

57BL(S) Series Brushless Dc Motor

General specification

Item	Specification
Winding type	Delta
Hall effect angle	120degree electrical angle
Shaft run out	0.025mm
Radial play	0.025mm@460g
End play	0.025mm@4000g
Max.radial force	75N@10mm from the flange
Max.axial force	15N
Insulation class	Class B
Dielectric Strength	500VDC for one minute
Insulation resistance	100MΩ Min.500VDC



Electric connection

Lead NO.	Lead Color	Lead Gauge	Function	DESCRIPTION
1	Red	UL1007/26AWG	VCC	SUPPLY VOLTAGE FOR HALL SENSORS
2	Black		GND	GROUND FOR HALL SENSORS
3	Yellow		HALL A	
4	Green	UL1007/20AWG	HALL B	
5	Blue		HALL C	
6	Yellow		PHASE U	
7	Green		PHASE V	
8	Blue		PHASE W	

Technique Specification

Model		57BL(S)005	57BL(S)01	57BL(S)02	57BL(S)03	57BL(S)04
Voltage	V			36		
Number of poles				8		
Number of phase				3		
No load speed	rpm	5200	5200	5200	5300	5400
Rated torque	Nm	0.055	0.11	0.22	0.32	0.42
Rated Speed	rpm	4000	4000	4000	4000	4000
Rated Current	A	1	1.8	3.2	4.7	6.5
Peak Torque	Nm	0.16	0.3	0.65	0.9	1.3
Back-EMF constant	V/Krpm	4.3	4.5	4.8	4.83	4.9
Torque Constant	Nm/A	0.068	0.072	0.078	0.08	0.09
Resistance	ohm	4	1.7	0.75	0.5	0.39
Weight	Kg	0.28	0.5	0.75	1	1.25
Length	mm	45	55	75	95	115

Drawing

