



Stator lengths available:

Model	Length (in)	mm	Cont. Watts
1210		mm	65
1215		mm	
1220		mm	
1230		mm	

30mm diameter 1200 Series are small outrunner motors designed to deliver high torque in lightweight (16 gram) packages. Capable of spinning 7" or 8" propellers, these are typically used for fixed wing or multirotor applications.

Motor type: outrunner

Poles: 26p

Slots: 24s

Finned: Optional

Sealed: Optional

Sensored: Optional

Gearbox(es): n/a

Shaft size(s): 5mm

Max RPM: 15,000

1210

Diam.	Length	Weight	Max Cont. Watts	Max Peak Watts
inch: 1.2		.49 ozs.	65	125
mm: 30		14g		

Motor	KV	Rm Ohms	Io @ 10v	Torque Constant mNm/A inOz/A	Max Volts	Max Amps
-------	----	---------	----------	---------------------------------	-----------	----------

1210

Diam.	Length	Weight	Max Cont. Watts	Max Peak Watts
inch: 1.2		.49 ozs.	65	125
mm: 30		14g		

Motor	KV	Rm Ohms	Io @ 10v	Torque Constant		Max Volts	Max Amps
				mNm/A	inOz/A		
1210/10Y	1,480	0.370	0.3	6.465	0.916	10	12
1210/9Y	1,665	0.300	0.3	5.747	0.814	9	14
1210/8Y	1,850	0.210	0.4	5.172	0.732	8	15
1210/7Y	2,100	0.160	0.1	4.556	0.645	7	18

1215

Diam.	Length	Weight	Max Cont. Watts	Max Peak Watts
inch: 1.2		.72 ozs.		
mm: 30		20g		

Motor	KV	Rm Ohms	Io @ 10v	Torque Constant		Max Volts	Max Amps
				mNm/A	inOz/A		
1215/9Y	1,100	0.390	0.3	8.699	1.232	14	
1215/8Y	1,250	0.308	0.3	7.655	1.084	12	
1215/7y	1,400	0.236	0.4	6.835	0.968	11	
1215/6Y	1,665	0.173	0.5	5.747	0.814	9	

1220

Diam.	Length	Weight	Max Cont. Watts	Max Peak Watts
inch: 1.2		.95 ozs.		
mm: 30		27g		

Motor	KV	Rm Ohms	Io @ 10v	Torque Constant		Max Volts	Max Amps
				mNm/A	inOz/A		
1220	925	1.233	0.2	10.344	1.465	16	
1220/7Y	1,050	0.295	0.4	9.113	1.290	14	
1220/6Y	1,233	0.217	0.5	7.758	1.099	12	
1220/5Y	1,480	0.150	0.5	6.465	0.916	10	

1230

Diam.	Length	Weight	Max Cont. Watts	Max Peak Watts
inch: 1.2		1.175 ozs.		
mm: 30		33g		

Motor	KV	Rm Ohms	Io @ 10v	Torque Constant		Max Volts	Max Amps
				mNm/A	inOz/A		
1230/8Y	550	0.578	0.3	17.397	2.464	27	

1230

Diam.	Length	Weight	Max Cont. Watts	Max Peak Watts
inch: 1.2		1.175 ozs.		
mm: 30		33g		

Motor	KV	Rm Ohms	Io @ 10v	Torque Constant		Max Volts	Max Amps
				mNm/A	inOz/A		
1230/7Y	625	0.442	0.4	15.309	2.168	24	
1230/6Y	822	0.325	0.5	11.637	1.648	18	
1230/5Y	987	0.226	0.5	9.698	1.373	15	

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.

Copyright (c) 2021 Neutronics Enterprises Inc.