

Gear Motor TA Series Adapter Type

■ Adapter type reducer

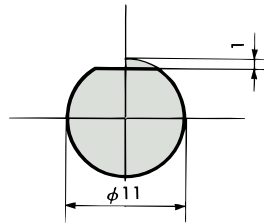
(1) This reducer has an adapter flange to which a motor can be attached.

Special motors other than our standard can be attached to it easily.

- Motors of other makers
- Explosion-proof motors
- Other special motors

(2) This reducer can be matched to motors conforming to the IEC and JEM standards.

- The flange dimensions and shaft dimensions are adjusted accordingly.
- For 0.2 kw or less, this reducer is ready for keyless D-cut shafts.

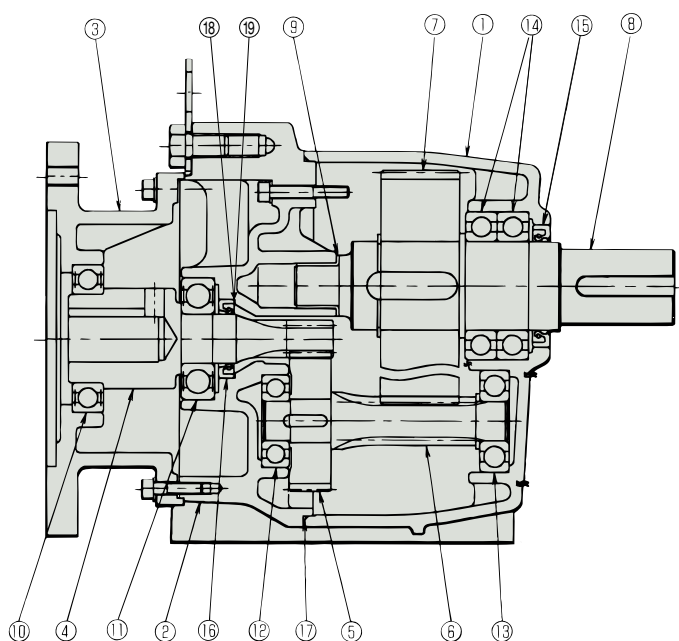


(3) For servomotors, DC motors, etc., that have special shaft dimensions, we manufacture reducers suitable for them as made-to-order products. Please contact us in such cases.

(4) We ask you to attach the motor to the reducer on your own.

■ Structure

■ GRTA150-38L30FI



- 1 . L Case
- 2 . M bracket
- 3 . Motor flange
- 4 . Adapter input shaft with pinion
- 5 . 1st stage wheel
- 6 . 2nd shaft with pinion
- 7 . 2nd stage wheel
- 8 . Output shaft
- 9 . Plametal (output shaft M bracket side)
- 10 . Bearing (input shaft R motor flange side)
- 11 . Bearing (input shaft M bracket side)
- 12 . Bearing (2nd shaft M bracket side)
- 13 . Bearing (2nd shaft L case side)
- 14 . Bearing (output shaft L case side)
- 15 . Oil seal (output shaft)
- 16 . Oil seal (input shaft)
- 17 . O-ring
- 18 . Filter
- 19 . Shim

Adapter Type Specification Chart

Specification Chart

Model number	4P motor capacity equivalence kW	Frame number	Nominal reduction ratio	Actual reduction ratio	Number of reduction steps	Allowable output shaft torque				Allowable output shaft O.H.L.		Page and drawing number of outline dimensions		
						N·m		{kgf·m}		N	{kgf}	Foot mount	Flange mount	
						50Hz		60Hz						
GRTA010	5FI	0.1	18	1/5	1/ 4.932 (5.031)	2	2.8	{0.29}	2.4	{0.24}	274	{ 28}	P86 Drawing A-11	P87 Drawing A-16
	10FI						5.7	{0.58}	4.8	{0.49}	431	{ 44}		
	15FI						8.6	{0.88}	7.2	{0.73}	568	{ 58}		
	20FI						11.8	{ 1.2}	9.5	{0.97}	686	{ 70}		
	25FI						14.7	{ 1.5}	11.8	{ 1.2}	804	{ 82}		
	30FI						17.6	{ 1.8}	14.7	{ 1.5}	902	{ 92}		
	40FI		22.5	{ 2.3}	19.6	{ 2.0}	1098	{ 112}						
	50FI		28.4	{ 2.9}	23.5	{ 2.4}	1264	{ 129}						
	60FI		34.3	{ 3.5}	28.4	{ 2.9}	1431	{ 146}						
	75FI		43.1	{ 4.4}	36.3	{ 3.7}	1666	{ 170}						
	100FI		56.8	{ 5.8}	48.0	{ 4.9}	2009	{ 205}						
	120FI		68.6	{ 7.0}	56.8	{ 5.8}	2274	{ 232}						
	165FI		94.1	{ 9.6}	78.4	{ 8.0}	2813	{ 287}						
	200FI		115	{11.7}	95.1	{ 9.7}	3195	{ 326}						
	300FI		143	{14.6}	120	{12.2}	3195	{ 326}						
	360FI		172	{17.5}	143	{14.6}	3606	{ 368}						
	450FI		215	{21.9}	179	{18.3}	4185	{ 427}						
	600FI		286	{29.2}	239	{24.4}	5076	{ 518}						
720FI	344	{35.1}	286	{29.2}	5733	{ 585}								
1000FI	446	{45.5}	319	{32.5}	6664	{ 680}								
1200FI	*459	*{46.8}	382	{39.0}	6684	{ 682}								
GRTA020	5FI	0.2	18	1/5	1/ 5.023 (5.031)	2	5.7	{0.58}	4.7	{0.48}	431	{ 44}	P88 Drawing A-21	P89 Drawing A-27
	10FI						11.8	{ 1.2}	9.5	{0.97}	686	{ 70}		
	15FI						17.6	{ 1.8}	14.7	{ 1.5}	902	{ 92}		
	20FI						22.5	{ 2.3}	19.6	{ 2.0}	1098	{ 112}		
	25FI						28.4	{ 2.9}	23.5	{ 2.4}	1264	{ 129}		
	30FI						34.3	{ 3.5}	28.4	{ 2.9}	1431	{ 146}		
	40FI		46.1	{ 4.7}	38.2	{ 3.9}	1735	{ 177}						
	50FI		56.8	{ 5.8}	48.0	{ 4.9}	2009	{ 205}						
	60FI		68.6	{ 7.0}	56.8	{ 5.8}	2274	{ 232}						
	75FI		86.2	{ 8.8}	71.5	{ 7.3}	2636	{ 269}						
	100FI		115	{11.7}	95.1	{ 9.7}	3195	{ 326}						
	120FI		137	{14.0}	115	{11.7}	3606	{ 368}						
	165FI		189	{19.3}	158	{16.1}	4459	{ 455}						
	200FI		218	{22.2}	181	{18.5}	4822	{ 492}						
	300FI		286	{29.2}	239	{24.4}	4861	{ 496}						
	360FI		343	{35.0}	286	{29.2}	5488	{ 560}						
	450FI		430	{43.9}	358	{36.5}	5792	{ 591}						
	600FI		611	{62.3}	509	{51.9}	7301	{ 745}						
	720FI		733	{74.8}	611	{62.3}	8242	{ 841}						
	1000FI		827	{84.4}	689	{70.3}	9800	{1000}						
	1200FI		*840	*{85.7}	700	{71.4}	9800	{1000}						

Note 1) The actual reduction ratios of the three-phase-motor-type gear motors (brake type, non-brake type) and CB gear motors (single-phase motor type, three-phase motor type) are shown in parentheses.

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

Specification Chart

0.1
0.2

Adapter Type Specification Chart

Specification Chart

Model number	4P motor capacity equivalence kW	Frame number	Nominal reduction ratio	Actual reduction ratio	Number of reduction steps	Allowable output shaft torque				Allowable output shaft O.H.L.		Page and drawing number of outline dimensions					
						N·m		{kgf·m}		N	{kgf}	Foot mount	Flange mount				
						50Hz		60Hz									
GRTA040	5FI	0.4	24	1/5	1/ 4.950	2	12.1	{ 1.23}	10.0	{ 1.02}	686	{ 70}	P90 Drawing A-33	P91 Drawing A-38			
	10FI			1/10	1/ 10.313		24.5	{ 2.5}	20.6	{ 2.1}	1098	{ 112}					
	15FI			1/15	1/ 15.125		36.3	{ 3.7}	30.4	{ 3.1}	1431	{ 146}					
	20FI			1/20	1/ 19.388		48.0	{ 4.9}	40.2	{ 4.1}	1735	{ 177}					
	25FI			1/25	1/ 24.750		60.8	{ 6.2}	50.0	{ 5.1}	2009	{ 205}					
	30FI			1/30	1/ 30.875		72.5	{ 7.4}	60.8	{ 6.2}	2274	{ 232}					
	40FI		28	1/40	1/ 40.519	3	94.1	{ 9.6}	78.4	{ 8.0}	2754	{ 281}	P90 Drawing A-34	P91 Drawing A-39			
	50FI			1/50	1/ 50.909		118	{ 12.0}	98.0	{ 10.0}	3195	{ 326}					
	60FI			1/60	1/ 60.000		140	{ 14.3}	118	{ 12.0}	3606	{ 368}					
	75FI			1/75	1/ 73.247		175	{ 17.9}	146	{ 14.9}	4185	{ 427}					
	100FI			1/100	1/ 101.544		234	{ 23.9}	195	{ 19.9}	5076	{ 518}					
	120FI			1/120	1/ 117.113		281	{ 28.7}	234	{ 23.9}	5733	{ 585}					
	165FI		38	1/165	1/ 160.705	4	364	{ 37.1}	303	{ 30.9}	6664	{ 680}	P90 Drawing A-35	P91 Drawing A-40			
	200FI			1/200	1/ 192.560		389	{ 39.7}	324	{ 33.1}	6684	{ 682}					
	300FI			42	1/300		1/ 292.226	611	{ 62.3}	509	{ 51.9}	7301			{ 745}		
	360FI				1/360		1/ 368.952	733	{ 74.8}	611	{ 62.3}	8242			{ 841}		
	450FI				1/450		1/ 437.152	916	{ 93.5}	763	{ 77.9}	9565			{ 976}		
	600FI			50	1/600		1/ 597.694	4	1222	{124.7}	1018	{103.9}			11584	{1182}	P90 Drawing A-37
720FI	1/720	1/ 748.052	1466		{149.6}	1222	{124.7}		13073	{1334}							
1000FI	1/1000	1/ 962.850	1654		{168.8}	1379	{140.7}		13230	{1350}							
1200FI	1/1200	1/1165.714	*1680		*{171.4}	1400	{142.9}		13230	{1350}							
5FI	0.75	28	1/5		1/ 5.061	2	22.6		{ 2.31}	18.8	{ 1.92}	1049	{ 107}	P92 Drawing A-43	P92 Drawing A-47		
10FI			1/10		1/ 10.159		45.1		{ 4.6}	38.2	{ 3.9}	1666	{ 170}				
15FI			1/15	1/ 14.694	67.6		{ 6.9}	56.8	{ 5.8}	2176	{ 222}						
20FI			1/20	1/ 19.948	91.1		{ 9.3}	75.5	{ 7.7}	2636	{ 269}						
25FI			1/25	1/ 25.397	114		{ 11.6}	94.1	{ 9.6}	3058	{ 312}						
30FI			1/30	1/ 30.381	136		{ 13.9}	114	{ 11.6}	3459	{ 353}						
40FI		38	1/40	1/ 40.635	3	175	{ 17.9}	146	{ 14.9}	4185	{ 427}	P92 Drawing A-44	P92 Drawing A-48				
50FI			1/50	1/ 49.143		220	{ 22.4}	183	{ 18.7}	4861	{ 496}						
60FI			1/60	1/ 60.082		264	{ 26.9}	220	{ 22.4}	5488	{ 560}						
75FI			1/75	1/ 74.667		300	{ 30.6}	250	{ 25.5}	5792	{ 591}						
100FI			1/100	1/ 96.280		439	{ 44.8}	369	{ 37.7}	7301	{ 745}						
120FI			1/120	1/ 122.500		527	{ 53.8}	439	{ 44.8}	8242	{ 841}						
165FI		42	1/165	1/ 160.820	4	724	{ 73.9}	604	{ 61.6}	9800	{1000}	P92 Drawing A-45	P92 Drawing A-49				
200FI			1/200	1/ 197.979		735	{ 75.0}	613	{ 62.5}	9800	{1000}						
300FI			50	1/300		1/ 298.523	1146	{116.9}	955	{ 97.4}	9418			{ 961}			
360FI				1/360		1/ 363.462	1289	{131.5}	1074	{109.6}	10633			{1085}			
450FI				1/450		1/ 448.907	*1396	*{142.4}	1163	{118.7}	12338			{1259}			
5FI			1.5	38		1/5	1/ 5.000	2	45.3	{ 4.62}	37.7			{ 3.85}	1666	{ 170}	P93 Drawing A-51
10FI	1/10	1/ 10.000			91.1	{ 9.3}	75.5		{ 7.7}	2548	{ 260}						
15FI	1/15	1/ 15.000			136	{ 13.9}	114		{ 11.6}	3342	{ 341}						
20FI	1/20	1/ 19.615			181	{ 18.5}	151		{ 15.4}	4047	{ 413}						
25FI	1/25	1/ 24.091			226	{ 23.1}	189		{ 19.3}	4694	{ 479}						
30FI	1/30	1/ 30.000			272	{ 27.8}	226		{ 23.1}	5302	{ 541}						
40FI	42	1/40		1/ 39.253	3	351	{ 35.8}	293	{ 29.9}	6292	{ 642}	P93 Drawing A-52	P93 Drawing A-55				
50FI		1/50		1/ 48.704		439	{ 44.8}	366	{ 37.3}	7301	{ 745}						
60FI		1/60		1/ 61.492		527	{ 53.8}	439	{ 44.8}	8242	{ 841}						
75FI		1/75		1/ 72.859		659	{ 67.2}	549	{ 56.0}	9565	{ 976}						
100FI		1/100		1/ 99.616		878	{ 89.6}	732	{ 74.7}	11584	{1182}						
120FI		1/120		1/ 124.675		1054	{107.5}	878	{ 89.6}	13073	{1334}						
165FI	50	1/165		1/ 160.475	4	1449	{147.9}	1207	{123.2}	13230	{1350}	P93 Drawing A-53	P93 Drawing A-56				
200FI		1/200		1/ 194.286		*1470	*{150.0}	1225	{125.0}	13230	{1350}						

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

Adapter Type Specification Chart

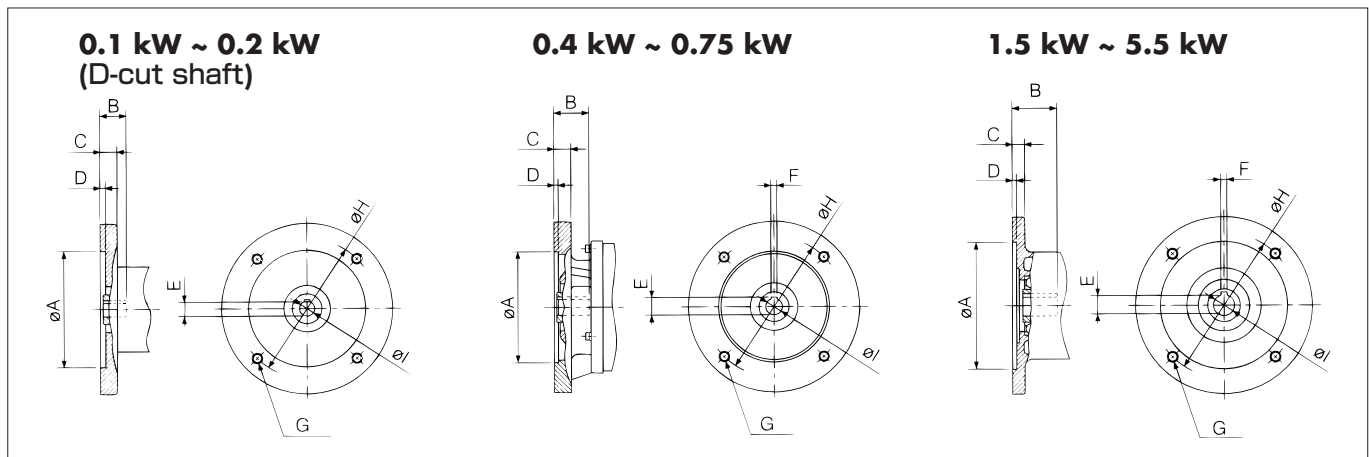
GEAR MOTOR TA Series

Specification Chart

Model number	4P motor capacity equivalence kW	Frame number	Nominal reduction ratio	Actual reduction ratio	Number of reduction steps	Allowable output shaft torque				Allowable output shaft O.H.L.		Page and drawing number of outline dimensions		
						N·m		{kgf·m}		N	{kgf}	Foot mount	Flange mount	
						50Hz		60Hz						
GRTA220	5FI	2.2	42	1/5	1/ 5.000	2	66.6	{ 6.8}	55.9	{ 5.7}	2078	{ 212}	P94 Drawing A-57	P94 Drawing A-60
	10FI			1/10	1/ 9.870		133	{ 13.6}	111	{ 11.3}	3293	{ 336}		
	15FI			1/15	1/ 14.454		200	{ 20.4}	167	{ 17.0}	4312	{ 440}		
	20FI			1/20	1/ 20.659		266	{ 27.1}	221	{ 22.6}	5223	{ 533}		
	25FI			1/25	1/ 25.455		332	{ 33.9}	277	{ 28.3}	6066	{ 619}		
	30FI			1/30	1/ 29.143		399	{ 40.7}	332	{ 33.9}	6850	{ 699}		
	40FI	50	3	1/40	1/ 38.806	515	{ 52.6}	429	{ 43.8}	8114	{ 828}	P94 Drawing A-58	P94 Drawing A-61	
	50FI			1/50	1/ 49.754	644	{ 65.7}	537	{ 54.8}	9418	{ 961}			
	60FI			1/60	1/ 60.577	773	{ 78.9}	644	{ 65.7}	10633	{1085}			
	75FI			1/75	1/ 74.818	966	{ 98.6}	805	{ 82.1}	12338	{1259}			
	100FI	63	3	1/100	1/101.957	1288	{131.4}	1076	{109.5}	14955	{1526}	P94 Drawing A-59	P94 Drawing A-62	
	120FI			1/120	1/118.321	1545	{157.7}	1288	{131.4}	16885	{1723}			
	165FI			1/165	1/165.073	2126	{216.9}	1771	{180.7}	17640	{1800}			
	200FI			1/200	1/200.138	*2156	*{220.0}	1796	{183.3}	17640	{1800}			
GRTA370	5FI	3.7	50	1/5	1/ 4.865	2	112	{ 11.4}	93.1	{ 9.5}	2930	{ 299}	P95 Drawing A-63	P95 Drawing A-85
	10FI			1/10	1/ 10.080		223	{ 22.8}	186	{ 19.0}	4645	{ 474}		
	15FI			1/15	1/ 15.158		335	{ 34.2}	279	{ 28.5}	6096	{ 622}		
	20FI			1/20	1/ 20.667		448	{ 45.7}	372	{ 38.0}	7389	{ 754}		
	25FI			1/25	1/ 24.923	560	{ 57.1}	466	{ 47.6}	8565	{ 874}			
	30FI			1/30	1/ 30.545	671	{ 68.5}	560	{ 57.1}	9673	{ 987}			
	40FI			3	1/40	1/ 40.461	866	{ 88.4}	722	{ 73.7}	10290	{1050}	P95 Drawing A-64	P95 Drawing A-65
	50FI				1/50	1/ 49.703	1083	{110.5}	903	{ 92.1}	10290	{1050}		
GRTA550	5FI	5.5	50	1/5	1/ 5.069	2	167	{ 17.0}	138	{ 14.1}	3812	{ 389}	P95 Drawing A-67	P95 Drawing A-68
	10FI			1/10	1/ 9.990		332	{ 33.9}	277	{ 28.3}	6056	{ 618}		
	15FI			1/15	1/ 15.359		499	{ 50.9}	416	{ 42.4}	7938	{ 810}		
	20FI			1/20	1/ 19.770		665	{ 67.9}	554	{ 56.5}	9624	{ 982}		
	25FI			1/25	1/ 24.370		831	{ 84.8}	693	{ 70.7}	10290	{1050}		
	30FI			1/30	1/ 29.244		*893	*{ 91.1}	744	{ 75.9}	10290	{1050}		

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

Dimensions of input section



(mm)

Motor output	A	B	C	D	E	F	G	H	I
0.1 kW	110G7	25	14	5	10	—	4-M8	130	11F7
0.2 kW	110G7	25	14	5	10	—	4-M8	130	11F7
0.4 kW	110G7	32	14	5	16.3	5	4-M8	130	14F7
0.75 kW	130G7	42	20	5	21.8	6	4-M10	165	19F7
1.5 kW	130G7	52	16	5	27.3	8	4-M10	165	24F7
2.2 kW	180G7	62	20	5	31.3	8	4-M12	215	28F7
3.7 kW	180G7	62	20	5	31.3	8	4-M12	215	28F7
5.5 kW	230G7	82	20	5	41.3	10	4-M12	265	38F7

Specification Chart

2.2
3.7
5.5