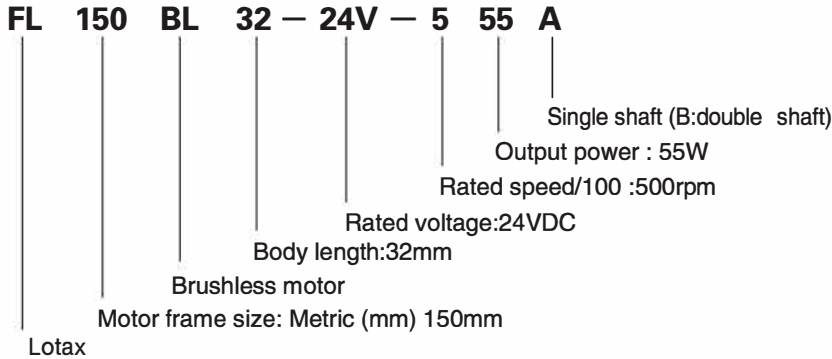




# Brushless DC Motor

## FL150BL SERIES

### ● INDICATIONS OF THE MODELS



### ● GENERAL SPECIFICATIONS

Winding type	Star
Hall effect angle	120 degree electrical angle
Shaft run out	0.05mm
Radial play	0.02mm @ 450g
End play	0.08mm @ 450g
Max. radial force	115N @ 10mm from the flange
Max. axial force	45N
Insulation class	CLASS B/F
Dielectric strength	500VAC @ 1Min
Insulation resistance	100MΩ , 500VDC

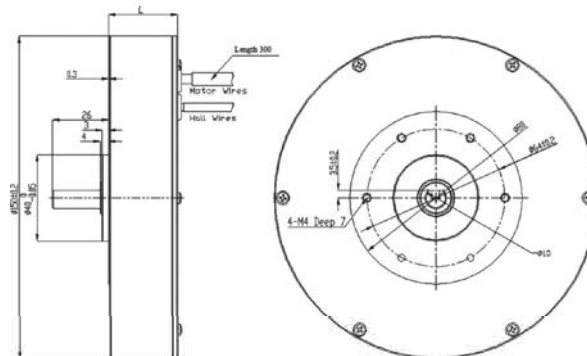
### ● ELECTRIC CONNECTION

No.	Lead color	Lead Gauge	Function	Description
1	Red	AWG26	Hall Vcc	+5 → +24V
2	Blue		Hall U	
3	Green		Hall V	
4	White		Hall W	
5	Black	AWG16	Hall GND	0 V
6	Yellow		Phase U	
7	Red		Phase V	
8	Black		Phase W	

### ● ELECTRICAL SPECIFICATIONS

Model	Unit	FL150BL32-24V-555A	FL150BL36-24V-355A	FL150BL46-48V-4140A
Number of poles		28	28	28
Number of phase		3	3	3
Rated voltage	VDC	24	24	48
Rated speed	RPM	500	300	350
Continuous stall torque	N.m	1.2	1.96	4.32
Rated torque	N.m	1.0	1.80	3.60
Rated power	W	55	55	140
Peak torque	N.m	3.0	5.4	10.8
Peak current	A	10	11	13
Resistance	ohms @ 20°C	0.85	0.85	1.25
Inductance	mH	3.0	3.0	8.2
Torque constant	mNm/A	315	505	831
Back EMF	Vrms/KRPM	23.3	37.4	61.5
Rotor inertia	g.cm <sup>2</sup>	1800	3000	6000
Body length	mm	32	36	46
Mass	Kg	1.4	2.2	4.1

### ● DIMENSIONS



\*Product developing, only available for samples.