

Brushless DC Motor

57BLA SERIES

● INDICATIONS OF THE MODELS

57 BLA 01

Series number of stator stack
Brushless motor A series(sintered magnet)
Frame: 57mm



● GENERAL SPECIFICATIONS

Winding type	Star
Hall effect angle	120 degree electrical angle
Shaft run out	0.025mm
Radial play	0.025mm@460g
End play	0.025mm@4000g
Max. radial force	115N@20mm from the flange
Max. axial force	45N
Insulation class	Class F
Dielectric strength	500VAC for one minute
Insulation resistance	100MΩ, 500VDC

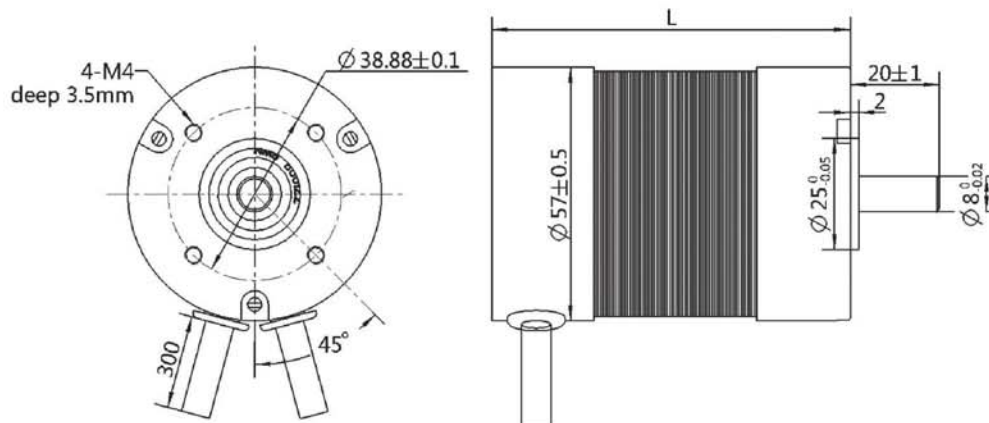
● ELECTRIC CONNECTION

Lead No.	Lead Color	Lead Gauge	Function	Description
1	Red	UL1430 AWG26	Vcc	HALL positive:+5—+24V
2	Blue		Hall U	
3	Green		Hall V	
4	White		Hall W	
5	Black	UL 1430 AWG16/ 18/ 20/22	GND	HALL negative
6	Yellow		Phase U	
7	Red		Phase V	
8	Black		Phase W	

● ELECTRICAL SPECIFICATIONS

Model	Unit	57BLA01	57BLA02	57BLA03	57BLA04
Number of poles				6	
Number of phase				3	
Rated voltage	VDC			36	
Rated speed	RPM			4000	
Continuous running torque	mN.m	240	480	720	960
Rated torque	mN.m	200	400	600	800
Rated power	W	83	167	251	335
Peak torque	N.m	0.6	1.2	1.8	2.4
Peak current	A	8.6	16	29	35
Line to line resistance	ohms@20°C	0.95	0.40	0.25	0.20
Line to line inductance	mH	1.20	0.55	0.40	0.25
Torque constant	mNm/A	74	77	63	70
Back E.M.F	Vrms/KRPM	5.5	5.7	4.7	5.2
Rotor inertia	g.cm ²	100	200	300	400
Body length(L)	mm	53.6	73.6	93.6	113.6

● DIMENSIONS



*This motor can be designed & manufactured with customized request.