

# Gear Motor TA Series Specification Chart

## Specification Chart

( ) The values in parentheses are for brake types.

Model number	Motor output (kW)	Frame number	Nominal reduction ratio	Number of reduction steps	Output shaft revolution rate r/min		Allowable output shaft torque				Allowable output shaft O.H.L.		Page and drawing number of outline dimensions								
					50Hz	60Hz	N·m		(kgf·m)		N	(kgf)	Three-phase		Single-phase						
							50Hz	60Hz	Foot mount	Flange mount			Foot mount	Flange mount							
GMTA010 GMTA100	5	18	1/5	2	300	360	2.8	{0.29}	2.4	{0.24}	274	{ 28}	P28 Drawing M-11	P28 Drawing M-16	P38 Drawing M-69	P39 Drawing M-74	*1				
	10		1/10		150	180	5.7	{0.58}	4.8	{0.49}	431	{ 44}	P28 Drawing M-12	P29 Drawing M-17	P38 Drawing M-70	P39 Drawing M-75					
	15		1/15		100	120	8.6	{0.88}	7.2	{0.73}	568	{ 58}									
	20		1/20		75	90	11.8	{ 1.2}	9.5	{0.97}	686	{ 70}									
	25		1/25		60	72	14.7	{ 1.5}	11.8	{ 1.2}	804	{ 82}									
	30		1/30		50	60	17.6	{ 1.8}	14.7	{ 1.5}	902	{ 92}									
	40		1/40		37.5	45	22.5	{ 2.3}	19.6	{ 2.0}	1098	{ 112}									
	50		1/50		30	36	28.4	{ 2.9}	23.5	{ 2.4}	1264	{ 129}									
	60	0.1	24	3	25	30	34.3	{ 3.5}	28.4	{ 2.9}	1431	{ 146}	P28 Drawing M-13	P29 Drawing M-18	P38 Drawing M-71	P39 Drawing M-76					
	75				20	24	43.1	{ 4.4}	36.3	{ 3.7}	1666	{ 170}	P42 Drawing B-13	P43 Drawing B-18	P52 Drawing B-71	P53 Drawing B-76					
	100				1/100	15	18	56.8	{ 5.8}	48.0	{ 4.9}	2009						{ 205}			
	120				1/120	12.5	15	68.6	{ 7.0}	56.8	{ 5.8}	2274	{ 232}								
	165				1/165	9.1	10.9	94.1	{ 9.6}	78.4	{ 8.0}	2813	{ 287}								
	200				1/200	7.5	9	115	{11.7}	95.1	{ 9.7}	3195	{ 326}								
	300				28	4	4	5	6	143	{14.6}	120	{12.2}	3195	{ 326}	P28 Drawing M-14		P29 Drawing M-19	P38 Drawing M-72	P39 Drawing M-77	
	360							1/360	4.2	5	172	{17.5}	143	{14.6}	3606	{ 368}		P42 Drawing B-14	P43 Drawing B-19	P52 Drawing B-72	P53 Drawing B-77
450	1/450	3.3	4	215				{21.9}	179	{18.3}	4185	{ 427}									
600	1/600	2.5	3	286				{29.2}	239	{24.4}	5076	{ 518}									
720	1/720	2.1	2.5	344				{35.1}	286	{29.2}	5733	{ 585}									
1000	1/1000	1.5	1.8	446				{45.5}	319	{32.5}	6664	{ 680}									
1200	1/1200	1.3	1.5	*459				{46.8}	382	{39.0}	6684	{ 682}									
GMTA020 GMTA200	5	18	1/5	2				300	360	5.7	{0.58}	4.7	{0.48}	431	{ 44}	P30 Drawing M-21	P31 Drawing M-27	P40 Drawing M-78	P41 Drawing M-83	*2	
	10		1/10		150	180	11.8	{ 1.2}	9.5	{0.97}	686	{ 70}	P30 Drawing M-22	P31 Drawing M-28	P40 Drawing M-80	P41 Drawing M-86					
	15		1/15		100	120	17.6	{ 1.8}	14.7	{ 1.5}	902	{ 92}									
	20		1/20		75	90	22.5	{ 2.3}	19.6	{ 2.0}	1098	{ 112}									
	25		1/25		60	72	28.4	{ 2.9}	23.5	{ 2.4}	1264	{ 129}									
	30		24		3	3	50	60	34.3	{ 3.5}	28.4	{ 2.9}	1431	{ 146}	P30 Drawing M-23	P31 Drawing M-29	P40 Drawing M-81	P41 Drawing M-87			
	40						1/40	37.5	45	46.1	{ 4.7}	38.2	{ 3.9}	1735					{ 177}		
	50						1/50	30	36	56.8	{ 5.8}	48.0	{ 4.9}	2009	{ 205}						
	60						1/60	25	30	68.6	{ 7.0}	56.8	{ 5.8}	2274	{ 232}						
	75						1/75	20	24	86.2	{ 8.8}	71.5	{ 7.3}	2636	{ 269}						
	100						1/100	15	18	115	{11.7}	95.1	{ 9.7}	3195	{ 326}						
	GMTA200		120		28	3	3	12.5	15	137	{14.0}	115	{11.7}	3606	{ 368}	P30 Drawing M-24	P31 Drawing M-30	P40 Drawing M-82	P41 Drawing M-88		
		165	1/165	9.1				10.9	189	{19.3}	158	{16.1}	4459	{ 455}							
		200	1/200	7.5				9	218	{22.2}	181	{18.5}	4822	{ 492}							
		300	38	4				4	5	6	286	{29.2}	239	{24.4}	4861	{ 496}	P30 Drawing M-25	P31 Drawing M-31	P40 Drawing M-83		P41 Drawing M-89
		360							1/360	4.2	5	343	{35.0}	286	{29.2}	5488					
		450							1/450	3.3	4	430	{43.9}	358	{36.5}	5792	{ 591}				
		600			1/600	2.5	3		611	{62.3}	509	{51.9}	7301	{ 745}							
		720			1/720	2.1	2.5		733	{74.8}	611	{62.3}	8242	{ 841}							
		1000			1/1000	1.5	1.8		827	{84.4}	689	{70.3}	9800	{1000}							
		1200	1/1200	1.3	1.5	*840	{85.7}	*700	{71.4}	9800	{1000}										

(Note 1) The nominal reduction ratio is shown as the reduction ratio.

(Note 2) The output shaft revolution rate is calculated by dividing the motor synchronous revolution rate by the nominal reduction ratio.

For the actual reduction ratio, refer to the specification chart for the inline reducer on pages 69 to 71.

(Note 3) The page and drawing numbers of the brake type outline dimensions for the models marked with

\*1 and \*2 are as shown to the right.

(Note 4) The models marked with \* are ones for which the torque is limited.

	Three-phase		Single-phase	
	Foot mount	Flange mount	Foot mount	Flange mount
Models marked with *1	(P42 Drawing B-11)	(P43 Drawing B-16)	(P52 Drawing B-69)	(P53 Drawing B-74)
Models marked with *2	(P44 Drawing B-21)	(P45 Drawing B-27)	(P54 Drawing B-79)	(P55 Drawing B-85)

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( ) The values in parentheses are for brake type.

Model number	Motor output (kW)	Frame number	Nominal reduction ratio	Number of reduction steps	Output shaft revolution rate r/min		Allowable output shaft torque				Allowable output shaft O.H.L.		Page and drawing number of outline dimensions	
					50Hz	60Hz	N·m		{ kgf·m }		N	{ kgf }	Three-phase	
							50Hz	60Hz	Foot mount	Flange mount				
GMTA040	5	24	1/5	2	300	360	12.1	{ 1.23 }	10.0	{ 1.02 }	686	{ 70 }	P32 Drawing M-33 (P46 Drawing B-33)	P33 Drawing M-38 (P47 Drawing B-38)
					150	180	24.5	{ 2.5 }	20.6	{ 2.1 }	1098	{ 112 }		
					100	120	36.3	{ 3.7 }	30.4	{ 3.1 }	1431	{ 146 }		
					75	90	48.0	{ 4.9 }	40.2	{ 4.1 }	1735	{ 177 }		
					60	72	60.8	{ 6.2 }	50.0	{ 5.1 }	2009	{ 205 }		
	40	28	1/40	3	37.5	45	94.1	{ 9.6 }	78.4	{ 8.0 }	2754	{ 281 }	P32 Drawing M-34 (P46 Drawing B-34)	P33 Drawing M-39 (P47 Drawing B-39)
					30	36	118	{ 12.0 }	98.0	{ 10.0 }	3195	{ 326 }		
					25	30	140	{ 14.3 }	118	{ 12.0 }	3606	{ 368 }		
					20	24	175	{ 17.9 }	146	{ 14.9 }	4185	{ 427 }		
	100	38	1/100	3	15	18	234	{ 23.9 }	195	{ 19.9 }	5076	{ 518 }	P32 Drawing M-35 (P46 Drawing B-35)	P33 Drawing M-40 (P47 Drawing B-40)
					120	15	281	{ 28.7 }	234	{ 23.9 }	5733	{ 585 }		
					165	10.9	364	{ 37.1 }	303	{ 30.9 }	6664	{ 680 }		
					200	9	389	{ 39.7 }	324	{ 33.1 }	6684	{ 682 }		
	300	42	1/300	4	5	6	611	{ 62.3 }	509	{ 51.9 }	7301	{ 745 }	P32 Drawing M-36 (P46 Drawing B-36)	P33 Drawing M-41 (P47 Drawing B-41)
					360	5	733	{ 74.8 }	611	{ 62.3 }	8242	{ 841 }		
					450	4	916	{ 93.5 }	763	{ 77.9 }	9565	{ 976 }		
600					3	1222	{ 124.7 }	1018	{ 103.9 }	11584	{ 1182 }			
720		50	1/720	4	2.1	2.5	1466	{ 149.6 }	1222	{ 124.7 }	13073	{ 1334 }	P32 Drawing M-37 (P46 Drawing B-37)	P33 Drawing M-42 (P47 Drawing B-42)
					1000	1.8	1654	{ 168.8 }	1379	{ 140.7 }	13230	{ 1350 }		
					1200	1.5	*1680	{ *171.4 }	*1400	{ *142.9 }	13230	{ 1350 }		
						1.3								
GMTA075	5	28	1/5	2	300	360	22.6	{ 2.31 }	18.8	{ 1.92 }	1049	{ 107 }	P34 Drawing M-43 (P48 Drawing B-43)	P34 Drawing M-47 (P48 Drawing B-47)
					150	180	45.1	{ 4.6 }	38.2	{ 3.9 }	1666	{ 170 }		
					100	120	67.6	{ 6.9 }	56.8	{ 5.8 }	2176	{ 222 }		
					75	90	91.1	{ 9.3 }	75.5	{ 7.7 }	2636	{ 269 }		
					60	72	114	{ 11.6 }	94.1	{ 9.6 }	3058	{ 312 }		
	40	38	1/40	3	37.5	45	175	{ 17.9 }	146	{ 14.9 }	4185	{ 427 }	P34 Drawing M-44 (P48 Drawing B-44)	P34 Drawing M-48 (P48 Drawing B-48)
					30	36	220	{ 22.4 }	183	{ 18.7 }	4861	{ 496 }		
					25	30	264	{ 26.9 }	220	{ 22.4 }	5488	{ 560 }		
					20	24	300	{ 30.6 }	250	{ 25.5 }	5792	{ 591 }		
	100	42	1/100	3	15	18	439	{ 44.8 }	369	{ 37.7 }	7301	{ 745 }	P34 Drawing M-45 (P48 Drawing B-45)	P34 Drawing M-49 (P48 Drawing B-49)
					120	15	527	{ 53.8 }	439	{ 44.8 }	8242	{ 841 }		
					165	10.9	724	{ 73.9 }	604	{ 61.6 }	9800	{ 1000 }		
					200	9	735	{ 75.0 }	613	{ 62.5 }	9800	{ 1000 }		
	300	50	1/300	4	5	6	1146	{ 116.9 }	955	{ 97.4 }	9418	{ 961 }	P34 Drawing M-46 (P48 Drawing B-46)	P34 Drawing M-50 (P48 Drawing B-50)
					360	5	1289	{ 131.5 }	1074	{ 109.6 }	10633	{ 1085 }		
					450	4	*1396	{ *142.4 }	*1163	{ *118.7 }	12338	{ 1259 }		
					3.3									
GMTA150	5	38	1/5	2	300	360	45.3	{ 4.62 }	37.7	{ 3.85 }	1666	{ 170 }	P35 Drawing M-51 (P49 Drawing B-51)	P35 Drawing M-54 (P49 Drawing B-54)
					150	180	91.1	{ 9.3 }	75.5	{ 7.7 }	2548	{ 260 }		
					100	120	136	{ 13.9 }	114	{ 11.6 }	3342	{ 341 }		
					75	90	181	{ 18.5 }	151	{ 15.4 }	4047	{ 413 }		
					60	72	226	{ 23.1 }	189	{ 19.3 }	4694	{ 479 }		
					50	60	272	{ 27.8 }	226	{ 23.1 }	5302	{ 541 }		
	40	42	1/40	3	37.5	45	351	{ 35.8 }	293	{ 29.9 }	6292	{ 642 }	P35 Drawing M-52 (P49 Drawing B-52)	P35 Drawing M-55 (P49 Drawing B-55)
					30	36	439	{ 44.8 }	366	{ 37.3 }	7301	{ 745 }		
					25	30	527	{ 53.8 }	439	{ 44.8 }	8242	{ 841 }		
					20	24	659	{ 67.2 }	549	{ 56.0 }	9565	{ 976 }		
	100	50	1/100	3	15	18	878	{ 89.6 }	732	{ 74.7 }	11584	{ 1182 }	P35 Drawing M-53 (P49 Drawing B-53)	P35 Drawing M-56 (P49 Drawing B-56)
					120	15	1054	{ 107.5 }	878	{ 89.6 }	13073	{ 1334 }		
					165	10.9	1449	{ 147.9 }	1207	{ 123.2 }	13230	{ 1350 }		
					200	9	*1470	{ *150.0 }	*1225	{ *125.0 }	13230	{ 1350 }		

(Note 1) The output shaft revolution rate is calculated by dividing the motor synchronous revolution rate by the nominal reduction ratio.

For the actual reduction ratio, refer to the specification chart for the inline reducer on pages 69 to 71.

(Note 2) The models marked with \* are ones for which the torque is limited.

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GEAR MOTOR TA Series

## Specification Chart

( ) The values in parentheses are for brake type.

Model number	Motor output (kW)	Frame number	Nominal reduction ratio	Number of reduction steps	Output shaft revolution rate r/min		Allowable output shaft torque				Allowable output shaft O.H.L.		Page and drawing number of outline dimensions	
					50Hz	60Hz	50Hz		60Hz		N	{kgf}	Foot mount	Flange mount
							N·m	{kgf·m}	N·m	{kgf·m}				
GMTA220	5	42	1/5	2	300	360	66.6	{ 6.8}	55.9	{ 5.7}	2078	{ 212}	P36	P36
	10		1/10		150	180	133	{ 13.6}	111	{ 11.3}	3293	{ 336}	Drawing M-57	Drawing M-60
	15		1/15		100	120	200	{ 20.4}	167	{ 17.0}	4312	{ 440}	{ P50	{ P50
	20		1/20		75	90	266	{ 27.1}	221	{ 22.6}	5223	{ 533}	{ Drawing B-57	{ Drawing B-60
	25		1/25		60	72	332	{ 33.9}	277	{ 28.3}	6066	{ 619}		
	30		1/30		50	60	399	{ 40.7}	332	{ 33.9}	6850	{ 699}		
	40	50	1/40	3	37.5	45	515	{ 52.6}	429	{ 43.8}	8114	{ 828}	P36 Drawing M-58	P36 Drawing M-61
	50		1/50		30	36	644	{ 65.7}	537	{ 54.8}	9418	{ 961}	{ P50 Drawing B-58	{ P50 Drawing B-61
	60		1/60		25	30	773	{ 78.9}	644	{ 65.7}	10633	{1085}		
	75		1/75		20	24	966	{ 98.6}	805	{ 82.1}	12338	{1259}		
	100	63	1/100	3	15	18	1288	{131.4}	1073	{109.5}	14955	{1526}	P36 Drawing M-59	P36 Drawing M-62
	120		1/120		12.5	15	1545	{157.7}	1288	{131.4}	16885	{1723}		
	165		1/165		9.1	10.9	2126	{216.9}	1771	{180.7}	17640	{1800}	{ P50 Drawing B-59	{ P50 Drawing B-62
	200		1/200		7.5	9	*2156	*{220.0}	*1796	*{183.3}	17640	{1800}		
GMTA370	5	50	1/5	2	300	360	112	{ 11.4}	93.1	{ 9.5}	2930	{ 299}	P37	P37
	10		1/10		150	180	223	{ 22.8}	186	{ 19.0}	4645	{ 474}	Drawing M-63	Drawing M-65
	15		1/15		100	120	335	{ 34.2}	279	{ 28.5}	6096	{ 622}	{ P51	{ P51
	20		1/20		75	90	448	{ 45.7}	372	{ 38.0}	7389	{ 754}	{ Drawing B-63	{ Drawing B-65
	25		1/25		60	72	560	{ 57.1}	466	{ 47.6}	8565	{ 874}		
	30		1/30		50	60	671	{ 68.5}	560	{ 57.1}	9673	{ 987}		
	40	3	1/40	3	37.5	45	866	{ 88.4}	722	{ 73.7}	10290	{1050}	P37 Drawing M-64	P37 Drawing M-66
	50		1/50		30	36	1083	{110.5}	903	{ 92.1}	10290	{1050}	{ P51 Drawing B-64	{ P51 Drawing B-66
GMTA550	5	50	1/5	2	300	360	167	{ 17.0}	138	{ 14.1}	3812	{ 389}	P37	P37
	10		1/10		150	180	332	{ 33.9}	277	{ 28.3}	6056	{ 618}	Drawing M-67	Drawing M-68
	15		1/15		100	120	499	{ 50.9}	416	{ 42.4}	7938	{ 810}	{ P51	{ P51
	20		1/20		75	90	665	{ 67.9}	554	{ 56.5}	9624	{ 982}	{ Drawing B-67	{ Drawing B-68
	25		1/25		60	72	831	{ 84.8}	693	{ 70.7}	10290	{1050}		
	30		1/30		50	60	*893	*{ 91.1}	*744	*{ 75.9}	10290	{1050}		

(Note 1) The nominal reduction ratio is shown as the reduction ratio.

(Note 2) The output shaft revolution rate is calculated by dividing the motor synchronous revolution rate by the nominal reduction ratio.

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Specification Chart

2.2  
3.7  
5.5