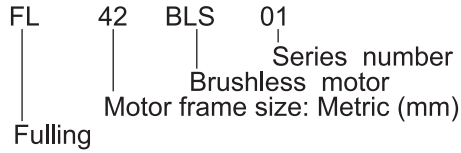




Brushless DC Motor

FL42BLS 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 AWG26	Vcc	SUPPLY VOLTAGE FOR HALL SENEORS
2	Blue		HALL A	
3	Green		HALL B	
4	White		HALL C	
5	Black	UL1430 AWG26	GND	GROUND FOR HALL SENEORS
6	Yellow		PHASE A	
7	Red		PHASE B	
8	Black		PHASE C	

● Electrical Specifications

Model		FL42BLS01	FL42BLS02	FL42BLS03	FL42BLS04
Number of poles		8			
Number of phase		3			
Rated voltage	VDC	24			
Rated speed	RPM	4000			
Continuous stall torque	N.m	0.075	0.15	0.22	0.3
Rated torque	N.m	0.0625	0.125	0.185	0.25
Rated power	W	26	52.5	77.5	105
Peak torque	N.m	0.19	0.38	0.56	0.75
Peak current	A	5.4	10.6	15.5	20
Line to line resistance	ohms	1.5	0.8	0.43	0.3
Line to line inductance	mH	2.1	1.2	0.71	0.5
Torque constant	Nm/A	0.035	0.0355	0.038	0.0355
Back E.M.F	V/KRPM	2.45	2.71	2.74	2.62
Rotor inertia	g.cm ²	24	48	72	96
Body length	mm	40.3	60.3	80.3	100.3
Mass	Kg	0.3	0.45	0.65	0.8

● Dimension

