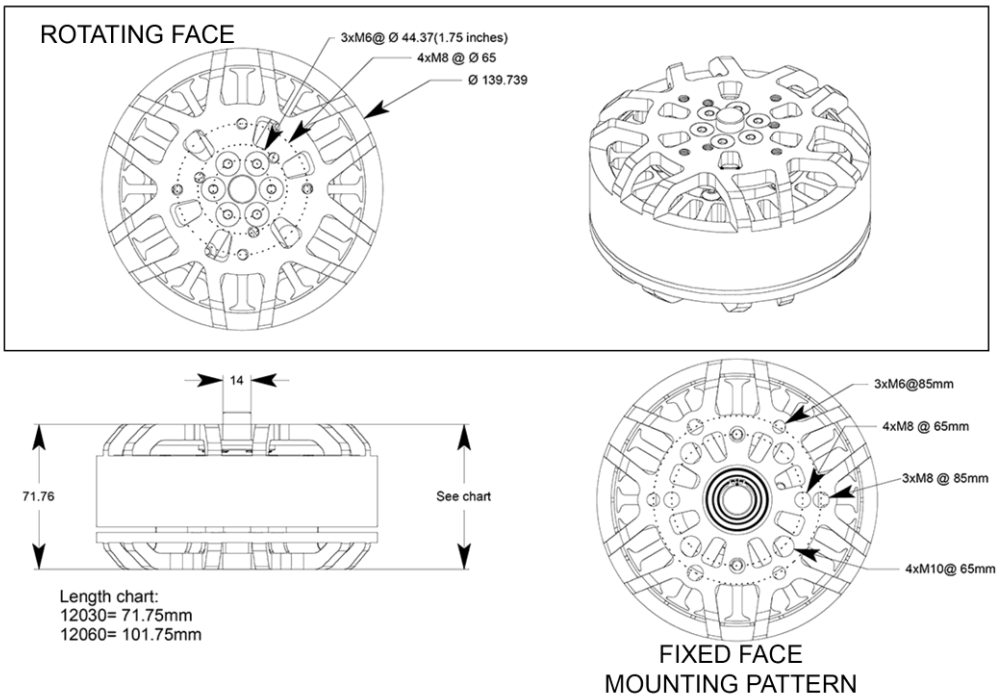

Stator lengths available:

Model	Length (in) / (mm)	Weight(g)	Continuous Watts	Base Price
12030	2.8" 72mm	2600g	15,000	944.00
12042	" mm	g	22,000	1,216.00
12060	4.0" 102mm	g	30,000	1,624.00

Large diameter motor for high torque

Motor type:	outrunner	**Finned:**		**Gearbox(es):**	call
Poles:	26p	**Sealed:**		**Shaft size(s):**	14mm
Slots:	24s	**Sensored:**	Call	**Max RPM:**	10,000

12030

	Diam.	Length	Weight	Max Cont. Watts	Max Peak Watts
inch:	5.5	2.8	91.7 ozs.	15,000	30,000
mm:	140	72	2595g		

Motor	KV	Rm Ohms	Io @ 10v	Torque Constant mNm/A	Torque Constant inOz/A	Max Volts (max rpm/Kv)	Saturation Amps
12030/100/4	4	4.526	0.118	2392.101	338.750	2,500	12
12030/95/5	5	4.086	0.125	1913.681	271.000	2,000	13

12030

	Diam.	Length	Weight	Max Cont. Watts	Max Peak Watts
inch:	5.5	2.8	91.7 ozs.	15,000	30,000
mm:	140	72	2595g		

Motor	KV	Rm Ohms	Io @ 10v	Torque Constant mNm/A	Torque Constant inOz/A	Max Volts (max rpm/Kv)	Saturation Amps
12030/70/6	6	2.222	0.169	1594.734	225.833	1,667	17
12030/65/7	7	1.917	0.182	1366.915	193.571	1,429	19
12030/55/8	8	1.375	0.215	1196.050	169.375	1,250	22
12030/50/9	9	1.137	0.237	1063.156	150.556	1,111	24
12030/45/10	10	0.922	0.263	956.840	135.500	1,000	27
12030/38/11	11	0.659	0.311	869.855	123.182	909	32
12030/36/12	12	0.592	0.329	797.367	112.917	833	34
12030/34/13	13	0.528	0.348	736.031	104.231	769	36
12030/30/14	14	0.412	0.394	683.457	96.786	714	40
12030/28/16	16	0.359	0.423	598.025	84.688	625	43
12030/26/17	17	0.310	0.455	562.847	79.706	588	47
12030/24/18	18	0.265	0.493	531.578	75.278	556	50
12030/22/20	20	0.223	0.538	478.420	67.750	500	55
12030/20/22	22	0.185	0.592	434.927	61.591	455	61
12030/19/23	23	0.167	0.623	416.018	58.913	435	64
12030/18/24	24	0.150	0.657	398.683	56.458	417	67
12030/17/26	26	0.134	0.696	368.015	52.115	385	71
12030/16/27	27	0.119	0.739	354.385	50.185	370	76
12030/15/29	29	0.105	0.789	329.945	46.724	345	81
12030/14/31	31	0.091	0.845	308.658	43.710	323	86
12030/13/33	33	0.079	0.910	289.952	41.061	303	93
12030/12/36	36	0.068	0.986	265.789	37.639	278	101
12030/11/39	39	0.057	1.076	245.344	34.744	256	110
12030/10/43	43	0.047	1.183	222.521	31.512	233	121
12030/9.5/46	46	0.043	1.245	208.009	29.457	217	127
12030/9/48	48	0.039	1.314	199.342	28.229	208	134
12030/8.5/51	51	0.034	1.392	187.616	26.569	196	142
12030/8/54	54	0.031	1.479	177.193	25.093	185	151
12030/7.5/58	58	0.027	1.577	164.972	23.362	172	161
12030/7/62	62	0.024	1.690	154.329	21.855	161	173
12030/6.5/67	67	0.021	1.820	142.812	20.224	149	186

12030

	Diam.	Length	Weight	Max Cont. Watts	Max Peak Watts
inch:	5.5	2.8	91.7 ozs.	15,000	30,000
mm:	140	72	2595g		

Motor	KV	Rm Ohms	Io @ 10v	Torque Constant mNm/A	Torque Constant inOz/A	Max Volts (max rpm/Kv)	Saturation Amps
12030/6/72	72	0.018	1.972	132.894	18.819	139	202
12030/5.5/79	79	0.015	2.151	121.119	17.152	127	220
12030/5/87	87	0.012	2.366	109.982	15.575	115	242
12030/4.5/96	96	0.010	2.629	99.671	14.115	104	269
12030/4/109	109	0.008	2.958	87.784	12.431	92	303
12030/3.5/124	124	0.006	3.380	77.165	10.927	81	346
12030/3/145	145	0.005	3.943	65.989	9.345	69	403
12030/2.5/174	174	0.003	4.732	54.991	7.787	57	484
12030/2/217	217	0.002	5.915	44.094	6.244	46	605
12030/1.5/289	289	0.001	7.887	33.109	4.689	35	807
12030/1/434	434	0.001	11.830	22.047	3.122	23	1,210

12042

	Diam.	Length	Weight	Max Cont. Watts	Max Peak Watts
inch:	5.5		ozs.	22,000	30,000
mm:	140		g		

Motor	KV	Rm Ohms	Io @ 10v	Torque Constant mNm/A	Torque Constant inOz/A	Max Volts (max rpm/Kv)	Saturation Amps
12042/95/3	3	5.376	0.125	3189.468	451.667	3,333	13
12042/85/4	4	4.306	0.139	2392.101	338.750	2,500	14
12042/60/5	5	2.150	0.197	1913.681	271.000	2,000	20
12042/50/6	6	1.495	0.237	1594.734	225.833	1,667	24
12042/45/7	7	1.212	0.263	1366.915	193.571	1,429	27
12042/38/8	8	0.865	0.311	1196.050	169.375	1,250	32
12042/34/9	9	0.694	0.348	1063.156	150.556	1,111	36
12042/30/10	10	0.541	0.394	956.840	135.500	1,000	40
12042/28/11	11	0.472	0.423	869.855	123.182	909	43
12042/26/12	12	0.407	0.455	797.367	112.917	833	47
12042/24/13	13	0.347	0.493	736.031	104.231	769	50
12042/22/14	14	0.292	0.538	683.457	96.786	714	55
12042/19/16	16	0.219	0.623	598.025	84.688	625	64

12042

	Diam.	Length	Weight	Max Cont. Watts	Max Peak Watts
inch:	5.5		ozs.	22,000	30,000
mm:	140		g		

Motor	KV	Rm Ohms	Io @ 10v	Torque Constant mNm/A	Torque Constant inOz/A	Max Volts (max rpm/Kv)	Saturation Amps
12042/18/17	17	0.196	0.657	562.847	79.706	588	67
12042/17/18	18	0.175	0.696	531.578	75.278	556	71
12042/16/19	19	0.156	0.739	503.600	71.316	526	76
12042/15/21	21	0.137	0.789	455.638	64.524	476	81
12042/14/22	22	0.119	0.845	434.927	61.591	455	86
12042/13/24	24	0.103	0.910	398.683	56.458	417	93
12042/12/26	26	0.088	0.986	368.015	52.115	385	101
12042/11/28	28	0.074	1.076	341.729	48.393	357	110
12042/10/31	31	0.062	1.183	308.658	43.710	323	121
12042/9.5/33	33	0.056	1.245	289.952	41.061	303	127
12042/9/34	34	0.050	1.314	281.424	39.853	294	134
12042/8.5/36	36	0.045	1.392	265.789	37.639	278	142
12042/8/39	39	0.040	1.479	245.344	34.744	256	151
12042/7.5/41	41	0.035	1.577	233.376	33.049	244	161
12042/7/44	44	0.031	1.690	217.464	30.795	227	173
12042/6.5/48	48	0.027	1.820	199.342	28.229	208	186
12042/6/52	52	0.023	1.972	184.008	26.058	192	202
12042/5.5/56	56	0.019	2.151	170.864	24.196	179	220
12042/5/62	62	0.016	2.366	154.329	21.855	161	242
12042/4.5/69	69	0.013	2.629	138.673	19.638	145	269
12042/4/78	78	0.010	2.958	122.672	17.372	128	303
12042/3.5/89	89	0.008	3.380	107.510	15.225	112	346
12042/3/103	103	0.006	3.943	92.897	13.155	97	403
12042/2.5/124	124	0.004	4.732	77.165	10.927	81	484
12042/2/155	155	0.003	5.915	61.732	8.742	65	605
12042/1.5/207	207	0.002	7.887	46.224	6.546	48	807
12042/1/310	310	0.001	11.830	30.866	4.371	32	1,210

12060

	Diam.	Length	Weight	Max Cont. Watts	Max Peak Watts
inch:	5.5	4.0	ozs.	30,000	40,000
mm:	140	102	g		

Motor	KV	Rm Ohms	Io @ 10v	Torque Constant mNm/A	Torque Constant inOz/A	Max Volts (max rpm/Kv)	Saturation Amps
12060/95/2	2	7.313	0.125	4784.201	677.500	5,000	13
12060/65/3	3	3.428	0.182	3189.468	451.667	3,333	19
12060/50/4	4	2.031	0.237	2392.101	338.750	2,500	24
12060/40/5	5	1.302	0.296	1913.681	271.000	2,000	30
12060/34/6	6	0.942	0.348	1594.734	225.833	1,667	36
12060/30/7	7	0.734	0.394	1366.915	193.571	1,429	40
12060/26/8	8	0.552	0.455	1196.050	169.375	1,250	47
12060/24/9	9	0.471	0.493	1063.156	150.556	1,111	50
12060/22/10	10	0.396	0.538	956.840	135.500	1,000	55
12060/20/11	11	0.328	0.592	869.855	123.182	909	61
12060/18/12	12	0.266	0.657	797.367	112.917	833	67
12060/16/13	13	0.210	0.739	736.031	104.231	769	76
12060/15/14	14	0.185	0.789	683.457	96.786	714	81
12060/14/15	15	0.162	0.845	637.894	90.333	667	86
12060/13/16	16	0.139	0.910	598.025	84.688	625	93
12060/12/18	18	0.119	0.986	531.578	75.278	556	101
12060/11/19	19	0.100	1.076	503.600	71.316	526	110
12060/10/21	21	0.083	1.183	455.638	64.524	476	121
12060/9.5/22	22	0.075	1.245	434.927	61.591	455	127
12060/9/24	24	0.068	1.314	398.683	56.458	417	134
12060/8.5/25	25	0.060	1.392	382.736	54.200	400	142
12060/8/27	27	0.054	1.479	354.385	50.185	370	151
12060/7.5/28	28	0.047	1.577	341.729	48.393	357	161
12060/7/30	30	0.041	1.690	318.947	45.167	333	173
12060/6.5/33	33	0.036	1.820	289.952	41.061	303	186
12060/6/35	35	0.030	1.972	273.383	38.714	286	202
12060/5.5/39	39	0.026	2.151	245.344	34.744	256	220
12060/5/43	43	0.021	2.366	222.521	31.512	233	242
12060/4.5/47	47	0.017	2.629	203.583	28.830	213	269
12060/4/53	53	0.014	2.958	180.536	25.566	189	303
12060/3.5/61	61	0.011	3.380	156.859	22.213	164	346

12060

	Diam.	Length	Weight	Max Cont. Watts	Max Peak Watts
inch:	5.5	4.0	ozs.	30,000	40,000
mm:	140	102	g		

Motor	KV	Rm Ohms	Io @ 10v	Torque Constant mNm/A	Torque Constant inOz/A	Max Volts (max rpm/Kv)	**Saturation Amps**
12060/3/71	71	0.008	3.943	134.766	19.085	141	403
12060/2.5/85	85	0.006	4.732	112.569	15.941	118	484
12060/2/106	106	0.004	5.915	90.268	12.783	94	605
12060/1.5/142	142	0.002	7.887	67.383	9.542	70	807
12060/1/213	213	0.001	11.830	44.922	6.362	47	1,210

NEUTRONICS ENTERPRISES INC.
4631 Viewridge Ave Unit B
San Diego, CA 92123
email: info@neutronics.com
phone: 858-674-2250
http://www.neumotors.com

DOMESTIC CONTENT / COUNTRY OF ORIGIN
Motors may be assembled with varying degrees of domestic (USA) content. Please contact to discuss content requirements, solutions, and resulting pricing variances, if any. Baseline motors are assembled and or tested in the US or Mexico from components sourced globally, including China.

QUALITY CONTROL
Our factory is ISO 9001 certified. Quality documentation available on a custom order basis.

POWER RATINGS (Watts):
Continuous rating is the power the motor can deliver while maintaining the external housing temperatures below 100C.

MAX power rating is the power the motor can deliver beginning with motor at a temp of 20C until it reaches it's limit temperature of 100C. The exact maximum power output of a motor is dependent on a number of variables including air flow, ambient air temperature, contact cooling, etc. 100C rating is measured on the outside of the case, which allows for higher internal temperatures and a small measure of overhead.

MAX VOLTAGE
Limited by kv (RPMs per volt) times the applied voltage. Max voltage must be kept below the voltage which will spin the motor over max rpm for the motor series.

MAX AMPERAGE
See power ratings above.

MTBF RATINGS:
When used within the constraints described above, BLDC motors' primary "wear" item(s) are the bearings supporting the shaft. Bearing life is inversely affected by speed, temperature, radial and axial loads. While an MTBF figure can be generated, it would be rendered invalid by excursions beyond prescribed temperatures or load limits – such as prop strikes or side loads. MTBF must be determined on a case by case basis, and even then it would be subject to numerous exceptions.

COMPONENT SPECIFICATIONS
Winding temperature: 180C
Magnet grade: 180C UH grade
Bearings: Japanese SPB bearings

Specifications subject to change without notice.