

BLDC Motor · B1215N2B- · B1220N2B- · \varnothing 12 mm

Specifications Please consult your authorized sales representative for custom specifications.

Type			B1215N2B-		B1220N2B-	
			180-3.7-001	474-4.0-001	190-3.7-001	238-7.4-001
Rated voltage	U	V	3.7	4	3.7	7.4
Terminal resistance	R	Ohm	2.63	0.369	1.2	3.55
No load speed	n_0	rpm	18000	47400	19070	23820
No load current	I_0	mA	120	390	125	70
Stall torque	T_s	mNm	2.32	8.12	5.28	5.78
Rated torque	T	mNm	0.5	1.17	0.86	0.88
Rated speed	n	rpm	14000	40000	15200	19200
Rated current	I	mA	390	1900	608	376
Power	P_{max}	W	0.72	4.9	1.37	1.77
Max. efficiency	η	%	50	59	64	67
Back-EMF constant	K_E	mV/rpm	0.19	0.081	0.186	0.3
Torque constant	K_T	mNm/A	1.8	0.777	1.783	2.87
Rotor inertia	J_{Rotor}	gcm ²	0.1	0.1	0.14	0.14
Speed regulation constant	$\Delta n / \Delta T$	rpm/mNm	7750	5837	3605	4121
Weight		g	8	8	11	11
Length	L	mm	15	15	20	20
Operational conditions*						
Temperature range	T	°C	-20 ~ +100		-20 ~ +100	
Axial force dynamic	F_{Adyn}	N	0.3		0.5	
Axial force static	F_{St}	N	10		10	
Radial force at 3 mm from mounting face	F_R	N	0.3		0.6	

Commutation	sensorless / Hallsensor as option
Max. winding temperature	130 °C
Protection class	IP 40
Bearings	2 Ball bearings

* at 25° C

Dimension (mm) · B1215N2B and B1220N2B:

