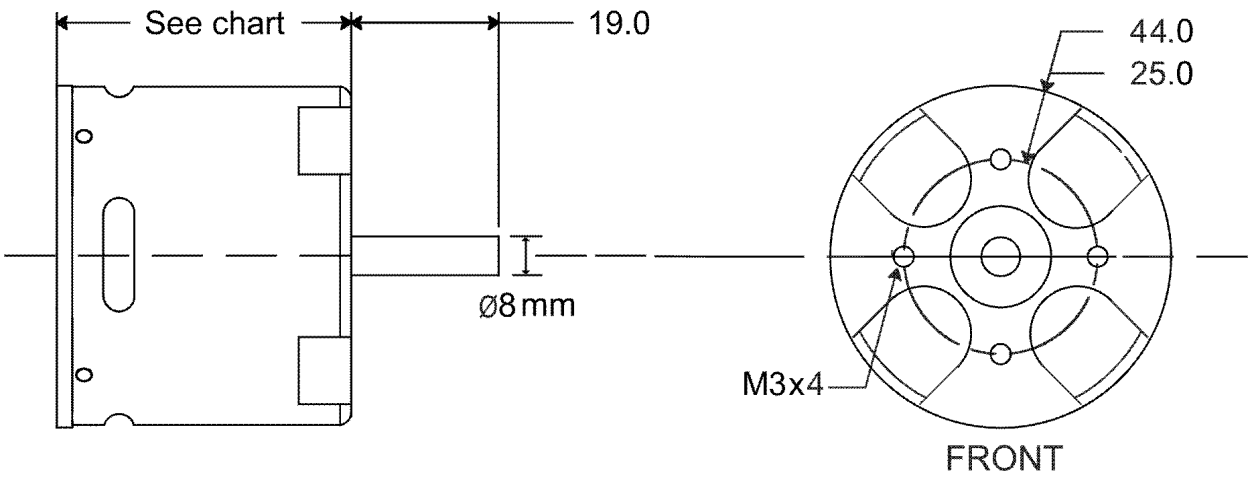

Stator lengths available:

Model	Length (in) / (mm)	Weight(g)	Continuous Watts	Base Price
1704	1.6" 41mm	136g	500	219.00
1706	1.6" 39mm	159g	600	230.00
1708	1.6" 39mm	187g	800	241.00
1710	2.1" 53mm	215g	1,000	263.00

43mm OD 1700 series innrunner brushless motors feature a large diameter rotor in a fixed enclosure combining all the torque advantages of a larger diameter motor with the mounting and operational advantages of a non-rotating enclosure.

1700 Series motors all feature 5mm hardened steel shafts and 13mm ball bearings. The 24 slot stator 8 pole rotor design is computer optimized for high torque and efficiency at operating RPM.

Configure these motors with a gearbox for impressive levels of torque.

Customizations include versions with waterproof housings.

Direct drive UAVs with 12” props,
Geared up to 21” props.

Motor type:	inrunner	**Finned:**	Optional	**Gearbox(es):**	P32
Poles:	8p	**Sealed:**	Optional	**Shaft size(s):**	5mm
Slots:	24s	**Sensored:**	Optional	**Max RPM:**	35,000

1704

	Diam.	Length	Weight	Max Cont. Watts	Max Peak Watts
inch:	1.7	1.6	4.8 ozs.	500	1,000
mm:	43	41	136g		

Motor	KV	Rm Ohms	Io @ 10v	Torque Constant mNm/A	Torque Constant inOz/A	Max Volts (max rpm/Kv)	**Max Amps (max watts/volts)**
1704/6D/855	855	0.077	0.780	11.191	1.585	41	24
1704/5.75D/892	892	0.071	0.814	10.727	1.519	39	25
1704/5.5D/933	933	0.065	0.851	10.256	1.452	38	27
1704/3Y/950	950	0.058	0.867	10.072	1.426	37	27
1704/5.25D/977	977	0.059	0.891	9.794	1.387	36	28
1704/5D/1026	1,026	0.053	0.936	9.326	1.321	34	29
1704/2.75Y/1036	1,036	0.048	0.945	9.236	1.308	34	30
1704/4.75D/1080	1,080	0.048	0.985	8.860	1.255	32	31
1704/2.5Y/1140	1,140	0.040	1.040	8.393	1.189	31	33
1704/4.5D/1140	1,140	0.043	1.040	8.393	1.189	31	33
1704/4.25D/1207	1,207	0.039	1.101	7.927	1.123	29	34
1704/2.25Y/1267	1,267	0.032	1.156	7.552	1.069	28	36
1704/4D/1283	1,283	0.034	1.170	7.458	1.056	27	37
1704/3.75D/1368	1,368	0.030	1.248	6.994	0.990	26	39
1704/2Y/1425	1,425	0.026	1.300	6.715	0.951	25	41
1704/3.5D/1466	1,466	0.026	1.337	6.527	0.924	24	42
1704/3.25D/1578	1,578	0.023	1.440	6.064	0.859	22	45
1704/1.75Y/1629	1,629	0.020	1.486	5.874	0.832	21	47
1704/3D/1710	1,710	0.019	1.560	5.596	0.792	20	49
1704/2.75D/1865	1,865	0.016	1.702	5.131	0.727	19	53
1704/1.5Y/1900	1,900	0.014	1.733	5.036	0.713	18	54
1704/2.5D/2052	2,052	0.013	1.872	4.663	0.660	17	59
1704/2.25D/2280	2,280	0.011	2.080	4.197	0.594	15	65
1704/1.25Y/2280	2,280	0.010	2.080	4.197	0.594	15	65
1704/2D/2565	2,565	0.009	2.340	3.730	0.528	14	73
1704/1Y/2850	2,850	0.006	2.600	3.357	0.475	12	81
1704/1.75D/2931	2,931	0.007	2.674	3.265	0.462	12	84
1704/1.5D/3420	3,420	0.005	3.120	2.798	0.396	10	98
1704/0.75Y/3800	3,800	0.004	3.467	2.518	0.357	9	109
1704/1.25D/4104	4,104	0.003	3.744	2.331	0.330	9	117
1704/1D/5130	5,130	0.002	4.680	1.865	0.264	7	147

1704

	Diam.	Length	Weight	Max Cont. Watts	Max Peak Watts
inch:	1.7	1.6	4.8 ozs.	500	1,000
mm:	43	41	136g		

Motor	KV	Rm Ohms	Io @ 10v	Torque Constant mNm/A	Torque Constant inOz/A	Max Volts (max rpm/Kv)	**Max Amps (max watts/volts)**
1704/0.5Y/5700	5,700	0.002	5.200	1.679	0.238	6	163
1704/0.75D/6840	6,840	0.001	6.240	1.399	0.198	5	195
1704/0.5D/10260	10,260	0.001	9.360	0.933	0.132	3	293
1704/0.25Y/11400	11,400	0.000	10.400	0.839	0.119	3	326
1704/0.25D/20520	20,520	0.000	18.720	0.466	0.066	2	586

1706

	Diam.	Length	Weight	Max Cont. Watts	Max Peak Watts
inch:	1.7	1.6	5.6 ozs.	600	1,200
mm:	43	39	158g		

Motor	KV	Rm Ohms	Io @ 10v	Torque Constant mNm/A	Torque Constant inOz/A	Max Volts (max rpm/Kv)	**Max Amps (max watts/volts)**
1706/6D/570	570	0.115	0.780	16.787	2.377	61	20
1706/5.75D/595	595	0.106	0.814	16.081	2.277	59	20
1706/5.5D/622	622	0.097	0.851	15.383	2.178	56	21
1706/3Y/633	633	0.086	0.867	15.116	2.141	55	22
1706/5.25D/651	651	0.088	0.891	14.698	2.081	54	22
1706/5D/684	684	0.080	0.936	13.989	1.981	51	23
1706/2.75Y/691	691	0.073	0.945	13.847	1.961	51	24
1706/4.75D/720	720	0.072	0.985	13.289	1.882	49	25
1706/4.5D/760	760	0.065	1.040	12.590	1.783	46	26
1706/2.5Y/760	760	0.060	1.040	12.590	1.783	46	26
1706/4.25D/805	805	0.058	1.101	11.886	1.683	43	28
1706/2.25Y/844	844	0.049	1.156	11.337	1.605	41	29
1706/4D/855	855	0.051	1.170	11.191	1.585	41	29
1706/3.75D/912	912	0.045	1.248	10.492	1.486	38	31
1706/2Y/950	950	0.038	1.300	10.072	1.426	37	33
1706/3.5D/977	977	0.039	1.337	9.794	1.387	36	33
1706/3.25D/1052	1,052	0.034	1.440	9.095	1.288	33	36
1706/1.75Y/1086	1,086	0.029	1.486	8.811	1.248	32	37
1706/3D/1140	1,140	0.029	1.560	8.393	1.189	31	39

1706

	Diam.	Length	Weight	Max Cont. Watts	Max Peak Watts
inch:	1.7	1.6	5.6 ozs.	600	1,200
mm:	43	39	158g		

Motor	KV	Rm Ohms	Io @ 10v	Torque Constant mNm/A	Torque Constant inOz/A	Max Volts (max rpm/Kv)	**Max Amps (max watts/volts)**
1706/2.75D/1244	1,244	0.024	1.702	7.692	1.089	28	43
1706/1.5Y/1267	1,267	0.022	1.733	7.552	1.069	28	43
1706/2.5D/1368	1,368	0.020	1.872	6.994	0.990	26	47
1706/1.25Y/1520	1,520	0.015	2.080	6.295	0.891	23	52
1706/2.25D/1520	1,520	0.016	2.080	6.295	0.891	23	52
1706/2D/1710	1,710	0.013	2.340	5.596	0.792	20	59
1706/1Y/1900	1,900	0.010	2.600	5.036	0.713	18	65
1706/1.75D/1954	1,954	0.010	2.674	4.897	0.693	18	67
1706/1.5D/2280	2,280	0.007	3.120	4.197	0.594	15	78
1706/0.75Y/2533	2,533	0.005	3.467	3.777	0.535	14	87
1706/1.25D/2736	2,736	0.005	3.744	3.497	0.495	13	94
1706/1D/3420	3,420	0.003	4.680	2.798	0.396	10	117
1706/0.5Y/3800	3,800	0.002	5.200	2.518	0.357	9	130
1706/0.75D/4560	4,560	0.002	6.240	2.098	0.297	8	156
1706/0.5D/6840	6,840	0.001	9.360	1.399	0.198	5	235
1706/0.25Y/7600	7,600	0.001	10.400	1.259	0.178	5	261
1706/0.25D/13680	13,680	0.000	18.720	0.699	0.099	3	469

1708

	Diam.	Length	Weight	Max Cont. Watts	Max Peak Watts
inch:	1.7	1.6	6.6 ozs.	800	1,500
mm:	43	39	187g		

Motor	KV	Rm Ohms	Io @ 10v	Torque Constant mNm/A	Torque Constant inOz/A	Max Volts (max rpm/Kv)	**Max Amps (max watts/volts)**
1708/6D/428	428	0.154	0.780	22.356	3.166	82	18
1708/5.75D/446	446	0.141	0.814	21.454	3.038	78	19
1708/5.5D/466	466	0.129	0.851	20.533	2.908	75	20
1708/3Y/475	475	0.115	0.867	20.144	2.853	74	20
1708/5.25D/489	489	0.118	0.891	19.567	2.771	72	21
1708/5D/513	513	0.107	0.936	18.652	2.641	68	22
1708/2.75Y/518	518	0.097	0.945	18.472	2.616	68	22

1708

	Diam.	Length	Weight	Max Cont. Watts	Max Peak Watts
inch:	1.7	1.6	6.6 ozs.	800	1,500
mm:	43	39	187g		

Motor	KV	Rm Ohms	Io @ 10v	Torque Constant mNm/A	Torque Constant inOz/A	Max Volts (max rpm/Kv)	**Max Amps (max watts/volts)**
1708/4.75D/540	540	0.096	0.985	17.719	2.509	65	23
1708/4.5D/570	570	0.086	1.040	16.787	2.377	61	24
1708/2.5Y/570	570	0.080	1.040	16.787	2.377	61	24
1708/4.25D/604	604	0.077	1.101	15.842	2.243	58	26
1708/2.25Y/633	633	0.065	1.156	15.116	2.141	55	27
1708/4D/641	641	0.068	1.170	14.927	2.114	55	27
1708/3.75D/684	684	0.060	1.248	13.989	1.981	51	29
1708/2Y/713	713	0.051	1.300	13.420	1.900	49	31
1708/3.5D/733	733	0.052	1.337	13.054	1.849	48	31
1708/3.25D/789	789	0.045	1.440	12.127	1.717	44	34
1708/1.75Y/814	814	0.039	1.486	11.755	1.665	43	35
1708/3D/855	855	0.038	1.560	11.191	1.585	41	37
1708/2.75D/933	933	0.032	1.702	10.256	1.452	38	40
1708/1.5Y/950	950	0.029	1.733	10.072	1.426	37	41
1708/2.5D/1026	1,026	0.027	1.872	9.326	1.321	34	44
1708/1.25Y/1140	1,140	0.020	2.080	8.393	1.189	31	49
1708/2.25D/1140	1,140	0.022	2.080	8.393	1.189	31	49
1708/2D/1283	1,283	0.017	2.340	7.458	1.056	27	55
1708/1Y/1425	1,425	0.013	2.600	6.715	0.951	25	61
1708/1.75D/1466	1,466	0.013	2.674	6.527	0.924	24	63
1708/1.5D/1710	1,710	0.010	3.120	5.596	0.792	20	73
1708/0.75Y/1900	1,900	0.007	3.467	5.036	0.713	18	81
1708/1.25D/2052	2,052	0.007	3.744	4.663	0.660	17	88
1708/1D/2565	2,565	0.004	4.680	3.730	0.528	14	110
1708/0.5Y/2850	2,850	0.003	5.200	3.357	0.475	12	122
1708/0.75D/3420	3,420	0.002	6.240	2.798	0.396	10	147
1708/0.5D/5130	5,130	0.001	9.360	1.865	0.264	7	220
1708/0.25Y/5700	5,700	0.001	10.400	1.679	0.238	6	244
1708/0.25D/10260	10,260	0.000	18.720	0.933	0.132	3	440

1710

	Diam.	Length	Weight	Max Cont. Watts	Max Peak Watts
inch:	1.7	2.1	7.6 ozs.	1,000	1,700
mm:	43	53	215g		

Motor	KV	Rm Ohms	Io @ 10v	Torque Constant mNm/A	Torque Constant inOz/A	Max Volts (max rpm/Kv)	**Max Amps (max watts/volts)**
1710/6D/342	342	0.192	0.780	27.978	3.962	102	17
1710/5.75D/357	357	0.176	0.814	26.802	3.796	98	17
1710/5.5D/373	373	0.161	0.851	25.653	3.633	94	18
1710/3Y/380	380	0.144	0.867	25.180	3.566	92	18
1710/5.25D/391	391	0.147	0.891	24.472	3.465	90	19
1710/5D/410	410	0.133	0.936	23.338	3.305	85	20
1710/2.75Y/415	415	0.121	0.945	23.056	3.265	84	20
1710/4.75D/432	432	0.120	0.985	22.149	3.137	81	21
1710/2.5Y/456	456	0.100	1.040	20.983	2.971	77	22
1710/4.5D/456	456	0.108	1.040	20.983	2.971	77	22
1710/4.25D/483	483	0.096	1.101	19.810	2.805	72	23
1710/2.25Y/507	507	0.081	1.156	18.873	2.673	69	25
1710/4D/513	513	0.085	1.170	18.652	2.641	68	25
1710/3.75D/547	547	0.075	1.248	17.493	2.477	64	27
1710/2Y/570	570	0.064	1.300	16.787	2.377	61	28
1710/3.5D/586	586	0.065	1.337	16.328	2.312	60	28
1710/3.25D/631	631	0.056	1.440	15.164	2.147	55	31
1710/1.75Y/651	651	0.049	1.486	14.698	2.081	54	32
1710/3D/684	684	0.048	1.560	13.989	1.981	51	33
1710/2.75D/746	746	0.040	1.702	12.826	1.816	47	36
1710/1.5Y/760	760	0.036	1.733	12.590	1.783	46	37
1710/2.5D/821	821	0.033	1.872	11.655	1.650	43	40
1710/2.25D/912	912	0.027	2.080	10.492	1.486	38	44
1710/1.25Y/912	912	0.025	2.080	10.492	1.486	38	44
1710/2D/1026	1,026	0.021	2.340	9.326	1.321	34	50
1710/1Y/1140	1,140	0.016	2.600	8.393	1.189	31	55
1710/1.75D/1173	1,173	0.016	2.674	8.157	1.155	30	57
1710/1.5D/1368	1,368	0.012	3.120	6.994	0.990	26	66
1710/0.75Y/1520	1,520	0.009	3.467	6.295	0.891	23	74
1710/1.25D/1642	1,642	0.008	3.744	5.827	0.825	21	80
1710/1D/2052	2,052	0.005	4.680	4.663	0.660	17	100

1710

	Diam.	Length	Weight	Max Cont. Watts	Max Peak Watts
inch:	1.7	2.1	7.6 ozs.	1,000	1,700
mm:	43	53	215g		

Motor	KV	Rm Ohms	Io @ 10v	Torque Constant mNm/A	Torque Constant inOz/A	Max Volts (max rpm/Kv)	**Max Amps (max watts/volts)**
1710/0.5Y/2280	2,280	0.004	5.200	4.197	0.594	15	111
1710/0.75D/2736	2,736	0.003	6.240	3.497	0.495	13	133
1710/0.5D/4104	4,104	0.001	9.360	2.331	0.330	9	199
1710/0.25Y/4560	4,560	0.001	10.400	2.098	0.297	8	221
1710/0.25D/8208	8,208	0.000	18.720	1.166	0.165	4	399

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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.