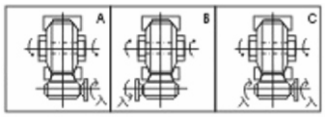
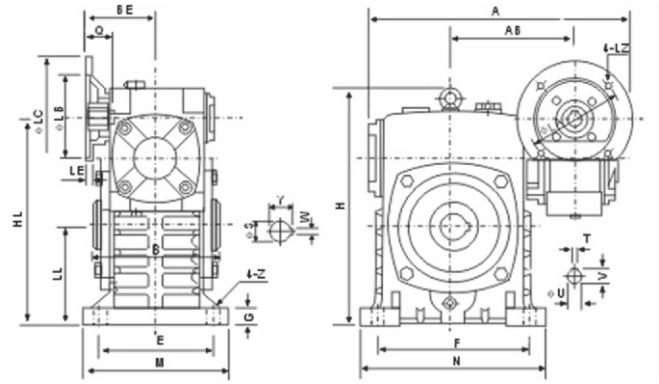
ZENDOR®
GEAR MOTOR

WPEDKS

SHAFT DIRECTION





size	input (kW)	ratio	A	AB	B	BE	HL	LL	H	M	N	E	F	G	Z	flange					input shaft			output shaft		weight(kg)
																LA	LB	LC	LE	LZ	Q	U	T x V	S	W x Y	
40-70	0.12		287	126	132	75	215	105	238	150	190	115	150	20	15	115	95	140	4	M8	31	11	4 x 12.8	30	8 x 33.3	19
50-80	0.18		314	144	150	83	250	120	273	170	220	135	180	20	15	115	95	140	4	M8	31	11	4 x 12.8	35	10 x 38.3	27
60-100	0.37		387	175	174	91	310	150	334	190	270	155	220	25	15	130	110	160	4	M8	33	14	5 x 16.3	40	12 x 43.3	45
70-120	0.37	1/200	425	193	180	109	370	180	423	230	320	180	260	30	18	130	110	160	4	M8	40	14	5 x 16.3	45	14 x 48.8	75
	0.75	1/300	445			111										165	130	200		M10	42	19	6 x 21.8			
80-135	0.75	1/400	499	226	214	125	430	215	482	250	350	200	290	30	18	165	130	200	4.5	M10	48	19	6 x 21.8	60	18 x 64.6	103
	1.5	1/500																			52	24	8 x 27.3			
100-155	1.5	1/600	570	269	256	148	490	235	541	275	390	220	320	35	21	165	130	200	4.5	M10	52	24	8 x 27.3	70	20 x 74.9	147
120-175	2.2	1/800	631	287	282	181	555	260	600	310	430	250	350	40	21	215	180	250	5	M12	63	28	8 x 31.3	80	22 x 85.4	204
	3.0	1/900																								
135-200	3.0		680	318	324	202	625	290	677	360	480	290	390	40	24	215	180	250	5	M12	63	28	8 x 31.3	85	22 x 90.4	298
	4.0																									
155-250	5.5		815	380	400	247	755	350	824	460	560	380	480	45	28	265	230	300	5	M12	83	38	10 x 41.3	110	28 x 116.4	470

Selection Steps

Number	Contents	Formula	Example
1	Calculate ratio	Calculate the ratio according to input and output shaft revolving speed 1. Get beltpulley revolving speed N_3 N_3 = speed of suspended object V / (rollpulley diameter D x π) 2. Calculate general ratio i i = input revolving speed N1 / beltpulley revolving speed N_3 3. Calculate reducer ratio i_1 i_1 = general ratio / beltpulley ratio i_2	1. N_3 = 12 / (0.4 x 3.142) = 9.6 r / min 2. I = 1440 / 9.6 = 150 3. assumei i_2 = 5, then i_1 = 150 / 5 = 30
2	Calculate Output torque	Calculate reducer output torque T T = weight of suspended object W x 10 x rollpully radius (D / 2) / (beltpulley ratio i_2 x beltpulley transmission effciency n_1)	T = 600 x 10 x (0.4 / 2) / (0.92 x 5) = 260.9 N.m
3	Revise Output torque	According to using condition : operation 8 hours a day, medium shock, running condition factor K = 1.25 calculate revised torque T_1 - T_1 = output torque T xk	T_1 = 260.9 x 1.25 = 326 N.m
4	Calculate Input power	Calculate input shaft power P P = revised output torque T_1 x output revolving speed N_2 / (9549 x reducer transmission efficiency n_2)	P = 326 x (1440 /30) / (9549 x 0.71) = 2.3 kw
5	Select model	According to product manual, the selection in, Model 120, ratio 1/30, rating input power 3kw, Output torque 413 N.m	