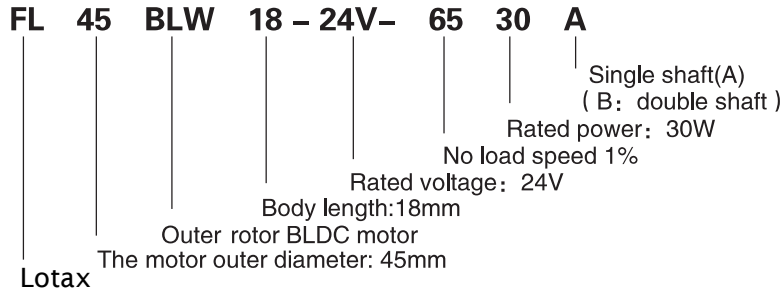


# Outer Rotor Brushless DC Motor

## FL45BLW SERIES

### ● INDICATIONS OF THE MODELS



### ● GENERAL SPECIFICATIONS

Winding type	Star
Electrical degree	120
Radial play	0.02mm@4N
End play	0.14mm@4N
Max. radial force	28N
Max. axial force	10N
Insulation class	Class B
Dielectric strength	500VAC for one minute
Insulation resistance	100MΩ Min., 500VDC

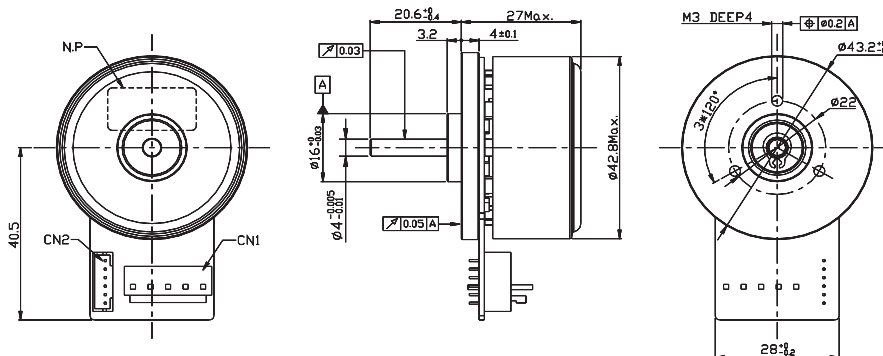
### ● ELECTRIC CONNECTION

Connector No.	PiN No.	Function	Description
CN1	1	Motor U	
	2	Motor V	
	3	Motor W	
CN2	1	GND	Ground for hall sensors
	2	Vcc	Supply voltage for hall sensors+5VDC---+24VDC
	3	HALL A	
	4	HALL B	
	5	HALL C	

### ● ELECTRICAL SPECIFICATIONS

Model	Unit	Tolerance	FL45BLW18-24V-6530A	FL45BLW21-24V-6750A	FL45BLW27-24V-6170A
Number of poles			16	16	16
Number of phase			3	3	3
Rated voltage	VDC		24	24	24
Noload speed	RPM	± 10%	6500	6700	6100
No load current	A	<0.5A	0.27	0.33	0.38
Rated speed	RPM	± 10%	5000	5260	4840
Rated torque	mN.m		50	84	130
Rated power	W		30	50	70
Peak torque	mN.m		150	250	390
Peak current	A	± 10%	4.8	7.8	11
Resistance	ohms@25°C	± 10%	1.42Ω	0.70Ω	0.56Ω
Inductance	mH	± 20%	0.59	0.33	0.27
Torque constant	mNm/A	± 10%	35.3	34.2	37.2
BackE.M.F constant	Vrms/KRPM	± 10%	2.61	2.53	2.75
Rotor inertia	g.cm <sup>2</sup>		99	135	181
Weight	g		80	120	150

### ● DIMENSIONS



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