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**YUQIU
MACHINE**

HANGZHOU YUQIU MACHINE CO.,LTD



WP Series Worm Gear Reducer

BRIEF INTRODUCTION

Hangzhou YUQIU Machinery Co. , Ltd. set worm gear, Gear Reducer R & D, production and sales in one, founded in 2000, is located in Qiantang District, Hangzhou, China, is a professional production of decelerating motor of large-scale industry and trade enterprises. Dedicated to the industry to provide professional, efficient and human-oriented overall transmission program.

The company's leading products include WP series worm gear reducers, RFKS four major series gear reducers, NMRV series worm gear reducers, KRV hyperbolic reducers, three-phase asynchronous motors, and SWL screw elevators. The company has a batch of advanced transmission machinery production equipment and precision testing equipment both domestically and internationally, and has established the Zhejiang Provincial High tech R&D Center to continuously improve and innovate based on market demand and customer feedback. With years of research and development experience and technological accumulation, our company is at the forefront of domestic technology, equipment, and product performance, entering the international advanced ranks. Our products are aimed at important fields such as food, chemical, mining, metallurgy, textiles, woodworking machinery, packaging, wind energy, electricity, and lifting.

The company has advanced production equipment and perfect production management system, modern production technology and strict quality control system to ensure that each reducer products are in line with relevant standards and customer requirements. At the same time the company is also committed to improve production efficiency and reduce costs, to provide customers with more competitive products and services.

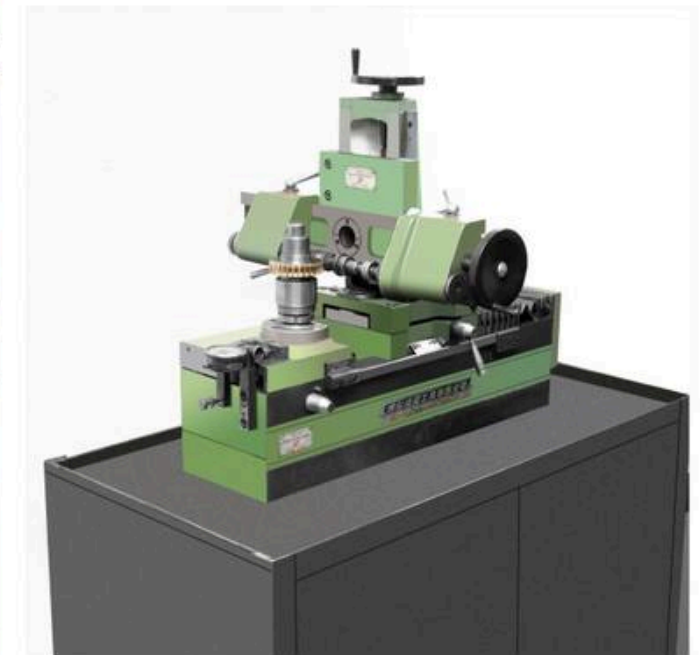
The company has established a sound sales network, with a professional sales team and technical services team, to provide customers with a full range of sales support and after-sales service. Always adhere to customer-centric, customer-oriented needs, to provide customers with quality services and solutions.

The company has been awarded the National high-tech Enterprises, Zhejiang manufacturing character certification, Zhejiang Province, Zhejiang province, specialized new small and medium-sized enterprises, small and medium-sized enterprises, such as science and technology. Our products have passed ISO9001 quality system, ISO14001 environmental management system, ISO45001 occupational health management system, 3C certification, CE certification and energy efficiency certification, at present, the products are widely sold all over the country and the developed countries in the world.



PRODUCTION & EQUIPMENT

YUQIU have advanced and perfect inspecting equipment to inspect the spare parts and whole machine precisely.



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PRODUCTS GUIDE

WPA



WPS



WPO



WPX



WPDA



WPDS



WPDO



WPDX



WPKA



WPKS



WPDKA



WPDKS



WPZ



WPDZ



WPKZ



WPDKZ



WPW



WPGA



WPWS



WPWO



WPWX



WPWT



WPWV



WPWD



WPWDA



WPWDS



WPWDX



WPWDO



WPWDT



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WPWK



WPWKA



WPWKS



WPWKO



WPWKT



WPWKV



WPWDK



WPWDKA



WPWDKS



WPWDKO

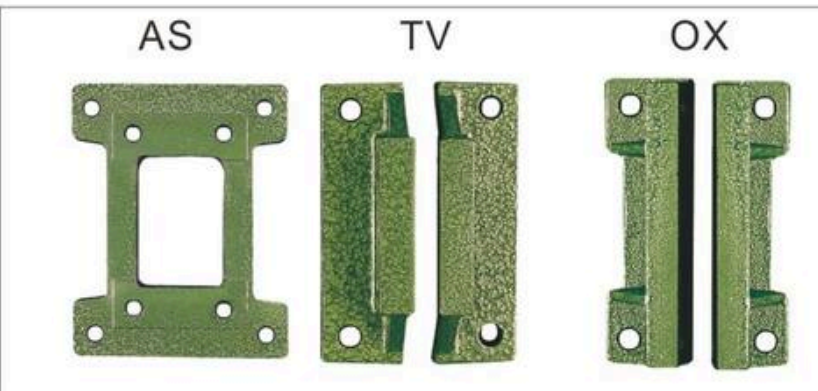


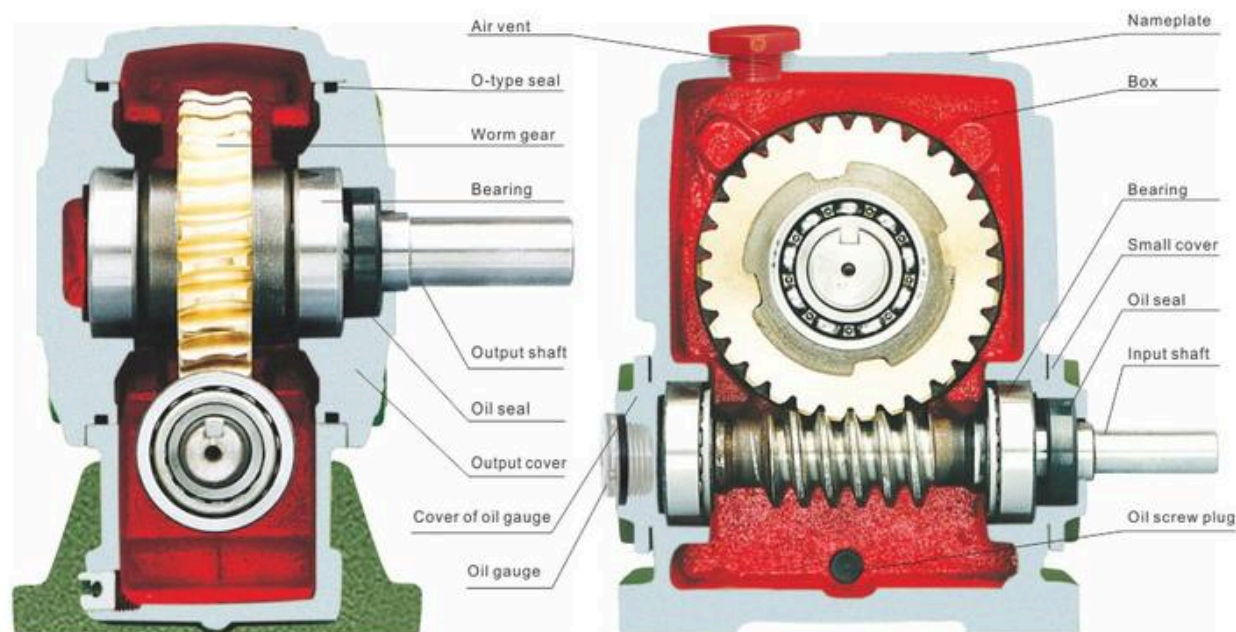
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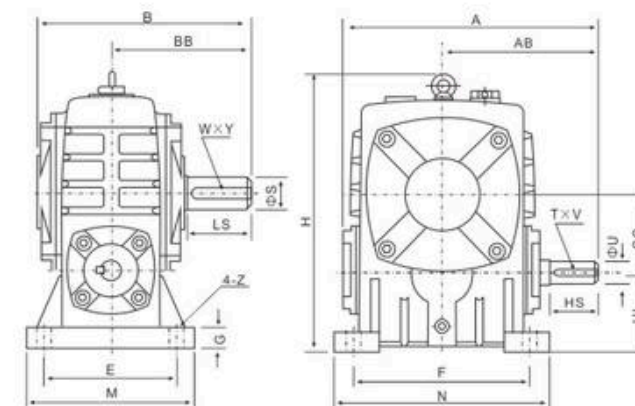
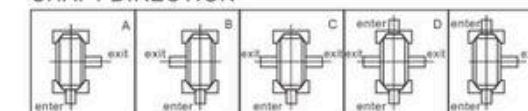
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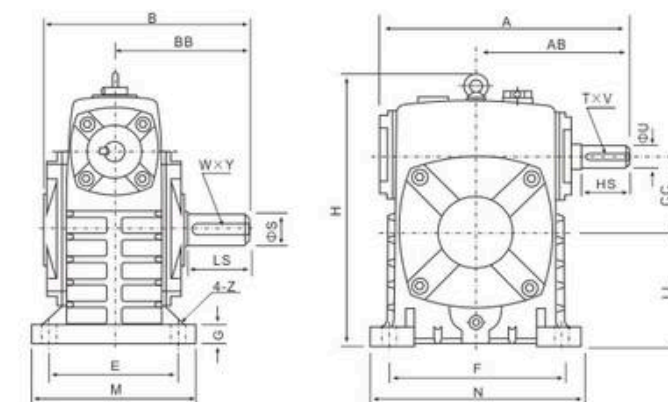
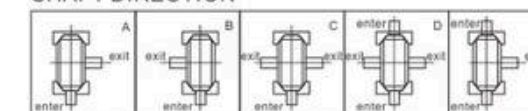


Product structural drawing

Model and structure table

W	P	W	E	D	K	A	50-80	600	B
1	2	3	4	5	6	7	8	9	10
Product name W-worm speed reduce	Box structure P-whole D-separate	Box model W-universal Non-code-basic	Unit sture E-double EE-multistage Non-code-basic	Connector of input shaft D-with motor frange Non-code-basic					
Structure of output shaft K-hollow Non-code-basic	Arrangement of input/output shaft A-input shaft is below S-input shaft is above O-output shaft is upward X-output shaft is downward T-input shaft is upward V-input shaft is downward Non-code-universal	Center distance 50-80	Ratio 600	Shaft direction B					

WPA

SHAFT DIRECTION


Size	Ratio	A	AB	B	BB	CC	H	HL	M	N	E	F	G	Z	HS	U	T×V	LS	S	W×Y	weight (kg)	Oil quantity (L)
40	5	143	87	114	74	40	138	40	90	100	70	80	13	10	25	12	4×2.5	28	14	5×3	4	0.13
50	10	175	107	150	97	50	173	50	120	140	95	110	15	12	30	12	4×2.5	40	17	5×3	7	0.17
60	15	198	122	168	112	60	204	60	130	150	105	120	20	12	40	15	5×3	50	22	6×3.5	10	0.22
70	20	231	140	194	131	70	236	70	150	190	115	150	20	15	40	18	6×3.5	60	28	8×4	15	0.60
80	25	261	160	214	142	80	268	80	170	220	135	180	20	15	50	22	6×3.5	65	32	10×5	20	0.85
100	30	322	190	254	169	100	329	100	190	270	155	220	25	15	50	25	8×4	75	38	10×5	35	1.50
120	40	381	229	282	190	120	430	120	230	320	180	260	30	18	65	30	8×4	85	45	14×5.5	60	3.20
135	50	433	260	317	210	135	480	135	250	350	200	290	30	18	75	35	10×5	95	55	16×6	80	3.60
147	60	439	264	324	212	147	501	123	250	350	200	280	32	18	80	35	10×5	95	55	16×6	90	3.70
155	70	504	302	382	252	155	531	135	275	390	220	320	35	21	85	40	12×5	110	60	18×7	110	3.80
175	80	545	325	402	262	175	600	160	310	430	250	350	40	21	85	45	14×5.5	110	65	18×7	150	4.60
200	100	587	350	467	305	200	667	175	360	480	290	390	40	24	95	50	14×5.5	125	70	20×7.5	215	6.50
250		705	420	552	360	250	800	200	460	560	380	480	45	28	110	60	18×7	155	90	25×9	360	9.00

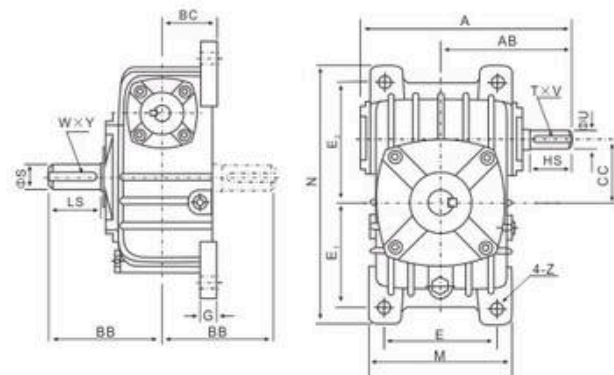
WPS

SHAFT DIRECTION


Size	Ratio	A	AB	B	BB	CC	H	LL	M	N	E	F	G	Z	HS	U	T×V	LS	S	W×Y	weight (kg)	Oil quantity (L)
40	5	143	87	114	74	40	141	60	90	100	70	80	13	10	25	12	4×2.5	28	14	5×3	4	0.30
50	10	175	107	150	97	50	180	80	120	140	95	110	15	12	30	12	4×2.5	40	17	5×3	7	0.45
60	15	198	122	168	112	60	207	90	130	150	105	120	20	12	40	15	5×3	50	22	6×3.5	10	0.55
70	20	231	140	194	131	70	238	105	150	190	115	150	20	15	40	18	6×3.5	60	28	8×4	15	0.80
80	25	261	160	214	142	80	270	120	170	220	135	180	20	15	50	22	6×3.5	65	32	10×5	20	1.10
100	30	322	190	254	169	100	331	150	190	270	155	220	25	15	50	25	8×4	75	38	10×5	35	2.90
120	40	381	229	282	190	120	423	180	230	320	180	260	30	18	65	30	8×4	85	45	14×5.5	60	4.40
135	50	433	260	317	210	135	482	215	250	350	200	290	30	18	75	35	10×5	95	55	16×6	80	6.20
147	60	439	264	324	212	147	495	203	250	350	200	280	32	18	80	35	10×5	95	55	16×6	90	6.35
155	70	504	302	382	252	155	541	235	275	390	220	320	35	21	85	40	12×5	110	60	18×7	110	6.50
175	80	545	325	402	262	175	594	260	310	430	250	350	40	21	85	45	14×5.5	110	65	18×7	150	8.00
200	100	587	350	467	305	200	677	290	360	480	290	390	40	24	95	50	14×5.5	125	70	20×7.5	215	9.30
250		705	420	552	360	250	824	350	460	560	380	480	45	28	110	60	18×7	155	90	25×9	360	18.0

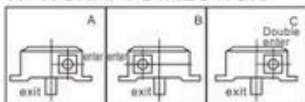
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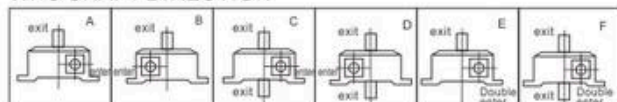
WPO



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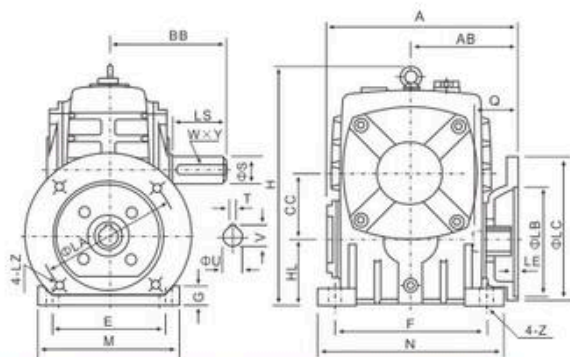


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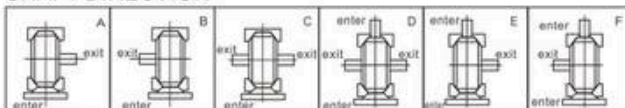


Size	Ratio	A	AB	BB	BC	CC	M	N	E	E ₁	E ₂	G	Z	Input shaft			Output shaft			Weight (kg)	Oil quantity (L)
														HS	U	T×V	LS	S	W×Y		
40	5	143	87	74	45	40	94	184	70	74	86	10	10	25	12	4×2.5	28	14	5×3	5	0.36
50	10	175	107	97	50	50	116	220	90	93	102	15	12	30	12	4×2.5	40	17	5×3	6	0.50
60	15	198	122	112	55	60	126	260	100	105	120	20	12	40	15	5×3	50	22	6×3.5	10	0.60
70	20	231	140	131	65	70	156	295	120	120	135	20	15	40	18	6×3.5	60	28	8×4	15	1.10
80	25	261	160	142	70	80	175	320	140	130	150	20	15	50	22	6×3.5	65	32	10×5	20	1.50
100	30	322	190	169	90	100	224	375	190	155	180	26	15	50	25	8×4	75	38	10×5	35	4.00
120	40	381	229	190	100	120	266	450	220	185	215	30	18	65	30	8×4	85	45	14×5.5	50	5.20
135	50	433	260	210	110	135	306	495	260	210	235	30	18	75	35	10×5	95	55	16×6	75	7.50
147	60	439	264	212	113	147	310	556	250	254	254	32	18	80	35	10×5	95	55	16×6	90	8.50
155	70	504	302	252	140	155	350	590	290	245	295	35	21	85	40	12×5	110	60	18×7	115	9.30
175	80	545	325	262	150	175	394	640	320	267	323	40	21	85	45	14×5.5	110	65	18×7	140	10.5
200	100	587	350	305	175	200	440	710	370	290	360	40	24	95	50	14×5.5	125	70	20×7.5	200	12.7
250		705	420	360	200	250	510	860	440	350	440	45	28	110	60	18×7	155	90	25×9	340	23.0

WPDA

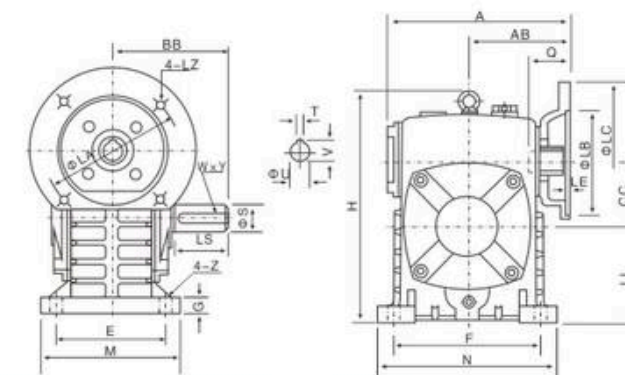


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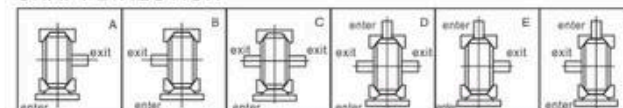


Size	Input power (kw)	Ratio	A	AB	BB	CC	H	HL	M	N	E	F	G	Z	Motor flange					Input hole				Output shaft			Weight (kg)
															LA	LB	LC	LE	LZ	Q	U	T×V	LS	S	W×Y		
40	0.12	5 10 15 20 25 30 40 50 60 70 80 100	135	75	74	40	138	40	90	100	70	80	13	10	115	95	140	4	M8	31	11	4×12.8	28	14	5×3	5	
50	0.18		151	83	97	50	176	50	120	140	95	110	15	12	115	95	140	4	M8	31	11	4×12.8	40	17	5×3	8	
60	0.37		167	91	112	60	204	60	130	150	105	120	20	12	130	110	160	4	M8	33	14	5×16.3	50	22	6×3.5	11	
70	0.37		200	109											130	110	160		M8	40	14	5×16.3					
	0.75		202	111	131	70	236	70	150	190	115	150	20	15	165	130	200	4	M10	42	19	6×21.8	60	28	8×4	17	
80	0.75		225	125	142	80	268	80	170	220	135	180	20	15	165	130	200	4.5	M10	48	19	6×21.8					
	1.5														52	24	8×27.3					65	32	10×5	22		
100	1.5		280	148	169	100	336	100	190	270	155	220	25	15	165	130	200	4.5	M10	52	24	8×27.3	75	38	10×5	38	
120	2.2		333	181	190	120	430	120	230	320	180	260	30	18	215	180	250	5	M12	63	28	8×31.3	85	45	14×5.5	64	
	3.0																										
135	3.0	375	202	210	135	480	135	250	350	200	290	30	18	215	180	250	5	M12	63	28	8×31.3	95	55	16×6	85		
	4.0																										
147	3.0	380	204	212	147	501	123	250	350	200	280	32	18	215	180	250	5	M12	63	28	8×31.3	95	55	16×6	96		
	4.0																										
155	4.0	425	224											215	180	250	5	M12	63	28	8×31.3						
	5.5	448	247	252	155	531	135	275	390	220	320	35	21	265	230	300	5	M12	83	38	10×41.3	110	60	18×7	118		
175	5.5	481	262	262	175	600	160	310	430	250	350	40	21	265	230	300	5	M12	83	38	10×41.3	110	65	18×7	165		
	7.5																										
200	7.5	516	258											265	230	300	5	M12	83	38	10×41.3						
	11.0	543	285	305	200	666	175	360	480	290	390	40	24	300	250	350	6	M16	114	42	12×45.3	125	70	20×7.5	236		
250	11.0	615	330	360	250	800	200	460	560	380	480	45	28	300	250	350	6	M16	114	42	12×45.3	155	90	25×9	396		
	15.0																										

WPDS

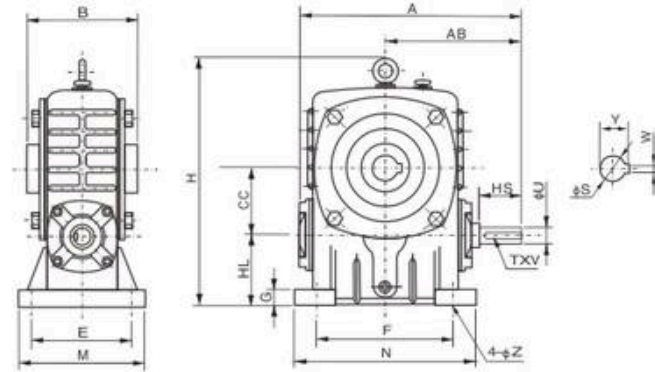


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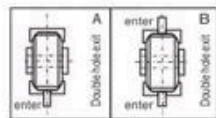


Size	Input power (kw)	Ratio	A	AB	BB	CC	H	LL	M	N	E	F	G	Z	Motor flange				Input hole				Output shaft			Weight (kg)																				
															LA	LB	LC	LE	LZ	Q	U	T×V	LS	S	W×Y																					
40	0.12		135	75	74	40	141	60	90	100	70	80	13	10	115	95	140	4	M8	31	11	4×12.8	28	14	5×3	5																				
50	0.18		151	83	97	50	180	80	120	140	95	110	15	12	115	95	140	4	M8	31	11	4×12.8	40	17	5×3	8																				
60	0.37		167	91	112	60	207	90	130	150	105	120	20	12	130	110	160	4	M8	33	14	5×16.3	50	22	6×3.5	11																				
70	0.37	5	200	109	131	70	238	105	150	190	115	150	20	15	130	110	160		M8	40	14	5×16.3	60	28	8×4	17																				
	0.75		202	111											165	130	200	4	M10	42	19	6×21.8																								
80	0.75		225	125	142	80	273	120	170	220	135	180	20	15	165	130	200	4.5	M10	48	19	6×21.8																								
100	1.5	15	280	148	169	100	334	150	190	270	155	220	25	15	165	130	200	4.5	M10	52	24	8×27.3	75	38	10×5	38																				
	1.5																										52	24	8×27.3																	
120	2.2																										333	181	190	120	423	180	230	320	180	260	30	18	215	180	250	5	M12	63	28	8×31.3
	3.0	25																																												
	3.0																										85	45	14×5.5	64																
135	3.0																										375	202	210	135	482	215	250	350	200	290	30	18	215	180	250	5	M12	63	28	8×31.3
	4.0	30																																												
	4.0																										95	55	16×6	85																
147	3.0																										380	204	212	147	495	203	250	350	200	280	32	18	215	180	250	5	M12	63	28	8×31.3
	4.0	40																																												
	4.0																										95	55	16×6	96																
155	4.0																										425	224	252	155	541	235	275	390	220	320	35	21	215	180	250	5	M12	63	28	8×31.3
	5.5	60	448	247										21	265	230	300	5	M12	83	38	10×41.3	110	60	18×7	118																				
	5.5																																													
175	5.5																										481	262	262	175	600	260	310	430	250	350	40	21	265	230	300	5	M12	83	38	10×41.3
	7.5	80																																												
	7.5																																													
200	7.5																										516	258	305	200	677	290	360	480	290	390	40	24	265	230	300	5	M12	83	38	10×41.3
	11.0	100	543	285											300	250	350	6	M16	114	42	12×45.3	125	70	20×7.5	236																				
	11.0																																													
250	11.0																										615	330	360	250	824	350	460	560	380	480	45	28	300	250	350	6	M16	114	42	12×45.3
	15.0																																													

WPKA

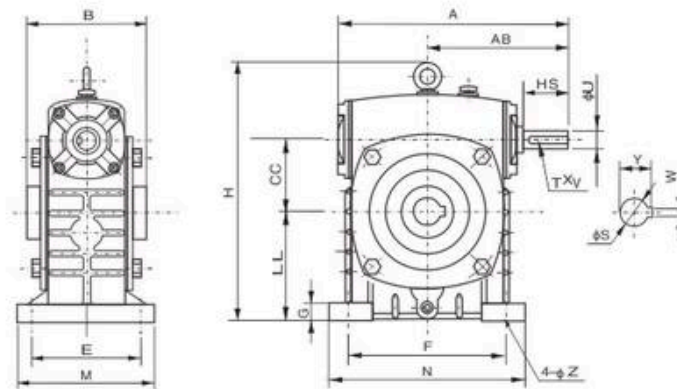


SHAFT DIRECTION

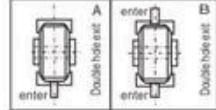


Size	Ratio	A	AB	B	CC	E	F	G	H	HL	LL	M	N	Z	Input shaft			Output shaft		Weight (kg)
															HS	U	T x V	S	W x Y	
40		143	87	90	40	70	80	13	138	40	80	90	100	10	25	12	4 x 2.5	16	5 x 18.3	4
50		175	107	100	50	95	110	15	173	50	100	120	140	12	30	12	4 x 2.5	20	6 x 22.8	7
60		198	122	112	60	105	120	20	204	60	120	130	150	12	40	15	5 x 3	25	8 x 28.3	10.5
70	1/5	231	140	126	70	115	150	20	236	70	140	150	190	15	40	18	6 x 3.5	30	8 x 33.3	14.5
80	1/10	261	160	136	80	135	180	20	268	80	160	170	220	15	50	22	6 x 3.5	35	10 x 38.3	22
100	1/20	322	190	160	100	155	220	25	329	100	200	190	270	15	50	25	8 x 4	40	12 x 43.3	36
120	1/25	381	229	180	120	180	260	30	430	120	240	230	320	18	65	30	8 x 4	45	14 x 48.8	63
135	1/30	433	260	204	135	200	290	30	480	135	270	250	350	18	75	35	10 x 5	60	18 x 64.4	80
155	1/40	504	302	250	155	220	320	35	541	155	320	275	390	21	85	40	12 x 5	70	20 x 74.9	114
175	1/50	545	325	282	175	250	350	40	600	175	375	360	480	24	95	50	14 x 5.5	85	22 x 90.4	218
200	1/60	587	350	324	200	290	390	40	667	200	400	380	500	28	110	60	18 x 7	110	28 x 116.4	360
250		705	420	380	250	380	480	45	800	250	450	460	560	28	110	60	18 x 7	110	28 x 116.4	360

WPKS

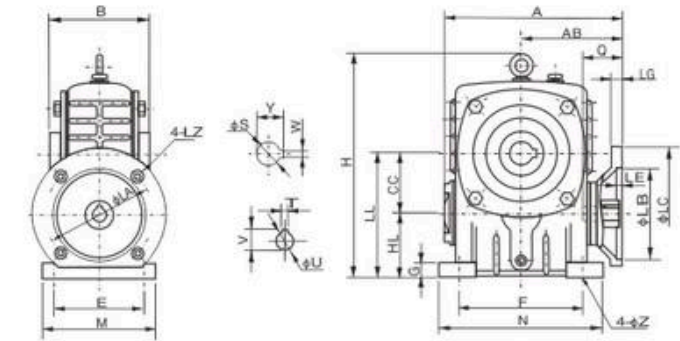


SHAFT DIRECTION

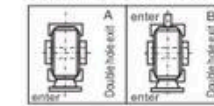


Size	Ratio	A	AB	B	CC	E	F	G	H	HL	LL	M	N	Z	Input shaft			Output shaft		Weight (kg)
															HS	U	T x V	S	W x Y	
40		143	87	90	40	70	80	13	141	100	80	90	100	10	25	12	4 x 2.5	16	5 x 18.3	4
50		175	107	100	50	95	110	15	180	130	80	120	140	12	30	12	4 x 2.5	20	6 x 22.8	7
60		198	122	112	60	105	120	20	207	150	90	130	150	12	40	15	5 x 3	25	8 x 28.3	10.5
70	1/5	231	140	126	70	115	150	20	238	175	105	150	190	15	40	18	6 x 3.5	30	8 x 33.3	14.5
80	1/10	261	160	136	80	135	180	20	270	200	120	170	220	15	50	22	6 x 3.5	35	10 x 38.3	22
100	1/20	322	190	160	100	155	220	25	331	250	150	190	270	15	50	25	8 x 4	40	12 x 43.3	36
120	1/25	381	229	180	120	180	260	30	423	300	180	230	320	18	65	30	8 x 4	45	14 x 48.8	63
135	1/30	433	260	204	135	200	290	30	482	350	215	250	350	18	75	35	10 x 5	60	18 x 64.4	80
155	1/40	504	302	250	155	220	320	35	541	390	235	275	390	21	85	40	12 x 5	70	20 x 74.9	114
175	1/50	545	325	282	175	250	350	40	594	435	260	310	430	21	85	45	14 x 5.5	80	22 x 90.4	150
200	1/60	587	350	324	200	290	390	40	677	490	290	360	480	24	95	50	14 x 5.5	85	22 x 90.4	218
250		705	420	380	250	380	480	45	800	600	350	460	560	28	110	60	18 x 7	110	28 x 116.4	360

WPDKA

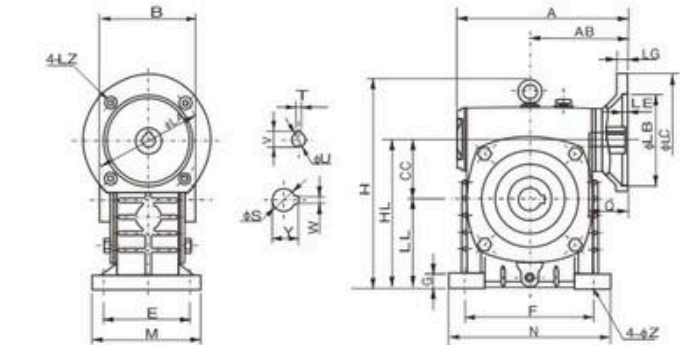


SHAFT DIRECTION

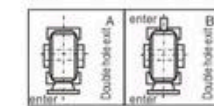


Size	Input power (kw)	Ratio	A	AB	B	CC	E	F	G	H	HL	LL	M	N	Z	Motor flange				Input hole			Output shaft		Weight (kg)	
																LA	LB	LC	LE	LZ	Q	U	T×V	S		W×Y
50	0.18	1/5	151	83	100	50	95	110	15	176	50	100	120	140	12	115	95	140	4	M8	31	11	4×12.8	20	6×22.8	8
60	0.37		167	91	112	60	105	120	20	204	60	120	130	150	12	130	110	160	4	M8	33	14	5×16.3	25	8×28.3	10.5
70	0.37		200	109												130	110	160		M8	40	14	5×16.3	30	8×33.3	17
	0.75		202	111	126	70	115	150	20	236	70	140	150	190	15	165	130	200	4	M10	42	19	6×21.8			
80	0.75	1/10	225	125	136	80	135	180	20	268	80	160	170	220	15	165	130	200	4.5	M10	48	19	6×21.8	35	10×38.3	26
	1.5	1/15																			52	24	8×27.3			
100	1.5	1/20	280	148	160	100	155	220	25	336	100	200	190	270	15	165	130	200	4.5	M10	52	24	8×27.3	40	12×43.3	38
120	2.2	1/25	333	181	180	120	180	260	30	430	120	240	230	320	18	215	180	250	5	M12	63	28	8×31.3	45	14×48.8	60
	3.0	1/30																								
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	8×31.3	60	18×64.4	85
	4.0	1/50																								
155	4.0	1/60	425	224	250	155	220	320	35	531	135	290	275	390	21	215	180	250	5	M12	63	28	8×31.3	70	20×74.9	120
	5.5		448	247																	83	38	10×41.3			
175	5.5	1/80	481	262	282	175	250	350	40	600	160	335	310	430	21	265	230	300	5	M12	83	38	10×41.3	80	22×85.4	150
	7.5																									

WPDKS

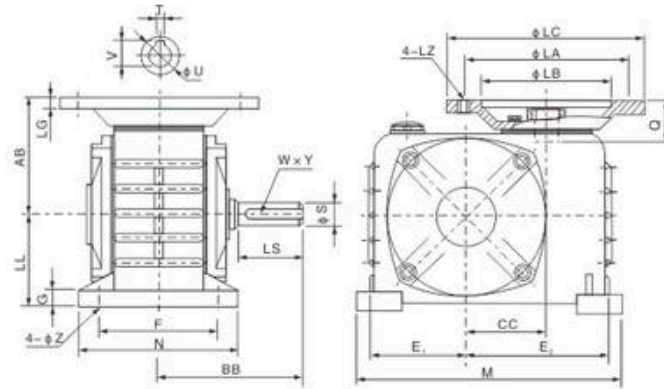


SHAFT DIRECTION

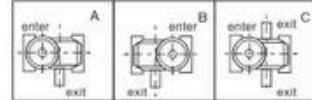


Size	Input power (kw)	Ratio	A	AB	B	CC	E	F	G	H	HL	LL	M	N	Z	Motor flange				Input hole			Output shaft		Weight (kg)	
																LA	LB	LC	LE	LZ	Q	U	T×V	S		W×Y
50	0.18	1/5	151	83	100	50	95	110	15	176	130	80	120	140	12	115	95	140	4	M8	31	11	4×12.8	20	6×22.8	8
60	0.37		167	91	112	60	105	120	20	202	150	90	130	150	12	130	110	160	4	M8	33	14	5×16.3	25	8×28.3	10.5
70	0.37		200	109	126	70	115	150	20	238	175	105	150	190	15	130	110	160	4	M8	40	14	5×16.3	30	8×33.3	17
	0.75		202	111												165	130	200			M10	42	19			
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	6×21.8	35	10×38.3	26
	1.5	1/15																52			24	8×27.3				
100	1.5	1/20	280	148	160	100	155	220	25	334	250	150	190	270	15	165	130	200	4.5	M10	52	24	8×27.3	40	12×43.3	38
120	2.2	1/25	333	181	180	120	180	260	30	423	300	180	230	320	18	215	180	250	5	M12	63	28	8×31.3	45	14×48.8	60
	3.0	1/30																								
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	8×31.3	60	18×64.4	85
	4.0	1/50																								
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	8×31.3	70	20×74.9	120
	5.5		448	247												265	230	300					83			
175	5.5	1/80	481	262	282	175	250	350	40	600	435	260	310	430	21	265	230	300	5	M12	83	38	10×41.3	80	22×85.4	150
	7.5																									

WPDZ

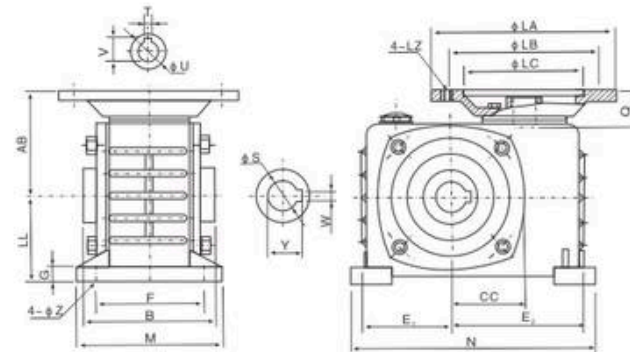


SHAFT DIRECTION



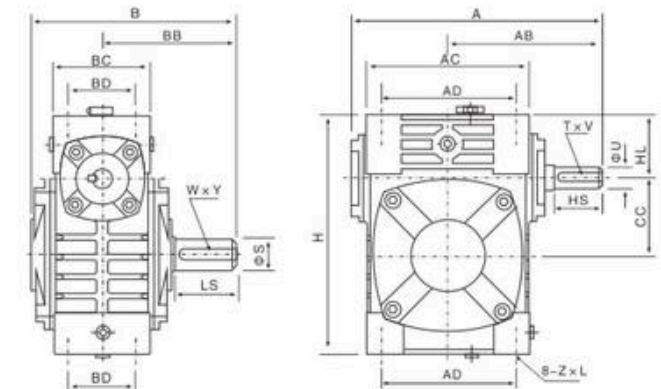
Size	Input power (kw)	Ratio	AB	LL	BB	CC	E ₁	E ₂	F	M	N	G	Z	Motor flange				Input hole			Output shaft			Weight (kg)	
														LA	LB	LC	LG	LZ	Q	U	T×V	LS	S		W×Y
50	0.18	5	88	77	95	50	53	77	100	160	125	15	11	115	95	140	10	M8	25	11	4×12.8	40	17	5×3	7.5
60	0.18	10	93	82	110	60	68	92	100	190	130	15	11	115	95	140	10	M8	25	11	4×12.8	50	22	6×3.5	12
	0.37	15												130	110	160			35	14	5×16.3				
70	0.37	20	113	95	130	70	75	115	120	230	155	20	15	130	110	160	10	M8	33	14	5×16.3	60	28	8×4	15
	0.75	25												165	130	200			43	19	6×21.8				
80	0.75	30	125	100	140	80	96	144	125	265	160	20	15	165	130	200	12	M10	43	19	6×21.8	65	32	10×4.5	22
	1.5	40												35	24	8×27.3									
100	1.5	50	150	135	163	100	100	150	155	310	195	22	15	165	130	200	15	M10	55	24	8×27.3	75	38	10×4.5	38
	2.2	60												215	180	250			65	28	8×31.3				
120	2.2	70	176	160	185	120	120	180	180	360	230	28	18	215	180	250	18	M12	65	28	8×31.3	85	45	14×4.5	60
	3.0	80																							
135	3.0	80	196	170	210	135	130	200	200	390	250	30	18	215	180	250	20	M12	65	28	8×31.3	95	55	16×6	80
	4.0	100																							

WPDKZ

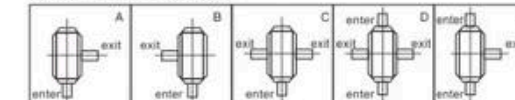


Size	Input power (kw)	Ratio	AB	B	CC	E ₁	E ₂	F	G	LL	N	M	Z	Motor flange				Input hole			Output shaft			Weight (kg)
														LB	LC	LA	LG	LZ	Q	U	T×V	S	W×Y	
50	0.18	1/5	88	100	50	53	77	100	15	76	160	125	11	115	95	140	10	M8	26	11	4×12.8	20	6×22.8	8
60	0.18	1/10	93	112	60	68	92	100	15	82	190	130	11	115	95	140	10	M8	27	11	4×12.8	25	8×28.3	12.5
	0.37	1/15												130	110	160			37	14	5×16.3			
70	0.37	1/20	107	126	70	75	115	120	20	95	230	155	15	130	110	160		M8	32	14	5×16.3	30	8×33.3	16
	0.75	1/25												165	130	200		M10	42	19	6×21.8			
80	0.75	1/30	136	136	80	96	144	125	20	100	265	160	15	165	130	200	12	M10	45	19	6×21.8	35	10×38.3	23
	1.5	1/40												57	24	8×27.3								
100	1.5	1/50	147	160	100	100	150	155	22	135	310	195	15	165	130	200		M10	60	24	8×27.3	40	12×43.3	38
	2.2	1/60												215	180	250	15	M12	70	28	8×31.3			
120	2.2	1/70	164	180	120	120	180	180	28	160	360	230	18	215	180	250	18	M12	70	28	8×31.3	45	14×48.8	60
	3.0																							
135	3.0	1/80	207	204	135	130	200	200	30	170	390	250	18	215	180	250	20	M12	68	28	8×31.3	60	18×64.4	80
	4.0																							

WPW



SHAFT DIRECTION

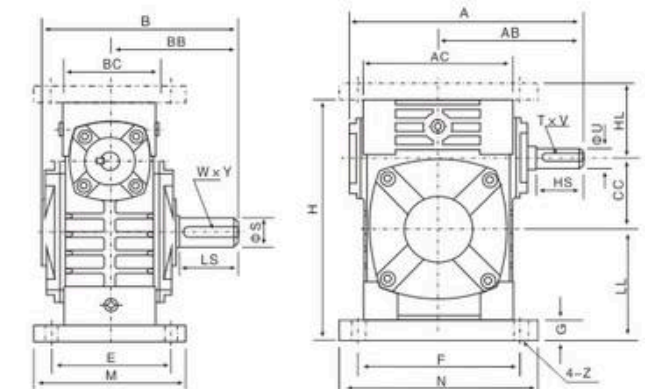


Size	Ratio	A	AB	B	BB	AC	BC	AD	BD	CC	HL	H	Z×L	Input shaft			Output shaft			weight (kg)
														HS	U	T×V	LS	S	W×Y	
40	5	149	89	124	79	95	61	78	42	40	35	125	M6×12	25	12	4×2.5	28	14	5×3	4
50	10	175	107	150	97	111	68	85	50	50	35	150	M6×18	30	12	4×2.5	40	17	5×3	6.5
60	15	198	122	168	112	127	76	105	55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

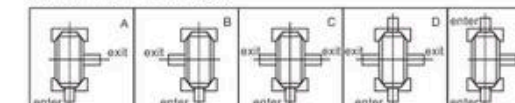
WPSA



WPWS



SHAFT DIRECTION

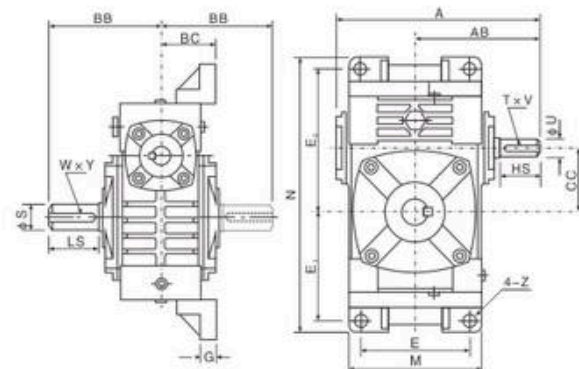


Size	Ratio	A	AB	B	BB	AC	BC	CC	HL	LL	H	M	N	E	F	G	Z	Input shaft			Output shaft			weight (kg)
																		HS	U	T×V	LS	S	W×Y	
40	5	149	89	124	79	95	61	40	45	60	135	100	130	80	110	10	10	25	12	4×2.5	28	14	5×3	4.5
50	10	175	107	150	97	111	68	50	50	80	165	120	140	95	110	15	12	30	12	4×2.5	40	17	5×3	7.5
60	15	198	122	168	112	127	76	60	60	93	195	130	150	105	120	18	12	40	15	5×3	50	22	6×3.5	11.5
70	20	231	140	194	131	152	86	70	73	108	233	150	190	115	150	18	15	40	18	6×3.5	60	28	8×4	15.5
80	25	261	160	214	142	169	102	80	83	123	268	170	220	135	180	18	15	50	22	6×3.5	65	32	10×5	24
100	30	322	190	254	169	216	117	100	100	150	330	190	270	155	220	20	15	50	25	8×4	75	38	10×5	39
120	40	381	229	282	190	256	124	120	120	180	395	230	320	180	260	25	18	65	30	8×4	85	45	14×5.5	57
135	50	433	260	317	210	296	147	135	135	215	455	250	350	200	290	30	18	75	35	10×5	95	55	16×6	85
155	60	504	302	382	252	345	185	155	135	235	493	280	380	220	320	32	21	85	40	12×5	110	60	18×7	110
175	70	545	325	402	262	374	192	175	160	260	558	310	410	250	350	37	21	85	45	14×5.5	110	65	18×7	152
200	80	587	350	467	305	412	230	200	175	290	620	355	445	290	390	45	24	95	50	14×5.5	125	70	20×7.5	216
250	100	705	420	552	360	500	285	250	200	350	750	460	560	380	480	50	28	110	60	18×7	155	90	25×9	350

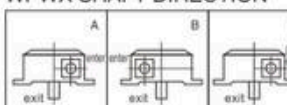
WPWX



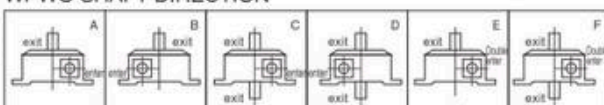
WPWO



WPWX SHAFT DIRECTION



WPWO SHAFT DIRECTION

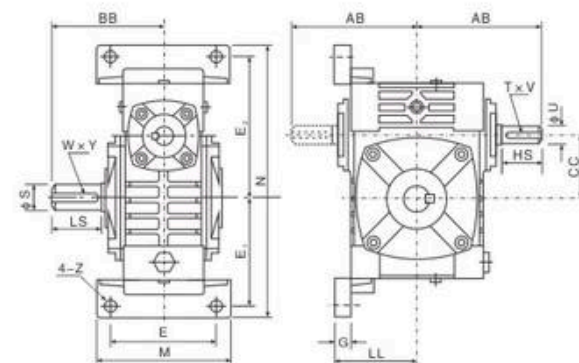


Size	Ratio	A	AB	BB	BC	CC	M	N	E	E ₁	E ₂	G	Z	Input shaft			Output shaft			Weight (kg)
														HS	U	T×V	LS	S	W×Y	
40	5	149	89	79	45	40	95	187	70	72	97	12	10	25	12	4×2.5	28	14	5×3	5
50	10	175	107	97	50	50	111	226	90	90	110	14	12	30	12	4×2.5	40	17	5×3	8
60	15	198	122	112	55	60	127	257	100	102	129	15	12	40	15	5×3	50	22	6×3.5	11
70	20	231	140	131	65	70	152	305	120	120	155	20	15	40	18	6×3.5	60	28	8×4	15.5
80	25	261	160	142	70	80	174	350	140	140	180	20	15	50	22	6×3.5	65	32	10×5	24
100	30	322	190	169	90	100	224	410	190	165	215	22	15	50	25	8×4	75	38	10×5	38
120	40	381	229	190	100	120	264	494	220	195	255	25	18	65	30	8×4	85	45	14×5.5	56
135	50	433	260	210	110	135	304	559	260	230	285	30	18	75	35	10×5	95	55	16×6	84
155	60	504	302	252	140	155	345	605	290	250	305	35	21	85	40	12×5	110	60	18×7	129
175	70	545	325	262	150	175	374	675	320	273	348	40	21	85	45	14×5.5	110	65	18×7	157
200	80	587	350	305	175	200	424	749	370	305	390	40	24	95	50	14×5.5	125	70	20×7.5	224
250	100	705	420	552	200	250	510	920	440	375	475	45	28	110	60	18×7	155	90	25×9	374

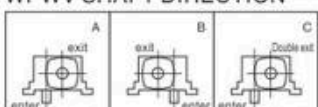
WPWT



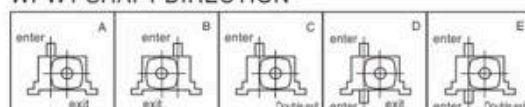
WPWV



WPWV SHAFT DIRECTION

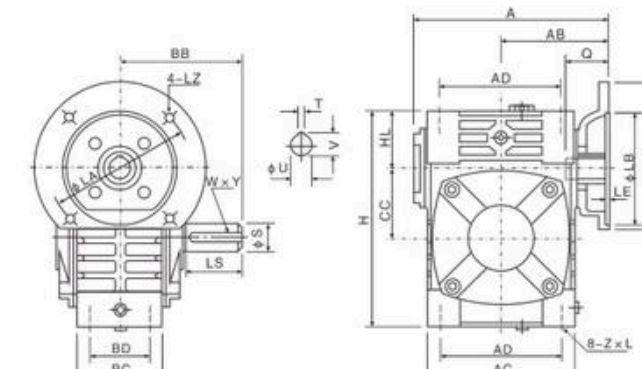


WPWT SHAFT DIRECTION

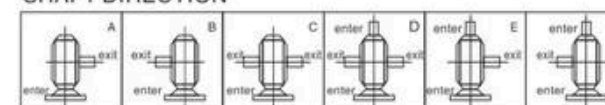


Size	Ratio	AB	BB	CC	LL	M	N	E	E ₁	E ₂	G	Z	Input shaft			Output shaft			Weight (kg)
													HS	U	T×V	LS	S	W×V	
40	1/5	87	79	40	63	90	187	70	72	97	12	10	25	12	4×2.5	28	14	5×3	5
50		107	97	50	70	120	226	95	90	110	14	12	30	12	4×2.5	40	17	5×3	8
60		122	112	60	80	130	257	105	102	129	15	12	40	15	5×3	50	22	6×3.5	11
70		140	131	70	95	150	305	115	120	155	20	15	40	18	6×3.5	60	28	8×4	15.5
80	1/15	160	142	80	105	170	350	135	140	180	20	15	50	22	6×3.5	65	32	10×5	24
100	1/20	190	169	100	135	190	410	155	165	215	22	15	50	25	8×4	75	38	10×5	38
120	1/25	229	190	120	160	230	494	180	195	255	25	18	65	30	8×4	85	45	14×5.5	56
135	1/30	260	210	135	185	250	559	200	230	285	30	18	75	35	10×5	95	55	16×6	84
155	1/40	302	252	155	220	275	605	220	250	305	35	21	85	40	12×5	110	60	18×7	129
175	1/50	325	262	175	240	310	675	250	273	348	40	21	85	45	14×5.5	110	65	18×7	157
200	1/60	350	305	200	280	360	749	290	305	390	40	24	95	50	14×5.5	125	70	20×7.5	224
250		420	552	250	315	460	920	380	375	475	45	28	110	60	18×7	155	90	25×9	374

WPWD



SHAFT DIRECTION

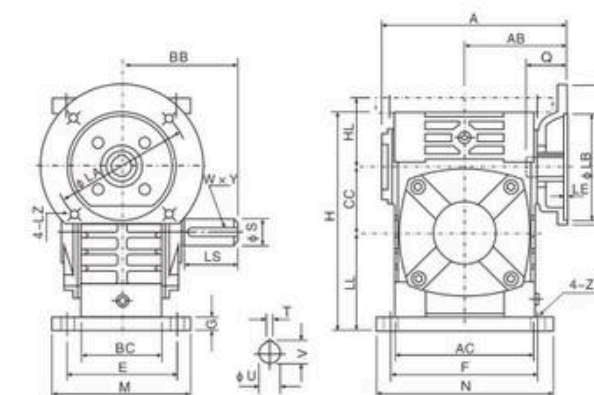


Size	Input power (kw)	Ratio												Motor flange				Input hole				Output shaft			Weight (kg)	
			A	AB	BB	AC	BC	AD	BD	CC	HL	H	Z×L	LA	LB	LC	LE	LZ	Q	U	T×V	LS	S	W×Y		
40	0.12	5	135	75	79	95	61	78	42	40	35	125	M6×12	115	95	140	4	M8	31	11	4×12.8	28	14	5×3	4	
50	0.18		151	83	97	111	68	85	50	50	35	150	M6×18	115	95	140	4	M8	31	11	4×12.8	40	17	5×3	7	
60	0.37		167	91	112	127	76	105	55	60	42	177	M8×20	130	110	160	4	M8	33	14	5×16.3	50	22	6×3.5	10	
70	0.37		200	109										130	110	160		M8	40	14	5×16.3					
	0.75		202	111	131	152	86	125	65	70	55	215	M10×25	165	130	200	4	M10	42	19	6×21.8	60	28	8×4	14.5	
80	0.75		225	125	142	169	102	140	70	80	65	250	M12×28	165	130	200	4.5	M10	48	19	6×21.8	65	32	10×5	23	
	1.5																	52	24	8×27.3						
100	1.5		20	280	148	169	216	117	180	90	100	80	310	M12×30	165	130	200	4.5	M10	52	24	8×27.3	75	38	10×5	36.5
120	2.2		25	333	181	190	256	124	220	100	120	95	370	M14×32	215	180	250	5	M12	63	28	8×31.3	85	45	14×5.5	54
	3.0																									
135	3.0	40	375	202	210	296	147	260	110	135	105	425	M16×35	215	180	250	5	M12	63	28	8×31.3	95	55	16×6	83	
	4.0																									
155	4.0	60	425	224	252	345	185	280	120	155	103	461	M16×35	215	180	250	5	M12	63	28	8×31.3	110	60	18×7	110	
	5.5																									
175	5.5	70	481	262	282	374	192	320	140	175	123	521	M16×35	265	230	300	5	M12	83	38	10×41.3	110	65	18×7	156	
	7.5																									
200	7.5	100	516	258	305	412	230	360	150	200	130	575	M20×36	265	230	300	6	M12	83	38	10×41.3	125	70	20×7.5	222	
	11.0																									
250	11.0		613	330	360	500	285	420	190	250	150	700	M24×42	300	250	350	6	M16	114	42	12×45.3	155	90	25×9	376	
	15.0																									

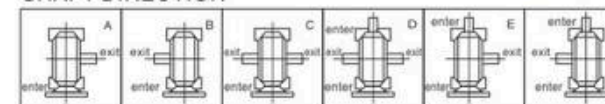
WPWDA



WPWDS

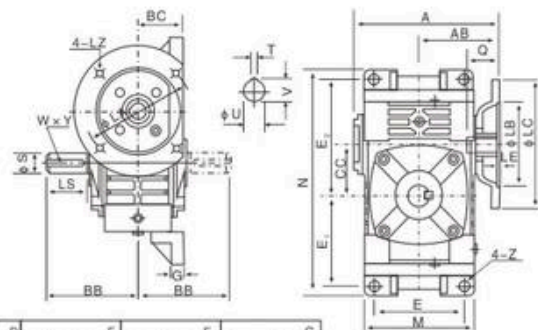
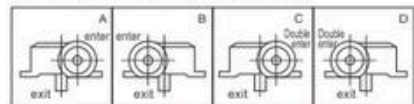
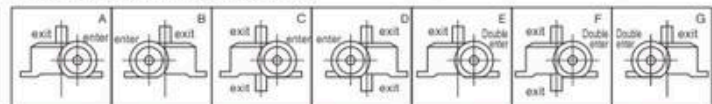


SHAFT DIRECTION



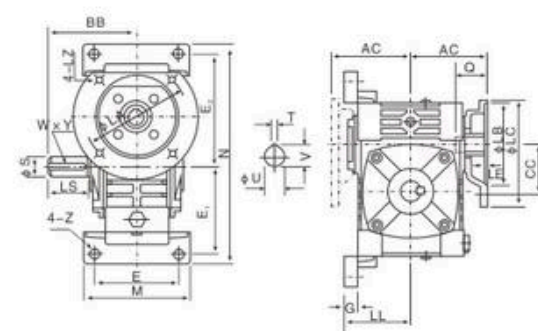
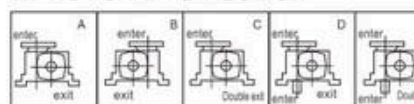
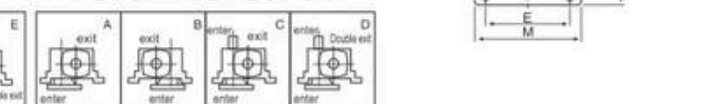
Size	Input power (kw)	Ratio	A	AB	BB	AC	BC	CC	HL	LL	H	M	N	E	F	G	Z	Motor flange				Input hole				Output shaft			Weight (kg)	
																		LA	LB	LC	LE	LZ	Q	U	T×V	LS	S	W×Y		
40	0.12	5	135	75	79	95	61	40	45	60	135	100	130	80	110	10	10	115	95	140	4	M8	31	11	4×12.8	28	14	5×3	5	
50	0.18		151	83	97	111	68	50	50	80	165	120	140	95	110	15	12	115	95	140	4	M8	31	11	4×12.8	40	17	5×3	8	
60	0.37		167	91	112	127	76	60	60	93	195	130	150	105	120	18	12	130	110	160	4	M8	33	14	5×16.3	50	22	6×3.5	12.5	
70	0.37		200	109														130	110	160		M8	40	14	5×16.3					
	0.75		202	111	131	152	86	70	73	108	233	150	190	115	150	18	15	165	130	200	4	M10	42	19	6×21.8	60	28	8×4	17	
80	0.75		10																				48	19	6×21.8					
	1.5			225	125	142	169	102	80	83	123	268	170	220	135	180	18	15	165	130	200	4.5	M10	52	24	8×27.3	65	32	10×5	26
100	1.5		20	280	148	169	216	117	100	100	150	330	190	270	155	220	20	15	165	130	200	4.5	M10	52	24	8×27.3	75	38	10×5	41.5
120	2.2		25																											
	3.0			333	181	190	256	124	120	120	180	395	230	320	180	260	25	18	215	180	250	5	M12	63	28	8×31.3	85	45	14×5.5	60
135	3.0	40																												
	4.0		375	202	210	296	147	135	135	215	455	250	350	200	290	30	18	215	180	250	5	M12	63	28	8×31.3	95	55	16×6	90	
155	4.0	60	425	224													215	180	250	5	M12	63	28	8×31.3						
	5.5		448	247	252	345	185	155	135	235	493	280	380	220	320	32	21	265	230	300	5	M12	83	38	10×41.3	110	60	18×7	118	
175	5.5	70																												
	7.5		481	262	262	374	192	175	160	260	558	310	410	250	350	37	21	265	230	300	5	M12	83	38	10×41.3	110	65	18×7	167	
200	7.5	100	516	258													265	230	300	6	M12	83	38	10×41.3						
	11.0		543	285	305	412	230	200	175	290	620	355	445	290	390	45	24	300	250	350	6	M16	114	42	12×45.3	125	70	20×7.5	237	
250	11.0		615	330	360	500	285	250	200	350	750	460	560	380	480	50	28	300	250	350	6	M16	114	42	12×45.3	155	90	25×9	395	
	15.0																													

WPWDX

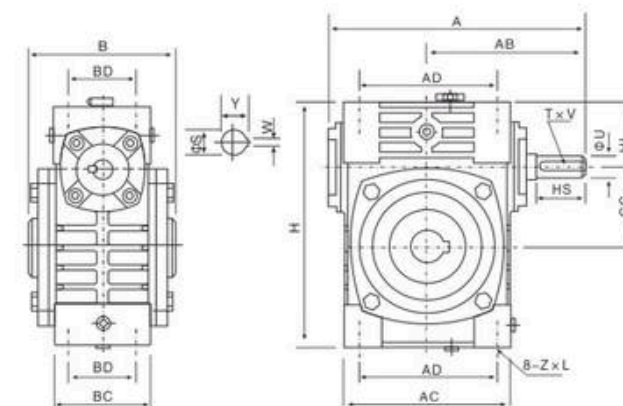
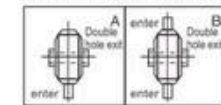
WPWDO

WPWDX SHAFT DIRECTION

WPWDO SHAFT DIRECTION


Size	Input power (kw)	Ratio	A	AB	BB	BC	CC	M	N	E	E ₁	E ₂	G	Z	Motor flange				Input hole			Output shaft			Weight (kg)																				
															LA	LB	LC	LE	LZ	Q	U	T×V	LS	S	W×Y																				
40	0.12	5	135	75	79	45	40	95	187	70	72	97	12	10	115	95	140	4	M8	31	11	4×12.8	28	14	5×3	5.4																			
50	0.18		151	83	97	50	50	111	226	90	90	110	14	12	115	95	140	4	M8	31	11	4×12.8	40	17	5×3	8.5																			
60	0.37		167	91	112	55	60	127	257	100	102	129	15	12	130	110	160	4	M8	33	14	5×16.3	50	22	6×3.5	12																			
70	0.37		200	109	111	131	65	70	152	305	120	120	155	20	15	130	110	160	4	M8	40	14	5×16.3	60	28	8×4	17																		
	0.75		165	130												200	M10	42		19	6×21.8																								
80	0.75	10	202	111	125	142	70	80	174	350	140	140	180	20	15	165	130	200	4.5	M10	48	19	6×21.8	65	32	10×5	26																		
	1.5		52	24																8×27.3																									
100	1.5		280	148																169	90	100	224					410	190	165	215	22	15	165	130	200	4.5	M10	52	24	8×27.3	75	38	10×5	40.5
120	2.2		333	181																190	100	120	264					494	220	195	255	25	18	215	180	250	5	M12	63	28	8×31.3	85	45	14×5.5	59
	3.0																																												
135	3.0	40	375	202	210	110	135	304	559	260	230	285	30	18	215	180	250	5	M12	63	28	8×31.3	95	55	16×6	89																			
	4.0																																												
155	4.0		50	425	224	252	140	155	345	605	290	250	305	35	21	215	180	250	5	M12	63	28	8×31.3	110	60	18×7	138																		
	5.5																																												
175	5.5			60	448	247	252	140	155	345	605	290	250	305	35	21	265	230	300	5	M12	83	38	10×41.3	110	65	18×7	172																	
	7.5																																												
200	7.5	80			481	262	262	150	175	374	675	320	273	348	40	21	265	230	300	5	M12	83	38	10×41.3	110	65	18×7	172																	
	11.0																																												
250	11.0		100		516	258	305	175	200	424	749	370	305	390	40	21	265	230	300	6	M12	83	38	10×41.3	125	70	20×7.5	246																	
	15.0																																												
	15.0				543	285	305	175	200	424	749	370	305	390	40	21	300	250	350	6	M16	114	42	12×45.3	155	90	25×9	410																	
					615	330	360	200	250	510	920	440	375	475	45	28	300	250	350	6	M16	114	42	12×45.3	155	90	25×9	410																	

WPWDT

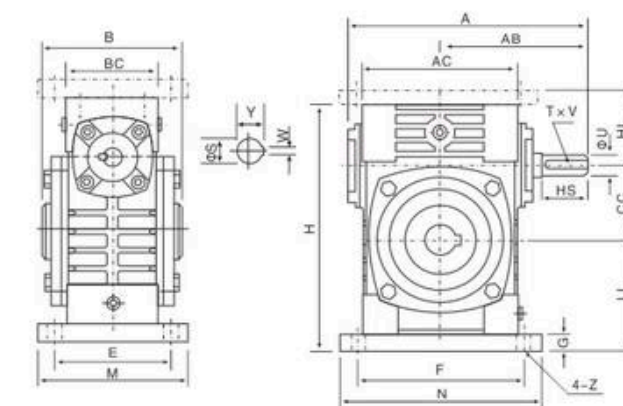
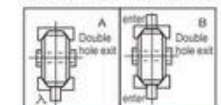
WPWDV

WPWDT SHAFT DIRECTION

WPWDV SHAFT DIRECTION


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

WPWK

SHAFT DIRECTION


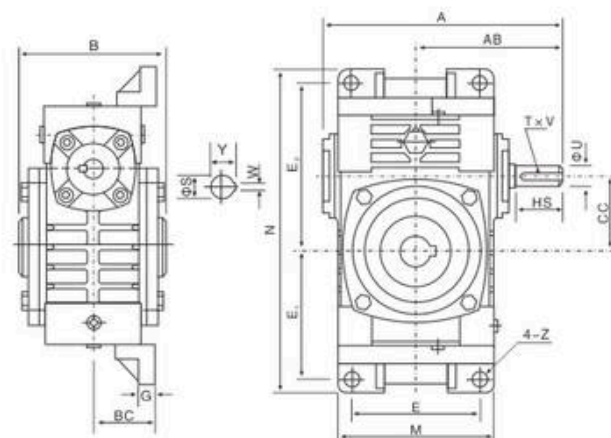
Size	Ratio	A	AB	B	AC	BC	AD	BD	CC	HL	H	Z×L	Input shaft			Output shaft		Weight (kg)
													HS	U	T×V	S	W×Y	
40	5	149	89	90	95	61	78	42	40	35	125	M6×12	25	12	4×2.5	16	5×18.3	4
50	10	175	107	100	111	68	85	50	50	35	150	M6×18	30	12	4×2.5	20	6×22.8	6.5
60	15	198	122	112	127	76	105	55	60	42	177	M8×20	40	15	5×3	25	8×28.3	9
70	20	231	140	126	152	86	125	65	70	55	215	M10×25	40	18	6×3.5	30	8×33.3	13
80	25	261	160	136	169	102	140	70	80	65	250	M12×28	50	22	6×3.5	35	10×38.3	21
100	30	322	190	160	216	117	180	90	100	80	310	M12×30	50	25	8×4	40	12×43.3	34
120	40	381	229	180	256	124	220	100	120	95	370	M14×32	65	30	8×4	45	14×48.8	51
135	50	433	260	204	296	147	260	110	135	105	425	M16×35	75	35	10×5	60	18×64.4	78
155	60	504	302	250	345	185	280	120	155	103	461	M16×35	85	40	12×5	70	20×74.9	102
175	70	545	325	282	374	192	320	140	175	123	521	M16×35	85	45	14×5.5	80	22×85.4	142
200	80	587	350	324	412	230	360	150	200	130	575	M20×36	95	50	14×5.5	85	22×90.4	202
250	100	705	420	380	500	285	420	190	250	150	700	M24×42	110	60	18×7	110	28×116.4	340

WPWKA

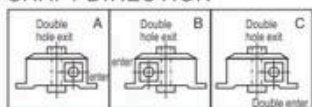
WPWKS

SHAFT DIRECTION


Size	Ratio	A	AB	B	AC	BC	CC	HL	LL	H	M	N	E	F	G	Z	Input shaft			Output shaft		Weight (kg)
																	HS	U	T×V	S	W×Y	
40	5	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	10	175	107	100	111	68	50	50	80	165	120	140	95	110	15	12	30	12	4X2.5	20	6×22.8	7.5
60	15	198	122	112	127	76	60	60	93	195	130	150	105	120	18	12	40	15	5×3	25	8×28.3	11.5
70	20	231	140	126	152	86	70	73	108	233	150	190	115	150	18	15	40	18	6×3.5	30	8×33.3	15.5
80	25	261	160	136	169	102	80	83	123	268	170	220	135	180	18	15	50	22	6×3.5	35	10×38.3	24
100	30	322	190	160	216	117	100	100	150	330	190	270	155	220	20	15	50	25	8×4	40	12×43.3	39
120	40	381	229	180	256	124	120	120	180	395	230	320	180	260	25	18	65	30	8×4	45	14×48.8	57
135	50	433	260	204	296	147	135	135	215	455	250	350	200	290	30	18	75	35	10×5	60	18×64.4	85
155	60	504	302	250	345	185	155	135	235	493	280	380	220	320	32	21	85	40	12×5	70	20×74.9	110
175	70	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	80	587	350	324	412	230	200	175	290	620	355	445	290	390	45	24	95	50	14×5.5	85	22×90.4	216
250	100	705	420	380	500	285	250	200	350	750	460	560	380	480	50	28	110	60	18×7	110	28×116.4	355

WPWKO



SHAFT DIRECTION

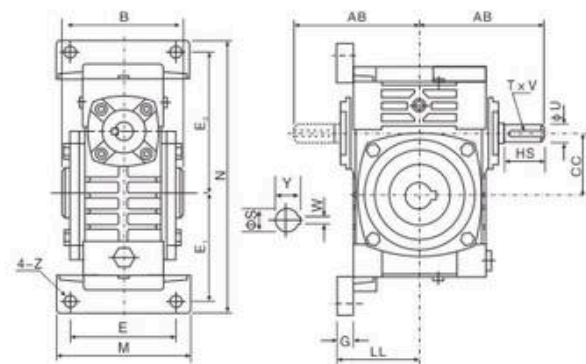


Size	Ratio	A	AB	B	BC	CC	M	N	E	E ₁	E ₂	G	Z	Input shaft			Output shaft		Weight (kg)
														HS	U	T×V	S	W×Y	
40	5	149	89	90	45	40	95	167	70	72	97	12	10	25	12	4 × 2.5	16	5 × 18.3	5
50		175	107	100	50	50	111	226	90	90	110	14	12	30	12	4 × 2.5	20	6 × 22.8	8
60		198	122	112	55	60	127	257	100	102	129	15	12	40	15	5 × 3	25	8 × 28.3	11
70		231	140	126	65	70	152	305	120	120	155	20	15	40	18	6 × 3.5	30	8 × 33.3	15.5
80	25	261	160	136	70	80	174	350	140	140	180	20	15	50	22	6 × 3.5	35	10 × 38.3	24
100	30	322	190	160	90	100	224	410	190	165	215	22	15	50	25	8 × 4	40	12 × 43.3	38
120	40	381	229	180	100	120	264	494	220	195	255	25	18	65	30	8 × 4	45	14 × 48.8	56
135	50	433	260	204	110	135	304	559	260	230	285	30	18	75	35	10 × 5	60	18 × 64.4	84
155	60	504	302	250	140	155	345	605	290	250	305	35	21	85	40	12 × 5	70	20 × 74.9	129
175	70	545	325	282	150	175	374	675	320	273	348	40	21	85	45	14 × 5.5	80	22 × 85.4	157
200	80	587	350	324	175	200	424	749	370	305	390	40	24	95	50	14 × 5.5	85	22 × 90.4	224
250	100	705	420	380	200	250	510	920	440	375	475	45	28	110	60	18 × 7	110	28 × 116.4	374

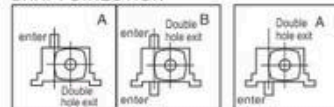
WPWKT



WPWKV

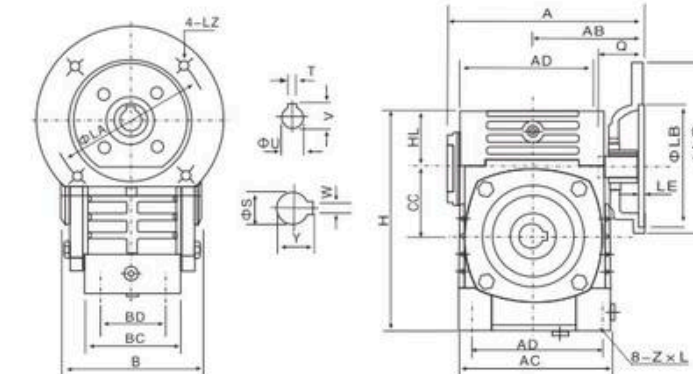


SHAFT DIRECTION

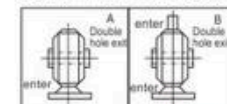


Size	Ratio	AB	B	CC	LL	M	N	E	E ₁	E ₂	G	Z	Input shaft			Output shaft		Weight (kg)	
													HS	U	T×V	S	W×V		
40	1/5	87	90	40	63	90	187	70	72	97	12	10	25	12	4×2.5	16	5×18.3	5	
50		107	100	50	70	120	226	95	90	110	14	12	30	12	4×2.5	20	6×22.8	8	
60		1/10	122	112	60	80	130	257	105	102	129	15	12	40	15	5×3	25	8×28.3	11
70			140	126	70	95	150	305	115	120	155	20	15	40	18	6×3.5	30	8×33.3	15.5
80	1/15	160	136	80	105	170	350	135	140	180	20	15	50	22	6×3.5	35	10×38.3	24	
100	1/20	190	160	100	135	190	410	155	165	215	22	15	50	25	8×4	40	12×43.3	38	
120	1/25	229	180	120	160	230	494	180	195	255	25	18	65	30	8×4	45	14×48.8	56	
135	1/30	260	204	135	185	250	559	200	230	285	30	18	75	35	10×5	60	18×64.4	84	
155	1/40	302	250	155	220	275	605	220	250	305	35	21	85	40	12×5	70	20×74.9	129	
175	1/50	325	282	175	240	310	675	250	273	348	40	21	85	45	14×5.5	80	22×85.4	157	
200	1/60	350	324	200	280	360	749	290	305	390	40	24	95	50	14×5.5	85	22×90.4	224	
250		420	380	250	315	460	920	380	375	475	45	28	110	60	18×7	110	28×116.4	374	

WPWDK



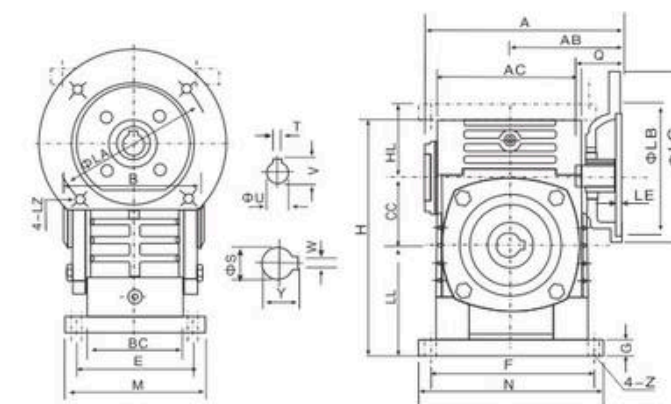
SHAFT DIRECTION

[illegible]

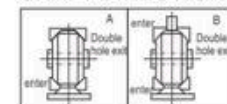
WPWDKA



WPWDKS

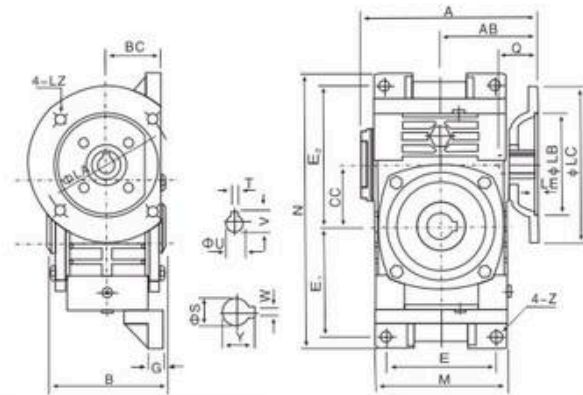


SHAFT DIRECTION

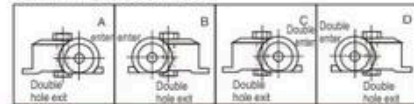


Size	Input power (kw)	Ratio	A	AB	B	AC	BC	CC	HL	LL	H	M	N	E	F	G	Z	Motor flange				Input hole			Output shaft		Weight (kg)	
			LA	LB	LC	LE	LZ	Q	U	T×V	S	W×Y																
40	0.12	5	135	75	90	95	61	40	45	60	135	100	130	80	110	10	10	115	95	140	4	M8	31	11	4×12.8	16	5×18.3	5
50	0.18		151	83	100	111	68	50	50	80	165	120	140	95	110	15	12	115	95	140	4	M8	31	11	4×12.8	20	6×22.8	8
60	0.37		167	91	112	127	76	60	60	93	195	130	150	105	120	18	12	130	110	160	4	M8	33	14	5×16.3	25	8×28.3	12.5
70	0.37		200	109	126	152	86	70	73	108	233	150	190	115	150	18	15	130	110	160	4	M10	42	19	6×21.8	30	8×33.3	17
	0.75		202	111																								
80	0.75	10	225	125	136	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
	1.5		22	52	24	8×27.3																						
100	1.5	20	280	148	160	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	2.2	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
	3.0																											
135	3.0	30	375	202	204	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
	4.0																											
155	4.0	40	425	224	250	345	185	155	135	235	493	280	380	220	320	32	21	215	180	250	5	M12	63	28	8×31.3	70	20×74.9	118
	5.5		448	227																								
175	5.5	50	481	262	282	374	192	175	160	260	558	310	410	250	350	37	21	265	230	300	5	M12	83	38	10×41.3	80	22×85.4	167
	7.5																											
200	7.5	60	516	258	324	412	230	200	175	290	620	355	445	290	390	45	24	265	230	300	5	M12	83	38	10×41.3	85	22×90.4	237
	11.0		543	285																								
250	11.0	70	615	330	380	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	390
	15.0																											

WPWDKO

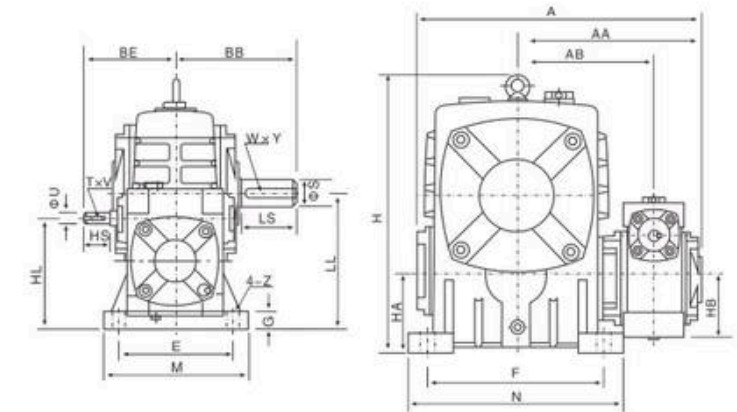


SHAFT DIRECTION

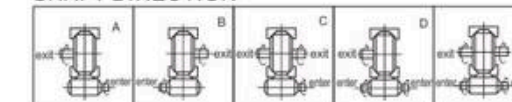


Size	Input power (kw)	Ratio	A	AB	B	BC	CC	M	N	E	E ₁	E ₂	G	Z	Motor flange				Input hole			Output shaft		Weight (kg)		
															LA	LB	LC	LE	LZ	Q	U	T×V	S		W×Y	
40	0.12	5	135	75	90	45	40	95	187	70	72	97	12	10	115	95	140	4	M8	31	11	4×12.8	16	5×18.3	5.4	
50	0.18		151	83	100	50	50	111	226	90	90	110	14	12	115	95	140	4	M8	31	11	4×12.8	20	6×22.8	8.5	
60	0.37		167	91	112	55	60	127	257	100	102	129	15	12	130	110	160	4	M8	33	14	5×16.3	25	8×28.3	12	
70	0.37		200	109	126	65	70	152	305	120	120	155	20	15	130	110	160	4	M8	40	14	5×16.3	30	8×33.3	17	
	0.75		202	111											165	130	200		M10	42	19	6×21.8				
80	0.75	15	225	125	136	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													52	24	8×27.3										
100	1.5		280	148	160	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	
120	2.2		30	333	181	180	100	120	264	494	220	195	255	25	18	215	180	250	5	M12	63	28	8×31.3	45	14×48.8	59
	3.0																									
135	3.0	40		375	202	204	110	135	304	559	260	230	285	30	18	215	180	250	5	M12	63	28	8×31.3	60	18×64.4	89
	4.0																									
155	4.0			60	425	224	250	140	155	345	605	290	250	305	35	21	215	180	250	5	M12	63	28	8×31.3	70	20×74.9
	5.5		448		247	265											230	300	5		M12	83	38	10×41.3		
175	5.5		80		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
	7.5																									
200	7.5	100			516	258	324	175	200	424	749	370	305	390	40	24	265	230	300	5	M12	83	38	10×41.3	85	22×90.4
	11.0			543	285	300											250	350	6		M16	114	42	12×45.3		
250	11.0			15.0	615	330	380	200	250	510	920	440	375	475	45	28	300	250	350	6	M16	114	42	12×45.3	110	28×116.4

WPEA



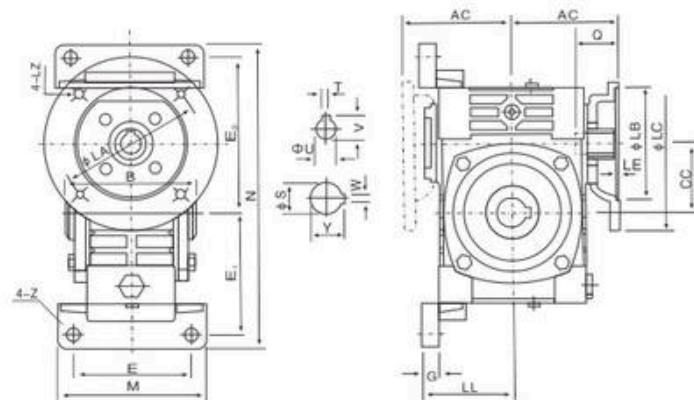
SHAFT DIRECTION



Size	Ratio	A	AA	AB	BB	BE	HL	LL	H	HA	HB	M	N	E	F	G	Z	Input shaft			Output shaft			Weight (kg)
																		HS	U	T×V	LS	S	W×Y	
40-70	200	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		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		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		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		471	298	226	210	160	215	270	480	135	105	250	350	200	290	30	18	50	22	6×3.5	95	55	16×6	101
80-147	600	476	301	229	212	160	203	270	501	123	105	250	350	200	280	32	18	50	22	6×3.5	95	55	16×6	112
100-155	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
120-175	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
135-200	155-250	662	425	318	305	260	310	375	666	175	185	360	480	290	390	40	24	75	35	10×5	125	70	20×7.5	293
155-250		795	510	380	360	302	355	450	800	200	203	460	560	380	480	45	28	85	40	12×5	155	90	25×9	462

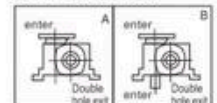
WPWDKT

WPWDKV



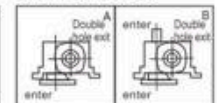
WPWDKT

SHAFT DIRECTION



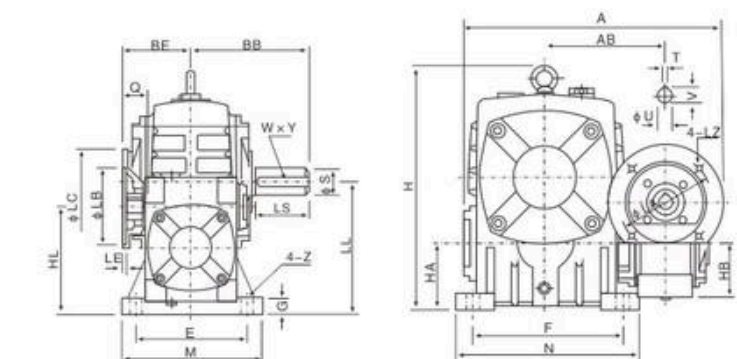
WPWDKV

SHAFT DIRECTION



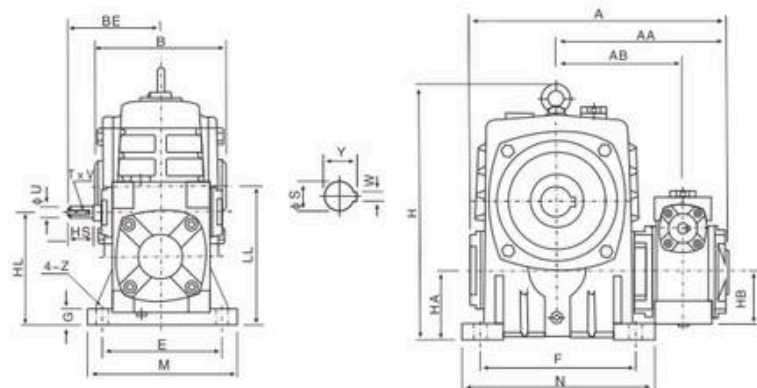
Size	Input power (kw)	Ratio	AC	B	CC	LL	M	N	E	E ₁	E ₂	G	Z	Motor flange				Input hole				Output shaft		Weight (kg)
				LA	LB	LC	LE	LZ	Q	U	T×V	S	W×Y											
40	0.12	1/5	75	90	40	63	90	187	70	72	97	12	10	115	95	140	4	M8	31	11	4×12.8	16	5×18.3	5.4
50	0.18		83	100	50	70	120	226	90	90	110	14	12	115	95	140	4	M8	31	11	4×12.8	20	6×22.8	8.5
60	0.37		91	112	60	80	130	257	105	102	129	15	12	130	110	160	4	M8	33	14	5×16.3	25	8×28.3	12
70	0.37		109	126	70	95	150	305	115	120	155	20	15	130	110	160	4	M8	40	14	5×16.3	30	8×33.3	17
	0.75		111											165	130	200		M10	42	19	6×21.8			
80	0.75	1/10	125	136	80	105	170	350	135	140	180	20	15	165	130	200	4.5	M10	48	19	6×21.8	35	10×38.3	26
	1.5																		52	24	8×27.3			
100	1.5	1/20	148	160	100	135	190	410	155	165	215	22	15	165	130	200	4.5	M10	52	24	8×27.3	40	12×43.3	40.5
120	2.2	1/25	181	180	120	160	230	494	180	195	255	25	18	215	180	250	5	M12	63	28	8×31.3	45	14×48.8	59
	3.0																							
135	3.0	1/30	202	204	135	185	250	559	200	230	285	30	18	215	180	250	5	M12	63	28	8×31.3	60	18×64.4	89
	4.0																							
155	5.5	1/50	247	250	155	220	275	605	220	250	305	35	21	265	230	300	5	M12	83	38	10×41.3	70	20×74.9	138
175	5.5	1/60	262	282	175	240	310	675	250	273	348	40	21	265	230	300	5	M12	83	38	10×41.3	80	22×85.4	172
	7.5																							
200	11.0	1/60	285	324	200	280	360	749	290	305	390	40	24	300	250	350	6	M16	114	42	12×45.3	85	22×90.4	246
250	11.0		330	380	250	315	460	920	380	375	475	45	28	300	250	350	6	M16	114	42	12×45.3	110	28×116.4	410
	15.0																							

WPEDA

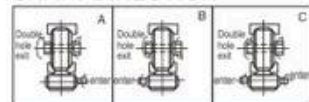


SHAFT DIRECTION

WPEKA

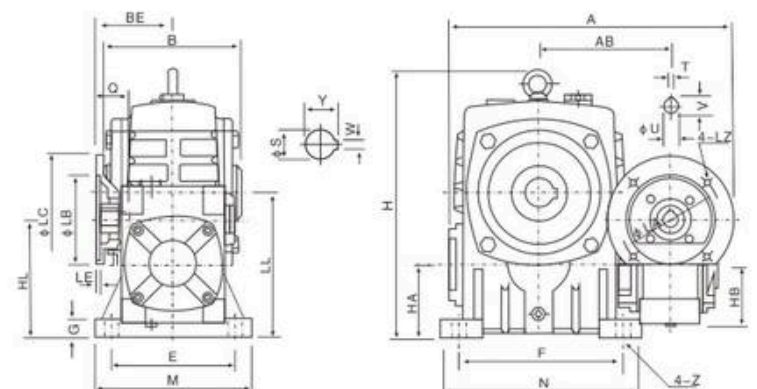


SHAFT DIRECTION

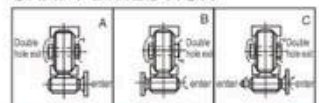


Size	Ratio	A	AA	AB	B	BE	HL	LL	H	HA	HB	M	N	E	F	G	Z	Input shaft			Output shaft		Weight (kg)	
																		HS	U	T×V	S	W×Y		
40~70	200	262	171	126	126	89	110	140	236	70	50	150	190	115	150	20	15	25	12	4×2.5	30	8×33.3	20	
50~80		297	197	144	136	107	130	160	268	80	65	170	220	135	180	20	15	30	12	4×2.5	35	10×38.3	27	
60~100		300	363	231	175	160	122	160	200	336	100	75	190	270	155	220	25	15	40	15	5×3	40	12×43.3	44
70~120		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	500	471	298	226	204	160	215	270	480	135	105	250	350	200	290	30	18	50	22	6×3.5	60	18×64.4	101	
100~155	600	555	354	269	250	190	235	290	531	135	130	275	390	220	320	35	21	50	25	8×4	70	20×74.9	144	
120~175	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	900	662	425	318	324	260	310	375	666	175	185	360	480	290	390	40	24	75	35	10×5	85	22×90.4	293	
155~250		795	510	380	380	302	355	450	800	200	203	460	560	380	480	45	28	85	40	12×5	110	28×116.4	466	

WPEDKA



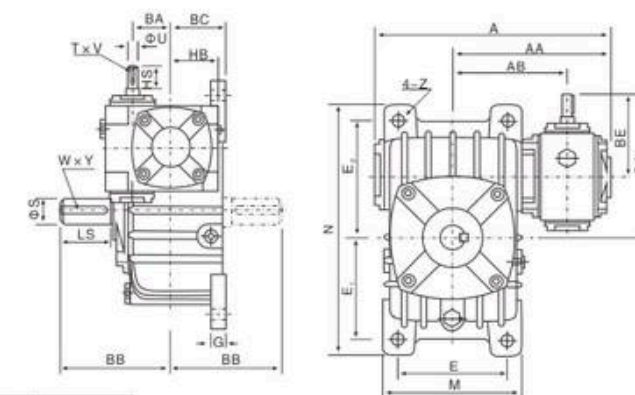
SHAFT DIRECTION



Size	Input power (kw)	Ratio	A	AB	B	BE	HL	LL	H	HA	HB	M	N	E	F	G	Z	Motor flange					Input hole				Output shaft			Weight (kg)
																		LA	LB	LC	LE	LZ	Q	U	TxV	S	WxY			
40-70	0.12	200 300 400 500 600 800 900	287	126	126	75	110	140	236	70	50	150	190	115	150	20	15	115	95	140	4	M8	31	11	4x12.8	30	8x33.3	19		
50-80	0.18		314	144	136	83	130	160	268	80	65	170	220	135	180	20	15	115	95	140	4	M8	31	11	4x12.8	35	10x38.3	27		
60-100	0.37		387	175	160	91	160	200	336	100	75	190	270	155	220	25	15	130	110	160	4	M8	33	14	5x16.3	40	12x43.3	45		
70-120	0.37		425			109												130	110	160	4	M8	40	14	5x16.3	45	14x48.8	75		
	0.75		445	193	180	111	190	240	430	120	90	230	320	180	260	30	18	165	130	200	4	M10	42	19	6x21.8					
80-135	0.75		499	226	204	125	215	270	480	135	105	250	350	200	290	30	18	165	130	200	4.5	M10	48	19	6x21.8	60	18x64.4	103		
	1.5																					52	24	8x27.3						
100-155	1.5		570	269	250	148	235	290	531	135	130	275	390	220	320	35	21	165	130	200	4.5	M10	52	24	8x27.3	70	20x74.9	147		
120-175	2.2		631	287	282	181	280	335	600	160	155	310	430	250	350	40	21	215	180	250	5	M12	63	28	8x31.3	80	22x85.4	204		
	3.0																													
135-200	3.0	680	318	324	202	310	375	666	175	185	360	480	290	390	40	24	215	180	250	5	M12	63	28	8x31.3	85	22x90.4	298			
155-250	4.0	815	380	380	224	355	450	800	200	203	460	560	380	480	45	28	215	180	250	5	M12	63	28	8x31.3	110	28x116.4	470			
	5.5				247												265	230	300	5	M12	63	38	10x41.3						

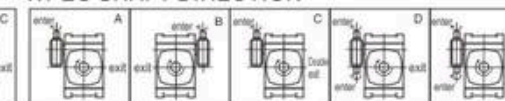
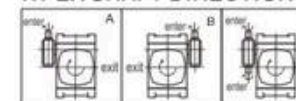
WPEX

WPEO



WPEX SHAFT DIRECTION

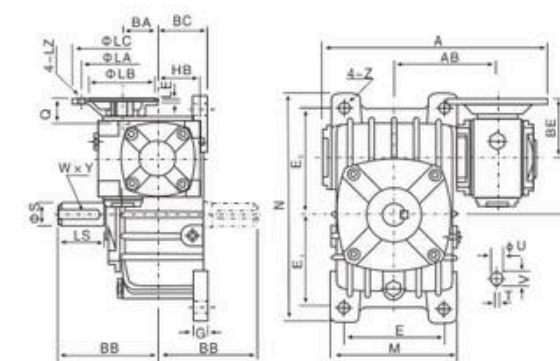
WPEO SHAFT DIRECTION



Size	Ratio	A	AA	AB	BA	BB	BC	BE	HB	CA	M	N	E	E ₁	E ₂	G	Z	Input shaft			Output shaft			Weight (kg)
																		HS	U	TxV	LS	S	WxY	
40-70		262	171	126	40	131	65	89	50	159	156	295	120	120	135	20	15	25	12	4x2.5	60	28	8x4	19
50-80	200	297	197	144	50	142	70	107	65	187	175	320	140	130	150	20	15	30	12	4x2.5	65	32	10x5	27
60-100	300	363	231	175	60	169	90	122	75	222	224	375	190	155	180	26	15	40	15	5x3	75	38	10x5	44
70-120	400	408	256	193	70	190	100	140	90	260	266	450	220	185	215	30	18	40	18	6x3.5	85	45	14x5.5	63
80-135	500	471	298	226	80	210	110	160	105	295	306	495	260	210	235	30	18	50	22	6x3.5	95	55	16x6	96
80-147	600	476	301	229	80	212	113	160	105	307	310	556	250	254	254	32	18	50	22	6x3.5	95	55	16x6	112
100-155	800	555	354	269	100	252	140	190	130	345	350	590	290	245	295	35	21	50	25	8x4	110	60	18x7	149
120-175	900	598	379	287	120	262	150	229	155	404	394	640	320	267	323	40	21	65	30	8x4	110	65	18x7	191
135-200		662	425	318	135	305	175	260	185	460	440	710	370	290	360	40	24	75	35	10x5	125	70	20x7.5	278
155-250		795	510	380	155	360	200	302	203	552	510	860	440	350	440	45	28	85	40	12x5	155	90	25x9	442

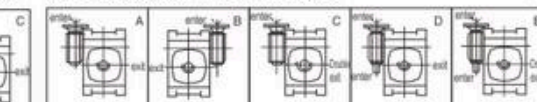
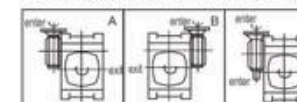
WPEDX

WPEDO



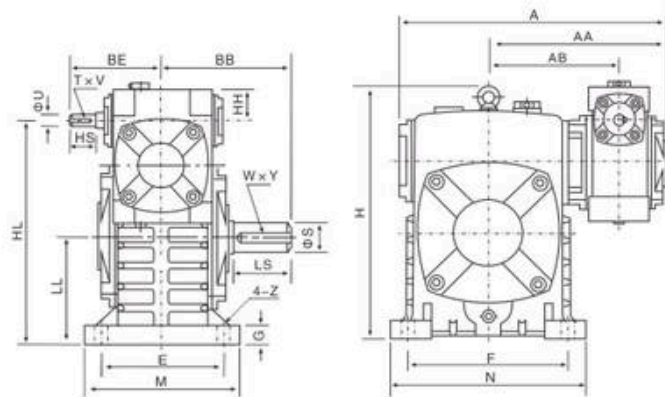
WPEDX SHAFT DIRECTION

WPEDO SHAFT DIRECTION

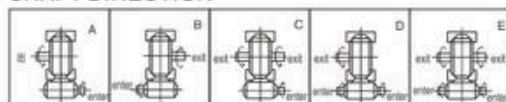


Size	Input power (kw)	Ratio	A	AB	BA	BB	BC	BE	HB	CA	M	N	E	E ₁	E ₂	G	Z	Motor flange					Input hole			Output shaft			Weight (kg)
																		LA	LB	LC	LE	LZ	Q	U	TxV	LS	S	WxY	
40-70	0.12		287	126	40	131	65	75	50	145	156	295	120	120	135	20	15	115	95	140	4	M8	31	11	4x12.8	60	28	8x4	19
50-80	0.18		314	144	50	142	70	83	65	163	175	320	140	130	150	20	15	115	95	140	4	M8	31	11	4x12.8	65	32	10x5	27
60-100	0.37		387	175	60	169	90	91	75	191	224	375	190	155	180	26	15	130	110	160	4	M8	33	14	5x16.3	75	38	10x5	45
70-120	0.75	200	425	193	70	190	100	111	90	231	266	450	220	185	215	30	18	130	110	160	4	M8	40	14	5x16.3	85	45	14x5.5	65
80-135	1.5	300	445	226	80	210	110	125	105	260	306	495	260	210	235	30	18	165	130	200	4.5	M10	48	19	6x21.8	95	55	16x6	98
80-147	0.75	400	499	269	80	212	113	125	105	272	310	556	250	254	254	32	18	165	130	200	4.5	M10	48	19	6x21.8	95	55	16x6	114
100-155	3.0	600	570	287	100	252	140	148	130	303	350	590	290	245	295	35	21	165	130	200	4.5	M10	52	24	8x27.3	110	60	18x7	152
120-175	4.0	800	631	318	120	262	150	181	155	356	394	640	320	267	323	40	21	215	180	250	5	M12	63	28	8x31.3	110	65	18x7	194
135-200	5.5	900	680	318	135	305	175	202	185	402	440	710	370	290	360	40	24	215	180	250	5	M12	63	28	8x31.3	125	70	20x7.5	283
155-250			815	380	155	360	200	224	203	474	510	860	440	350	440	45	28	215	180	250	5	M12	63	28	8x31.3	155	90	25x9	450

WPES

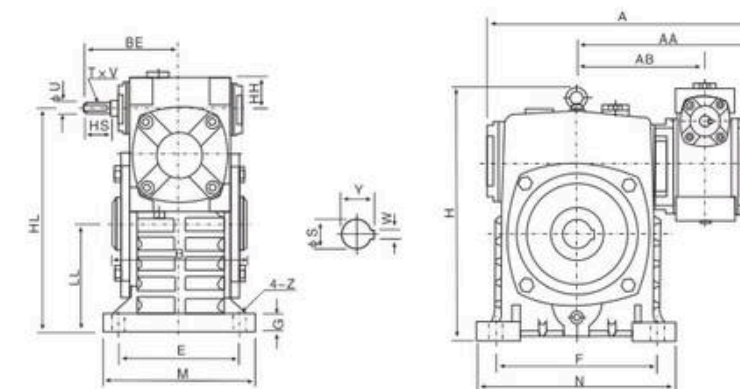


SHAFT DIRECTION

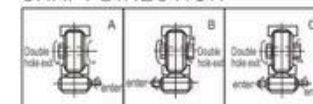


Size	Ratio	A	AA	AB	BB	BE	HH	HL	LL	H	M	N	E	F	G	Z	Input shaft			Output shaft			Weight (kg)
																	HS	U	T×V	LS	S	W×Y	
40~70	200	262	171	126	131	89	35	215	105	238	150	190	115	150	20	15	25	12	4×2.5	60	28	8×4	20
50~80		297	197	144	142	107	35	250	120	273	170	220	135	180	20	15	30	12	4×2.5	65	32	10×5	27
60~100		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		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		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
80~147	500	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
100~155		555	354	269	252	190	80	490	235	541	275	390	220	320	35	21	50	25	8×4	110	60	18×7	144
120~175		598	379	287	262	229	95	555	260	600	310	430	250	350	40	21	65	30	8×4	110	65	18×7	201
135~200		662	425	318	305	260	105	625	290	677	360	480	290	390	40	24	75	35	10×5	125	70	20×7.5	293
155~250		795	510	380	360	302	103	755	350	824	460	560	380	480	45	28	85	40	12×5	155	90	25×9	466

WPEKS

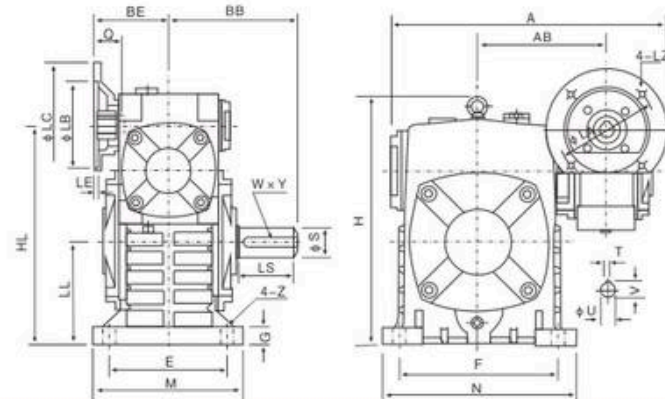


SHAFT DIRECTION

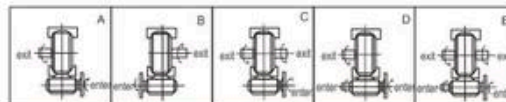


Size	Ratio	A	AA	AB	B	BE	HH	HL	LL	H	M	N	E	F	G	Z	Input shaft			Output shaft		Weight (kg)
																	HS	U	T×V	S	W×Y	
40~70	200	262	171	126	126	89	35	215	105	238	150	190	115	150	20	15	25	12	4×2.5	30	8×33.3	20
50~80		297	197	144	136	107	35	250	120	273	170	220	135	180	20	15	30	12	4×2.5	35	10×38.3	27
60~100		363	231	175	160	122	42	310	150	334	190	270	155	220	25	15	40	15	5×3	40	12×43.3	44
70~120		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		471	298	226	204	160	65	430	215	482	250	350	200	290	30	18	50	22	6×3.5	60	18×64.4	101
100~155	600	555	354	269	250	190	80	490	235	541	275	390	220	320	35	21	50	25	8×4	70	20×74.9	144
120~175	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	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	380	302	103	755	350	824	460	560	380	480	45	28	85	40	12×5	110	28×116.4	466

WPEDS

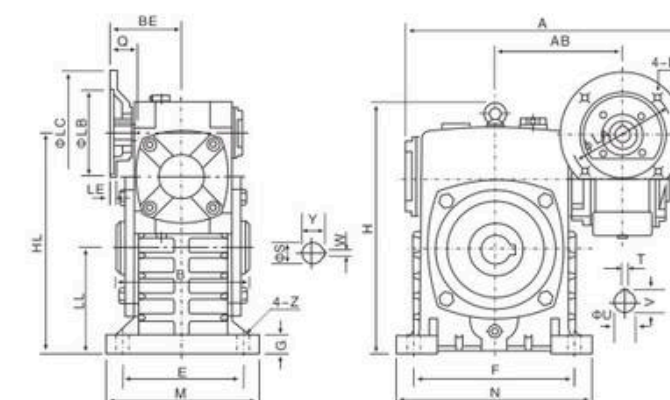


SHAFT DIRECTION

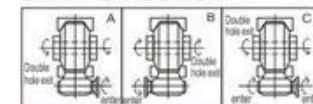


Size	Input power (kw)	Ratio	A	AB	BB	BE	HL	LL	H	M	N	E	F	G	Z	Motor flange				Input hole				Output shaft			Weight (kg)
																LA	LB	LC	LE	LZ	Q	U	TxV	LS	S	WxY	
40-70	0.12	200	287	126	131	75	215	105	238	150	190	115	150	20	15	115	95	140	4	M8	31	11	4x12.8	60	28	8x4	19
50-80	0.18		314	144	142	83	250	120	273	170	220	135	180	20	15	115	95	140	4	M8	31	11	4x12.8	65	32	10x5	27
60-100	0.37		387	175	169	91	310	150	334	190	270	155	220	25	15	130	110	160	4	M8	33	14	5x16.3	75	38	10x5	45
70-120	0.37		425	193	190	109	370	180	423	230	320	180	260	30	18	130	110	160	4	M8	40	14	5x16.3	85	45	14x5.5	75
80-135	0.75		445	226	210	111	430	215	482	250	350	200	290	30	18	165	130	200	4.5	M10	42	19	6x21.8	95	55	16x6	103
80-147	1.5	300	499	226	210	125	430	203	495	250	350	200	280	32	18	165	130	200	4.5	M10	52	24	8x27.3	95	55	16x6	114
100-155	1.5		504	229	212	125	430	203	495	250	350	200	280	32	18	165	130	200	4.5	M10	52	24	8x27.3	110	60	18x7	147
120-175	2.2		570	269	252	148	490	235	541	275	390	220	320	35	21	165	130	200	4.5	M10	52	24	8x27.3	110	60	18x7	147
135-200	3.0		631	287	262	181	555	260	600	310	430	250	350	40	21	215	180	250	5	M12	63	28	8x31.3	110	65	18x7	204
155-250	4.0		680	318	305	202	625	290	677	360	480	290	390	40	24	215	180	250	5	M12	63	28	8x31.3	125	70	20x7.5	298
	5.5		815	380	360	224	755	350	824	460	560	380	480	45	28	215	180	250	5	M12	63	28	8x31.3	155	90	25x9	470

WPEDKS

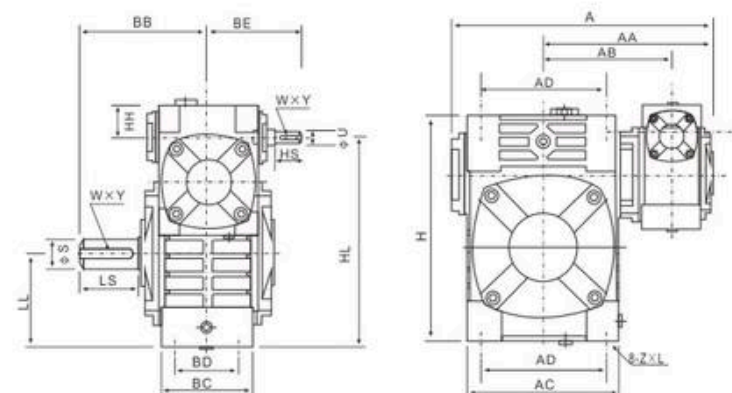


SHAFT DIRECTION

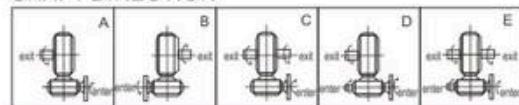


Size	Input power (kw)	Ratio	A	AB	B	BE	HL	LL	H	M	N	E	F	G	Z	Motor flange					Input hole				Output shaft		Weight (kg)
																LA	LB	LC	LE	LZ	Q	U	T×V	S	W×Y		
40~70	0.12	200	287	126	126	75	215	105	238	150	190	115	150	20	15	115	95	140	4	M8	31	11	4×12.8	30	8×33.3	19	
50~80	0.18		314	144	136	83	250	120	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	160	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	0.37		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	
	0.75		445			111																					M10
80~135	0.75	400	499	226	204	125	430	215	482	250	350	200	290	30	18	165	130	200	4.5	M10	48	19	6×21.8	60	18×64.4	103	
	1.5																				52						24
100~155	1.5	600	570	269	250	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	2.2	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	
3.0																											
135~200	3.0	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	4.0		815	380	380	224	755	350	824	460	560	380	480	45	28	215	180	250	5	M12	63	28	8×31.3	110	28×116.4	470	
	5.5					247																					M12

WPWE

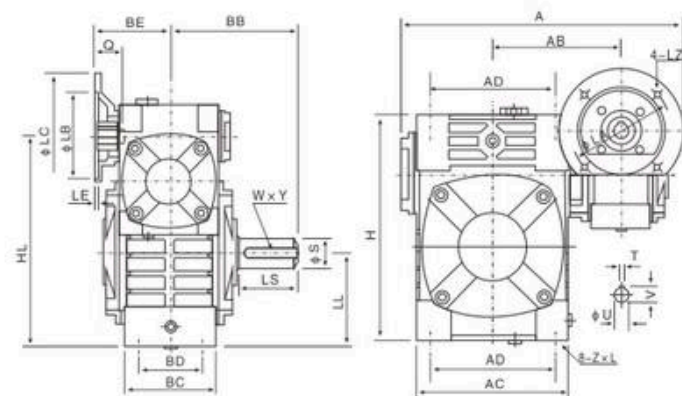


SHAFT DIRECTION

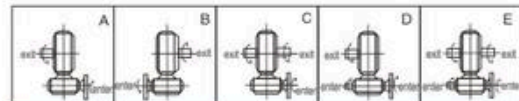


Size	Ratio	A	AA	AB	BB	BE	AC	BC	AD	BD	HH	HL	LL	H	Z×L	Input shaft			Output shaft			Weight (kg)
																HS	U	T×V	LS	S	W×Y	
40-70	200	262	171	126	131	89	152	86	125	65	35	200	90	215	M10×25	25	12	4×2.5	60	28	8×4	17
50-80		297	197	144	142	107	169	102	140	70	35	235	105	250	M12×28	30	12	4×2.5	65	32	10×5	28
60-100	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	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	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	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	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	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

WPWED

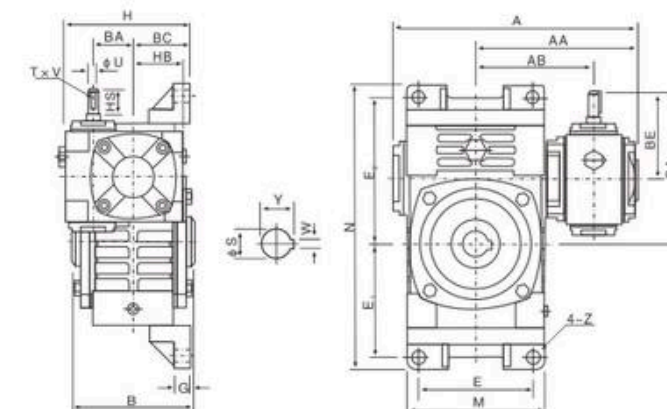


SHAFT DIRECTION

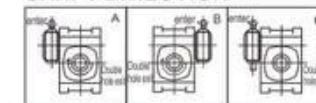


Size	Input power (kw)	Ratio	A	AB	BB	BE	AC	BC	AD	BD	HL	LL	H	ZxL	Motor flange				Input hole			Output shaft			Weight (kg)		
															LA	LB	LC	LE	LZ	Q	U	T×V	LS	S		W×Y	
40-70	0.12	200	287	126	131	75	152	86	125	65	200	90	215	M10X25	115	95	140	4	M8	31	11	4×12.8	60	28	8×4	17	
50-80	0.18		314	144	142	83	169	102	140	70	235	105	250	M12X28	115	95	140	4	M8	31	11	4×12.8	65	32	10×5	28	
60-100	0.37		387	175	169	91	216	117	180	90	290	130	310	M12X30	130	110	160	4	M8	33	14	5×16.3	75	38	10×5	44	
70-120	0.37		425			109									M14X32	130	110	160	4	M8	40	14	5×16.3				
	0.75		445	193	190	111	256	124	220	100	345	155	370	M14X32	165	130	200	4	M10	42	19	6×21.8	85	45	14×5.5	66	
80-135	0.75	400	499	226	210	125	296	147	260	110	400	185	425	M16X35	165	130	200	4.5	M10	48	19	6×21.8	95	55	16×6	101	
	1.5		500																52	24	8×27.3						
100-155	1.5	600	570	269	252	148	345	185	280	120	458	203	461	M16X35	165	130	200	4.5	M10	52	24	8×27.3	110	60	18×7	139	
120-175	2.2	800	631	287	262	181	374	192	320	140	518	223	521	M16X35	215	180	250	5	M12	63	28	8×31.3	110	65	18×7	196	
	3.0		900																								
135-200	3.0		680	318	305	202	412	230	360	150	580	245	575	M20X36	215	180	250	5	M12	63	28	8×31.3	125	70	20×7.5	285	
	4.0																										
155-250	4.0		815	380	360	224	500	285	420	190	705	300	700	M24X42	215	180	250	5	M12	63	28	8×31.3	155	90	25×9	450	
	5.5					247										265	230	300	5	M12	83	38	10×41.3				

WPWEKO

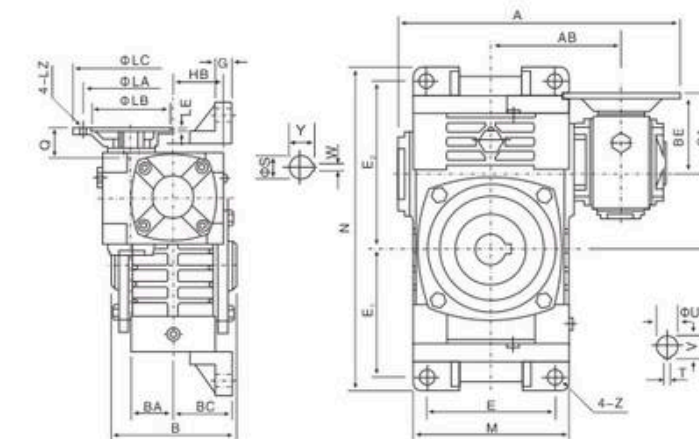


SHAFT DIRECTION

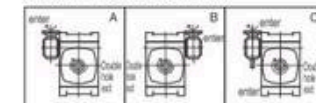


Size	Ratio	A	AA	AB	B	BA	BC	BE	HB	CA	H	M	N	E	E ₁	E ₂	G	Z	Input shaft			Output shaft		Weight (kg)	
																			HS	U	T×V	S	W×Y		
40~70	200	262	171	126	126	40	65	89	50	159	140	152	305	120	120	155	20	15	25	12	4×2.5	30	8×33.3	19.5	
50~80		297	197	144	136	50	70	107	65	187	155	174	350	140	140	180	20	15	30	12	4×2.5	35	10×38.3	30.5	
60~100		300	363	231	175	160	60	90	122	76	222	192	224	410	190	165	215	22	15	40	15	5×3	40	12×43.3	47
70~120		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	500	471	298	226	204	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	600	555	354	269	250	100	140	190	130	345	320	345	605	290	250	305	35	21	50	25	8×4	70	20×74.9	163	
120~175	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	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	380	155	200	302	203	552	458	510	920	440	375	475	45	28	85	40	12×5	110	28×116.4	476	

WPWEDKO

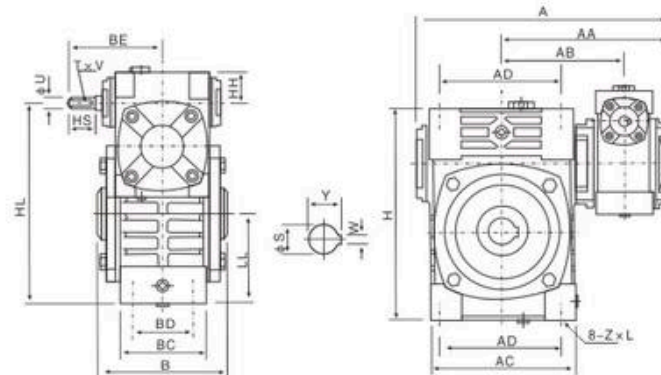


SHAFT DIRECTION

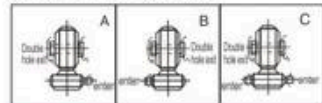


Size	Input power (kw)	Ratio	A	AB	B	BA	BC	BE	HB	CA	M	N	E	E ₁	E ₂	G	Z	Motor flange					Input hole			Output shaft		Weight (kg)
																		LA	LB	LC	LE	LZ	Q	U	T×V	S	W×Y	
40-70	0.12	200	287	126	126	40	65	75	50	145	152	305	120	120	155	20	15	115	95	140	4	M8	31	11	4×12.8	30	8×33.3	20
50-80	0.18		314	144	136	50	70	83	65	163	174	350	140	140	180	20	15	115	95	140	4	M8	31	11	4×12.8	35	10×38.3	31
60-100	0.37		387	175	160	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	0.37	300	425	193	180	70	100	109	90	229	264	494	220	195	255	25	18	130	110	160	4	M8	40	14	5×16.3	45	14×48.8	71
	0.75		165					130		200								M10	42	19								
80-135	0.75	400	499	226	204	80	110	125	105	260	304	559	260	230	285	30	18	165	130	200	4.5	M10	48	19	6×21.8	60	18×64.4	107
	1.5		52																				24					
100-155	1.5	600	570	269	250	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
120-175	2.2	800	631	287	282	120	150	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
	3.0																											
135-200	3.0	900	680	318	324	135	175	202	185	402	424	749	370	305	390	40	24	215	180	250	5	M12	63	28	8×31.3	85	22×90.4	307
	4.0																											
155-250	4.0		815	380	380	155	200	224	203	474	510	920	440	375	475	45	28	215	180	250	5	M12	63	28	8×31.3	110	28×116.4	484
	5.5							247		497																		

WPWEK

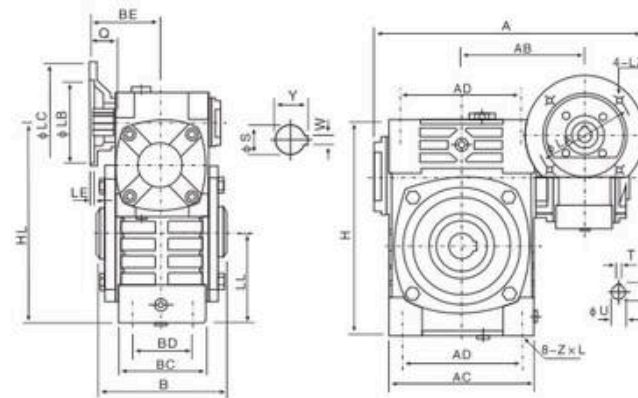


SHAFT DIRECTION

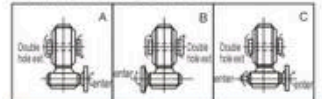


Size	Ratio	A	AA	AB	B	BE	AC	BC	AD	BD	HH	HL	LL	H	ZxL	Input shaft			Output shaft		Weight (kg)
																HS	U	T×V	S	W×Y	
40-70		262	171	126	126	89	152	86	125	65	35	200	90	215	M10 X25	25	12	4×2.5	30	8×33.3	17
50-80		297	197	144	136	107	169	102	140	70	35	235	105	250	M12X28	30	12	4×2.5	35	10×38.3	28
60-100	200	363	231	175	160	122	216	117	180	90	42	290	130	310	M12X30	40	15	5×3	40	12×43.3	43
70-120	300	408	256	193	180	140	256	124	220	100	55	345	155	370	M14X32	40	18	6×3.5	45	14×48.8	64
80-135	400	471	298	226	204	160	296	147	260	110	65	400	185	425	M16X35	50	22	6×3.5	60	18×64.4	99
100-155	500	555	354	269	250	190	345	185	280	120	80	458	203	461	M16X35	50	25	8×4	70	20×74.9	136
120-175	600	598	379	287	282	229	374	192	320	140	95	518	223	521	M16X35	65	30	8×4	80	22×85.4	193
135-200	800	662	425	318	324	260	412	230	360	150	105	580	245	575	M20X36	75	35	10×5	85	22×90.4	280
155-250	900	795	510	380	380	302	500	285	420	190	103	705	300	700	M24X42	85	40	12×5	110	28×116.4	442

WPWEDK

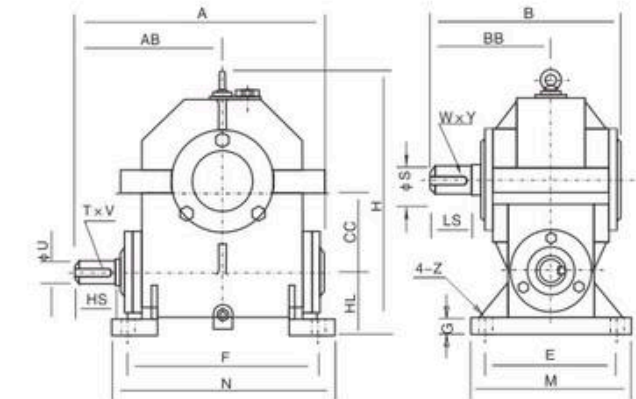


SHAFT DIRECTION

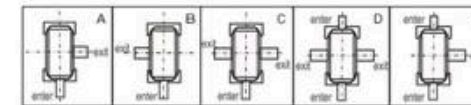


Size	Input power (kw)	Ratio	A	AB	B	BE	AC	BC	AD	BD	HL	LL	H	ZxL	Motor flange				Input hole				Output shaft		Weight (kg)	
															LA	LB	LC	LE	LZ	Q	U	T×V	S	W×Y		
40-70	0.12	200 300 400 500 600 800 900	287	126	126	75	152	86	125	65	200	90	215	M10 X25	115	95	140	4	M8	31	11	4×12.8	30	8×33.3	17	
50-80	0.18		314	144	136	83	169	102	140	70	235	105	250	M12X28	115	95	140	4	M8	31	11	4×12.8	35	10×38.3	28	
60-100	0.37		387	175	160	91	216	117	180	90	290	130	310	M12X30	130	110	160	4	M8	33	14	5×16.3	40	12×43.3	44	
70-120	0.37		425			109									130	110	160		M8	40	14	5×16.3				
	0.75		445	193	180	111	256	124	220	100	345	155	370	M14X32	165	130	200	4	M10	42	19	6×21.8	45	14×48.8	66	
80-135	0.75		499	226	204	125	296	147	260	110	400	185	425	M16X35	165	130	200	4.5	M10	48	19	6×21.8	60	18×64.4	101	
	1.5																		52	24	8×27.3					
100-155	1.5		600	570	269	250	148	345	185	280	120	458	203	461	M16X35	165	130	200	4.5	M10	52	24	8×27.3	70	20×74.9	139
120-175	2.2		900	631	287	282	181	374	192	320	140	518	223	521	M16X35	215	180	250	5	M12	63	28	8×31.3	80	22×85.4	196
	3.0																									
135-200	3.0		680	318	324	202	412	230	360	150	580	245	575	M20X36	215	180	250	5	M12	63	28	8×31.3	85	22×90.4	285	
155-250	4.0		815	380	380	224	500	285	420	190	705	300	700	M24X42	215	180	250	5	M12	63	28	8×31.3	110	28×116.4	450	
	5.5																									

WD



SHAFT DIRECTION



Size	Module	Teeth	A	AB	B	BB	CC	E	F	H	HL	M	N	G	Z	Input shaft			Output shaft			Weight (kg)
																HS	U	T×V	LS	S	W×Y	
33	1.5	30	137	86	124	79	33	75	95	120	40	90	110	10	7	30	14	5×3	30	16	5×3	4
43	1.5	40	170	103	134	85	43	80	100	141	42	100	120	11	9	30	14	5×3	30	16	5×3	5
48	1.5	50	177	106	135	85	48	75	115	151	40	95	135	12	7	30	14	5×3	30	16	5×3	7
55.5	1.5	60	197	116	145	90	55.5	80	130	171	40	100	150	13	7	30	14	5×3	30	16	5×3	14
33	2	20	137	86	124	79	33	75	95	120	40	90	110	10	7	30	14	5×3	30	16	5×3	4
43	2	30	170	103	134	85	43	80	100	141	42	100	120	11	9	30	15	5×3	30	18	6×3.5	5
53	2	40	175	105	140	88	53	90	116	162	42	110	140	12	9	30	15	5×3	30	18	6×3.5	7
63	2	50	194	118	155	99	63	102	135	183	45	120	160	13	9	30	16	5×3	35	18	6×3.5	10
73	2	60	225	132	184	115	73	124	174	211	52	150	200	15	12	30	16	5×3	35	22	6×3.5	15
43	2.5	20	170	103	134	85	43	80	100	141	42	100	120	11	9	30	15	5×3	30	18	6×3.5	5
53	2.5	30	175	105	140	88	53	90	116	162	42	110	140	12	9	30	15	5×3	30	18	6×3.5	7
63	2.5	40	230	139	181	114	63	114	160	197	55	140	190	14	12	40	22	6×3.5	40	24	8×4	14
78	2.5	50	247	146	189	119	78	130	188	232	62	160	220	16	12	40	22	6×3.5	40	28	8×4	18
90	2.5	60	288	176	215	138	90	130	210	294	70	170	246	17	14	50	24	8×4	50	28	8×4	24
48	3	20	192	116	163	102	48	90	120	161	47	120	150	13	11	35	18	6×3.5	35	22	6×3.5	7
63	3	30	230	139	181	114	63	114	160	197	55	140	190	14	12	40	22	6×3.5	40	24	8×4	14
78	3	40	247	146	189	119	78	130	188	232	62	160	220	16	12	40	22	6×3.5	40	28	8×4	18
93	3	50	301	185	224	114	93	154	206	280	77	180	240	17	14	50	24	8×4	50	28	8×4	24
108	3	60	327	196	238	154	108	135	238	350	80	164	268	17	14	50	28	8×4	60	34	10×5	30
63	4	20	230	139	181	114	63	114	160	195	55	140	190	14	12	40	22	6×3.5	40	24	8×4	14
82	4	30	263	162	221	140	82	154	184	268	88	180	220	17	14	50	24	8×4	50	28	8×4	24
102	4	40	310	187	246	160	102	144	234	342	80	180	270	18	14	50	28	8×4	60	34	10×5	30
122	4	50	373	224	296	190	122	188	274	390	95	220	310	22	16	60	30	8×4	70	38	12×5	48
80	5	20	268	171	253	168	80	134	184	252	80	170	215	16	14	60	30	8×4	70	34	10×5	25
105	5	30	326	203	270	178	105	144	234	341	80	180	270	18	14	65	30	8×4	70	38	12×5	36
130	5	40	366	222	275	181	130	184	284	392	80	220	320	21	16	65	30	8×4	75	42	12×5	48
153	5	50	439	267	293	194	153	190	350	464	112	230	390	25	18	80	36	10×5	80	40	12×5	70
122	6	30	383	234	296	190	122	188	274	390	95	220	310	22	16	70	36	10×5	70	38	12×5	50
153	6	40	439	267	293	194	153	190	350	464	112	230	390	25	18	80	36	10×5	80	40	12×5	70
180	6	50	519	310	327	213	180	210	390	537	112	250	430	26	18	80	36	10×5	85	42	12×5	82

Selection Methods

Selection elements

Input power, output torque

The conversion formula for input power and output torque is as follows:

Input power P (kW)=output torque T (N.m) x output shaft speed N_2 (r/min)/(9549 x efficiency η)

The input power of the reducer is the input power capacity of the reducer, and the output torque is the allowable bearing capacity of the reducer,

All are listed in the "power and torque" tables of the product, which can be used as a reference for selection.

Input shaft speed, output shaft speed

The conversion formula for input shaft and output shaft speed is as follows:

Output shaft speed N_2 (r/min)=Input shaft speed N_1 (r/min)/Transmission ratio i

When the reducer is driven by pulleys, sprockets, and couplings, the input shaft speed should not exceed 2000 (r/min),

The general speed range is 600-1800 (r/min). Excessive rotational speed can increase friction and shorten the lifespan of bearings.

efficiency

The efficiency calculation formula is as follows:

Efficiency η =(output power/input power) x 100%

Due to the internal friction and vibration during the operation of the reducer, some of the input energy will be converted into non working consumption such as heat energy. Efficiency is the utilization rate of the input energy of the reducer, which depends on the number of worm heads, worm speed, lubricating oil viscosity, bearing friction resistance, and the friction coefficient of the worm gear pair material.

The efficiency values of each specification and transmission ratio of the reducer are different. The following table lists the range of efficiency values for reference when selecting:

Speed 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%

Rotation direction of input shaft and output shaft

The direction of rotation of the output shaft of the worm gear reducer depends on the direction of the worm screw teeth, and basic worm gear reducers are all right-hand screw teeth. Based on the WPA photos on our company's product samples, when viewed from the input shaft and output shaft, when the input shaft rotates clockwise, the output shaft rotates counterclockwise; Based on the WPS photo, when looking at the input shaft and output shaft, when the input shaft rotates clockwise, the output shaft rotates clockwise; The steering of other output shaft assembly structures can be determined according to the above method. When the direction of the worm screw thread is made left-handed according to special requirements, the situation is exactly the opposite.

Operating condition coefficient

When designing a reducer, the strength calculation of its input power capacity and allowable bearing capacity is based on the ideal working condition of continuous operation for eight hours a day with a stable load. In actual use, the on-site working conditions (such as whether there are repeated starts and stops or frequent forward and reverse rotations, whether the use time is less than or more than eight hours, and the size and characteristics of the impact load) may differ greatly from the ideal working conditions. When selecting the input power or output torque of the reducer, the following formula can be used for correction:

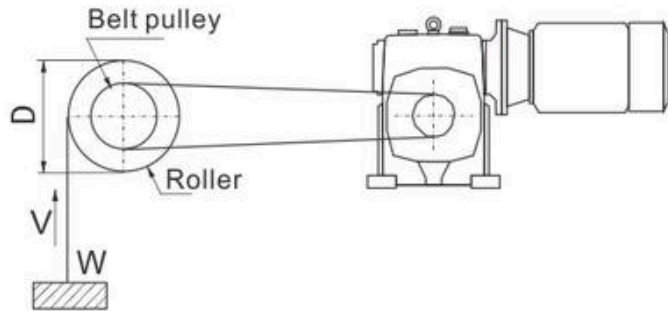
Correction output torque T_2 (N.m)=theoretical output torque T_1 (N.m) x operating condition coefficient K

Table of running condition factor k

Prime mover	Load case	Daily operating time (hours)			
		0.5~2	2~6	6~10	10~24
Motor	Stable load	0.80	0.90	1.00	1.25
	Moderate shocks	0.90	1.00	1.25	1.50
	Significant impact	1.00	1.25	1.50	1.75
Note: When the number of forward and reverse rotations or stops exceeds 10 times within one hour, the K value in the above table should also be multiplied by 1.2					

Selection example

The basic condition

Transmission structure	Related data
	• Weight of lifted object $W=600\text{kg}$
	• Lifting speed of objects $V=12\text{m/min}$
	• roller diameter $D=0.4\text{m}$
	• Belt pulley transmission efficiency $\eta_1=0.92$
	• Transmission efficiency of gearbox $\eta_2=0.71$
	• Operating time 8 hours/day
	• Number of starts 2 times/hour, significant impact
	• Use power supply Three phase 380V, 50Hz

Selection steps

Number	Content	Calculation formula	Calculation Example
1	Constant transmission ratio	Determine the transmission ratio based on the rotational speed of the input shaft and output shaft 1. Calculate the pulley speed N_3 $N_3 = \text{lifting speed } V / (\text{roller diameter } D \times \pi)$ 2. Calculate the total transmission ratio i $i = \text{input shaft speed } N_1 / \text{pulley speed } N_3$ 3. Calculate the gear ratio i_1 of the reducer $i_1 = \text{total transmission ratio } i / \text{pulley transmission ratio } i_2$	1. $N_3 = 12 / (0.4 \times 3.142) = 9.6 \text{ r/min}$ 2. $i = 1440 / 9.6 = 150$ 3. If $i_2 = 5$, then $i_1 = 150 / 5 = 30$
2	Calculate output torque	Calculate the output torque T of the gearbox $T = \text{object weight } W \times 10 \times \text{roller radius } (D/2) / (\text{Belt pulley transmission Efficiency of } i_2 \times \text{pulley transmission } (\eta_1))$	$T = 600 \times 10 \times (0.4/2) / (0.92 \times 5) = 260.9 \text{ N.m}$
3	Correct output torque	According to usage conditions, 8-hour operation with significant impact, operating condition coefficient $K=1.5$ Calculate the corrected output torque T_1 $T_1 = \text{output torque } T \times K$	$T_1 = 260.9 \times 1.25 = 326 \text{ N.m}$
4	Calculate input power	Convert power P $P = \text{corrected output torque } T_1 \times \text{output shaft speed } N_2 / (9549 \times \text{gearbox transmission efficiency } \eta_2)$	$P = 326 \times (1440/30) / (9549 \times 0.71) = 2.3 \text{ kW}$
5	Select model specifications	Based on the product sample, select model 120 with a transmission ratio of 1/30 and an input shaft power of 3KW Output shaft torque 413N.m	

Dynamical Capacity Table

WP. WPK. WPW. WPWK (A.S.X.O.T.V) Input Shaft Power and Output Shaft Torque Table
 Input shaft speed: 1500r/min

Power and torque Ratio Size	Input shaft power(kw)								Output shaft torque(N.m)							
	10	15	20	25	30	40	50	60	10	15	20	25	30	40	50	60
40	0.40	0.33	0.26	0.24	0.22	0.16	0.14	0.12	19	23	20	25	25	20	22	20
50	0.65	0.52	0.40	0.37	0.34	0.27	0.24	0.20	31	36	32	38	39	36	37	35
60	1.00	0.82	0.65	0.59	0.54	0.45	0.40	0.32	50	58	56	68	62	71	75	59
70	1.60	1.35	1.10	0.96	0.82	0.67	0.61	0.52	83	98	101	112	99	104	113	97
80	2.20	1.78	1.36	1.28	1.20	0.90	0.80	0.75	113	133	120	149	151	140	145	146
100	3.60	3.10	2.60	2.35	2.10	1.68	1.30	1.00	193	237	258	284	277	291	257	229
120	5.20	4.35	3.50	3.25	3.00	2.20	1.90	1.50	262	336	361	404	413	392	399	355
135	9.75	7.85	6.00	5.50	5.00	3.69	2.89	2.30	540	622	619	696	707	667	626	562
147	10.71	8.43	6.18	5.71	5.23	3.84	3.09	2.52	586	676	637	727	739	694	669	616
155	12.80	9.90	7.00	6.53	6.00	4.40	3.61	3.00	709	785	722	842	848	784	770	791
175	17.30	13.60	10.00	9.13	8.30	6.18	4.85	4.07	958	1091	1044	1221	1189	1133	1127	1078
200	22.60	18.20	13.86	12.75	11.67	8.78	6.71	5.58	1280	1477	1482	1643	1782	1654	1516	1449
250	33.20	27.40	21.60	20.00	18.43	14.00	10.43	8.62	1881	2266	2310	2579	2745	2674	2357	2371

Note: Model 147 currently does not have WPW (A.S.X.O.T.V) or WPWK (A.S.O.T.V) available.

WPD.WPKD-WPWD.WPWKD. (A.S.X.O.T.V) Input Shaft Power and Output Shaft Torque Table
 Input shaft speed: 1500r/min (Equipped with AO2 or Y series motors)

Power and torque Ratio Size	Input shaft power(kw)								Output shaft torque(N.m)							
	10	15	20	25	30	40	50	60	10	15	20	25	30	40	50	60
40	0.12								6	8	9	13	14	15	19	20
50									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

Note: Model 147 currently does not have WPW (A.S.X.O.T.V) or WPWK (A.S.O.T.V) available

- WPE.WPEK.WPEW.WPWEK
 WPED.WPEDK.WPWED.WPWEDK (A.S.X.O) type
 Input shaft power and output shaft torque table
 Input shaft speed:1500r/min

Size	Power and torque	WPE.WPEK.WPEW.WPWEK							WPED.WPEDK.WPWED.WPWEDK						
		Ratio							Ratio						
		200	300	400	500	600	800	900	200	300	400	500	600	800	900
40~70	Input shaft power (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
	Output shaft torque (N.m)	250	250	250	250	250	250	250	63	88	107	120	130	150	177
50~80	Input shaft power (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
	Output shaft torque (N.m)	350	350	350	350	350	350	350	97	124	150	166	203	217	252
60~100	Input shaft power (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
	Output shaft torque (N.m)	500	500	500	500	500	500	500	195	276	356	420	463	529	561
70~120	Input shaft power (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
	Output shaft torque (N.m)	840	840	840	840	840	840	840	384	534	692	750	486	536	887
80~135	Input shaft power (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
	Output shaft torque (N.m)	1400	1400	1400	1400	1400	1400	1400	616	880	1108	1294	1010	1071	1426
80~147	Input shaft power (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
	Output shaft torque (N.m)	1575	1575	1575	1575	1575	1575	1575	662	902	1208	1316	1300	1321	1575
100~155	Input shaft power (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
	Output shaft torque (N.m)	2100	2100	2100	2100	2100	2100	2100	854	1079	1307	1522	1667	1864	2100
120~175	Input shaft power (kw)	5.09	3.91	3.27	2.72	2.53	2.50	2.05	3	3	3	3	2.2	2.2	3
	Output shaft torque (N.m)	3050	3050	3050	3050	3050	3050	3050	1798	2340	2798	3050	2500	2685	3050
135~200	Input shaft power (kw)	7.22	5.41	4.46	3.83	3.46	2.91	2.71	4	4	4	4	3	3	4
	Output shaft torque (N.m)	3950	3950	3950	3950	3950	3950	3950	2188	2920	3543	3950	3950	3950	3950
155~250	Input shaft power (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
	Output shaft torque (N.m)	6050	6050	6050	6050	6050	6050	6050	2841	4087	5546	6050	6050	6050	6050

Note: Models 80~147 currently do not have WPWE (A.S.X.O) or WPWEK (A.S.O) available

- WD type input power and output shaft torque table
 Input shaft speed:1500r/min

Size	Modules	Ratio	Input shaft power (KW)	Output shaft torque (N.m)	Size	Modules	Ratio	Input shaft power (KW)	Output shaft torque (N.m)	Size	Modules	Ratio	Input shaft power (KW)	Output shaft torque (N.m)	Size	Modules	Ratio	Input shaft power (KW)	Output shaft torque (N.m)
33	1.5	15	0.21	13	73	2	30	0.84	114	78	3	20	1.11	105	105	5	15	3.12	241
		30	0.14	14			60	0.57	122			40	0.73	115			30	2.08	270
43	1.5	20	0.22	17	43	2.5	10	0.37	16	93	3	25	1.49	176	130	5	20	3.58	369
		40	0.16	19			20	0.25	18			50	0.96	190			40	2.27	393
48	1.5	25	0.23	23	53	2.5	15	0.43	30	108	3	30	2.00	283	153	5	25	4.70	570
		50	0.18	28			30	0.29	32			60	1.10	261			50	2.90	595
55.5	1.5	30	0.26	32	63	2.5	20	0.67	64	63	4	10	1.20	57	122	6	15	4.63	358
		60	0.20	38			40	0.45	70			20	0.73	59			30	2.80	385
33	2	10	0.28	13	78	2.5	25	0.95	110	82	4	15	1.75	132	153	6	20	5.21	537
		20	0.16	11			50	0.64	120			30	1.10	139			40	3.29	603
43	2	15	0.31	21	90	2.5	30	1.32	187	102	4	20	2.60	262	180	6	25	6.60	851
		30	0.22	24			60	0.82	188			40	1.68	282			50	3.96	908
53	2	20	0.40	36	48	3	10	0.63	31	122	4	25	3.28	412					
		40	0.27	39			20	0.39	30			50	1.88	395					
63	2	25	0.65	74	63	3	15	0.85	60	80	5	10	2.36	122					
		50	0.42	75			30	0.58	90			20	1.36	118					

Installment and use

Installation precautions

- ★ The reducer must be installed on a flat and sturdy base, and the foot bolts must be tightened and shock resistant.
- ★ The connecting shafts of the prime mover reducer working machine must be accurately aligned with each other after installation.
- ★ The outer diameter tolerance dimensions of the input and output shafts of the reducer are made according to h6. The inner holes of the matching transmission parts such as couplings, pulleys, sprockets, etc. must be prepared according to appropriate tolerance dimensions to avoid damage to the bearings due to tight assembly and affect normal power transmission due to loose assembly.
- ★ When installing transmission components such as sprockets and gears on the shaft extension, they should be placed as close to the bearing as possible to reduce bending stress on the shaft extension.
- ★ When assembling the motor of the WPD reducer, butter should be applied to the inner hole wall and keyway of the worm head to avoid tight assembly and prevent the shaft hole from rusting over time.
- ★ When ordering and using various WPD reducers, if the motor weight is too large, a support device should be installed.

Precautions for use

- ★ Before use, attention should be paid to checking whether the reducer type structure, center distance specification, transmission ratio, input shaft connection method, output shaft structure, input shaft output shaft direction, and rotation direction meet the requirements for use.
- ★ According to the requirements specified in the "Selection and Use of Lubricating Oil" section of the sample, inject the appropriate variety and brand of lubricating oil. After refueling, tighten the top vent and remove the small cone plug on the vent before the gearbox can start running. Suitable grade lubricating oil must be selected, the appropriate amount of oil must be controlled, and the oil must be changed in a timely manner according to the prescribed requirements. Special attention should be paid to replacing the new oil after the first 100 hours of use.
- ★ When abnormal situations occur during use, the machine should be stopped for inspection in a timely manner, and can be handled according to the "Fault Causes and Solutions" table. The maximum allowable oil temperature for the gearbox is 95 °C. Within this temperature limit, as long as the oil temperature no longer rises, it can be used with confidence.

Choice of Lubricant

Before using the worm gear reducer, N220–N320 (ambient temperature $-30^{\circ}\text{C} \sim 40^{\circ}\text{C}$) or N320 ~ N460 (ambient temperature $40^{\circ}\text{C} \sim 65^{\circ}\text{C}$) lubricating oil should be injected above the center point of the oil gauge, and the small cone plug on the ventilator should be removed. After the first 100 hours of use, clean the interior and replace it with new oil. Afterwards, change the oil every 2500 hours.

When using the reducer, lubricating oil can be selected according to the table below

Worm shaft speed (r/min)		Lubricant	Operating Position Worm Shaft, upper Worm Shaft Vertical	Operating Position Worm Shaft, lower Output Shaft Vertical
over	up to			
1000	3000	Synthetic oils	PG 460	PG 220
	1000			PG 460
2000	3000	Mineral oils	ISO VG 460	ISO VG 200
750	2000			ISO VG 320
250	750			ISO VG 460
	250		ISO VG 680	ISO VG 680

Ambient Temp	Load	ISO VG	GB3141-82		Mobil	AGMA American Gear Manufacturers Association	Sinopec
$-30^{\circ}\text{C} \sim -15^{\circ}\text{C}$	Commonly	VG-100	N100	Shell Omala 100	Gear 627	5	HD-100
	Weight	VG-150	N150	Shell Omala 150	Gear 629	7	HD-150
$-15^{\circ}\text{C} \sim 5^{\circ}\text{C}$	Commonly	VG-150	N150	Shell Omala 150	Gear 629	7	HD-150
	Weight	VG-220	N220	Shell Omala 220	Gear 630	7EP	HD-220
$5^{\circ}\text{C} \sim 25^{\circ}\text{C}$	Commonly	VG-220	N220	Shell Omala 220	Gear 630	7EP	HD-220
	Weight	VG-320	N320	Shell Omala 320	Gear 632	6	HD-320
$25^{\circ}\text{C} \sim 40^{\circ}\text{C}$	Commonly	VG-320	N320	Shell Omala 320	Gear 632	6	HD-320
	Weight	VG-460	N460	Shell Omala 460	Gear 634	8	HD-460
$40^{\circ}\text{C} \sim 65^{\circ}\text{C}$	Commonly	VG-460	N460	Shell Omala 460	Gear 634	8	HD-460
	Weight	VG-680	N680	Shell Omala 680	Gear 636	8EP	HD-680

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

Every 2500 hours of operation:
Drain; flush and refill.

Cause and solution of malfunction

Fault conditions	Reason for malfunction	Solution
Overheat	Improper connection of prime mover, reducer, and working machine	Adjust to the appropriate position so that the axis connecting the three is coaxial
	Overloaded operation	Adjust the load appropriately
	Excessive friction of oil seal	Drip lubricating oil at the lip of the oil seal
	Excessive or insufficient lubricating oil	Adjust the oil level according to the oil gauge indicator point
	Excessive impurities or poor lubricity in lubricating oil	Replace with suitable new oil
Vibration	Poor fixation of prime mover, reducer, and working machine	Identify the fixed defective parts and tighten them correctly
	Wear or damage to the teeth of the worm gear pair	Replace the worm gear pair (with the cooperation of our company if necessary)
	Bearing wear	Replace bearings
	Loose bolts	Tighten the bolt
Noise	Bearing damage or excessive clearance	Replace bearings
	Poor meshing of worm gear pairs	Repair the tooth surface or replace the worm gear pair (please contact our company)
	Insufficient lubricating oil	Add lubricating oil according to the oil gauge indication point
	There are foreign objects inside the body	Pour out the lubricating oil and remove any foreign objects, then add clean lubricating oil again
Oil leakage	Wear of oil seal lip	Replace the oil seal
	Oil seal gear shaft neck wear	Replace the output shaft or input shaft
	Excessive oil quantity	Adjust the oil level according to the oil gauge indicator point
	The oil drain plug is not tightened	Add sealant to the threaded area and tighten the plug
	Oil label damage	Replace the oil gauge
The output shaft does not rotate	Worm gear and worm gear overheat	Replace or repair
	Bearing damage	Replace bearings
	Foreign object intrusion	Remove foreign objects and replace lubricating oil
	Excessive wear of worm gear and worm gear	Replace the worm gear or worm gear
The wear of the tooth surface of the worm gear pair is too fast	Overloaded operation	Adjust to appropriate load
	Lubricating oil does not meet the requirements	Replace the appropriate lubricating oil
	Insufficient lubricating oil	Add sufficient lubricating oil according to the oil gauge indication point
	Failure to change the oil in a timely manner as required, resulting in deterioration of the lubricating oil	Change the oil in a timely manner as required by regulations
	Operating temperature too high	1. Handle according to the "overheating" fault 2. Take appropriate measures to reduce the ambient temperature

Note: If other malfunctions cannot be resolved, please feel free to contact us at any time for consultation services.