



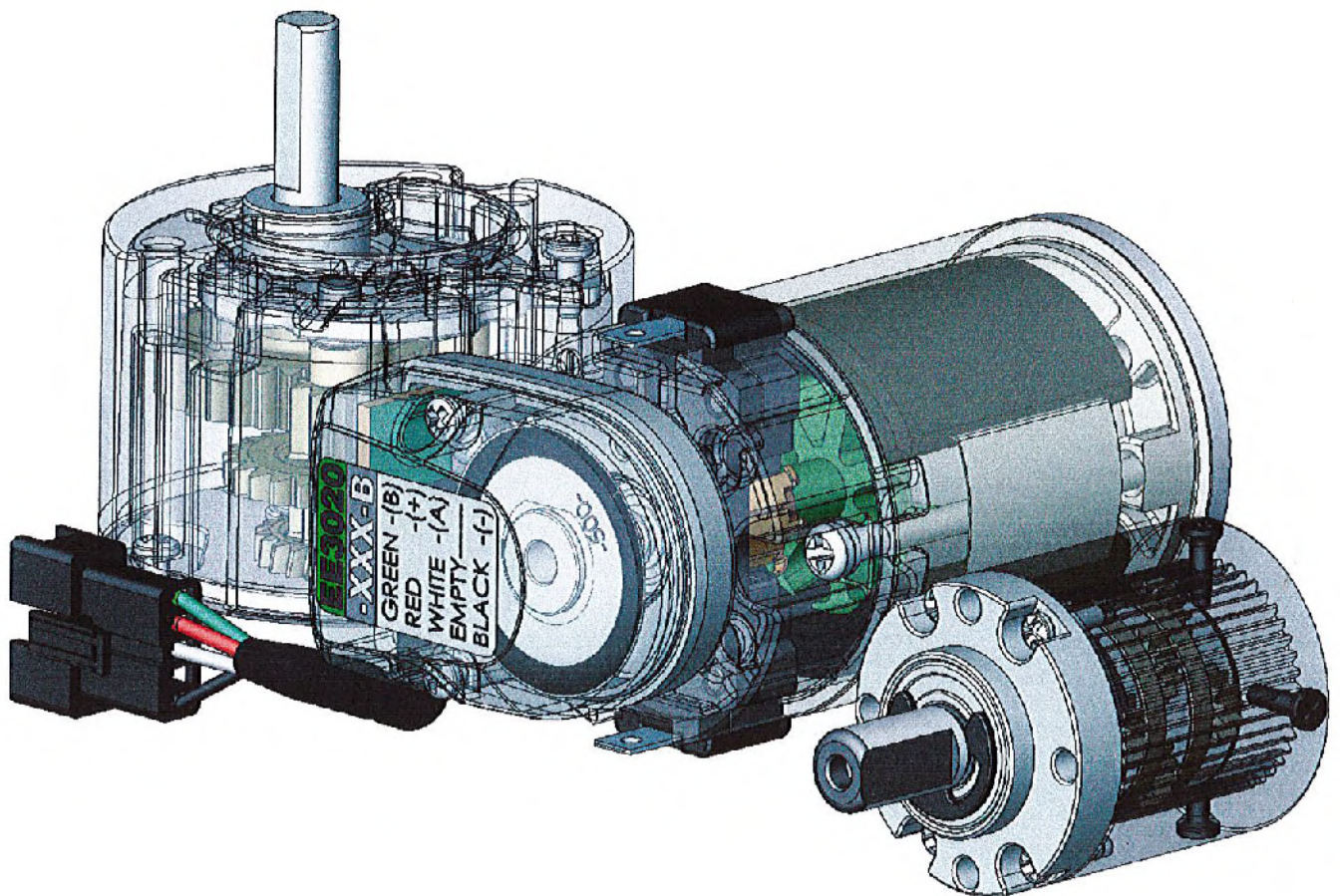
**Motor**



**Gear**



**Encoder**



**Cliff Electronic Components Limited**

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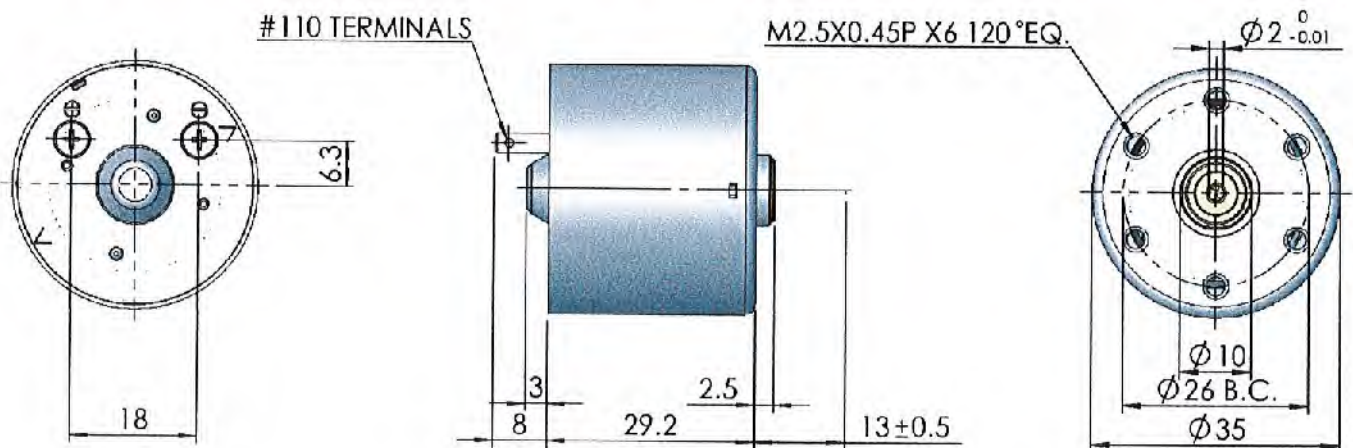
DC Motor

# 3M3529-8CYC

-Available with gearheads of GBS35/GBM37 Series  
 - Armature Inertia : 0.015 kg-cm Motor Weight : 80 grams

Winding Part Nos.	Volt V DC	No Load		Rated at Max. Eff.					Stall		Peak O/P	Rt	La	Kt	Ke
		mA	RPM	G-Cm	RPM	mA	%	Watts	G-Cm	mA	Watts	Ω	mH	Kg-Cm/A	V/K RPM
15420	6	22	1400	13	1036	63	36.55	0.14	50	180	0.18	33.33	44.6	0.32	3.88
17330	6	32	1750	16	1326	97	37.44	0.22	66	300	0.30	20.00	24.4	0.25	3.08
19262	6	36	2220	19	1730	134	41.95	0.34	86	480	0.49	12.50	15.7	0.19	2.44
21215	6	43	2650	21	2110	173	43.87	0.46	103	680	0.70	8.82	10.2	0.16	2.00
23178	6	56	3380	25	2709	228	50.76	0.70	126	925	1.09	6.49	7.3	0.14	1.65
25151	6	70	4000	29	3227	292	54.79	0.96	150	1220	1.54	4.92	5.5	0.13	1.41
27130	6	86	4650	30	3799	385	50.89	1.17	164	1720	1.96	3.49	3.9	0.10	1.20
29112	6	90	5300	32	4358	419	56.98	1.43	180	1940	2.45	3.09	2.9	0.10	1.04
12655	12	17	1750	18	1318	51	40.19	0.24	73	153	0.33	78.43	96.0	0.54	6.00
13560	12	19	2100	19	1601	62	42.00	0.31	80	200	0.43	60.00	80.0	0.44	5.10
15420	12	23	2900	22	2309	90	48.52	0.52	108	350	0.80	34.29	44.6	0.33	3.88
17330	12	34	3650	27	2936	141	48.17	0.81	138	580	1.29	20.69	24.4	0.25	3.08
19262	12	40	4500	30	3729	193	49.71	1.15	175	930	2.02	12.90	15.7	0.20	2.44
21215	12	52	5500	35	4600	264	52.14	1.65	214	1350	3.02	8.89	10.2	0.16	2.00
23178	12	66	6760	41	5660	348	57.05	2.38	252	1800	4.37	6.67	7.3	0.15	1.65
25151	12	80	8000	47	6747	440	61.63	3.26	300	2380	6.16	5.04	5.5	0.13	1.41
27130	12	96	9300	48	7939	574	56.85	3.91	328	3360	7.83	3.57	3.9	0.10	1.20
12655	24	20	3600	31	2856	78	48.66	0.91	150	300	1.39	80.00	96.0	0.54	6.00
13560	24	22	4300	32	3461	94	50.52	1.14	164	390	1.81	61.54	80.0	0.45	5.10
15420	24	27	5800	35	4851	134	54.31	1.74	214	680	3.19	35.29	44.6	0.33	3.88
17330	24	38	7300	43	6163	208	54.48	2.72	276	1130	5.17	21.24	24.4	0.25	3.08
19262	24	46	9000	48	7766	290	55.01	3.83	350	1825	8.09	13.15	15.7	0.20	2.44

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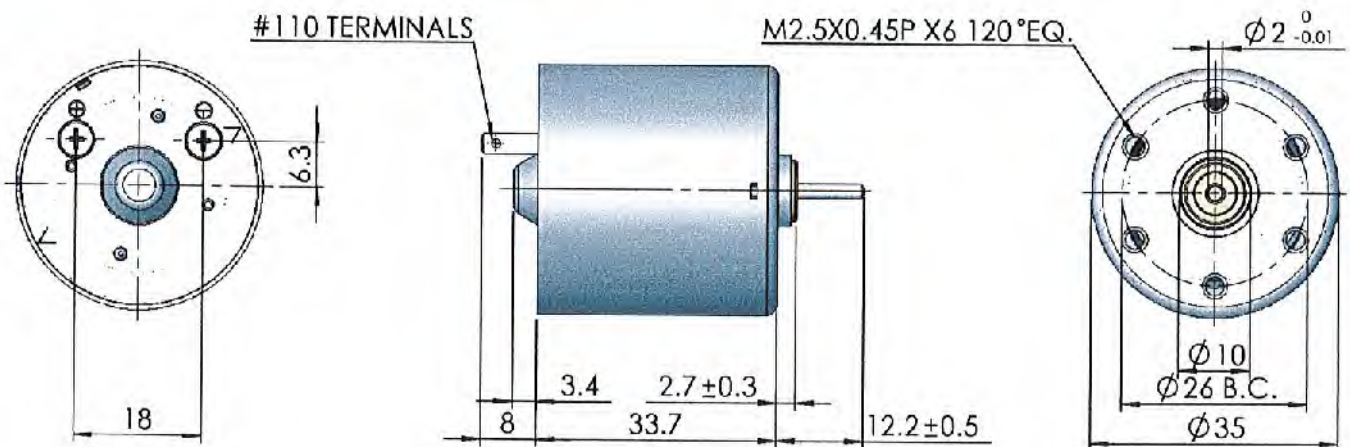
**DC Motor**

# 3M3535-15YC

- Available with gearheads of GBP30/GBS35/GBM37/GBM50 Series  
 - Armature Inertia : 0.025 kg-cm  
 Motor Weight : 115 grams

Winding Part Nos.	Volt V DC	No Load		Rated at Max. Eff.					Stall		Peak O/P	Rt	La	Kt	Ke
		mA	RPM	G-Cm	RPM	mA	%	Watts	G-Cm	mA	Watts	Ω	mH	Kg-Cm/A	V/K RPM
17330	6	20	1150	19	866	64	43.73	0.17	77	200	0.23	30.00	53.4	0.43	4.69
19260	6	24	1450	20	1138	86	45.57	0.23	93	310	0.35	19.35	37.9	0.33	3.78
21210	6	30	1800	23	1437	120	47.30	0.34	114	474	0.53	12.66	21.8	0.26	2.98
23175	6	36	2200	24	1749	146	49.36	0.43	117	570	0.66	10.53	14.0	0.22	2.48
25150	6	50	2400	30	1935	205	48.52	0.60	155	850	0.86	7.06	8.5	0.19	2.11
27125	6	65	2850	35	2296	272	50.55	0.83	180	1130	1.32	5.31	6.6	0.17	1.78
29110	6	75	3380	35	2744	317	51.80	0.99	186	1363	1.61	4.40	4.2	0.14	1.54
32090	6	100	4350	38	3524	427	53.70	1.38	200	1820	2.23	3.30	3.2	0.12	1.24
12600	12	12	1300	21	997	40	45.04	0.21	90	131	0.30	91.60	131.0	0.76	8.51
13520	12	14	1500	23	1155	49	46.22	0.27	100	167	0.39	71.86	79.0	0.65	7.50
15410	12	16	1900	25	1520	65	49.88	0.39	125	262	0.61	45.80	65.2	0.51	5.80
17330	12	23	2380	31	1919	96	53.01	0.61	160	400	0.98	30.00	53.4	0.42	4.69
19260	12	26	2900	32	2398	125	52.43	0.79	185	600	1.38	20.00	37.9	0.32	3.78
21210	12	35	3700	38	3102	183	55.13	1.21	235	950	2.23	12.63	21.8	0.26	2.98
23175	12	43	4500	39	3769	221	56.85	1.51	240	1140	2.77	10.53	14.0	0.22	2.48
25150	12	55	4900	48	4156	303	56.28	2.05	316	1690	3.98	7.10	8.5	0.19	2.11
27125	12	70	5800	55	4914	405	57.17	2.78	360	2260	5.36	5.31	6.6	0.16	1.78
29110	12	85	6900	57	5865	480	59.65	3.43	380	2716	6.73	4.42	4.2	0.14	1.54
32090	12	110	8700	60	7395	626	60.66	4.56	400	3550	8.93	3.38	3.2	0.12	1.24
12600	24	12	2600	33	2123	56	53.90	0.72	180	250	1.20	96.00	131.0	0.76	8.51
13520	24	14	3000	35	2475	68	54.88	0.89	200	320	1.54	75.00	79.3	0.65	7.50
15410	24	18	3900	40	3276	97	57.98	1.35	250	510	2.50	47.06	65.2	0.51	5.80
17330	24	25	4800	49	4070	144	59.38	2.05	322	805	3.97	29.81	53.4	0.41	4.69
19260	24	32	5800	53	4969	196	57.37	2.70	370	1180	5.51	20.34	37.9	0.32	3.78
21210	24	50	7500	67	6442	311	59.40	4.43	475	1900	9.15	12.63	21.8	0.26	2.98
23175	24	53	9000	68	7776	352	64.32	5.43	500	2250	11.55	10.67	14.0	0.23	2.48
25150	24	60	9800	77	8608	457	62.01	6.81	633	3327	15.93	7.21	8.5	0.19	2.11

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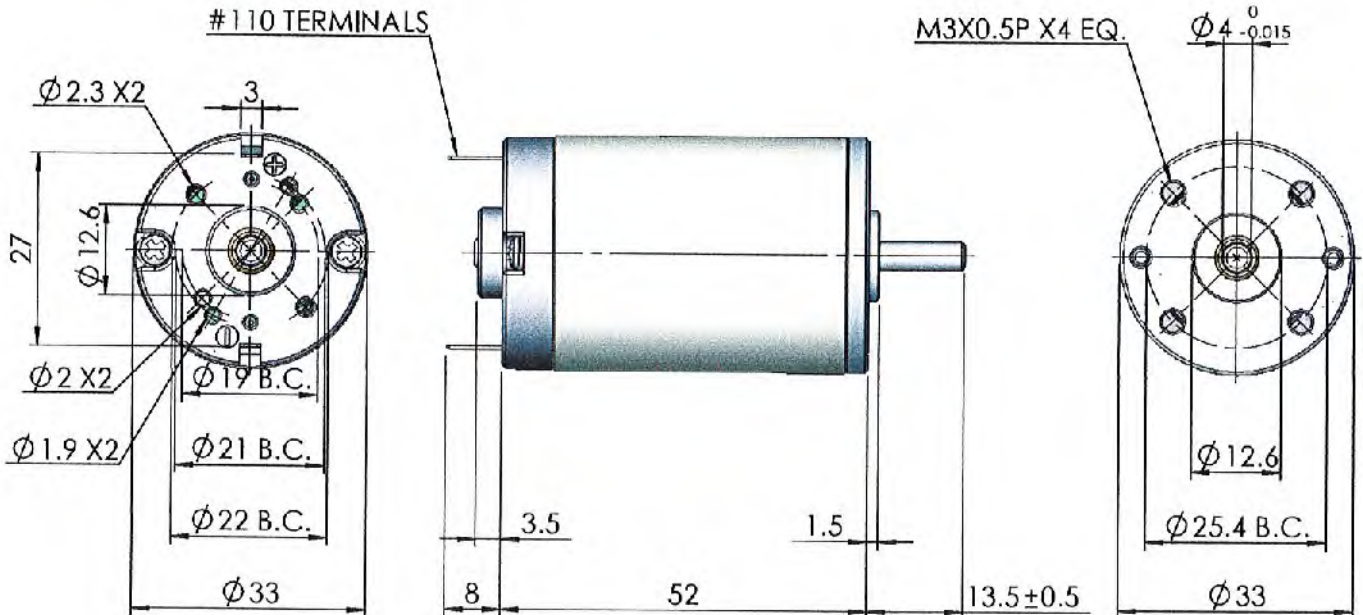


DC Motor

# 7E3355-18Y

-Available with gearheads of GBP30/GBL35/GBM37/GBM50 Series  
 - Armature Inertia : 0.022 kg-cm Motor Weight : 140 grams

Winding Part Nos.	Volt V DC	No Load		Rated at Max. Eff.					Stall		Peak O/P	Rt	La	Kt	Ke
		mA	RPM	G-Cm	RPM	mA	%	Watts	G-Cm	mA	Watts	$\Omega$	mH	Kg-Cm/A	V/K RPM
17125	12	70	2630	64	2029	240	46.38	1.33	280	812	1.89	14.78	10.0	0.38	4.00
19100	12	95	2345	76	1825	340	34.94	1.42	343	1200	2.07	10.00	6.4	0.31	3.20
21080	12	125	4250	84	3330	475	50.44	2.87	388	1740	4.23	6.90	0.2	0.24	2.60
23068	12	135	4850	93	3906	661	47.02	3.73	478	2840	5.95	4.23	3.0	0.18	2.20
25058	12	175	5800	102	4698	761	53.90	4.92	537	3260	8.00	3.68	2.2	0.17	1.85
27048	12	215	7100	106	5816	990	53.29	6.33	586	4500	10.68	2.67	1.5	0.14	1.53
29042	12	260	8100	119	6601	1209	55.59	8.07	643	5390	13.37	2.23	1.1	0.13	1.33
13210	24	50	3270	83	2528	177	50.87	2.16	366	608	3.07	39.47	28.0	0.66	6.70
15160	24	70	4300	97	3389	267	52.70	3.38	458	1000	5.06	24.00	16.0	0.49	5.07
17125	24	75	5520	101	4533	358	54.68	4.70	565	1660	8.01	14.46	10.0	0.36	4.00
19100	24	110	6800	120	5569	524	54.53	6.86	663	2400	11.58	10.00	6.4	0.29	3.20
21080	24	140	8950	132	7445	712	59.09	10.09	785	3540	18.04	6.78	4.2	0.23	2.60





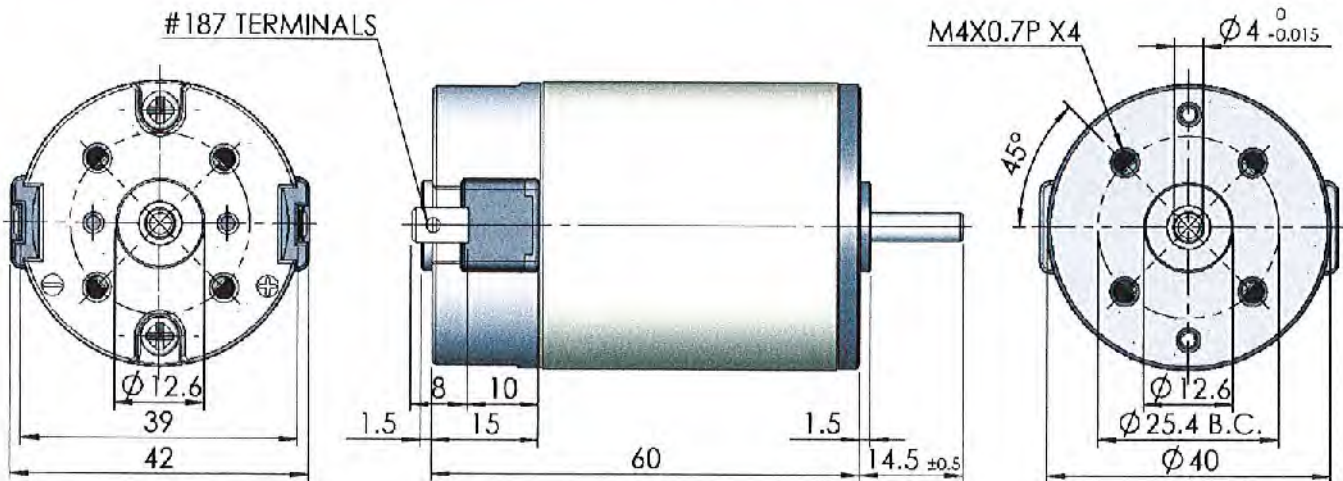
DC Motor

# 7E4060B-20Y

- Available with gearheads of GBP30/GBM50 Series  
 - Armature Inertia : 0.035 kg-cm Motor Weight : 250 grams

Winding Part Nos.	Volt		No Load		Rated at Max. Eff.				Stall		Peak O/P	Rt	La	Kt	Ke	
	V DC	mA	mA	RPM	G-Cm	RPM	mA	%	Watts	G-Cm	mA	Watts	Ω	mH	Kg-Cm/A	V/K RPM
32042	6	180	180	2420	135	1951	784	57.49	2.71	697	3300	4.33	1.82	1.07	0.22	3.88
35035	6	210	210	3100	146	2564	1031	62.18	3.85	845	4960	6.73	1.21	0.75	0.18	3.08
37030	6	255	255	3600	155	2964	1269	61.99	4.72	878	5997	8.12	1.00	0.55	0.15	2.44
40026	6	310	310	3800	165	3118	1517	58.06	5.28	920	7040	8.98	0.85	0.40	0.14	2.00
17145	12	50	50	1550	106	1221	192	57.70	1.33	500	720	1.99	16.67	13.00	0.75	7.68
19115	12	65	65	1850	122	1474	265	58.01	1.85	600	1050	2.85	11.43	8.20	0.61	6.03
21095	12	75	75	2260	136	1845	346	62.04	2.58	740	1550	4.29	7.74	5.62	0.50	5.00
23080	12	100	100	2700	161	2209	486	62.67	3.65	885	2220	6.14	5.41	3.95	0.42	4.22
25068	12	116	116	3200	166	2656	598	63.16	4.53	977	2950	8.03	4.07	2.90	0.34	3.53
27058	12	132	132	3750	177	3157	723	66.18	5.74	1120	3870	10.78	3.10	2.10	0.30	3.07
29050	12	160	160	4200	207	3565	932	67.77	7.58	1370	5270	14.77	2.28	1.61	0.27	2.73
32042	12	205	205	5100	218	4323	1198	67.31	9.68	1430	6720	18.72	1.79	1.07	0.22	2.25
35035	12	245	245	6420	233	5526	1572	70.12	13.22	1673	9770	27.58	1.23	0.75	0.18	1.85
37030	12	310	310	7430	247	6378	1946	69.29	16.18	1744	11860	33.27	1.01	0.55	0.15	1.55
40026	12	360	360	8100	268	6969	2334	68.50	19.18	1920	14500	39.93	0.83	0.40	0.14	1.40
17145	24	51	51	3000	166	2510	274	65.09	4.28	1017	1417	7.83	16.94	13.00	0.74	7.68
19115	24	70	70	3850	190	3233	391	67.28	6.31	1185	2070	11.71	11.59	8.20	0.59	6.03
21095	24	90	90	4600	218	3915	530	68.86	8.77	1465	3050	17.30	7.87	5.62	0.49	5.00
23080	24	110	110	5500	243	4720	704	69.68	11.78	1713	4300	24.19	5.58	3.95	0.41	4.22
25068	24	135	135	6500	262	5616	904	69.63	15.11	1926	5790	32.14	4.15	2.90	0.34	3.53
27058	24	155	155	7560	277	6593	1094	71.42	18.76	2166	7500	42.04	3.20	2.10	0.29	3.07
29050	24	190	190	8500	314	7445	1364	73.34	24.01	2530	9650	55.21	2.49	1.61	0.27	2.73

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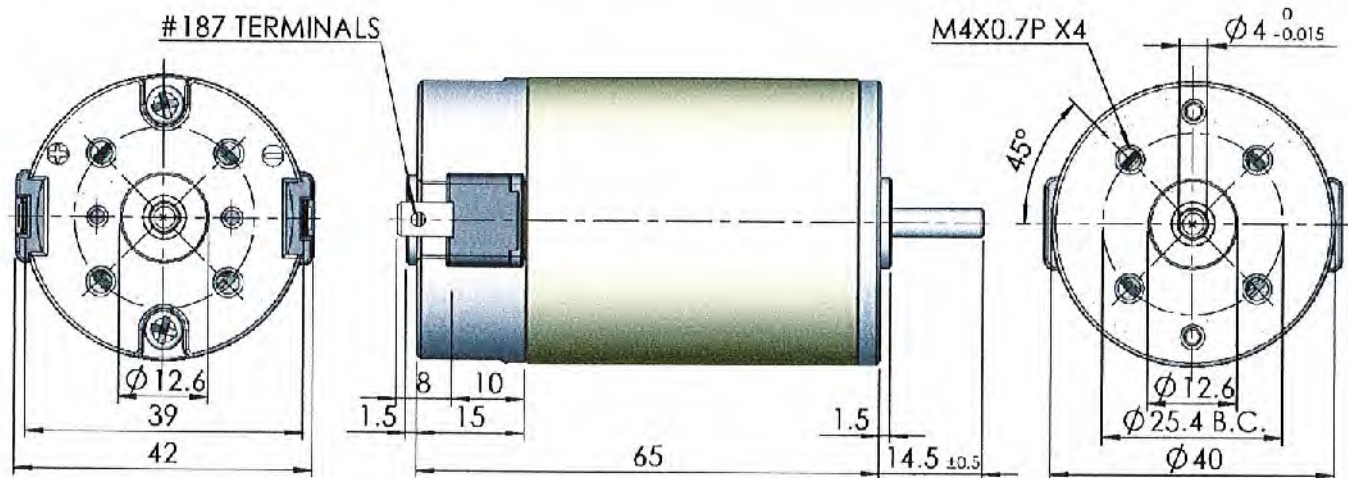
DC Motor

# 7E4065B-28Y

-Available with gearheads of GBP30/GBM50 Series  
 - Armature Inertia : 0.043 kg-cm Motor Weight : 280 grams

Winding	Volt	No Load		Rated at Max. Eff.					Stall		Peak O/P	Rt	La	Kt	Ke
		Part Nos.	V DC	mA	RPM	G-Cm	RPM	mA	%	Watts	G-Cm	mA	Watts	$\Omega$	mH
17145	12	40	1230	108	970	154	58.06	1.08	510	580	1.61	20.69	16.90	0.94	9.70
19115	12	52	1470	130	1180	221	59.43	1.58	660	910	2.49	13.19	10.60	0.77	7.70
21095	12	62	1800	144	1476	292	62.29	2.18	800	1340	3.70	8.96	7.25	0.63	6.30
23080	12	70	2150	151	1789	364	63.45	2.77	900	1825	4.97	6.58	5.10	0.51	5.30
25068	12	102	2550	182	2122	511	64.70	3.97	1085	2540	7.10	4.72	3.77	0.45	4.50
27058	12	106	3000	185	2538	608	66.12	4.82	1200	3360	9.24	3.57	2.70	0.37	3.80
29050	12	130	3500	202	2968	763	67.23	6.16	1330	4300	11.95	2.79	2.00	0.32	3.30
32042	12	155	4200	223	3611	987	69.80	8.27	1590	6090	17.15	1.97	1.40	0.27	2.78
35035	12	210	4850	233	4114	1235	66.45	9.84	1535	6960	19.11	1.72	0.92	0.23	2.35
37030	12	245	5700	253	4899	1588	66.80	12.73	1800	9800	26.34	1.22	0.72	0.19	1.98
40026	12	300	6500	283	5614	2026	67.11	16.32	2077	12970	34.66	0.93	0.54	0.16	1.72
15185	24	36	1900	151	1545	160	62.36	2.40	808	700	3.94	34.29	28.50	1.22	12.00
17145	24	43	2420	175	2024	229	66.21	3.64	1070	1180	6.65	20.34	16.90	0.94	9.70
19115	24	60	3030	206	2556	334	67.52	5.41	1317	1810	10.25	13.26	10.60	0.75	7.70
21095	24	68	3750	222	3216	428	71.34	7.33	1560	2600	15.02	9.23	7.25	0.62	6.30
23080	24	85	4400	242	3808	555	71.08	9.47	1800	3580	20.33	6.70	5.10	0.52	5.30
25068	24	110	5200	280	4500	745	72.34	12.94	2080	4830	27.77	4.97	3.77	0.44	4.50
27058	24	122	6100	287	5348	911	72.12	15.76	2328	6520	36.46	3.68	2.70	0.36	3.80
29050	24	150	7100	303	6233	1119	72.23	19.39	2480	8080	45.21	2.97	2.00	0.31	3.30
32042	24	180	8500	350	7593	1500	75.82	27.29	3280	12550	71.58	1.91	1.42	0.27	2.78

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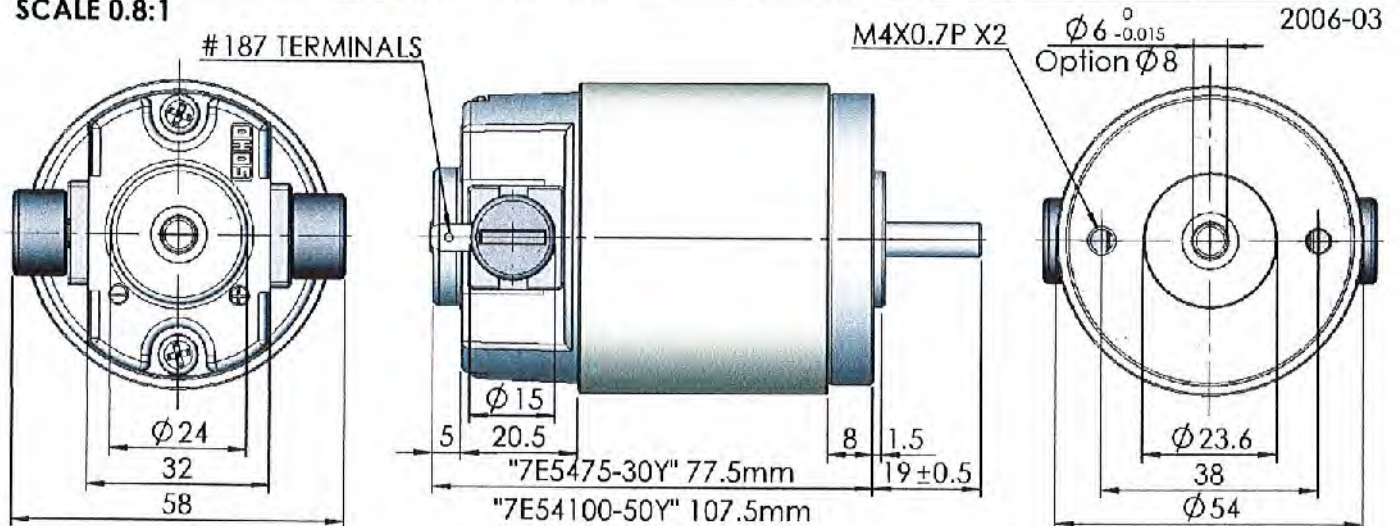
DC Motor

**7E5475B-30Y**  
**7E54100B-50Y**

-Available with gearheads of GBM50/GBP52 Series  
-7E5475 Armature Inertia : 0.185 kg-cm Motor Weight : 610 grams  
-7E54100 Armature Inertia : 0.301 kg-cm Motor Weight : 850 grams

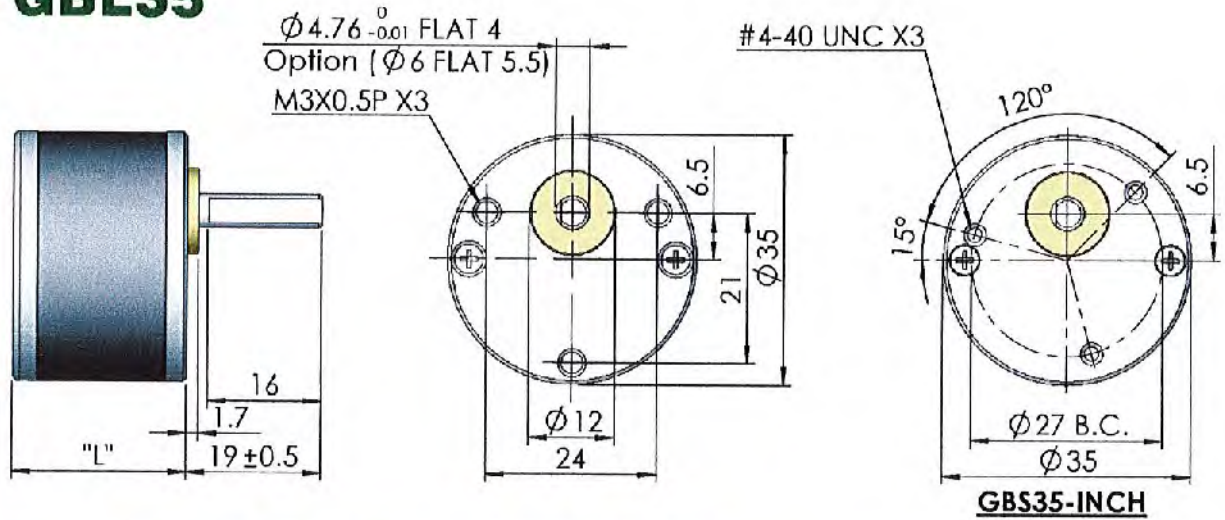
Winding Part Nos.	Volt V DC	No Load		Rated at Max. Eff.					Stall		Peak O/P	Rt	La	Kt	Ke
		mA	RPM	G-Cm	RPM	mA	%	Watts	G-Cm	mA	Watts	Ω	mH	Kg-Cm/A	V/K RPM
25110-30Y	12	110	1150	319	897	405	60.50	2.94	1450	1450	4.28	8.28	11.00	1.08	9.90
27095-30Y	12	140	1275	361	996	514	59.86	3.69	1650	1850	5.40	6.49	8.40	0.96	8.70
32065-30Y	12	200	1900	397	1527	858	60.42	6.22	2020	3550	9.85	3.38	4.00	0.60	5.80
35055-30Y	12	260	2280	442	1832	1132	61.21	8.32	2250	4700	13.17	2.55	2.80	0.51	5.00
37050-30Y	12	285	2400	472	1956	1324	59.66	9.48	2550	5900	15.71	2.03	2.30	0.45	4.55
40045-30Y	12	305	2685	477	2219	1484	61.07	10.87	2750	7100	18.96	1.69	1.86	0.40	4.10
45035-30Y	12	410	3370	530	2794	2084	60.82	15.21	3100	10200	26.82	1.18	1.15	0.32	3.20
25110-30Y	24	130	2300	501	1896	617	65.88	9.75	2850	2900	16.83	8.28	11.00	1.03	9.90
27095-30Y	24	165	2620	523	2163	799	60.62	11.62	3000	3800	20.18	6.32	8.40	0.83	8.70
32065-30Y	24	225	3900	605	3304	1276	67.01	20.53	3956	7100	39.61	3.38	4.00	0.58	5.80
35055-30Y	24	315	4650	708	3902	1721	68.71	28.37	4400	9050	52.53	2.65	2.80	0.50	5.00
37050-30Y	24	320	5000	707	4286	1988	65.22	31.12	4950	12000	63.55	2.00	2.30	0.42	4.55
40045-30Y	24	360	5590	741	4808	2267	67.26	36.59	5300	14000	76.07	1.71	1.86	0.39	4.10
45035-30Y	24	455	7120	808	6169	3065	69.59	51.19	6050	20000	110.60	1.20	1.15	0.31	3.20
25110-50Y	12	75	720	338	566	288	56.88	1.96	1580	1070	2.92	11.21	15.90	1.59	15.70
27095-50Y	12	85	850	356	677	349	59.07	2.48	1750	1384	3.82	8.67	12.00	1.35	13.60
32065-50Y	12	135	1200	447	977	619	60.33	4.48	2400	2735	7.39	4.39	5.70	0.92	9.30
35055-50Y	12	160	1500	474	1237	778	64.52	6.02	2700	3678	10.40	3.26	4.00	0.77	7.80
37050-50Y	12	180	1650	512	1368	922	65.01	7.20	3000	4530	12.71	2.85	3.33	0.69	7.10
40045-50Y	12	210	1800	554	1507	1096	65.21	8.57	3400	5645	15.71	2.13	2.70	0.63	6.40
45035-50Y	12	280	2300	600	1942	1540	64.74	11.96	3850	8365	22.74	1.43	1.60	0.48	5.00
25110-50Y	24	85	1500	540	1243	434	66.20	6.89	3150	2120	12.13	11.32	15.90	1.55	15.70
27095-50Y	24	100	1700	565	1426	530	65.03	8.27	3500	2764	15.28	8.68	12.00	1.31	13.60
32065-50Y	24	165	2500	699	2120	945	67.09	15.22	4600	5300	29.53	4.53	5.70	0.90	9.30
35055-50Y	24	190	3000	758	2579	1236	67.88	20.08	5400	7642	41.59	3.14	4.00	0.72	7.80
37050-50Y	24	210	3300	779	2857	1410	67.56	22.86	5800	9142	49.14	2.63	3.33	0.65	7.10
40045-50Y	24	240	3650	839	3186	1690	67.67	27.45	6600	11650	61.85	2.06	2.70	0.58	6.40
45035-50Y	24	320	4700	900	4136	2354	67.67	38.23	7500	17270	90.50	1.39	1.60	0.44	5.00

SCALE 0.8:1

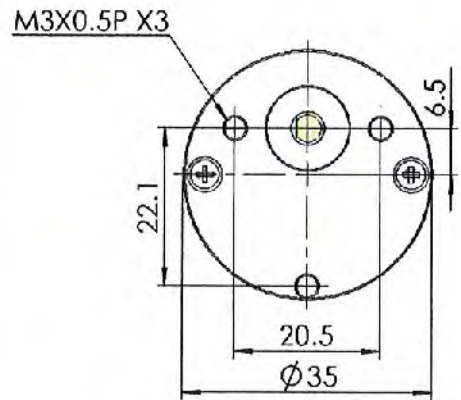




# Spur Gearhead GBL35

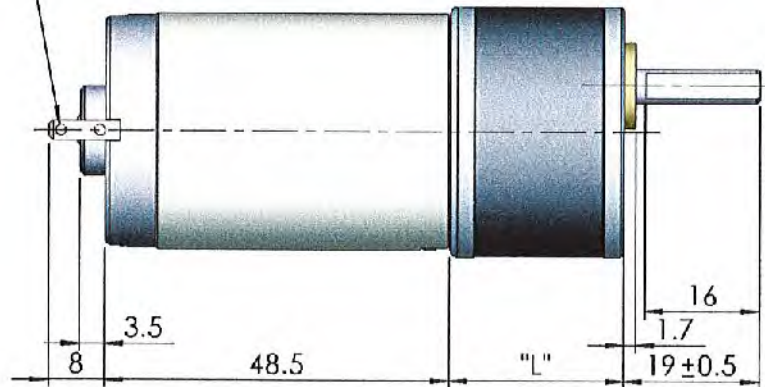
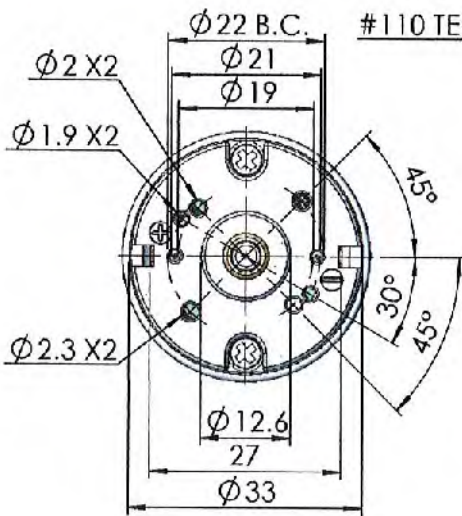


Type		A	B	C	D	E	F
Step		2	3	4	5	6	7
Ratio	H	6.36	19.7	61.2	190	588	1822
	G	10	31.2	96.7	300	930	2880
Dim. "L"	H	24.5		27.5	30.5	33.5	
	G	24.5	27.5	30.5	33.5	36.5	
Eff. %		81	73	65	60	53	48
Max. Cont. Torque kg-cm		0.5	1.3	3.5	4.7	5.5	6



**GBM35**

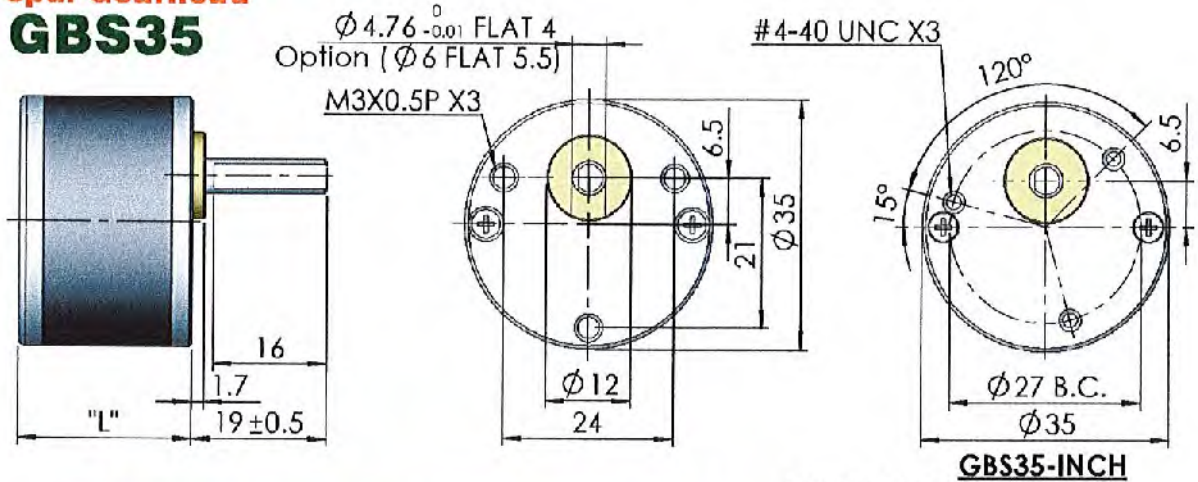
2006-03







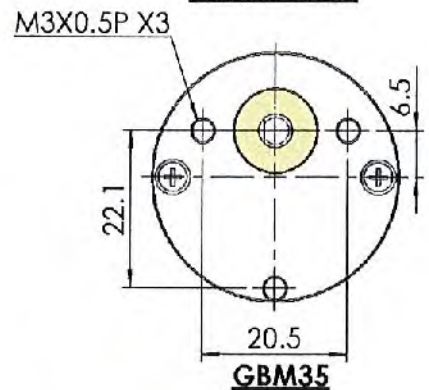
**Spur Gearhead**  
**GBS35**



**GBS35-INCH**

Type	A	B	C	D	E	F
Step	2	3	4	5	6	7
Ratio	<b>6.36</b>	<b>19.7</b>	<b>61.2</b>	<b>190</b>	<b>588</b>	<b>1822</b>
Dim. "L"	<b>24.5</b>		<b>27.5</b>		<b>30.5</b>	<b>33.5</b>
Eff. %	81	73	65	60	53	48
Max. Cont. Torque kg-cm	0.5	1.3	3.5	4.7	5.5	6

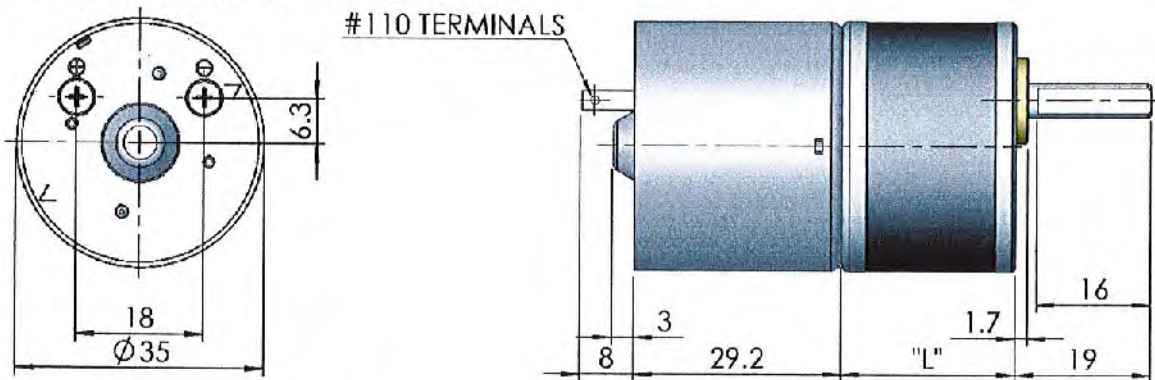
2006-03



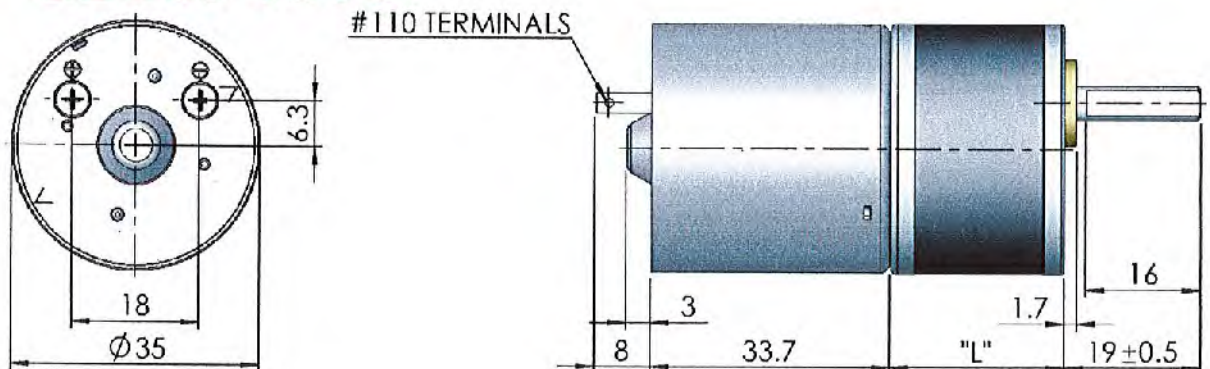
**GBM35**



**Gearmotor**  
**GBS35-8CYC**



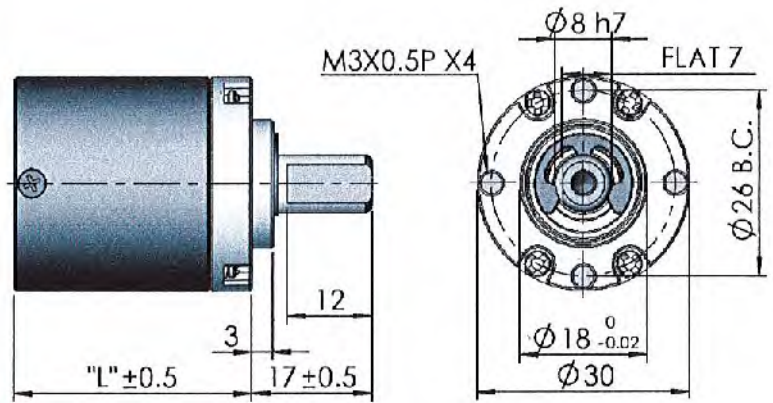
**Gearmotor**  
**GBS35-15YC**



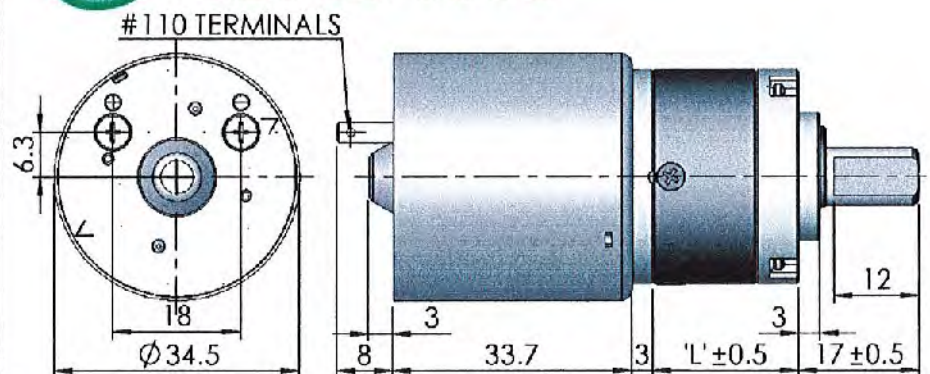


## Planetary Gearhead GBP30

Type	Ratio	Step	Dim. "L"	Eff. %	Cont. Torque	Peak Torque
A	3.3	1	20.5	81	8	24
B	4					
C	5.2					
D	10.9	2	27	73	20	40
E	13.2					
F	16					
G	20.8					
H	27					
I	35.9	3	33.5	65	30	60
J	43.6					
K	52.8					
L	64					
M	89.2					
N	108.2					
O	140.6					
P	118.6	4	40	60	30	60
Q	186.9					
R	226.5					
S	256					
T	332.8					
U	432.6					
V	562.4					
W	731.1					



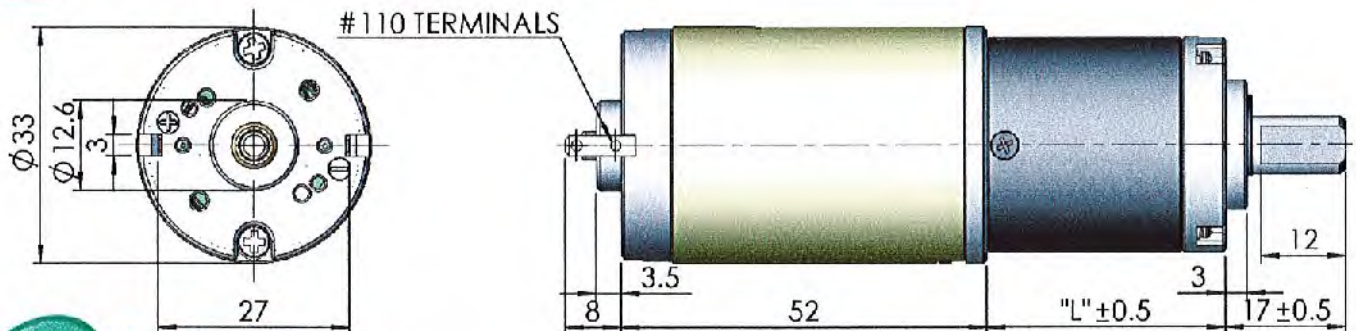
## Gearmotor GBP30-15YC



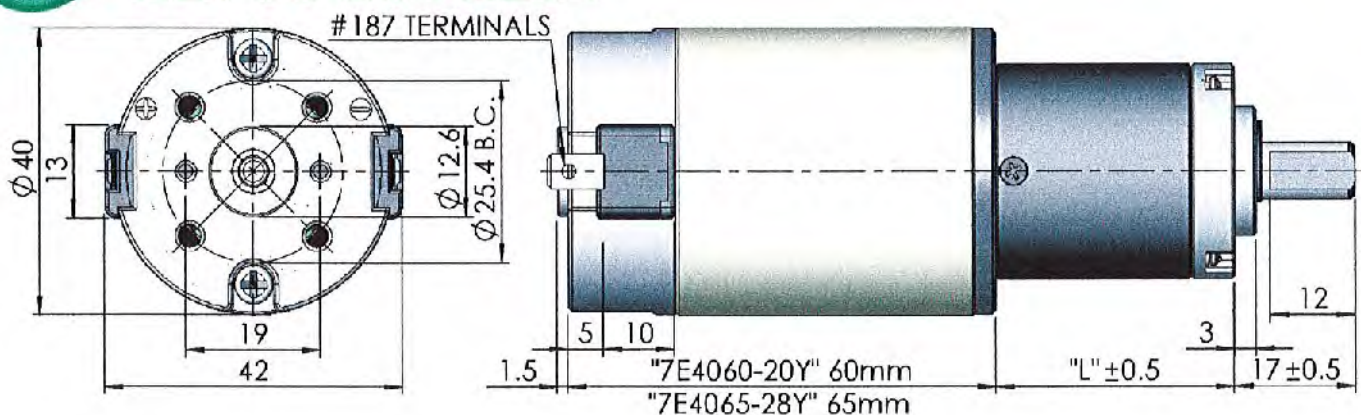
2006-03



## Gearmotor GBP30-18Y



## Gearmotor GBP30-20Y&28Y

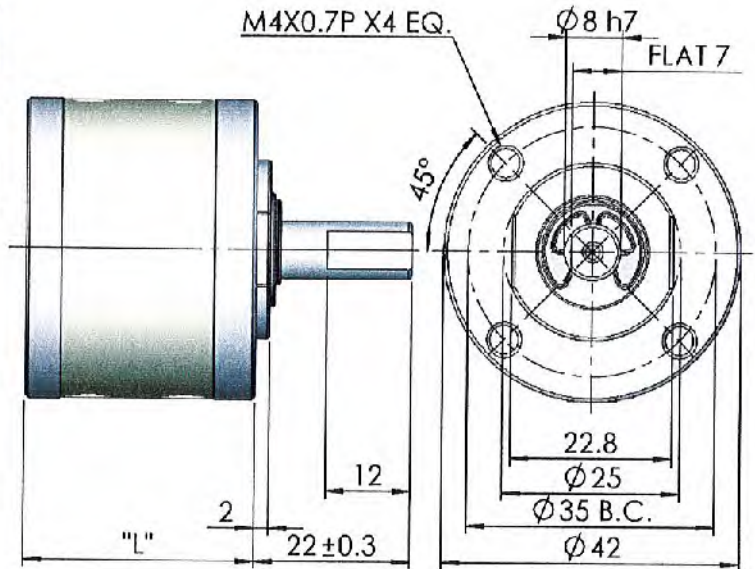




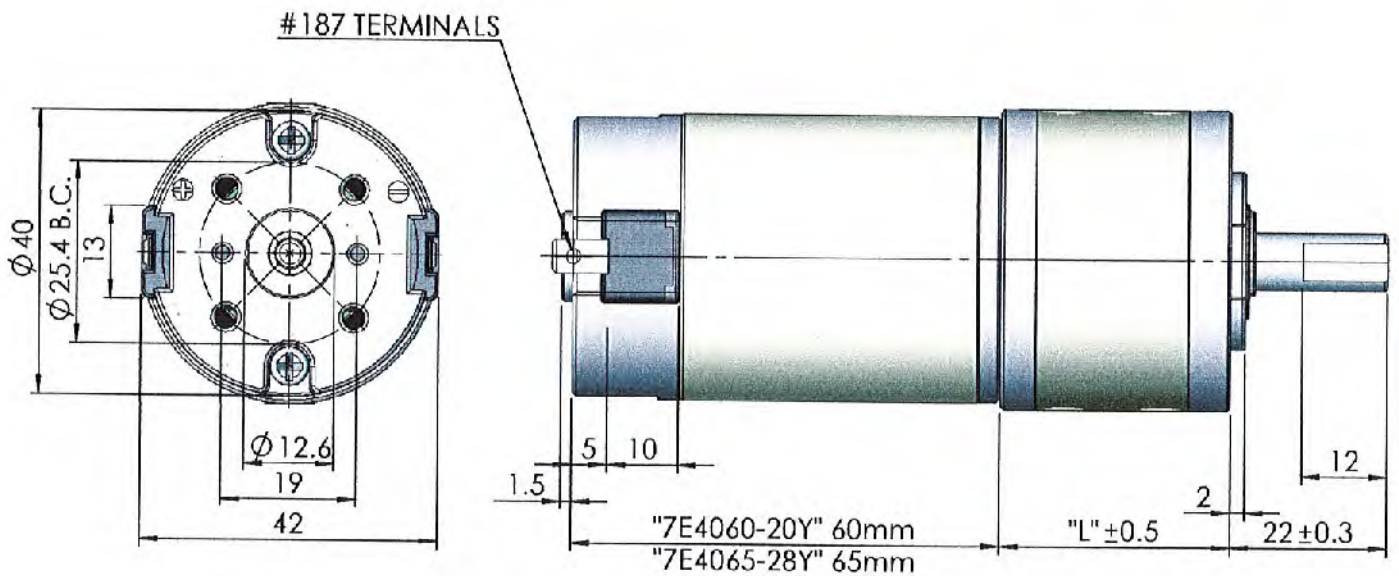
**Planetary Gearhead**  
**GBP42**

Type	Ratio	Step	Dim. "L"	Eff. %	Cont. Torque	Peak Torque
A	4	1	33	81	5	15
B	14	2	39	73	10	30
C	17.3					
D	24	3	46	65	20	60
E	49					
F	60.7					
G	84					
H	104					
I	144	4	53	60	30	90
J	212.3					
K	294					
L	504					
M	624					
N	702	O	864		kg-cm	kg-cm
O	864					

2006-03



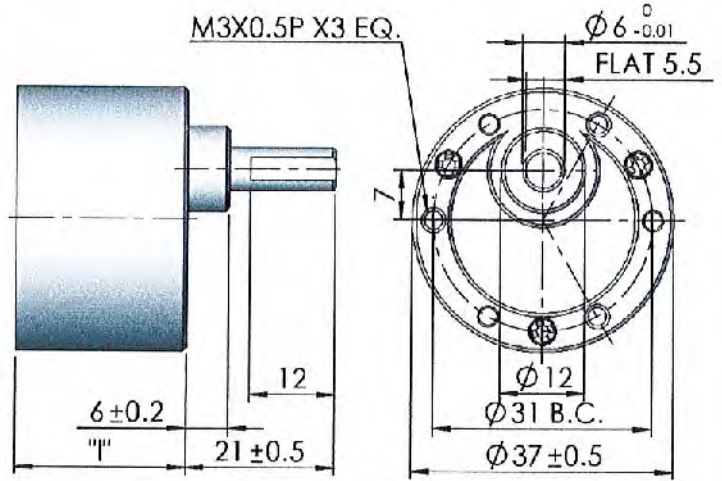
**Gearmotor**  
**GBP42-20Y&28Y**





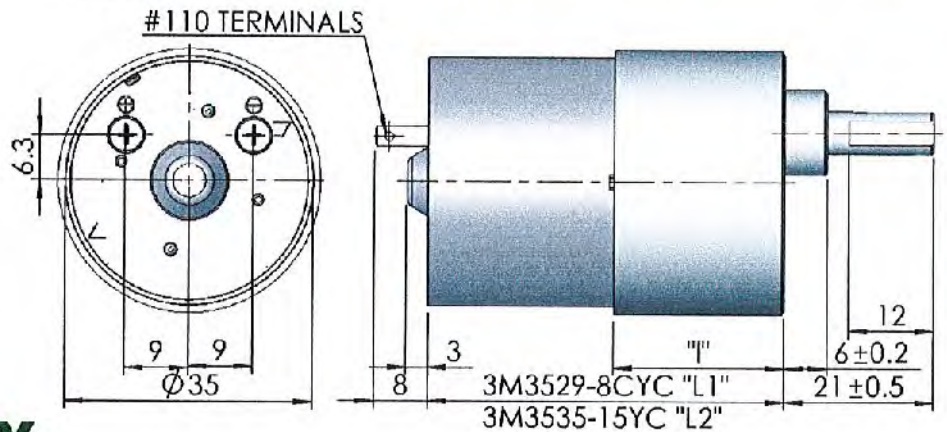
## Spur Gearhead GBM37

Type	Ratio	Step	Eff. %	Dim.				Cont. Torque kg-cm	Peak Torque kg-cm
				"I"	"L1"	"L2"	"L3"		
A	6	2	81	22	60.5	55	72.8	1	3
B	10								
C	18								
D	30								
E	50	3	73	24	53	57.5	75.3	2	6
F	60								
G	75								
H	90								
I	100	4	66	27	55.5	60	77.8	3	6
J	120								
K	150								
L	180								
M	200	5	59	31	58	62.5	80.3	4	12
N	250								
O	300								
P	350								
Q	400	6	53	33	60.5	65	82.8	6	18
R	450								
S	500								
T	600								
U	700	7	48	33	63	67.5	85.3	6	18
V	750								
W	900								
X	1000								
Y	1500	7	48	33	63	67.5	85.3	6	18
Z	3000								

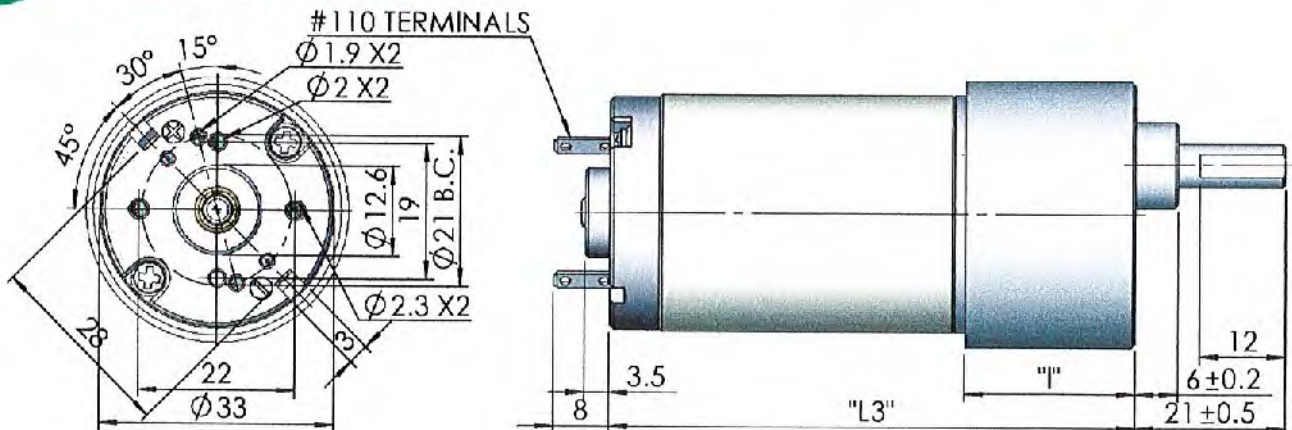


## Gearmotor GBM37-8CY&15YC

2006-03



## Gearmotor GBM37-18Y

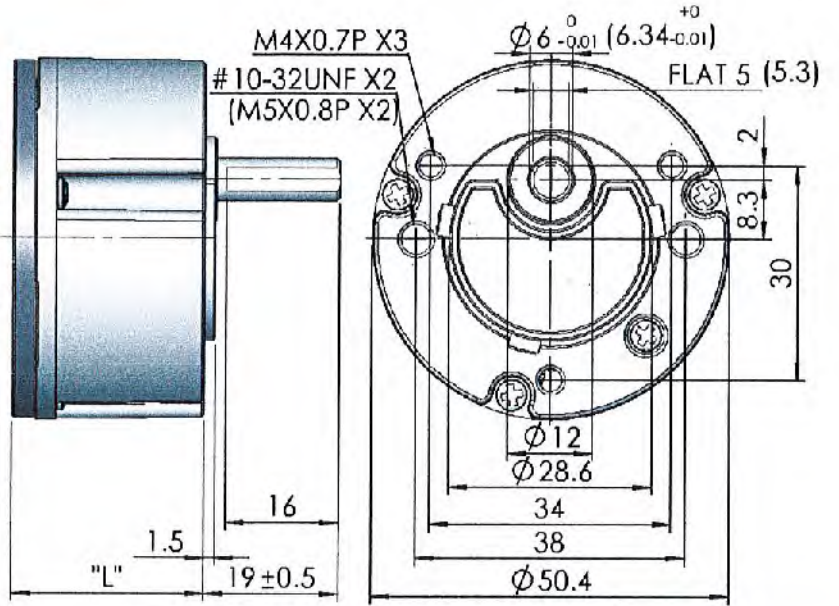




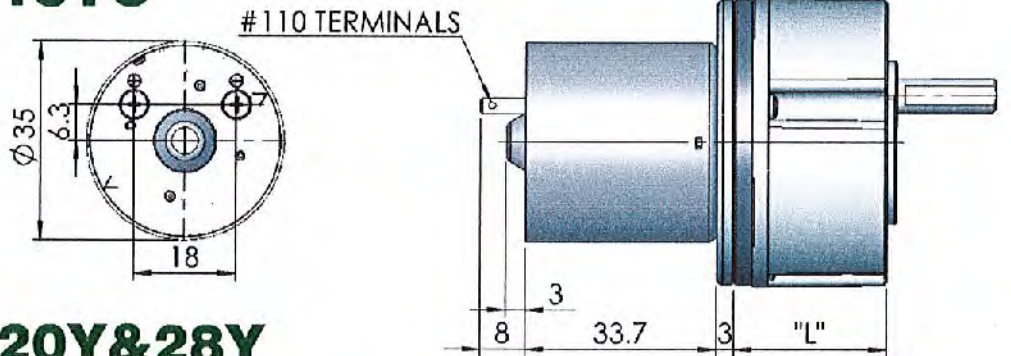
**Spur Gearhead**  
**GBM50**

2006-03

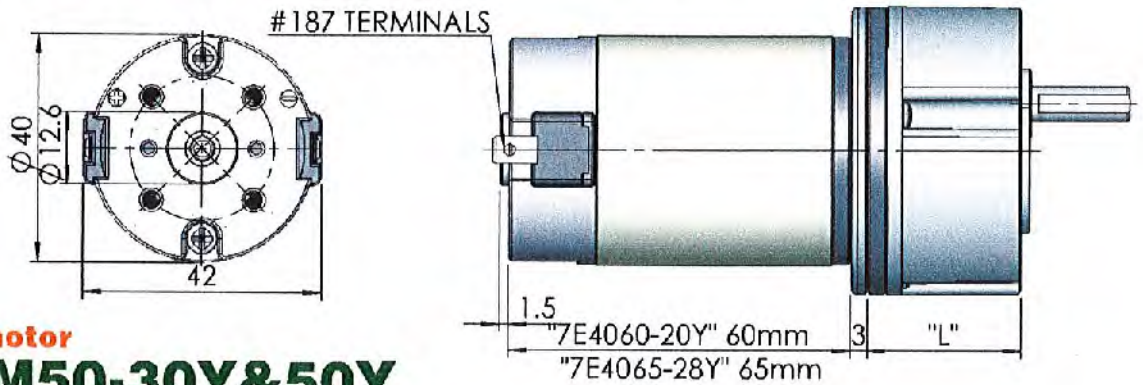
Step	2	3	4	5	6	7
Ratio A	6	18	54	162	486	1458
Ratio B	8	24	72	216	648	1944
Ratio C	10	30	90	270	810	2430
Ratio D	12	36	108	324	972	2916
Dim."L"	27		34.5		42	
Eff. %	81	73	65	60	53	48
Cont. Torque kg-cm	2	6	18	24	30	30
Peak Torque kg-cm	6	18	54	60	60	60



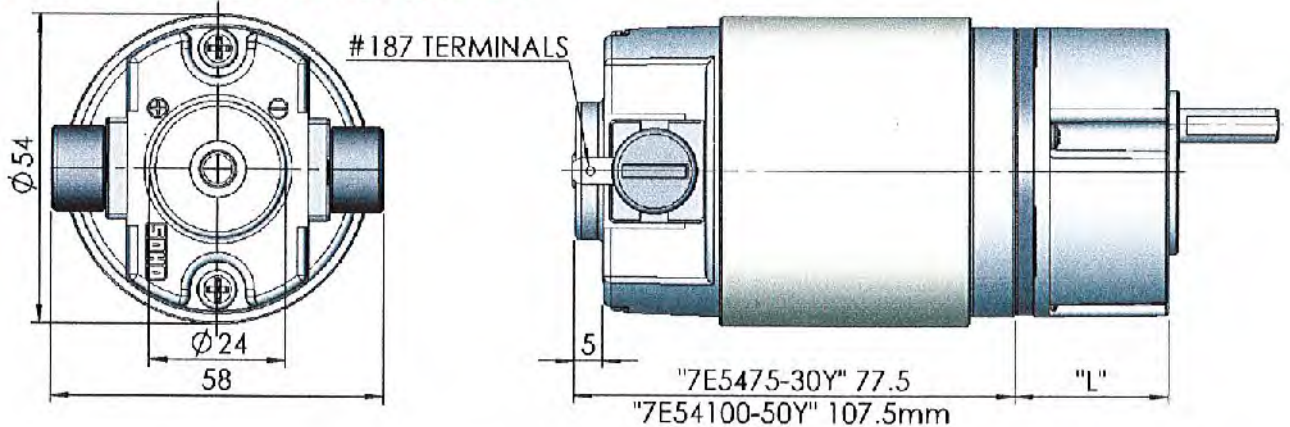
**Gearmotor**  
**GBM50-15YC**



**Gearmotor**  
**GBM50-20Y&28Y**

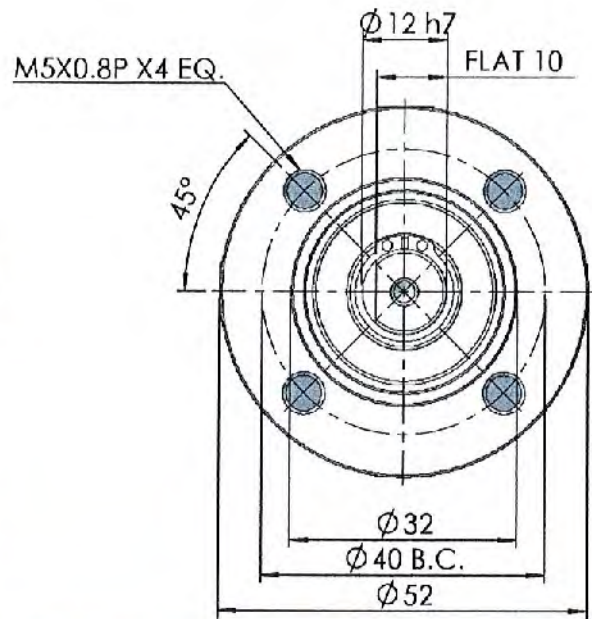
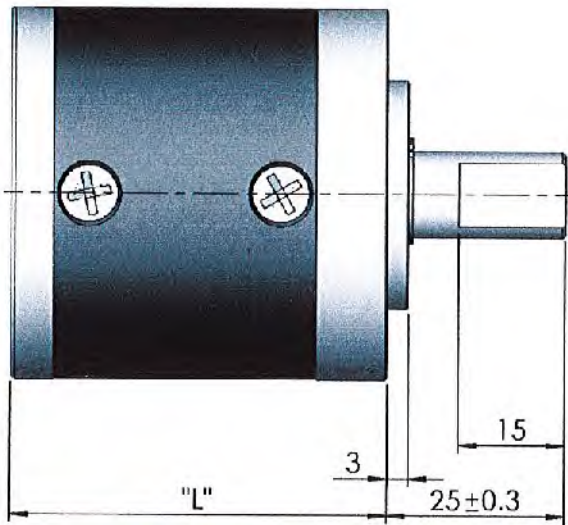


**Gearmotor**  
**GBM50-30Y&50Y**





## Planetary Gearhead GBP52



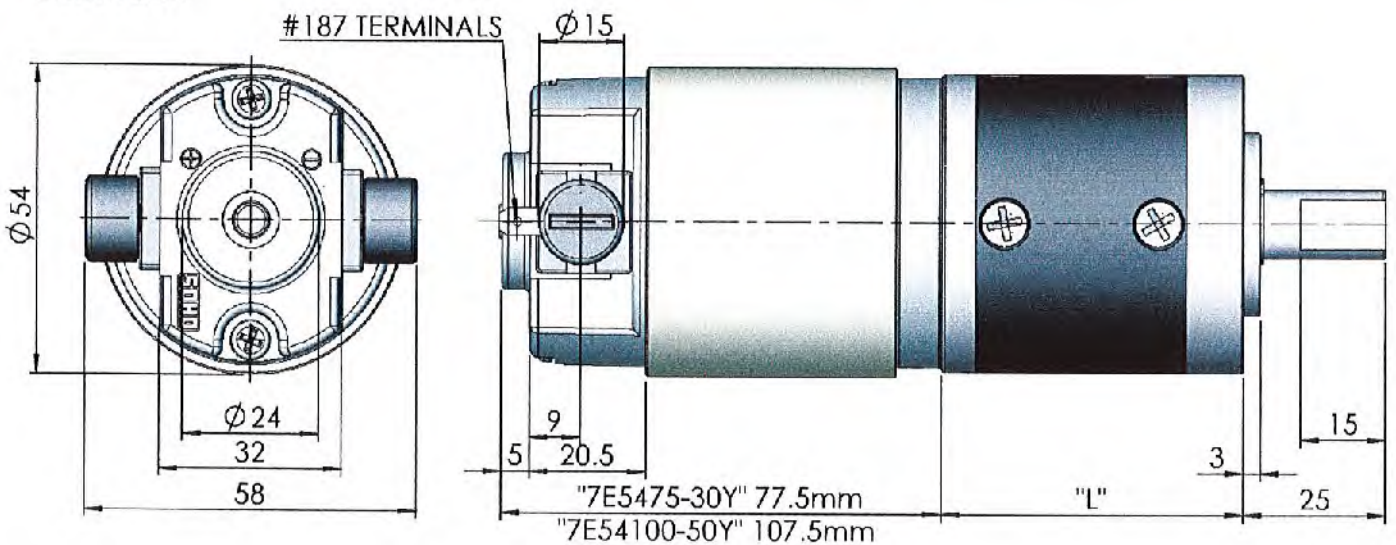
Type	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
Ratio	3.5	4.3	12.3	15.2	21	26	42.9	53.1	65.7	81.4	100.3	126	158	230	284.8	352.6	488.2	546	676	756	936
Step	1		2			3						4									
Dim. "L"	53		68.5			84						99.5									
Eff %	81		73			65						60									
Cont. Torque	15 kg-cm		50 kg-cm			100 kg-cm						100 kg-cm									
Peak Torque	45 kg-cm		150 kg-cm			300 kg-cm						300 kg-cm									

2006-03



## Gearmotor GBP52-30Y&50Y

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**Encoder**  
**EE3020**

Resolution	3	5	12	16	24	25	50	100	200	256	360	400	500	512	
Power Source	5V~24V							5V±10%			5V±10%				
Current Consumption	≤40mA							≤30mA			≤30mA				
Output Signal	A OR A.B.							A.B.			A.B.				
Phase Difference	90°±45°							90°±45°			90°±45°				
Response Frequency	15 kHz							40 kHz			40 kHz				
Operation Temperature	-10°C~80°C							-10°C~80°C			-10°C~80°C				
Sense Mode	Magnetic							Optical							

2006-03

