

# 90W 120W

□90×90mm

## MOTOR PERFORMANCE

MODEL	(W) MAXIMUM OUTPUT POWER	V	Hz	A	r/min	N·mm START TORQUE	(N·mm) RATED TORQUE		RUNNING CAPACITOR							
							1200r/min	90r/min								
GEAR SHAFT 90YS90GV11 90YR90GV11 90YT90GV11 90YB90GV11	90	Single phase	50Hz	1.70	90-1300	525	710	200	20μf/250V							
										110	60Hz	1.50	90-1600	420	710	200
GEAR SHAFT 90YS90GV22 90YR90GV22 90YT90GV22 90YB90GV22	90	Single phase	50Hz	0.95	90-1300	525	710	200	5μf/450V							
										220	60Hz	0.86	90-1600	420	710	200
GEAR SHAFT 90YS90GY22 90YB90GY22	90	Three phase	50Hz	0.69	90-1300	910	700									
			ROUND SHAFT 90YS90DY22 90YB90DY22	60Hz	0.63	90-1600	730	560								
GEAR SHAFT 90YS90GY38 90YB90GY38	90	Three phase	50Hz	0.41	90-1300	910	700									
			ROUND SHAFT 90YS90DY38 90YB90DY38	60Hz	0.38	90-1600	730	560								

\*Although the speed range of the motor is 50Hz, 90~1300r/min, 60Hz, 90~1600r/min, it easily causes overload and the cooling effect of the motor fan is poor if the speed is too low (<400r/min) and the motor torque decreases too much; therefore, please keep sufficient power margin and avoid operating in low speed section frequently. The optimal speed range of the motor is 50Hz, 400~1300r/min, 60Hz, 400~1600r/min.

\*When the power is cut off, the motor will stop immediately and hold the load.

## MOTOR PERFORMANCE

MODEL	(W) MAXIMUM OUTPUT POWER	V	Hz	A	r/min	N·mm START TORQUE	(N·mm) RATED TORQUE		RUNNING CAPACITOR							
							1200r/min	90r/min								
GEAR SHAFT 90YS120GV11 90YR120GV11 90YT120GV11 90YB120GV11	120	Single phase	50Hz	2.04	90-1300	720	840	300	24μf/250V							
										110	60Hz	1.84	90-1600	600	840	300
GEAR SHAFT 90YS120GV22 90YR120GV22 90YT120GV22 90YB120GV22	120	Single phase	50Hz	1.02	90-1300	720	840	300	6μf/450V							
										220	60Hz	0.92	90-1600	600	840	300
GEAR SHAFT 90YS120GY22 90YB120GY22	120	Three phase	50Hz	0.89	90-1300	1195	924									
			ROUND SHAFT 90YS120DY22 90YB120DY22	60Hz	0.81	90-1600	1014	750								
GEAR SHAFT 90YS120GY38 90YB120GY38	120	Three phase	50Hz	0.51	90-1300	1195	924									
			ROUND SHAFT 90YS120GY38 90YB120GY38	60Hz	0.45	90-1600	1014	750								

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\*When the power is cut off, the motor will stop immediately and hold the load.

## REDUCTION RATIO PERFORMANCE CHART

REDUCTION RATIO			3	3.6	5	6	7.5	10	12.5	15	18	20	25	30	
90W	50Hz	r/min Output bearing speed	433	361	260	217	173	130	104	87	72	65	52	43	
		N·m Rated torque	1.79	2.14	2.98	3.57	4.46	5.29	6.61	7.93	9.52	10.58	12.07	14.48	
	60Hz	r/min Output bearing speed	533	444	320	267	213	160	128	107	89	80	64	53	
		N·m Rated torque	1.49	1.79	2.48	2.98	3.72	4.41	5.51	6.61	7.93	8.82	10.06	12.07	
	120W	50Hz	r/min Output bearing speed	433	361	260	217	173	130	104	87	72	65	52	43
			N·m Rated torque	2.25	2.70	3.75	4.50	5.62	6.88	8.60	10.31	12.38	13.75	15.43	18.51
60Hz		r/min Output bearing speed	533	444	320	267	213	160	128	107	89	80	64	53	
		N·m Rated torque	1.87	2.25	3.12	3.75	4.68	5.73	7.16	8.60	10.31	11.46	12.86	15.43	
REDUCTION RATIO			36	40	50	60	75	90	100	120	150	180	200		
90W	50Hz	r/min Output bearing speed	36	33	26	22	17	14	13	11	9	7	7		
		N·m Rated torque	17.38	19.31	20	20	20	20	20	20	20	20	20	20	
	60Hz	r/min Output bearing speed	44	40	32	27	21	18	16	13	11	9	8		
		N·m Rated torque	14.48	16.09	20	20	20	20	20	20	20	20	20	20	
	120W	50Hz	r/min Output bearing speed	36	33	26	22	17	14	13	11	9	7	7	
			N·m Rated torque	20	20	20	20	20	20	20	20	20	20	20	20
60Hz		r/min Output bearing speed	44	40	32	27	21	18	16	13	11	9	8		
		N·m Rated torque	18.51	20	20	20	20	20	20	20	20	20	20	20	

•The speed in the table is the value of average motor speed (50Hz: 1300r/min, 60Hz: 1600r/min) divided by the reduction ratio.

•The actual speed changes according to the load ( $\pm 8\%$ ).



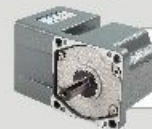
STANDARD GEARBOX  
90GF □H



EARED GEARBOX  
90GF □HE



RIGHT ANGLE HOLLOW GEARBOX  
L90GF □RC



RIGHT ANGLE SOLID GEARBOX  
L90GF □RT

□ in gearbox model indicates the reduction ratio (1:3~200)