

# Brushless DC Motor

## 42BLF Series

### General Specifications

Winding Type	Star
Hall Effect Angle	120° Electrical Angle
Insulation Class	B
Ambient Temperature Range	-20°C ~ +50°C
Insulation Resistance	100 MΩ Min. 500 VDC
Dielectric Strength	500 VAC 1 minute

**Customized solutions on request.**

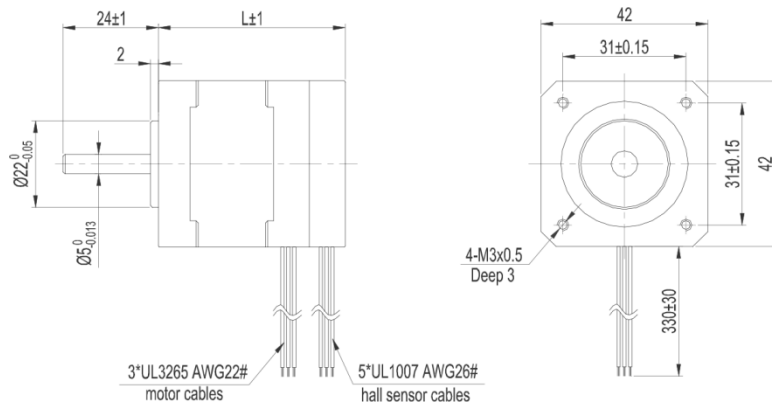


### Electrical Specifications

Model		42BLF01	42BLF02	42BLF03
Number of Poles		8	8	8
Number of Phases		3	3	3
Rated Voltage	VDC	24	24	24
Rated Speed	RPM	4000	4000	4000
Rated Torque	Nm	0.063	0.125	0.188
Rated Current	A	1.9	3.4	5.7
Output Power	W	26	52	78
Peak Torque	Nm	0.18	0.38	0.75
Peak Current	A	5.7	10.2	18
Torque Constant	Nm/A	0.035	0.036	0.036
Back EMF	V/KRPM	3.7	3.8	3.8
Rotor Inertia	gcm <sup>2</sup>	24	48	72
Body Length	mm	47	63	79
Mass	kg	0.33	0.48	0.63

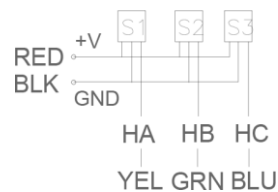
Caution: Peak Torque is provided for the purpose of performance calculations only. Operating near, or at this condition can result in motor damage.

### Mechanical Dimensions



### Connection diagram

#### Hall Sensor Cable



#### Wiring Cable



Note: Hall Sensor Power Supply voltage +5 to +20 VDC