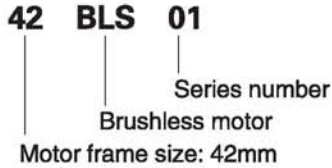


Brushless DC Motor

42BLS SERIES

● INDICATIONS OF THE MODELS



● GENERAL SPECIFICATIONS

Winding type	Delta
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

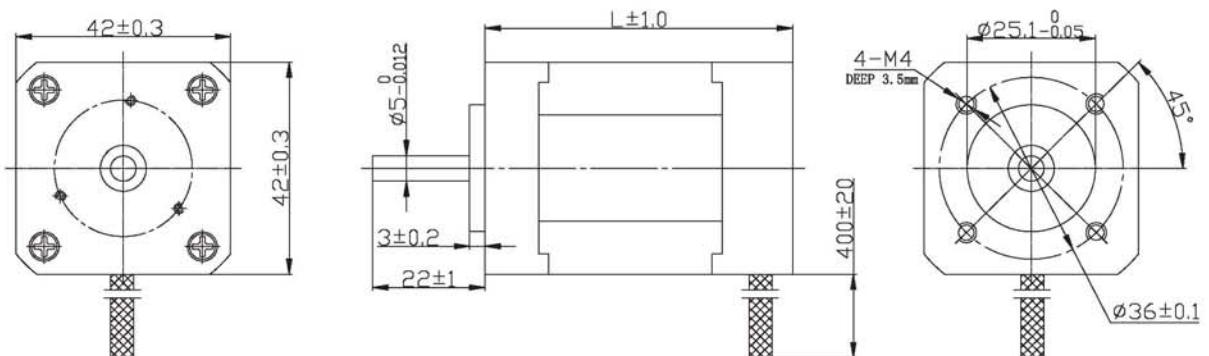
● ELECTRIC CONNECTION

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	42BLS01	42BLS02	42BLS03	42BLS04
Number of poles	8			
Number of phase	3			
Rated voltage	VDC 24			
Rated speed	RPM 4000			
Continuous stall torque	N.m 0.075	N.m 0.15	N.m 0.22	N.m 0.3
Rated torque	N.m 0.0625	N.m 0.125	N.m 0.185	N.m 0.25
Rated power	W 26	W 52.5	W 77.5	W 105
Peak torque	N.m 0.19	N.m 0.38	N.m 0.56	N.m 0.75
Peak current	A 6	A 10.8	A 15.5	A 21.7
Line to line resistance	ohms 1.5	ohms 0.8	ohms 0.43	ohms 0.3
Line to line inductance	mH 2.1	mH 1.2	mH 0.71	mH 0.5
Torque constant	N.m/A 0.033	N.m/A 0.036	N.m/A 0.037	N.m/A 0.035
Back E.M.F	Vrms/Krpm 2.45	Vrms/Krpm 2.71	Vrms/Krpm 2.74	Vrms/Krpm 2.62
Rotor inertia	g.cm ² 24	g.cm ² 48	g.cm ² 72	g.cm ² 96
Body length	mm 40.3	mm 60.3	mm 80.3	mm 100.3
Mass	Kg 0.3	Kg 0.45	Kg 0.65	Kg 0.8

● DIMENSIONS



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