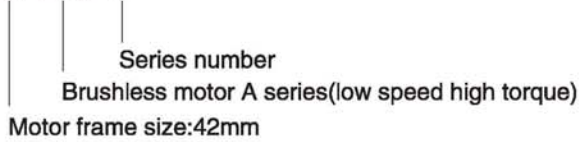


Brushless DC Motor

42BLA SERIES

● INDICATIONS OF THE MODELS

42 BLA 01



● GENERAL SPECIFICATIONS

Winding type	Star
Hall effect angle	120 degree electrical angle
Shaft run out	0.025mm
Radial play	0.02mm@450g
End play	0.08mm@450g
Max. radial force	28N @ 20mm from the flange
Max. axial force	10N
Insulation class	Class B
Dielectric strength	500VAC for one minute
Insulation resistance	100MΩ Min., 500VDC

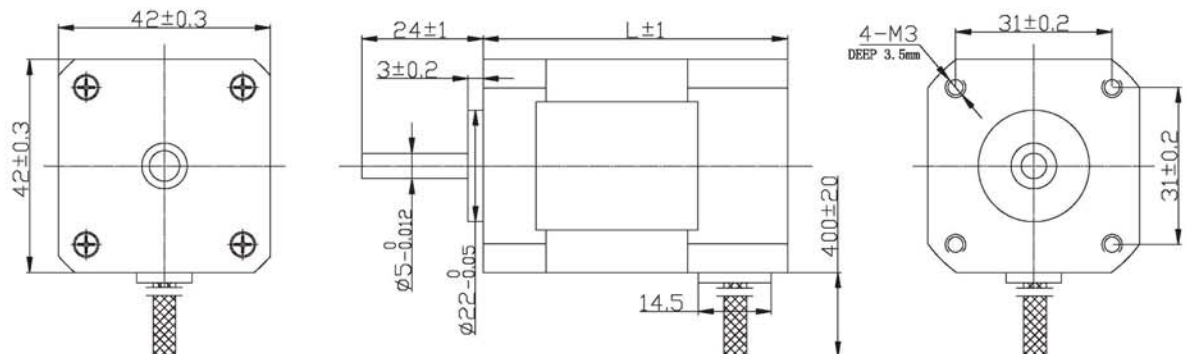
● ELECTRIC CONNECTION

Lead No.	Lead Color	Lead Gauge	FUNCTION	DESCRIPTION
1	Red	UL1430 26AWG	Vcc	Power supply positive of Hall:+5VDC--+24VDC
2	Blue		Hall A	
3	Green		Hall B	
4	White		Hall C	
5	Black	UL1430 20AWG	GND	Power supply negative of Hall
6	Yellow		Phase U	
7	Red		Phase V	
8	Black		Phase W	

● ELECTRICAL SPECIFICATIONS

Model		FL42BLA01	FL42BLA02	FL42BLA03	FL42BLA04
Number of poles		10			
Number of phase		3			
Rated voltage	VDC	24			
Rated speed	RPM	3000			
Continuous stall torque	N.m	0.081	0.19	0.30	0.41
Rated torque	N.m	0.07	0.16	0.26	0.36
Rated power	W	22	50	81	113
Peak torque	N.m	0.21	0.48	0.78	1.08
Peak current	A	4	8.3	13.5	19
Line to line resistance	ohms	2.6	1.1	0.7	0.48
Line to line inductance	mH	1.83	0.96	0.58	0.44
Torque constant	N.m/A	0.055	0.059	0.058	0.057
Back E.M.F	Vrms/Krpm	4.06	4.35	4.25	4.2
Rotor inertia	g.cm ²	60	80	100	120
Body length (L)	mm	40.3	60.3	80.3	100.3
Mass	Kg	0.26	0.46	0.65	0.85

● DIMENSIONS



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