.69		46.7	30	114	3.74	
46.7	30	55	2.86		35	40	143	4.12	
35	40	68	3.15		56	25	102	4.16	TRV75/TRVD75
28	50	72	3.39		46.7	30	117	4.42	
23.3	60	71	3.61		35	40	147	4.86	
35	40	70	4.12	TRV63/TRVD63	28	50	177	5.24	
28	50	83	4.44		23.3	60	200	5.56	
23.3	60	94	4.71		28	50	184	5.79	TRV90/TRVD90
17.5	80	115	5.19		23.3	60	212	6.16	
14	100	116	5.59		17.5	80	258	6.78	
23.3	60	98	5.56	TRV75/TRVD75	14	100	271	7.3	
17.5	80	121	6.13		17.5	80	274	8.57	TRV110/TRVD110
14	100	139	6.6		14	100	322	9.23	
0.55kW				TRV40/TRVD40	1.1kW				
186.7	7.5	24	1.31		186.7	7.5	49	2.35	
140	10	32	1.44		140	10	65	2.59	
93.3	15	41	1.65		93.3	15	93	2.97	
186.7	7.5	25	1.8	TRV50/TRVD50	70	20	122	3.27	
140	10	32	1.98		56	25	146	3.52	
93.3	15	46	2.27		46.7	30	150	3.74	
70	20	59	2.5		35	40	165	3.59	
56	25	71	2.69	TRV63/TRVD63	93.3	15	95	3.5	TRV75/TRVD75
46.7	30	81	2.86		70	20	123	3.86	
35	40	80	3.15		56	25	150	4.16	
70	20	60	3.27		46.7	30	171	4.42	
56	25	73	3.52		35	40	216	4.86	
46.7	30	83	3.74		28	50	264	4.6	
35	40	105	4.12		23.3	60	223	4.89	
28	50	124	4.44		35	40	225	5.38	TRV90/TRVD90

输出转速 Output speed r/min	传动比 Transmission ratio i	输出转矩 Output torque N.m	输出轴径向力 Output radial force kN	机型代号 Model code	输出转速 Output speed r/min	传动比 Transmission ratio i	输出转矩 Output torque N.m	输出轴径向力 Output radial force kN	机型代号 Model code
28	50	270	5.8	TRV110/TRVD110	56	25	315	5.81	TRV130/TRVD130
23.3	60	311	6.16		46.7	30	356	6.18	
17.5	80	328	6.17		35	40	468	6.8	
28	50	281	7.32		28	50	563	7.32	
23.3	60	324	7.78		23.3	60	648	7.78	
17.5	80	402	8.57		35	40	468	8.89	
14	100	473	9.23		28	50	563	9.58	
17.5	80	408	11.21	TRV130/TRVD130	23.3	60	648	10.18	TRV150/TRVD150
14	100	480	12.07		17.5	80	816	11.21	
15kW					14	100	869	10.62	
186.7	7.5	67	2.35	TRV63/TRVD63	28	50	570	13.1	
140	10	89	2.59		23.3	60	657	13.92	
93.3	15	127	2.97		17.5	80	816	15.32	
70	20	132	3.27		14	100	960	16.5	
140	10	90	3.06	TRV75/TRVD75	0.3kW				TRV75/TRVD75
93.3	15	130	3.5		186.7	7.5	136	2.78	
70	20	168	3.86		140	10	180	3.06	
56	25	205	4.16		93.3	15	208	3.5	
46.7	30	233	4.42		186.7	7.5	138	3.08	TRV90/TRVD90
70	20	171	4.27	TRV90/TRVD90	140	10	182	3.39	
56	25	210	4.6		93.3	15	264	3.88	
46.7	30	239	4.89		70	20	344	4.27	
35	40	307	5.38		56	25	378	4.6	
28	50	331	5.79		46.7	30	383	4.89	
23.3	60	339	6.16		93.3	15	264	4.9	TRV110/TRVD110
35	40	319	6.8	TRV110/TRVD110	70	20	348	5.39	
28	50	384	7.32		56	25	430	5.8	
23.3	60	442	7.78		46.7	30	485	6.18	
17.5	80	493	8.57		35	40	638	6.8	
17.5	80	556	11.21	TRV130/TRVD130	28	50	690	7.32	
14	100	655	12.07		56	25	429	7.6	TRV130/TRVD130
2.2kW					46.7	30	491	8.08	
186.7	7.5	100	2.78	TRV75/TRVD75	35	40	638	8.89	
140	10	132	3.06		28	50	767	9.58	
93.3	15	191	3.5		23.3	60	884	10.18	
70	20	240	3.38		17.5	80	890	11.21	
46.7	30	269	3.89		28	50	777	13.1	TRV150/TRVD150
186.7	7.5	101	3.08	TRV90/TRVD90	23.3	60	896	13.92	
140	10	134	3.39		17.5	80	1113	15.32	
93.3	15	194	3.88		14	100	1048	16.5	
70	20	252	4.27		4kW				TRV75/TRVD75
56	25	308	4.6		186.7	7.5	182	2.44	
46.7	30	351	4.89		186.7	7.5	184	3.08	TRV90/TRVD90
35	40	433	4.9		140	10	243	3.39	
28	50	393	5.28		93.3	15	352	3.88	
70	20	255	5.39	TRV110/TRVD110	70	20	366	4.27	

输出转速 Output speed r/min	传动比 Transmission ratio i	输出转矩 Output torque N.m	输出轴径向力 Output radial force kN	机型代号 Model code	输出转速 Output speed r/min	传动比 Transmission ratio i	输出转矩 Output torque N.m	输出轴径向力 Output radial force kN	机型代号 Model code
140	10	242	4.28	TRV110/TRVD110	7.5kW				
93.3	15	352	4.9		186.7	7.5	345	3.89	TRV110/TRVD110
70	20	464	5.39		140	10	455	4.28	
56	25	573	5.81		93.3	15	660	4.9	
46.7	30	647	6.18						
					186.7	7.5	349	5.09	TRV130/TRVD130
56	25	573	7.6	TRV130/TRVD130	140	10	455	5.6	
46.7	30	655	8.08		93.3	15	668	6.41	
35	40	851	8.89		70	20	880	7.06	
28	50	1023	9.58		56	25	966	7.6	
23.3	60	943	10.18		46.7	30	982	8.08	
					35	40	1117	8.89	
28	50	1036	13.1	TRV150/TRVD150	70	20	880	9.65	TRV150/TRVD150
23.3	60	1195	13.92		56	25	1074	10.4	
17.5	80	1187	15.32		46.7	30	1274	11.05	
					35	40	1436	12.16	
5.5kW									
186.7	7.5	253	3.89	TRV110/TRVD110	11kW				
140	10	334	4.28		186.7	7.5	512	6.96	TRV150/TRVD150
93.3	15	484	4.9		140	10	675	7.66	
70	20	638	5.39		93.3	15	990	8.77	
56	25	711	5.15		70	20	1291	9.65	
					56	25	1260	10.4	
140	10	333	5.6	TRV130/TRVD130	15kW				
93.3	15	490	6.41		186.7	7.5	698	6.96	TRV150/TRVD150
70	20	645	7.06		140	10	921	7.66	
56	25	788	7.6		93.3	15	1215	8.77	
46.7	30	900	8.08		70	20	1232	9.65	
35	40	1053	8.89						
28	50	1103	8.51						
70	20	645	9.65	TRV150/TRVD150					
56	25	788	10.4						
46.7	30	934	11.05						
35	40	1171	12.16						
28	50	1426	13.1						
23.3	60	1314	13.92						

5.2双级减速机（轴伸输入，输入转速1400r/min）/（配4极电机）

5.1Double step reducer(shaft extend input,input speed is 1400r/min)/(matched with 4 poles motor)

输出转速 Output speed r/min	总传动比 general transmission ratio i	高速传动比 Hight speed transmission ratio i ₁	低速传动比 Low speed transmission ratio i ₂	输出转矩 Output torque N.m	组合机型 规格 Combination model size	输出转速 Output speed r/min	总传动比 general transmission ratio i	高速传动比 Hight speed transmission ratio i ₁	低速传动比 Low speed transmission ratio i ₂	输出转矩 Output torque N.m	组合机型 规格 Combination model size
0.01kW						0.8	1800	60	30	42	30/40
0.28	5000	50	100	29	30/40	0.58	2400	60	40	33	30/40
0.35	4000	50	80	33	30/40	0.4	3200	80	40	39	30/40
0.47	3200	80	40	41	30/40	0.35	4000	80	50	18	30/40
0.58	2400	60	40	41	30/40	0.28	500	50	100	21	30/40
0.02kW						1.6	900	30	30	91	30/50
0.78	1800	60	30	45	30/40	1.2	1200	40	30	76	30/50
0.93	1500	50	30	45	30/40	0.93	1500	50	30	90	30/50
1.2	1200	30	40	41	30/40	0.78	1800	60	30	101	30/50
0.28	4800	60	80	65	40/50	0.6	2400	60	40	86	30/50
0.35	4000	50	80	65	40/50	0.5	3000	60	50	79	30/50
0.47	3000	60	50	73	40/50	0.35	4000	50	80	56	30/50
0.28	5000	50	100	85	40/63	0.29	4800	60	80	60	30/50
0.03kW						0.9	1500	30	50	132	30/63
1.6	900	30	30	45	30/40	0.78	1800	30	60	131	30/63
0.58	2400	60	40	76	40/50	0.58	2400	40	60	143	30/63
0.35	4000	50	80	122	40/63	0.47	3000	50	60	145	30/63
0.28	5000	50	100	135	50/75	0.35	4000	50	80	119	30/63
0.04kW						0.28	5000	50	100	93	30/63
1.9	750	25	30	45	30/40	1.6	900	30	30	84	40/50
2.3	600	20	30	45	30/40	0.93	1500	30	50	135	40/63
2.8	500	20	25	47	30/40	0.6	2400	40	60	214	40/75
0.78	1800	60	30	84	40/50	0.47	3000	50	60	196	40/75
0.93	1500	50	30	84	40/50	0.35	4000	50	80	161	40/75
1.2	1200	30	40	76	40/50	0.28	5000	50	100	136	40/75
0.47	3000	60	50	135	40/63	0.5	3000	50	60	263	40/90
0.35	4000	50	80	190	50/75	0.35	4000	50	80	237	40/90
0.05kW						0.28	5000	50	100	280	40/90
0.58	2400	60	40	145	40/63	0.28	5000	50	100	410	50/90
0.78	1800	30	60	130	40/63	0.28	5000	50	100	410	63/90
0.47	3000	60	50	210	50/75	0.07kW					
0.06kW						1.9	750	25	30	84	40/50
4.7	300	10	30	38	25/40	0.58	2400	30	40	220	50/75
3.5	400	10	40	41	25/40	0.08kW					
2.8	500	20	25	37	25/40	4.7	300	10	30	45	30/40
2.3	600	20	30	39	25/40	2.3	600	20	30	84	40/50
1.9	750	30	25	37	25/40	1.2	1200	30	40	145	40/63
1.6	900	30	30	46	25/40	0.35	4000	50	80	460	50/90
1.2	1200	40	30	44	25/40	0.47	3000	60	50	560	50/90
0.9	1500	50	30	38	25/40	0.35	4000	50	80	460	63/90
0.8	1800	60	30	42	25/40	0.47	3000	60	50	560	63/90
0.6	2400	60	40	34	25/40	0.09kW					
0.5	3000	60	50	42	25/40	4.7	300	10	30	19	25/30
0.4	4000	50	80	19	25/40	3.5	400	10	40	20	25/30
0.3	5000	50	100	23	25/40	2.8	500	20	25	22	25/30
4.7	300	10	30	37	30/40	2.3	600	20	30	17	25/30
3.5	400	10	40	41	30/40	1.9	750	30	25	19	25/30
2.8	500	10	50	37	30/40	1.6	900	30	30	23	25/30
2.3	600	20	30	47	30/40	1.2	1200	40	30	13	25/30
1.9	750	25	30	47	30/40	0.9	1500	50	30	16	25/30
1.6	900	30	30	45	30/40	0.78	1800	60	30	19	25/30
1.2	1200	40	30	43	30/40	0.58	2400	60	40	22	25/30
0.9	1500	50	30	50	30/40	0.47	3000	60	50	26	25/30

输出转速 Output speed r/min	总传动比 general transmission ratio i	高速传动比 Hight speed transmission ratio i ₁	低速传动比 Low speed transmission ratio i ₂	输出转矩 Output torque N.m	组合机型 规格 Combination model size
4.7	300	10	30	45	30/40
3.5	400	10	40	69	30/50
2.8	500	20	25	79	30/50
2.3	600	20	30	93	30/50
1.9	750	25	30	96	30/50
1.6	900	30	30	96	30/50
1.6	900	30	30	130	30/63
1.2	1200	30	40	153	30/63
0.93	1500	30	50	138	30/63
2.8	500	10	50	73	40/50
1.6	900	15	60	130	40/63
0.9	1500	30	50	233	40/75
0.78	1800	30	60	262	40/75
0.58	2400	40	60	225	40/75
0.5	3000	50	60	356	40/90
0.35	4000	50	80	284	40/90
0.78	1800	60	30	230	50/75
0.28	5000	50	100	460	63/110
0.1kW					
3.5	400	10	40	400	40/50
0.93	1500	50	30	230	50/75
0.11kW					
1.9	750	15	50	135	40/63
1.2	1200	30	40	220	50/75
0.58	2400	60	40	610	50/90
0.78	1800	60	30	505	50/90
0.58	2400	60	40	610	63/90
0.78	1800	60	30	505	63/90
0.28	5000	50	100	740	75/130
0.12kW					
4.7	300	10	30	77	30/50
3.5	400	10	40	83	30/50
2.8	500	20	25	74	30/50
2.8	500	20	25	111	30/63
2.3	600	20	30	135	30/63
1.9	750	25	30	156	30/63
1.6	900	30	30	211	40/75
1.2	1200	30	40	233	40/75
0.8	1800	30	60	319	40/90
0.58	2400	40	60	406	40/90
0.5	3000	50	60	574	50/110
0.35	4000	50	80	509	50/110
0.28	5000	50	100	482	50/110
0.35	4000	50	80	490	63/110
0.13kW					
2.3	600	15	40	145	40/63
0.14kW					
1.6	900	30	30	230	50/75
0.93	1500	50	30	560	50/90
0.93	1500	50	30	560	63/90
0.47	3000	60	50	600	63/110
0.15kW					
4.7	300	10	30	84	40/50
2.8	500	10	50	135	40/63
0.35	4000	50	80	840	75/130

输出转速 Output speed r/min	总传动比 general transmission ratio i	高速传动比 Hight speed transmission ratio i ₁	低速传动比 Low speed transmission ratio i ₂	输出转矩 Output torque N.m	组合机型 规格 Combination model size
0.16kW					
1.9	750	25	30	230	50/75
0.17kW					
1.2	1200	30	40	610	50/90
1.2	1200	30	40	610	63/90
0.58	2400	60	40	610	63/110
0.18kW					
3.5	400	10	40	143	30/63
3.5	400	10	40	145	40/63
2.8	500	20	25	133	30/63
2.3	600	20	30	235	40/75
1.9	750	25	30	254	40/75
1.6	900	30	30	253	40/75
1.9	750	25	30	230	50/75
1.2	1200	30	40	408	40/90
0.93	1500	30	50	382	40/90
0.8	1800	30	60	559	50/110
0.58	2400	40	60	723	50/110
0.19kW					
3.5	400	10	40	145	40/63
2.3	600	20	30	230	50/75
1.6	900	30	30	505	50/90
1.6	900	30	30	505	63/90
0.2kW					
0.47	3000	60	50	980	75/130
0.21kW					
2.8	500	10	50	210	50/75
0.23kW					
1.9	750	25	30	560	50/90
1.9	750	25	30	560	63/90
0.78	1800	60	30	630	63/110
0.24kW					
4.7	300	10	30	160	40/63
0.25kW					
7	400	10	40	103	30/63
5.6	500	20	25	120	30/63
3.5	400	10	40	218	40/75
2.8	500	20	25	99	40/75
2.3	600	20	30	332	40/90
1.9	750	25	30	349	40/90
1.6	900	30	30	346	40/90
1.2	1200	30	40	612	50/110
0.93	1500	30	50	691	50/110
0.78	1800	30	60	776	50/110
0.6	2400	40	60	1055	63/130
0.47	3000	50	60	1006	63/130
0.35	4000	50	80	797	63/130
0.28	5000	50	1000	789	63/130
0.8	1800	30	60	779	63/150
0.6	2400	40	60	939	63/150
0.5	3000	50	60	1113	63/150
0.4	4000	50	80	1185	63/150
0.3	5000	50	100	1024	63/150
0.58	2400	60	40	1050	75/130
0.26kW					
0.93	1500	50	30	630	63/110

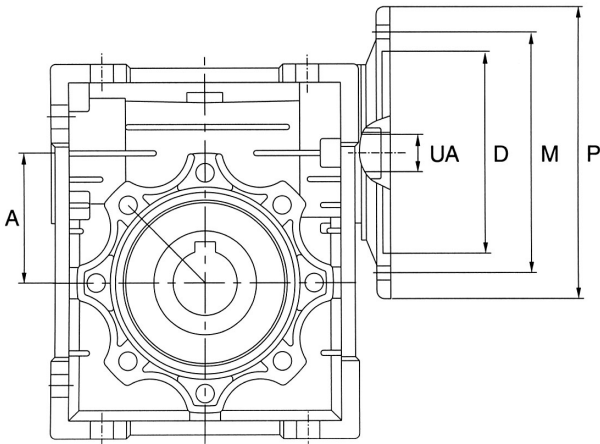
输出转速 Output speed r/min	总传动比 general transmission ratio i	高速传动比 Hight speed transmission ratio i ₁	低速传动比 Low speed transmission ratio i ₂	输出转矩 Output torque N.m	组合机型 规格 Combination model size
0.27kW					
3.5	400	10	40	220	50/75
1.2	1200	30	40	610	63/110
0.3kW					
2.3	600	20	30	610	50/90
2.3	600	20	30	610	63/90
0.34kW					
2.8	500	10	50	560	50/90
2.8	500	10	50	560	63/90
0.35kW					
0.78	1800	60	30	1040	75/130
0.36kW					
4.7	300	10	30	230	50/75
0.37kW					
4.7	300	10	30	263	40/75
3.5	400	10	40	226	40/75
4.7	300	10	30	261	40/90
3.5	400	10	40	339	40/90
2.8	500	20	25	357	40/90
2.3	600	20	30	393	40/90
1.9	750	25	30	617	50/110
1.6	900	30	30	701	50/110
1.2	1200	30	40	725	50/110
0.9	1500	30	50	1088	63/130
0.78	1800	30	60	1103	63/130
0.78	1800	30	60	1153	63/150
0.6	2400	40	60	1391	63/150
0.5	3000	50	60	1482	63/150
0.38kW					
1.6	900	30	30	630	63/110
0.39kW					
0.93	1500	50	30	1040	75/130
0.43kW					
3.5	400	10	40	610	50/90
3.5	400	10	40	610	63/90
1.9	750	25	30	630	63/110
1.2	1200	30	40	1050	75/130
0.48kW					
2.3	600	15	40	610	63/110
0.55kW					
4.7	300	10	30	415	50/110
3.5	400	10	40	536	50/110
2.8	500	20	25	639	50/110
2.3	600	20	30	767	50/110
1.9	750	25	30	825	50/110
2.8	500	20	25	647	63/130
1.9	750	25	30	956	63/130
1.2	1200	30	40	1108	63/130
0.8	1800	30	60	1371	63/130
0.6	2400	40	60	1654	63/130
0.56kW					
4.7	300	10	30	610	50/90
4.7	300	10	30	610	63/90
2.8	500	10	50	600	63/110

输出转速 Output speed r/min	总传动比 general transmission ratio i	高速传动比 Hight speed transmission ratio i ₁	低速传动比 Low speed transmission ratio i ₂	输出转矩 Output torque N.m	组合机型 规格 Combination model size
0.58kW					
1.6	900	30	30	1040	75/130
0.66kW					
1.9	750	25	30	1040	75/130
0.69kW					
3.5	400	10	40	610	63/110
7.5kW					
4.7	300	10	30	566	50/110
3.5	400	10	40	731	50/110
2.8	500	20	25	882	63/130
2.3	600	20	30	1060	63/130
1.9	750	25	30	1172	63/130
1.6	900	30	30	1187	63/130
2.8	500	20	25	839	63/150
2.3	600	20	30	993	63/150
1.9	750	25	30	1158	63/150
1.6	900	30	30	1295	63/150
1.2	1200	30	40	1742	63/150
0.76kW					
2.3	600	15	40	1050	75/130
0.86kW					
2.8	500	10	50	980	75/130
0.95kW					
4.7	300	10	30	630	63/110
1.09kW					
3.5	400	10	40	1050	75/130
1.1kW					
4.7	300	10	30	852	63/130
3.5	400	10	40	1086	63/130
2.8	500	20	25	1035	63/130
4.7	300	10	30	886	63/150
3.5	400	10	40	1052	63/150
2.8	500	20	25	1230	63/150
2.3	600	20	30	1457	63/150
1.9	750	25	30	1530	63/150
1.48kW					
4.7	300	10	30	1040	75/130
1.5kW					
4.7	300	10	30	1162	63/130
3.5	400	10	40	1036	63/130
4.7	300	10	30	1209	63/150
3.5	400	10	40	1435	63/150
2.8	500	20	25	1510	63/150
2.3	600	20	30	1788	63/150

6.安装尺寸
6.Installation dimensions

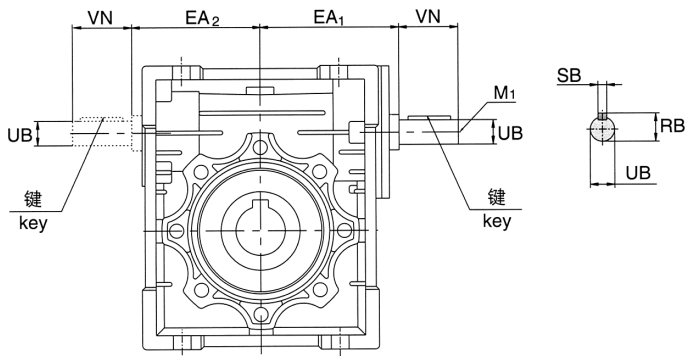
6.1单级蜗杆减速机 Single Step Worm Gear Reducer

电机输入法兰
Motor Input Flange



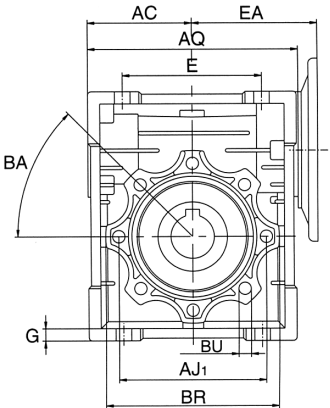
TRV

输入轴
Input Shaft



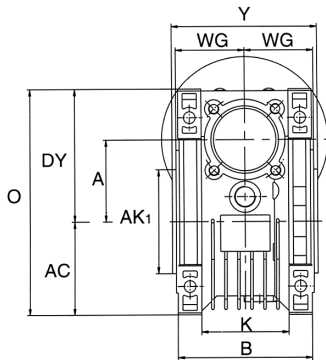
TRVD

电机输入法兰
Motor Input Flange

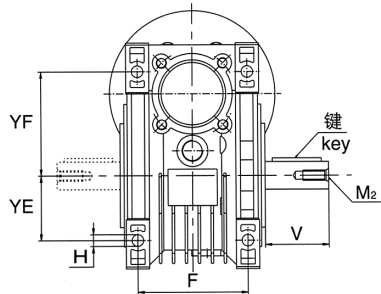


中心距 Center Distance A	电机法兰 Motor Flange				输入轴直径 UA Hole Diameter of input shaft										
	法兰规格 Flange Size	D	M	P	传动比 i Transmission ratio										
					7.5	10	15	20	25	30	40	50	60	80	100
25	56B14	50	65	80	9	9	9	9	-	9	9	9	9	-	-
30	63B5	95	115	140	11	11	11	11	11	11	11	11	-	-	-
	56B5	80	100	120	-	-	-	-	-	-	-	-	9	9	-
40	71B5	110	130	160	14	14	14	14	14	14	14	14	-	-	-
	63B5	95	115	140	-	-	-	-	-	-	-	-	11	11	-
	56B5	80	100	120	-	-	-	-	-	-	-	-	-	-	9
50	80B5	130	165	200	19	19	19	19	19	19	19	-	-	-	-
	71B5	110	130	160	-	-	-	-	-	-	-	14	14	14	-
	63B5	95	115	140	-	-	-	-	-	-	-	-	-	-	11
63	90B5	130	165	200	24	24	24	24	24	24	24	-	-	-	-
	80B5	130	165	200	-	-	-	-	-	-	-	19	19	-	-
	71B5	110	130	160	-	-	-	-	-	-	-	-	-	14	14
75	100/112B5	180	215	250	28	28	28	28	-	28	-	-	-	-	-
	90B5	130	165	200	-	-	-	-	24	-	24	24	24	-	-
	80B5	130	165	200	-	-	-	-	-	-	-	-	-	19	19
90	100/112B5	180	215	250	28	28	28	28	28	28	28	28	-	-	-
	90B5	130	165	200	-	-	-	-	-	-	-	-	24	24	-
	80B5	130	165	200	-	-	-	-	-	-	-	-	-	-	19
110	132B5	230	265	300	38	38	38	38	38	-	-	-	-	-	-
	100/112B5	180	215	250	-	-	-	-	-	28	28	28	28	-	-
	90B5	130	165	200	-	-	-	-	-	-	-	-	-	24	24
130	132B5	230	265	300	38	38	38	38	38	38	38	38	-	-	-
	100/112B5	180	215	250	-	-	-	-	-	-	-	-	28	28	28
150	160B5	250	300	350	42	42	42	42	42	-	-	-	-	-	-
	132B5	230	265	300	-	-	-	-	-	38	38	38	38	-	-
	100/112B5	180	215	250	-	-	-	-	-	-	-	-	-	28	28

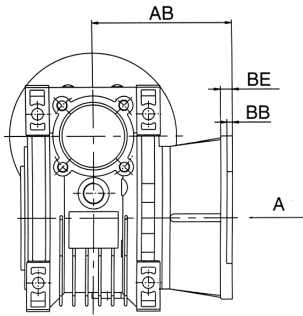
空心轴安装
Shaft Mount



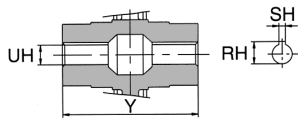
底脚安装
Foot Mount



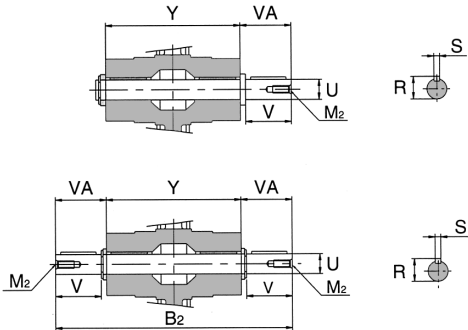
法兰安装
Flange Mount



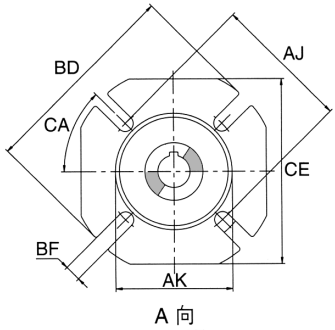
空心输出轴
Hollow Output Shaft



单/双出轴
Single or Double Output Shaft

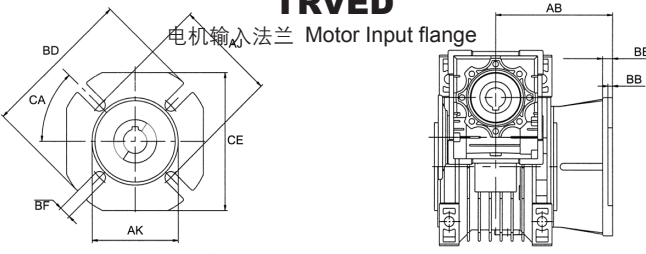


输出法兰
Output Flange

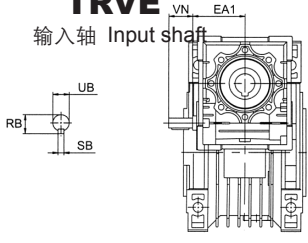


	25	30	40	50	63	75	90	110	130	150
A	25	30	40	50	63	75	90	110	130	150
AB	45	54.5	67	90	82	102	111	131	140	155
AC	35	40	50	60	72	86	103	127.5	147.5	170
AJ	55	68	87	90	150	165	175	230	255	255
AJ ₁	55	65	75	85	95	115	130	165	215	215
AK	40	50	60	70	115	130	152	170	180	180
AK ₁	45	55	60	70	80	95	110	130	180	180
AQ	70	80	100	120	144	172	206	252.5	292.5	340
B	42	56	71	85	103	112	130	144	155	185
B ₂	101	128	164	199	219	247	308	324	340	374
BA	10°	0°	45°	45°	45°	45°	45°	45°	45°	45°
BB	4	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	6.5	9	11	11	14	14	ø14	ø16	ø16
BR	65	75	87	100	110	140	160	200	250	250
BU	ø6.5(n3)	M6x11(n.4)	M6x8(n.4)	M8x10(n.4)	M8x14(n.8)	M8x14(n.8)	M10x18(n.8)	M10x18(n.8)	M12x21(n.8)	M12x21(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
DY	48	57	71	84	102	119	135	167.5	187.5	230
E	45	54	70	80	100	120	140	170	200	240
EA	45	63	71	80	95	112.5	130	160	180	210
EA1	-	50	61	74	90	105	125	142	162	195
EA2	-	45	53	64	75	90	108	135	155	175
F	34	44	60	70	85	90	100	115	120	145
G	5	5.5	6.5	7	8	10	11	15	15	18
H	6	6.5	7	8.5	8.5	11	13	14	16	18
K	22	32	43	49	67	72	74	-	-	-
M1	-	-	-	M6	M6	M8	M8	M10	M10	M12
M2	-	M6	M6	M10	M10	M10	M12	M16	M16	M16
O	83	97	121	144	174	205	238	295	335	400
R	12.5	16	20.5	28	28	31	38	45	48.5	53.5
RB	-	10.2	12.5	16	21.5	27	27	31	33	38
RH	12.8	16.3	20.8	28.3	28.3	31.3	38.3	45.3	48.8	53.8
S	4	5	6	8	8	8	10	12	4	14
SB	-	3	4	5	6	8	8	8	8	10
SH	4	5	6	8	8	8	10	12	14	14
U	11	14	18	25	25	28	35	42	45	50
UB	-	9	11	14	19	24	24	28	30	35
UH	11	14	18	25	25	28	35	42	45	50
V	23	30	40	50	50	60	80	80	80	82
VA	25.5	32.5	43	53.5	53.5	63.5	84.5	84.5	85	87
VN	-	20	23	30	40	50	50	60	80	80
WG	22.5	29	36.5	43.5	53	57	67	74	81	96
Y	50	63	78	92	112	120	140	155	170	200
YE	22	27	35	40	50	60	70	85	100	120
YF	35.5	44	55	64	80	93	102	125	140	180
输入轴平键 Input shaft key										
规格	-	3x3	4x4	5x5	6x6	8x7	8x7	8x7	8x7	10x8
长度	-	15	20	25	35	45	45	55	70	70
输出轴平键 Output shaft key										
规格	4x4	5x5	6x6	8x7	8x7	8x7	10x8	12x8	14x9	14x9
长度	20	25	35	45	45	55	70	70	70	75

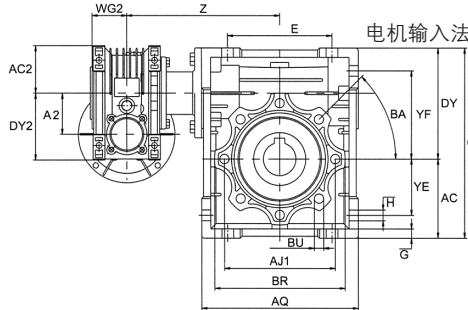
6.2双级蜗杆减速机 Double Steps Worm Gear Reducer



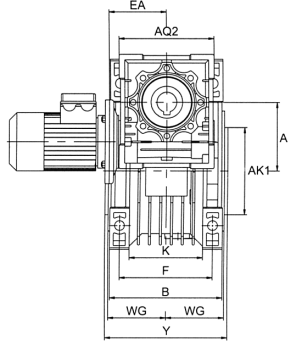
TRVED
电机输入法兰 Motor Input flange



TRVE
输入轴 Input shaft



TRVED
电机输入法兰、带电机 Motor Input flange/with motor

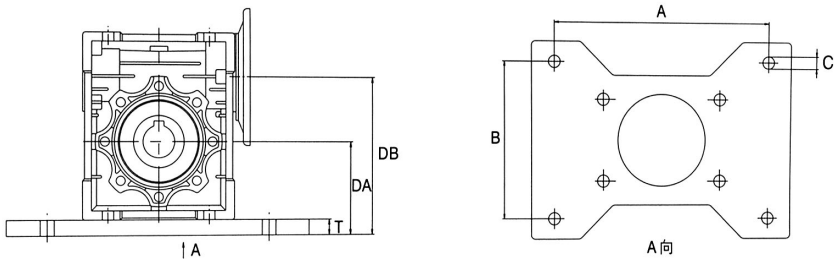


	25/30	25/40	30/40	30/50	40/50	30/63	40/63	40/75	50/75	40/90	50/90	63/90	50/110	63/110	63/130	75/130	63/150
A	30	40	40	50	50	63	63	70	75	90	90	90	110	110	130	130	150
A2	25	25	30	30	40	30	40	40	50	40	50	63	50	63	63	75	63
AB	54.5	67	37	90	90	82	82	102	102	111	111	111	131	131	140	140	155
AC	40	50	50	60	60	72	72	86	86	103	103	103	127.5	127.5	147.5	147.5	170
AC2	35	35	40	40	50	40	50	50	60	50	60	72	60	72	72	86	72
AJ	68	87	87	90	90	150	150	165	165	175	175	175	230	230	255	255	255
AJ1	65	75	75	85	85	95	95	115	115	130	130	130	165	165	215	215	215
AK	50	60	60	70	70	115	115	130	130	152	152	152	170	170	180	180	180
AK1	55	60	60	70	70	80	80	95	95	110	110	110	130	130	180	180	180
AQ	80	100	100	120	120	144	144	172	172	206	206	206	252.5	252.5	292.5	292.5	340
AQ2	70	70	80	80	100	80	100	100	120	100	120	144	120	144	144	172	144
B	56	71	71	85	85	103	103	112	112	130	130	130	144	144	155	155	185
BA	0°	45°	45°	45°	45°	45°	45°	45°	45°	45°	45°	45°	45°	45°	45°	45°	45°
BB	4	4	4	4	5	6	6	6	6	6	6	6	6	6	6	6	7

	25/30	25/40	30/40	30/50	40/50	30/63	40/63	40/75	50/75	40/90	50/90	63/90	50/110	63/110	63/130	75/130	63/150
BD	80	110	110	125	125	180	180	200	200	210	210	210	280	280	320	320	320
BE	6	6	7	9	9	10	10	13	13	13	13	13	15	15	15	15	15
BF	4-6.5	4-9	4-9	4-11	4-11	4-11	4-11	4-14	4-14	4-14	4-14	4-14	8-14	8-14	8-16	8-16	8-16
BR	75	87	87	100	100	110	110	140	140	160	160	160	200	200	250	250	250
BU	M6x11(n.4)	M6x8(n.4)	M6x8(n.4)	M8x10(n.4)	M8x10(n.4)	M8x14(n.8)	M8x14(n.8)	M8x14(n.8)	M8x14(n.8)	M10x18(n.8)	M10x18(n.8)	M10x18(n.8)	M10x18(n.8)	M10x18(n.8)	M12x21(n.8)	M12x21(n.8)	M12x21(n.8)
CA	45°	45°	45°	45°	45°	45°	45°	45°	45°	45°	45°	45°	45°	45°	22.5°	22.5°	22.5°
CE	70	95	95	110	110	142	142	170	170	200	200	200	260	260	290	290	290
DY	57	71	71	84	84	102	102	119	119	135	135	135	167.5	167.5	187.5	187.5	230
DY2	48	48	57	57	71	57	71	71	84	71	84	102	84	102	102	119	102
E	54	70	70	80	80	100	100	120	120	140	140	140	170	170	200	200	240
EA	45	63	63	63	71	63	71	71	80	71	80	95	80	95	95	112.5	95
EA1			50	50	61	50	61	61	74	61	74	90	74	90	90	105	90
F	44	60	60	70	70	85	85	90	90	100	100	100	115	115	120	120	145
G	5.5	6.5	6.5	7	7	8	8	10	10	11	11	11	15	15	16	16	18
H	6.5	7	7	8.5	8.5	8.5	8.5	11	11	13	13	13	14	14	16	16	18
K	32	43	43	49	49	67	67	72	72	74	74	74					
O	97	121	121	144	144	174	174	205	205	238	238	238	295	295	335	335	400
RB			10.2	10.2	12.5	10.2	12.5	12.5	16	12.5	16	21.5	16	21.5	21.5	27	21.5
RH	16.3	20.8	20.8	28.3	28.3	28.3	28.3	31.5	31.3	38.3	38.3	38.3	45.3	45.3	48.8	48.8	53.8
SB			3	3	4	3	4	4	5	4	5	6	5	6	6	8	6
SH	5	6	6	8	8	8	8	8	8	10	10	10	12	12	14	14	14
UB			9	9	11	9	11	11	14	11	14	19	14	19	19	24	19
UH	14	18	18	25	25	25	25	28	28	35	35	35	42	42	45	45	50
VN			20	20	23	20	23	23	30	23	30	40	30	40	40	50	40
WG	29	36.5	36.5	43.5	43.5	53	53	57	57	67	67	67	74	74	81	81	96
WG2	22.5	22.5	29	29	36.5	29	36.5	36.5	43.5	36.5	43.5	53	43.5	53	53	57	53
Y	63	78	78	92	92	112	112	120	120	140	140	140	155	155	170	170	200
YE	27	35	35	40	40	50	50	60	60	70	70	70	85	85	100	100	120
YF	44	55	55	64	64	80	80	93	93	102	102	102	125	125	140	140	180
Z	100	115	122	132	139	145	151	167.5	174	184.5	197	206.5	226	226	245	250	275

6.3附件 Accessories

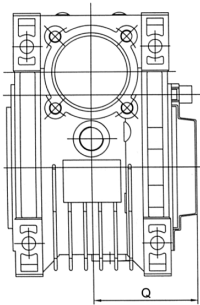
A.单出轴（外形及联接尺寸见6.1）Single output shaft(Outline and connection Measures see the table 6.1)
B.双出轴（外形及联接尺寸见6.1）Double output shaft(Outline and connection Measures see the table 6.1)
c.基座 Baseplate



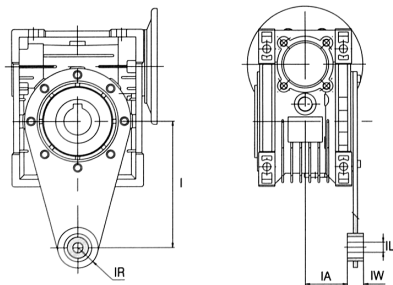
规格Size	30	40-A	40-B	50	63-A	63-B	75	90
尺寸Neasure								
A	111	111	146	162	179	203	214	241
B	84	84	114	119	124	133	149	156
C	8.5	8.5	10.5	12.5	12.5	12.5	12.5	12.5
DA	57	67	70	76	89	93	101.5	117.5
DB	87	107	110	126	152	156	176.5	207.5
T	17	17	20	16	17	21	15.5	14.5

D.防护罩 Protective cover

规格Size	30	40	50	63	75	90	110	130
尺寸Neasure								
Q		50	58	69	74	86	94	102



E转矩臂 Torque arm



规格Size	30	40	50	63	75	90	110	130
尺寸Neasure								
I	85	100	100	150	200	200	250	250
IA	24	31.5	38.5	49	47.5	57.5	62	69
IL	8	10	10	10	20	20	25	25
IR	15	18	18	18	30	30	35	35
IW	14	14	14	14	25	25	30	30

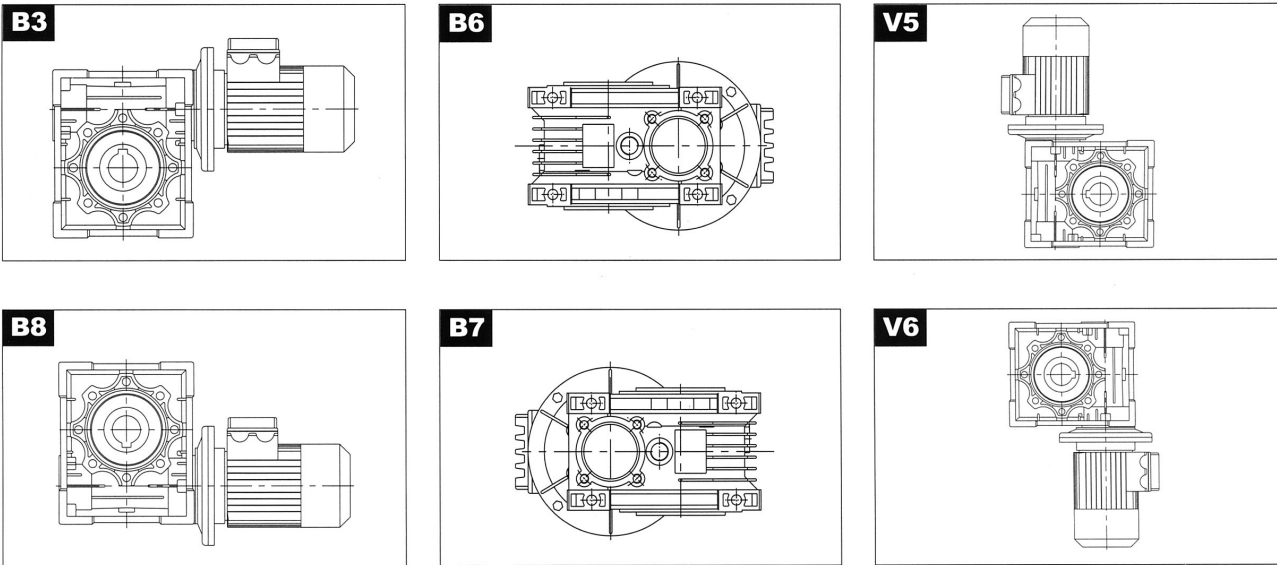
F.输出法兰（外形及联接尺寸见6.1）output flange(Outline and connection Measures see the table 6.1)

6.4尺寸公差 Dimension and Tolerance

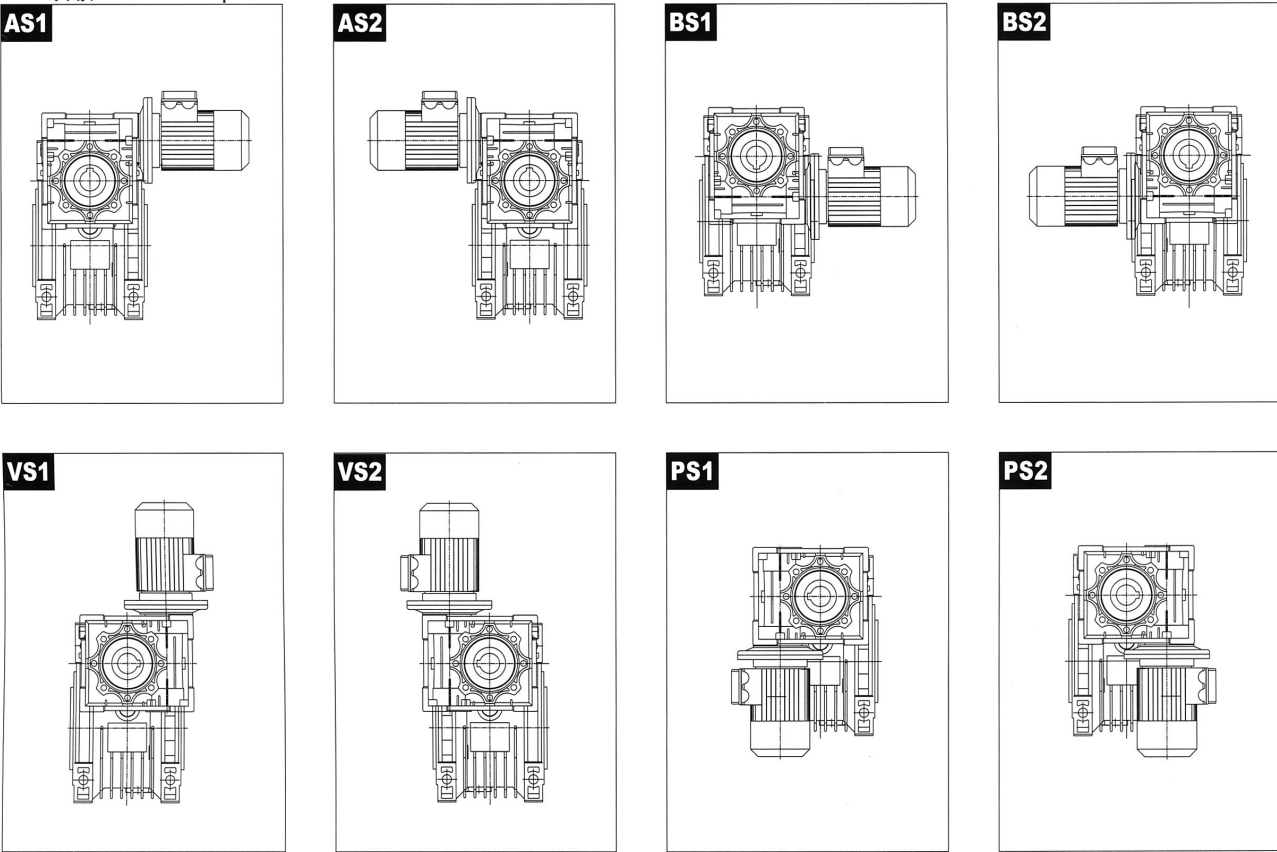
尺寸代号 Symbol	AK	AK1	D	U	UA	UB	UH
尺寸公差 Tolerance	H8	h8	H8	h6	E8	h6	H7

7.安装型式 7.Installation model

7.1单级 Single



8.2双级 Double step



8.使用说明

8.1安装注意事项

- 8.1.1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。
- 8.1.2原动机—减速机—工作机的各联接轴伸，安装后必须互相准确对准轴线。
- 8.1.3减速机输入端及输出端轴伸外径公差尺寸均按h6制作，与之相配的联轴器、皮带轮、链轮等传动件内孔须按合适的公差尺寸配制，避免装配过紧损坏轴承，装配过松影响正常动力传递。
- 8.1.4链轮、齿轮等传动件装上轴伸时，应尽量靠近轴承，以减少轴伸弯曲应力。
- 8.1.5减速机装配电机时，应在蜗杆头部内孔孔壁及键槽处涂抹黄油，避免装配过紧，防止轴孔日久生锈。
- 8.1.6使用各类电机直联型减速机时，若电机重量偏大，应设支撑装置。

8.2使用注意事项

- 8.2.1使用前应注意检查减速机型式结构、中心距规格、传动比、输入轴连接方式、输出轴结构、输入轴输出轴指向和回转方向等是否符合使用要求，蜗杆输入转数不宜超过1500r / min。
- 8.2.2开机时应逐步施加载荷，不能满载起动。
- 8.2.3规格25—90减速机仅设加油孔，箱体内已加好润滑油，用户无需再加油、换油、维护；规格110—150减速机设有加油孔及放油孔，箱体内未加润滑油，用户在使用前须参照下表所列品种及油量选加润滑油，首次运行100小时后，洗净内部，换注新油，以后每隔约5000小时换油一次。
- 8.2.4减速机允许最高油温为95℃，超过时应停机检查。

润滑油选用表 Lubrcation oil chosen table

减速机规格 Reducer size	25~90	110~150	
润滑油类型 Type of lubrication oil	合成润滑油 Complex lubrication oil	矿物润滑油 Mineral lubrication oil	
环境温度℃ Ambient temperature	-25~+50	-5~+40	-15~+25
ISO VG	ISO VG 320	ISO VG 460	ISO VG 220
AGIP	TELUM VST320	BLASIA 460	BLASIA 220
SHELL	TIVELA OIL SC 320	OMALA OIL 460	OMALA OIL 220
ESSO	S220	SPARTAN EP 460	SPARTAN EP 220
MOBIL	GLYGOYLE 30	MOBIL GEAR 634	MOBIL GEAR 630
CASTROL	ALPHASYN PG 320	ALPHA MAX 460	ALPHA MAX 220
BP	ENERGOL SG-XP320	EMERGOLGR-XP460	ENERGOLGR-XP220

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

安装型式 Installation model	规格 size	25	30	40	50	63	75	90	110	130	150
B3	0.03	0.05	0.1	0.2	0.4	0.7	1.2		3.6	6.7	11.8
B6 B7									3	4.2	7
B8									2.6	4.0	6.7
V5									3.6	5.4	9.6
V6									3	4.2	7

8.1 Notices of Installation

8.1.1 The base-plate must be plane and stoutness, and the base-bolts must be screwed down and shockproof.

8.1.2 The connecting shafts of prime mover, reducer and operation device must be coaxial after installation.

8.1.3 The diameter tolerance zone of input and output shaft is h6, the holes of fittings (such as couplings ,belt-pulley, sprocket wheel and so on) must properly mate the shaft, which prevents bearing from breakage because of over-tight mate or avoid effecting normal power transmission because of over-loose mate.

8.1.4 Drivers such as sprocket wheel and gear must be fitted close to bearings in order to reduce bending stress of hanging shaft.

8.1.5 While assembling motor to the reducer, it is necessary to add butters to the worm shaft input hole and keyway, so as to avoid tightly assembling and rusting when it is used for a long time.

8.1.6 Supporting unit is required when using various of reducer matched with motor directly and the weight of motor is a little bigger than common.

8.2 Notices of Usage

8.2.1 Before using, please check carefully whether the reducer model, distance size, ratio, input connecting method, output shaft structure, input and output shaft direction and revolving direction are right according to requirement. It is better for the input speed of worm shaft not more than 1500r/min.

8.2.2 The load should be added step by step when using the machine. Never running it with full load.

8.2.3 The reducer which model is among 25 - 90 has the oil hole only. It has been full of lubrication oil add hole and oil out hole. User doesn't need to think about oil adding, changing and service. The machine model of 110-150 has oil hole and oil out hole, but it doesn't have lubrication oil. So user should choose the type and amount of by the following table. After the first 100 hours running, clean the inter box and change new oil in it. Then change the oil once per 5000 hours.

8.2.4 The permitted temperature of the oil in reducer is 95. If up to this value, it must be stopped and checked.