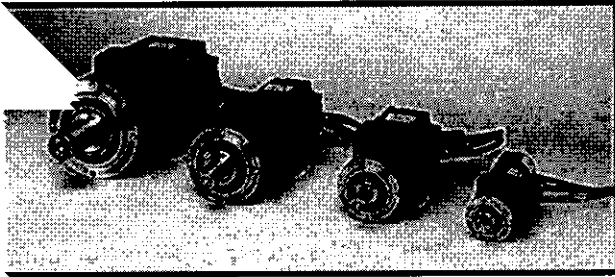


# SGMG Gearmotors (1500rpm)- With Incremental / Absolute Encoder

Rated Output : 0.45kW, 0.85kW, 1.3kW,  
1.8kW, 2.9kW, 4.4kW,  
5.5kW, 7.5kW, 11kW



For Additional Information	Page(s)
SGMG Gearmotor Ratings & Specifications	98
SGMG Gearmotor Dimensions	101 - 102
SGMG Gearmotor Selection/Ordering Information	103 - 107
SGDB Ratings & Specifications	129 - 130
SGDB Dimensions	131 - 137

## Design Features

- . Compact
  - Fits in limited mounting space
- . Speed
  - 307 to 30,090 in. lb. peak torque
  - Uses time-proven, SGMG motor technology
- . Encoders
  - 8192 PPR incremental encoder standard
  - 8192 PPR absolute encoder (option)
- . Enclosure
  - Totally enclosed, self-cooled IP67 (not including shaft)
- . Application Emphasis
  - Rugged, general purpose
  - Roll feeders
  - Chip mounters
  - X-Y tables
  - PCB drilling machines
  - Packaging
- . Certified International Standards
  - UL Recognized (File #: E165827), CE compliance (option)

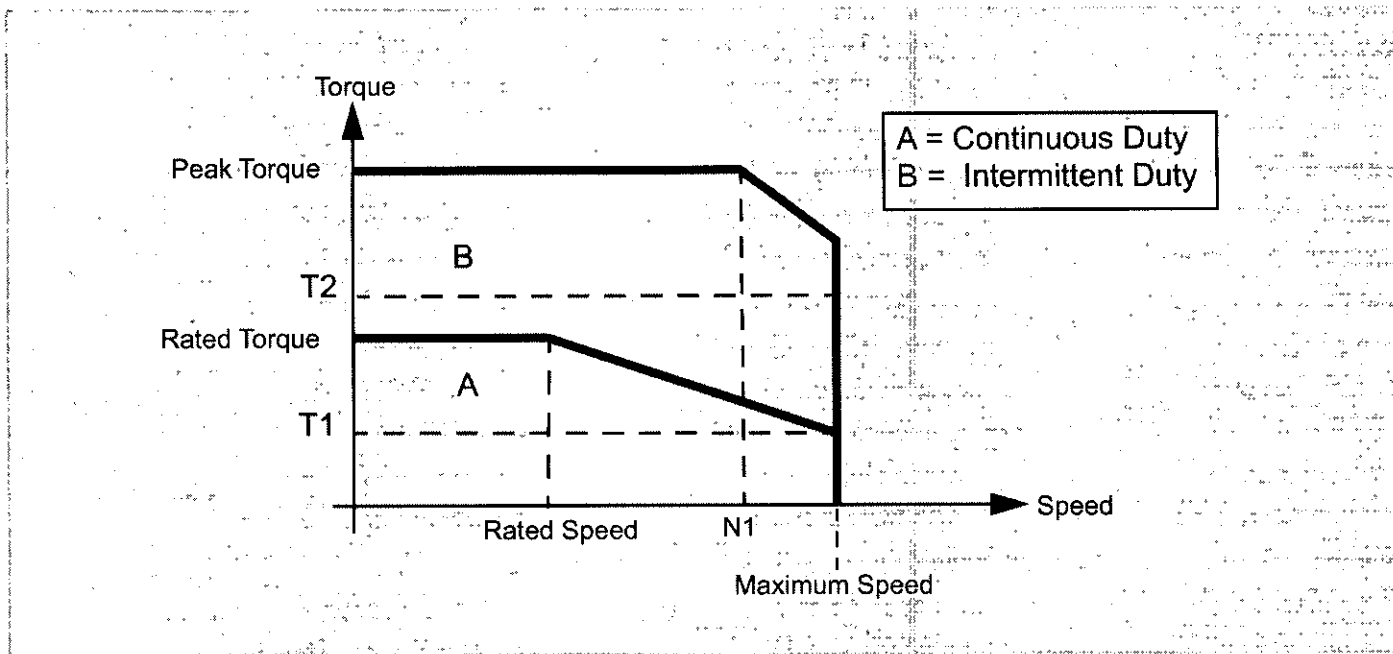


# Gearmotor Ratings and Specifications

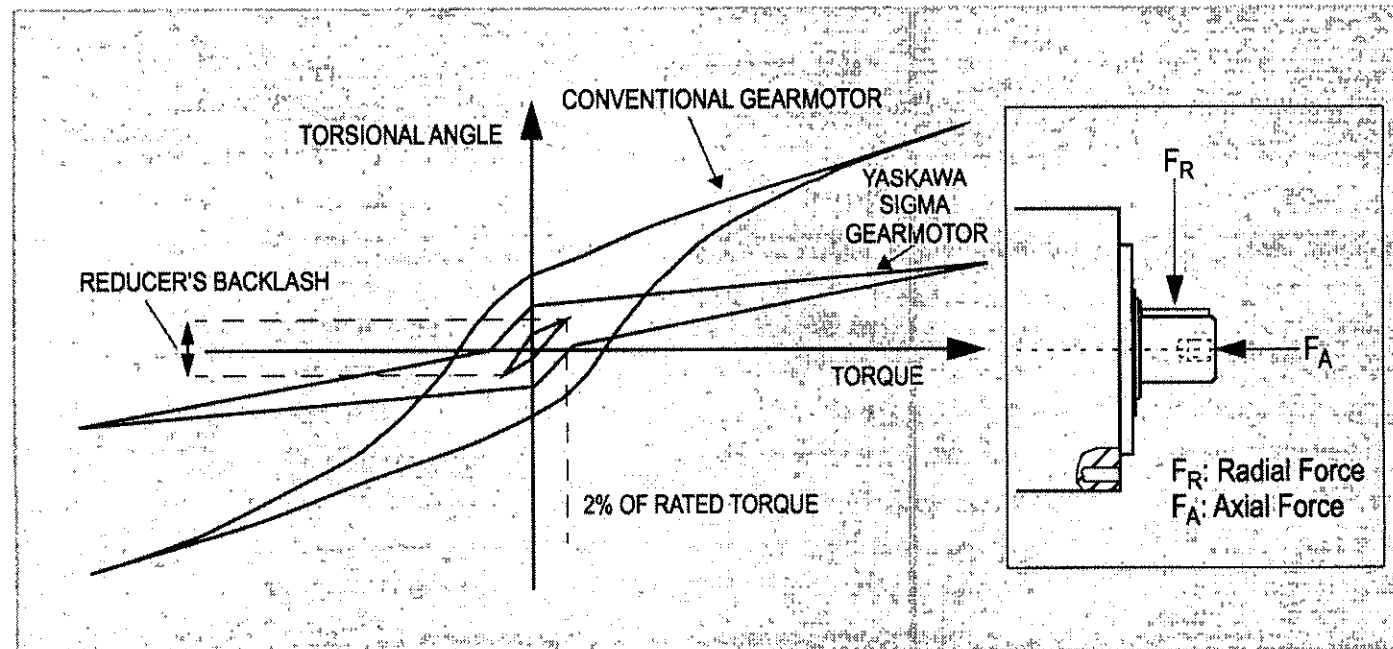
GEARMOTOR Part Number	Rated Torque (in. lb.)	Peak Torque (in. lb.)	Rated Speed (rpm)	Max Speed (rpm)	Speed N1 (rpm)	Torque T1 (in. lb.)	Torque T2 (in. lb.)	Amplifier Model Number SGDB-	
SG05SA-G05A2	121	383	300	600	460	63	184	05ADG	
SH04SA-G05A2	97	307	375	750	575	51	148		
SH05SA-G05A2	121	383	300	600	460	63	184		
SH07SA-G05A2	170	536	214	429	329	88	258		
SH10SA-G05A2	243	708	150	300	230	117	341		
SG10SA-G05A2	243	766	150	300	230	126	368		
SH20S□-G05A2	470	1485	75	150	115	244	714		
SG25SA-G05A2	594	1770	60	120	92	291	851		
SH28S□-G05A2	658	2,079	54	107	82	342	1000		
SH40S□-G05A2	940	2,213	38	75	57	364	1064		
SH50S□-G05A2	1,175	2,213	30	60	46	364	1064		
SH70S□-G05A2	1,645	4,426	21	43	33	728	2129		
SG05SA-G09A2	233	592	300	600	560	116	388		10ADG
SH04SA-G09A2	186	473	375	750	700	93	310		
SH05SA-G09A2	233	592	300	600	560	116	388		
SH07SA-G09A2	326	828	214	429	400	163	543		
SH10SA-G09A2	466	1,183	150	300	280	233	776		
SG10SA-G09A2	466	1,183	150	300	280	233	776		
SH16S□-G09A2	722	1,835	94	188	175	361	1203		
SH20S□-G09A2	902	2,213	75	150	140	435	1451		
SH28S□-G09A2	1,263	2,213	54	107	100	435	1451		
SH50S□-G09A2	2,256	4,426	30	60	56	871	2902		
SH70S□-G09A2	3,158	4,426	21	43	40	871	2902		
SG05SA-G13A2	359	1,004	300	600	540	179	728	15ADG	
SG10SA-G13A2	718	1,770	150	300	270	316	1283		
SH04SA-G13A2	287	803	375	750	675	144	582		
SH05SA-G13A2	359	1,004	300	600	540	179	728		
SH07SA-G13A2	502	1,406	214	429	386	251	1019		
SH10SA-G13A2	718	1,770	150	300	270	359	1455		
SH16S□-G13A2	1,113	2,213	94	188	169	396	1604		
SH20S□-G13A2	1,391	2,213	75	150	135	396	1604		
SH28S□-G13A2	1,948	4,426	54	107	96	791	3207		
SH40S□-G13A2	2,782	4,426	38	75	68	791	3207		
SH50S□-G13A2	3,186	4,426	30	60	54	791	3207		
SH70S□-G13A2	3,186	4,426	21	43	39	791	3207		
SH04SA-G20A2	396	986	375	750	700	198	776		20ADG
SH05SA-G20A2	495	1,232	300	600	560	247	970		
SH07SA-G20A2	693	1,725	214	429	400	346	1358		
SH10SA-G20A2	989	2,464	150	300	280	495	1940		
SH16S□-G20A2	1,534	3,820	94	188	175	767	3008		
SH20S□-G20A2	1,918	4,425	75	150	140	959	3760		
SH28S□-G20A2	2,685	4,425	54	107	100	1342	5264		
SH40S□-G20A2	3,835	9,550	38	75	70	1918	7520		
SH50S□-G20A2	4,794	9,736	30	60	56	1955	7666		
SH70S□-G20A2	6,712	9,736	21	43	40	1955	7666		
SH04SA-G30A2	640	1,568	375	750	625	318	970	30ADG	
SH05SA-G30A2	800	1,959	300	600	500	398	1212		
SH07SA-G30A2	1,120	2,743	214	429	357	557	1697		
SH10SA-G30A2	1,601	3,540	150	300	250	718	2191		
SH16S□-G30A2	2,482	6,076	94	188	156	1233	3760		
SH20S□-G30A2	3,102	7,595	75	150	125	1541	4700		
SH28S□-G30A2	4,343	9,736	54	107	89	1975	6025		
SH40S□-G30A2	6,204	9,736	38	75	62	1975	6025		
SH50S□-G30A2	7,755	16,815	30	60	50	3412	10405		
SH04S□-G44A2	978	2,444	375	750	600	481	1397		44ADG
SH05S□-G44A2	1,222	3,056	300	600	480	601	1746		
SH07S□-G44A2	1,711	4,278	214	429	343	842	2444		
SH10S□-G44A2	2,444	6,111	150	300	240	1203	3492		
SH16S□-G44A2	3,790	9,475	94	188	150	1865	5414		
SH20S□-G44A2	4,738	9,736	75	150	120	1916	5563		
SH28S□-G44A2	6,633	16,582	54	107	86	3264	9475		
SH40S□-G44A2	8,851	16,815	38	75	60	3310	9609		
SH50S□-G44A2	11,844	29,610	30	60	48	5828	16920		
SH04S□-G55A2	1,203	3,007	375	750	650	601	1746	60ADG	
SH05S□-G55A2	1,504	3,759	300	600	520	752	2182		
SH07S□-G55A2	2,105	5,262	214	429	371	1052	3055		
SH10S□-G55A2	3,007	7,518	150	300	260	1504	4365		
SH16S□-G55A2	4662	11,656	94	188	162	2331	6767		
SH20S□-G55A2	5828	15,035	75	150	130	3007	8729		
SH28S□-G55A2	8159	20,398	54	107	93	4080	11843		
SH40S□-G55A2	11656	29,140	38	75	65	5828	16919		
SH50S□-G55A2	14570	30,090	30	60	52	6018	17470		



# Gearmotor Speed/Torque Curve



# Gearmotor Mechanical Ratings



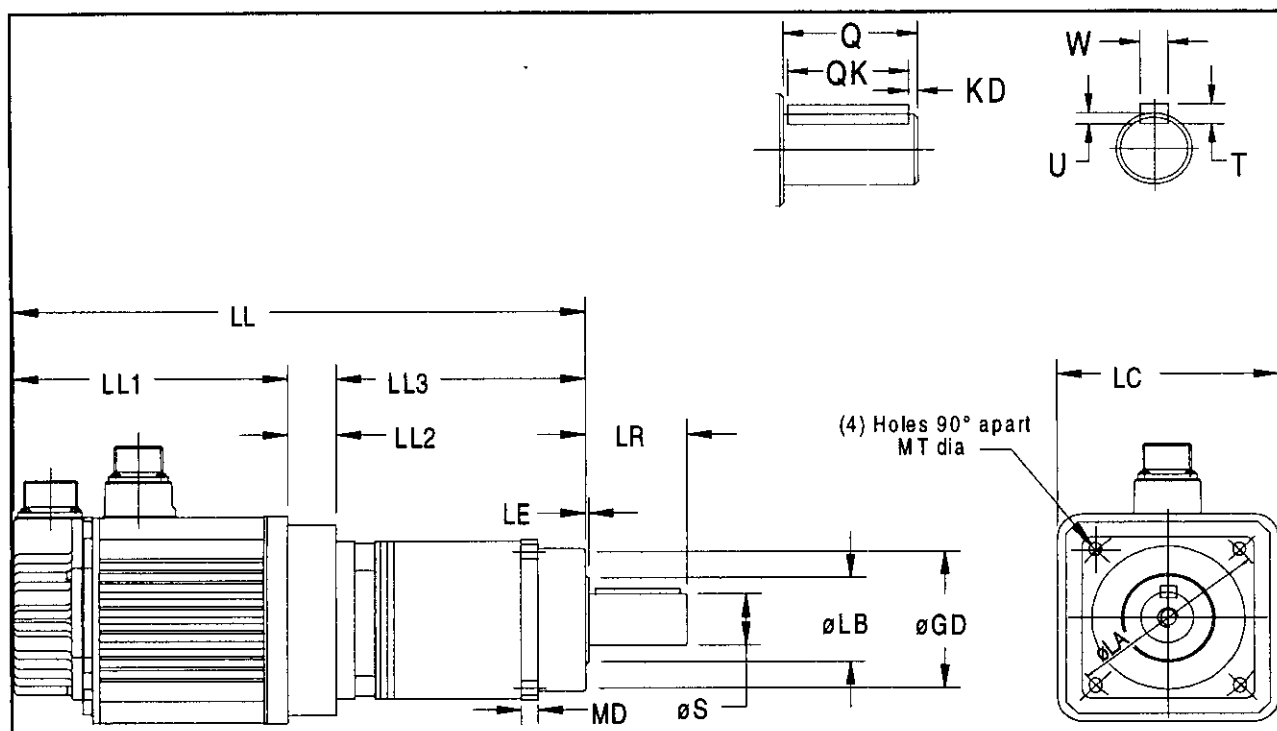
## Gearmotor Mounting Specifications

# Gearmotor Mechanical Ratings

GEARMOTOR Part Number	Gearhead Backlash (arc min)	Gearhead Maximum Radial Load (lb)	Gearhead Maximum Axial Load (lb)	Gearhead Inertia (lb. in. s <sup>2</sup> )	Gearmotor Weight (lb)
SG05SA-G05A2	<10	1035	900	0.0047	31.97
SH04SA-G05A2	<4	855	720	0.00056	18.294
SH05SA-G05A2	<4	855	720	0.00049	18.294
SH07SA-G05A2	<4	855	720	0.00043	18.294
SH10SA-G05A2	<4	855	720	0.00041	18.294
SG10SA-G05A2	<10	1035	900	0.0047	31.97
SH20S□-G05A2	<6	1350	1215	0.00159	27.77
SG25SA-G05A2	<10	1035	900	0.0043	36.82
SH28S□-G05A2	<6	1350	1215	0.00159	27.77
SH40S□-G05A2	<6	1350	1215	0.00106	27.77
SH50S□-G05A2	<6	1350	1215	0.00106	27.77
SH70S□-G05A2	<6	2025	2115	0.00239	44.02
SG05SA-G09A2	<10	1035	900	0.00470	36.6
SH04SA-G09A2	<4	855	720	0.00056	22.924
SH05SA-G09A2	<4	855	720	0.00049	22.924
SH07SA-G09A2	<4	855	720	0.00043	22.924
SH10SA-G09A2	<4	1350	1215	0.00115	30.42
SG10SA-G09A2	<10	1035	900	0.0047	36.6
SH16S□-G09A2	<6	1350	1215	0.00159	32.4
SH20S□-G09A2	<6	1350	1215	0.00159	32.4
SH28S□-G09A2	<6	1350	1215	0.00159	32.4
SH50S□-G09A2	<6	2025	2115	0.00239	48.65
SH70S□-G09A2	<6	2025	2115	0.00239	48.65
SG05SA-G13A2	<10	1035	900	0.00470	41.01
SG10SA-G13A2	<10	1035	900	0.00470	41.01
SH04SA-G13A2	<4	1350	1215	0.00239	34.83
SH05SA-G13A2	<4	1350	1215	0.00212	34.83
SH07SA-G13A2	<4	1350	1215	0.00186	34.83
SH10SA-G13A2	<4	1350	1215	0.00177	34.83
SH16S□-G13A2	<6	1350	1215	0.00221	36.81
SH20S□-G13A2	<6	1350	1215	0.00221	36.81
SH28S□-G13A2	<6	2025	2115	0.00451	53.06
SH40S□-G13A2	<6	2025	2115	0.00300	53.06
SH50S□-G13A2	<6	2025	2115	0.00300	53.06
SH70S□-G13A2	<6	2025	2115	0.00300	53.06
SH04SA-G20A2	<4	2025	2115	0.00726	56.26
SH05SA-G20A2	<4	2025	2115	0.00646	56.26
SH07SA-G20A2	<4	2025	2115	0.00575	56.26
SH10SA-G20A2	<4	2025	2115	0.00531	56.26
SH16S□-G20A2	<6	2025	2115	0.00673	62.76
SH20S□-G20A2	<6	2025	2115	0.00673	62.76
SH28S□-G20A2	<6	2025	2115	0.00673	62.76
SH40S□-G20A2	<6	3150	3037	0.00531	94.76
SH50S□-G20A2	<6	3150	3037	0.00531	94.76
SH70S□-G20A2	<6	3150	3037	0.00522	94.76
SH04SA-G30A2	<4	2025	2115	0.00726	65.08
SH05SA-G30A2	<4	2025	2115	0.00646	65.08
SH07SA-G30A2	<4	2025	2115	0.00575	65.08
SH10SA-G30A2	<4	2025	2115	0.00531	65.08
SH16S□-G30A2	<6	3150	3037	0.00726	103.58
SH20S□-G30A2	<6	3150	3037	0.00708	103.58
SH28S□-G30A2	<6	3150	3037	0.00690	103.58
SH40S□-G30A2	<6	3150	3037	0.00531	103.58
SH50S□-G30A2	<6	4050	5062	0.02040	152.18
SH04S□-G44A2	<4	3150	3037	0.0281	110.19
SH05S□-G44A2	<4	3150	3037	0.0230	110.19
SH07S□-G44A2	<4	3150	3037	0.0187	110.19
SH10S□-G44A2	<4	3150	3037	0.0164	110.19
SH16S□-G44A2	<6	3150	3037	0.0073	114.59
SH20S□-G44A2	<6	3150	3037	0.0071	114.59
SH28S□-G44A2	<6	4050	5062	0.0296	163.19
SH40S□-G44A2	<6	4050	5062	0.0215	163.19
SH50S□-G44A2	<6	6075	6255	0.0271	217.69
SH04S□-G55A2	<4	3150	3037	0.0320	125.63
SH05S□-G55A2	<4	3150	3037	0.0270	125.63
SH07S□-G55A2	<4	3150	3037	0.0226	125.63
SH10S□-G55A2	<4	3150	3037	0.0204	125.63
SH16S□-G55A2	<6	4050	5062	0.03717	178.63
SH20S□-G55A2	<6	4050	5062	0.03558	178.63
SH28S□-G55A2	<6	6075	6255	0.03823	233.13
SH40S□-G55A2	<6	6075	6255	0.03372	233.13
SH50S□-G55A2	<6	6075	6255	0.03106	233.13



# Dimensions in inches (mm)



GEARMOTOR	LL1	LL2	LL3	LL	LE	LR	LB	GD	S	LC	LA	MT	MD	Q	QK	KD	W	T	U
SG05SA-G05A2	5.43	1.10	4.02	10.55	0.236	2.756	3.543	4.724	1.260	4.720	4.252	M8	0.630	2.284	1.969	0.158	0.394	0.394	0.276
SH04SA-G05A2	5.43	0.87	3.78	10.08	0.079	1.496	1.496	2.756	0.866	5.118	3.346	0.260	0.276	1.417	1.260	0.079	0.236	0.236	0.138
SH05SA-G05A2	5.43	0.87	3.78	10.08	0.079	1.496	1.496	2.756	0.866	5.118	3.346	0.260	0.276	1.417	1.260	0.079	0.236	0.236	0.138
SH07SA-G05A2	5.43	0.87	3.78	10.08	0.079	1.496	1.496	2.756	0.866	5.118	3.346	0.260	0.276	1.417	1.260	0.079	0.236	0.236	0.138
SH10SA-G05A2	5.43	0.87	3.78	10.08	0.079	1.496	1.496	2.756	0.866	5.118	3.346	0.260	0.276	1.417	1.260	0.079	0.236	0.236	0.138
SG10SA-G05A2	5.43	1.10	4.02	10.55	0.236	2.756	3.543	4.724	1.260	4.720	4.252	M8	0.630	2.284	1.969	0.158	0.394	0.394	0.276
SH20SA-G05A2	5.43	1.10	5.77	12.30	0.079	2.362	2.165	3.543	1.260	5.118	4.724	0.354	0.394	2.283	1.969	0.157	0.394	0.315	0.197
SG25SA-G05A2	5.43	1.10	5.30	11.83	0.236	2.756	3.543	4.724	1.260	4.720	4.252	M8	0.630	2.284	1.969	0.158	0.394	0.394	0.276
SH28SA-G05A2	5.43	1.10	5.77	12.30	0.079	2.362	2.165	3.543	1.260	5.118	4.724	0.354	0.394	2.283	1.969	0.157	0.394	0.315	0.197
SH40SA-G05A2	5.43	1.10	5.77	12.30	0.079	2.362	2.165	3.543	1.260	5.118	4.724	0.354	0.394	2.283	1.969	0.157	0.394	0.315	0.197
SH50SA-G05A2	5.43	1.10	5.77	12.30	0.079	2.362	2.165	3.543	1.260	5.118	4.724	0.354	0.394	2.283	1.969	0.157	0.394	0.315	0.197
SH70SA-G05A2	5.43	1.20	7.13	13.76	0.118	3.346	2.756	5.118	1.575	5.118	6.496	0.433	0.472	3.228	2.756	0.197	0.472	0.315	0.197
SG05SA-G09A2	6.34	1.10	4.02	11.46	0.236	2.756	3.543	4.724	1.260	4.720	4.252	M8	0.630	2.284	1.969	0.158	0.394	0.394	0.276
SH04SA-G09A2	6.34	0.87	3.78	10.99	0.079	1.496	1.496	2.756	0.866	5.118	3.346	0.260	0.276	1.417	1.260	0.079	0.236	0.236	0.138
SH05SA-G09A2	6.34	0.87	3.78	10.99	0.079	1.496	1.496	2.756	0.866	5.118	3.346	0.260	0.276	1.417	1.260	0.079	0.236	0.236	0.138
SH07SA-G09A2	6.34	0.87	3.78	10.99	0.079	1.496	1.496	2.756	0.866	5.118	3.346	0.260	0.276	1.417	1.260	0.079	0.236	0.236	0.138
SH10SA-G09A2	6.34	1.10	4.49	11.93	0.079	2.362	2.165	3.543	1.260	5.118	4.724	0.354	0.394	2.283	1.969	0.157	0.394	0.315	0.197
SG10SA-G09A2	6.34	1.10	4.02	11.46	0.236	2.756	3.543	4.724	1.260	4.720	4.252	M8	0.630	2.284	1.969	0.158	0.394	0.394	0.276
SH16SA-G09A2	6.34	1.10	5.77	13.21	0.079	2.362	2.165	3.543	1.260	5.118	4.724	0.354	0.394	2.283	1.969	0.157	0.394	0.315	0.197
SH20SA-G09A2	6.34	1.10	5.77	13.21	0.079	2.362	2.165	3.543	1.260	5.118	4.724	0.354	0.394	2.283	1.969	0.157	0.394	0.315	0.197
SH28SA-G09A2	6.34	1.10	5.77	13.21	0.079	2.362	2.165	3.543	1.260	5.118	4.724	0.354	0.394	2.283	1.969	0.157	0.394	0.315	0.197
SH50SA-G09A2	6.34	1.20	7.13	14.67	0.118	3.346	2.756	5.118	1.575	5.118	6.496	0.433	0.472	3.228	2.756	0.197	0.472	0.315	0.197
SH70SA-G09A2	6.34	1.20	7.13	14.67	0.118	3.346	2.756	5.118	1.575	5.118	6.496	0.433	0.472	3.228	2.756	0.197	0.472	0.315	0.197

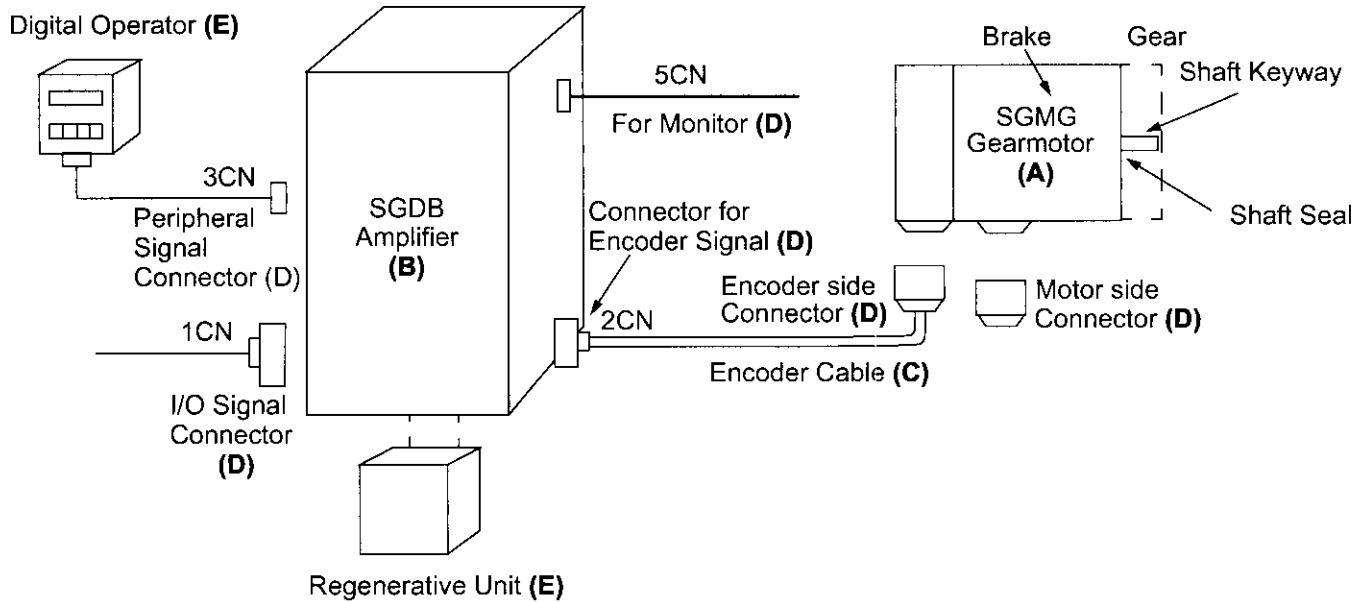




# Selecting Your SGMG Gearmotor System

Use the diagram below to locate and identify the components of your system. Each item is letter-coded and cross-referenced in the option tables on the following pages.

## System Configuration



## Model Number Designation

**SG 05 - S A - G 02 A 2 [C]**

<p><b>Sigma Gearmotor Series</b></p> <p>G: Stock (10 arc min) H: High Precision</p> <p><b>Reduction Ratio</b></p> <table border="0"> <tr><td>04: 4:1</td><td>25: 25:1</td></tr> <tr><td>05: 5:1</td><td>28: 28:1</td></tr> <tr><td>07: 7:1</td><td>40: 40:1</td></tr> <tr><td>10: 10:1</td><td>50: 50:1</td></tr> <tr><td>16: 16:1</td><td>70: 70:1</td></tr> <tr><td>20: 20:1</td><td>1A: 100:1</td></tr> </table> <p><b>Construction</b></p> <p>S: Standard</p> <p><b>Orientation</b></p> <p>A: Mounted horizontally B: Mounted vertically (shaft facing UP) C: Mounted vertically (shaft facing DOWN) Used to specify gearbox lubrication during manufacturing.</p>	04: 4:1	25: 25:1	05: 5:1	28: 28:1	07: 7:1	40: 40:1	10: 10:1	50: 50:1	16: 16:1	70: 70:1	20: 20:1	1A: 100:1	<p><b>Accessories</b></p> <p>C: 24VDC Brake</p> <p><b>Encoder Specifications</b></p> <p>2: 8192PPR Incremental Encoder S: 8192PPR Absolute Encoder</p> <p><b>Power Supply</b></p> <p>A: 200V</p> <p><b>Motor Output</b></p> <p>05: 0.5kW (0.7HP) 09: 0.9kW (1.2HP) 13: 1.3kW (1.7HP) 20: 2.0kW (2.7HP) 30: 3.0kW (4.0HP) 44: 4.4kW (6.0HP) 55: 5.5kW (7.5HP)</p> <p><b>Motor Series</b></p> <p>G: SGMG</p>
04: 4:1	25: 25:1												
05: 5:1	28: 28:1												
07: 7:1	40: 40:1												
10: 10:1	50: 50:1												
16: 16:1	70: 70:1												
20: 20:1	1A: 100:1												

## Gearmotor & Amplifier Selection

Use the table below to select the appropriate SGMG Sigma Gearmotor and Amplifier.

Description	Gearmotor				Gearhead only			Gearmotor MODEL # (A)	Amplifier MODEL # SGDB- (B)*	Motor & Amplifier Item Class
	Rated Torque (in. lb.)	Peak Torque (in. lb.)	Rated Speed (RPM)	Max. Speed (RPM)	Inertia (lb. in. sec <sup>2</sup> )	Gear Ratio	Backlash (arc min)			
200V 3-phase 8192 PPR Incremental Encoder Straight Shaft with Keyway MS connectors	121	383	300	600	0.0047	5:1	<10	SG05SA-G05A2	05ADG	Limited Stock
	97	307	375	750	0.00056	4:1	<4	SH04SA-G05A2		
	121	383	300	600	0.00049	5:1	<4	SH05SA-G05A2		
	170	536	214	429	0.00043	7:1	<4	SH07SA-G05A2		
	243	708	150	300	0.00041	10:1	<4	SH10SA-G05A2		
	243	766	150	300	0.0047	10:1	<10	SG10SA-G05A2		
	470	1485	75	150	0.00159	20:1	<6	SH20S□-G05A2		
	594	1770	60	120	0.0043	25:1	<10	SG25SA-G05A2		
	658	2,079	54	107	0.00159	28:1	<6	SH28S□-G05A2		
	940	2,213	38	75	0.00106	40:1	<6	SH40S□-G05A2		
	1,175	2,213	30	60	0.00106	50:1	<6	SH50S□-G05A2		
	1,645	4,426	21	43	0.00239	70:1	<6	SH70S□-G05A2		
	233	592	300	600	0.00470	5:1	<10	SG05SA-G09A2	10ADG	
	186	473	375	750	0.00056	4:1	<4	SH04SA-G09A2		
	233	592	300	600	0.00049	5:1	<4	SH05SA-G09A2		
	326	828	214	429	0.00043	7:1	<4	SH07SA-G09A2		
	466	1,183	150	300	0.00115	10:1	<4	SH10SA-G09A2		
	466	1,183	150	300	0.0047	10:1	<10	SG10SA-G09A2		
	722	1,835	94	188	0.00159	16:1	<6	SH16S□-G09A2		
	902	2,213	75	150	0.00159	20:1	<6	SH20S□-G09A2		
	1,263	2,213	54	107	0.00159	28:1	<6	SH28S□-G09A2		
	2,256	4,426	30	60	0.00239	50:1	<6	SH50S□-G09A2		
	3,158	4,426	21	43	0.00239	70:1	<6	SH70S□-G09A2		
	359	1,004	300	600	0.00470	5:1	<10	SG05SA-G13A2	15ADG	
	718	1,770	150	300	0.00470	10:1	<10	SG10SA-G13A2		
	287	803	375	750	0.00239	4:1	<4	SH04SA-G13A2		
	359	1,004	300	600	0.00212	5:1	<4	SH05SA-G13A2		
	502	1,406	214	429	0.00186	7:1	<4	SH07SA-G13A2		
	718	2,008	150	300	0.00177	10:1	<4	SH10SA-G13A2		
	1,113	2,213	94	188	0.00221	16:1	<6	SH16S□-G13A2		
	1,391	2,213	75	150	0.00221	20:1	<6	SH20S□-G13A2		
	1,948	4,426	54	107	0.00451	28:1	<6	SH28S□-G13A2		
	2,782	4,426	38	75	0.00300	40:1	<6	SH40S□-G13A2		
	3,186	4,426	30	60	0.00300	50:1	<6	SH50S□-G13A2		
	3,186	4,426	21	43	0.00300	70:1	<6	SH70S□-G13A2		
	396	986	375	750	0.00726	4:1	<4	SH04SA-G20A2	20ADG	
	495	1,232	300	600	0.00646	5:1	<4	SH05SA-G20A2		
	693	1,725	214	429	0.00575	7:1	<4	SH07SA-G20A2		
	989	2,464	150	300	0.00531	10:1	<4	SH10SA-G20A2		
	1,534	3,820	94	188	0.00673	16:1	<6	SH16S□-G20A2		
	1,918	4,775	75	150	0.00673	20:1	<6	SH20S□-G20A2		
	2,685	6,685	54	107	0.00673	28:1	<6	SH28S□-G20A2		
	3,835	9,550	38	75	0.00531	40:1	<6	SH40S□-G20A2		
	4,794	9,736	30	60	0.00531	50:1	<6	SH50S□-G20A2		
	6,712	9,736	21	43	0.00522	70:1	<6	SH70S□-G20A2		
	640	1,568	375	750	0.00726	4:1	<4	SH04SA-G30A2	30ADG	
	800	1,959	300	600	0.00646	5:1	<4	SH05SA-G30A2		
	1,120	2,743	214	429	0.00575	7:1	<4	SH07SA-G30A2		
	1,601	3,540	150	300	0.00531	10:1	<4	SH10SA-G30A2		
	2,482	6,076	94	188	0.00726	16:1	<6	SH16S□-G30A2		
3,102	7,595	75	150	0.00708	20:1	<6	SH20S□-G30A2			
4,343	9,736	54	107	0.00690	28:1	<6	SH28S□-G30A2			
6,204	9,736	38	75	0.00531	40:1	<6	SH40S□-G30A2			
7,755	16,815	30	60	0.02040	50:1	<6	SH50S□-G30A2			
978	2,444	375	750	0.0281	4:1	<4	SH04S□-G44A2	44ADG		
1,222	3,056	300	600	0.0230	5:1	<4	SH05S□-G44A2			
1,711	4,278	214	429	0.0187	7:1	<4	SH07S□-G44A2			
2,444	6,111	150	300	0.0164	10:1	<4	SH10S□-G44A2			
3,790	9,475	94	188	0.0073	16:1	<6	SH16S□-G44A2			
4,738	9,736	75	150	0.0071	20:1	<6	SH20S□-G44A2			
6,633	16,582	54	107	0.0296	28:1	<6	SH28S□-G44A2			
8,851	16,815	38	75	0.0215	40:1	<6	SH40S□-G44A2			
11,844	29,610	30	60	0.0271	50:1	<6	SH50S□-G44A2			
1,203	3,007	375	750	0.0320	4:1	<4	SH04S□-G55A2		60ADG Requires Regen Unit (E)	
1,504	3,759	300	600	0.0270	5:1	<4	SH05S□-G55A2			
2,105	5,262	214	429	0.0226	7:1	<4	SH07S□-G55A2			
3,007	7,518	150	300	0.0204	10:1	<4	SH10S□-G55A2			
4,662	11,656	94	188	0.03717	16:1	<6	SH16S□-G55A2			
5,828	15,035	75	150	0.03558	20:1	<6	SH20S□-G55A2			
8,159	20,398	54	107	0.03823	28:1	<6	SH28S□-G55A2			
11,656	29,140	38	75	0.03372	40:1	<6	SH40S□-G55A2			
14,570	30,090	30	60	0.03106	50:1	<6	SH50S□-G55A2			

Notes: 24VDC brakes for SGMG Sigma gearmotors are standard. Contact a local source for 24VDC power supplies.

For technical information, request manual number TSE-S800-16 from your Yaskawa representative.

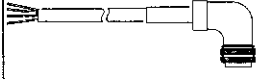
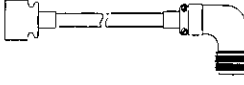
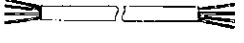
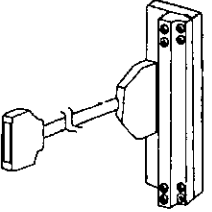
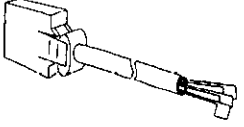
□ Implies that part number is incomplete. See Model Number Designation on previous page to complete part number.

\* For more detailed SGDB amplifier specifications and dimensions, refer to page 127.



## Pre-wired Cable Selection

Use the table below to select Pre-wired Cables for your SGMG Sigma Gearmotor.

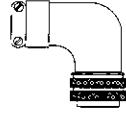
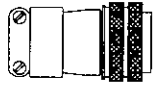


Cable Description (C)	Motor Size (kW)	Part Number		Comments	Item Class	
		without Brake	with Brake			
Power Cable with Connectors 	0.5, 0.9, 1.3	B1E-□	B1BE-□	Use the following key to specify required cable length (last digit of part #): 1: 3 meters 2: 5 meters 3: 10 meters (standard) 4: 15 meters 5: 20 meters		
	2.0, 3.0	B2E-□	B2BE-□			
	4.4	B3E-□	B3BE-□			
	5.5, 7.5 *	B5E-□	B5E-□ B7BE-□			
	11 *	B6E-□	B6E-□ B7BE-□			
Encoder Cable (incremental or absolute) 	All	DE9407237-□ rev. E			Stock **	
Encoder Cable Only for Solder Connections 		DP8409123				Up to 70 feet; for use with mating connector.
Encoder Cable Only for Solder Connections		DP8409179				Over 70 feet; splice cable to accommodate connector.
Input/Output 1CN Cable & Transition Terminal Block 		JUSP-TA50P				35 mm din rail mountable; the cable length is 0.5 meters.
Input/Output 1CN Cable with Pigtail Leads 		DE9406969-□				Use the following key to specify required cable length (last digit of part #): 1: 1 meter (standard) 2: 2 meters 3: 3 meters

\* When ordering these cables for motors with brakes, order the standard power cable and the additional cable for the brake.

\*\* Standard cable lengths are Stock items; non-standard cable lengths are Limited Stock items.

## Mating Connector Selection

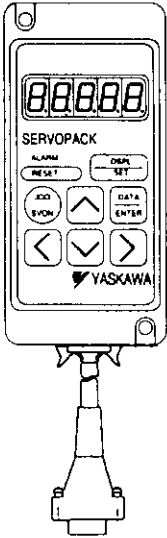
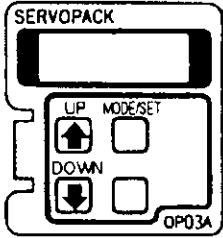

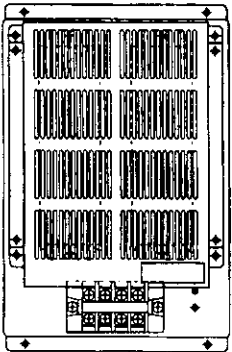
Use the table below to select Mating Connectors for your SGMG Sigma Gearmotor.

Connector Description (D)	Motor Size (kW)	Part Number		Comments	Item Class	
		without Brake	with Brake			
MS Connector for Motor Power Cable *		0.5, 0.9, 1.3	MS3106B18-10S MS3108B18-10S MS3057-10A	MS3106B20-15S MS3108B20-15S MS3057-12A	Straight-type connector L-type connector Cable clamp	Stock
		2.0, 3.0, 4.4	MS3106B22-22S MS3108B22-22S MS3057-12A	MS3106B24-10S MS3108B24-10S MS3057-16A	Straight-type connector L-type connector Cable clamp	
		5.5, 7.5, 11	MS3106B32-17S MS3108B32-17S MS3057-20A	MS3106B32-17S+ MS3106A10SL-3S MS3108B32-17S+ MS3108A10SL-3S MS3057-20A MS3057-4A	Straight-type connector L-type connector Cable clamp	
MS Connector for Encoder Cable (incremental or absolute encoder)		All	MS3106B20-29S MS3108B20-29S MS3057-12A		Straight-type connector L-type connector Cable clamp	
1CN Mating Connector			DE9406970		Can use 1CN for analog speed and torque monitor service checks.	
2CN Encoder Mating Connector			DE9406973		-	
3CN Peripheral Mating Connector			Stock 9-pin male D-shell connector		Source locally.	-
5CN Connector and 1m Cable with Pigtails			DE9404559		-	Stock

\* Choose either a straight or L-type connector and the associated cable clamp for a complete assembly. For example, L-type connector MS3108B18-10S is compatible with cable clamp MS3057-10A.

## Peripheral Device Selection

Use the table below to select Peripheral Devices for your SGMG Sigma Gearmotor System.

Component (E)	Part Number	Description	Item Class
Hand-held Digital Operator Panel		JUSP-OP02A-1	Portable unit with built-in cable Stock
Digital Operator Panel		JUSP-OP03A	Plugs into front of amplifier Non-Stock
SVMON Software		SVMON	Programming software for DOS 3.3 on a 3.5" floppy disk
Software Interface Cable		YS-11	Pre-wired 1.5 meter cable with 9-pin connector
Regenerative Unit for 3.0 kW amplifier (880 watts)		JUSP-RA04	— Stock



**NOTES**

