# **Brushless DC Motor**

## **42BLF Series**

### **General Specifications**

Winding Type Star

Hall Effect Angle 120°C Electrical Angle

Insulation Class

Ambient Temperature Range  $-20^{\circ}\text{C} \sim +50^{\circ}\text{C}$ Insulation Resistance  $100 \text{ M}\Omega \text{ Min. } 500 \text{ VDC}$ Dielectric Strength 500 VAC 1 minute

Customized solutions on request.





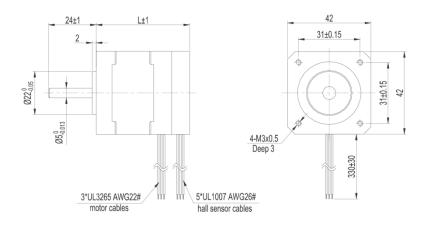
### **Electrical Specifications**

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	Α	1.9	3.4	5.7
Output Power	W	26	52	78
Peak Torque	Nm	0.18	0.38	0.75
Peak Current	Α	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	gcm²	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.

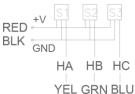
Operating near, or at this condition can result in motor damage.

#### **Mechanical Dimensions**



## **Connection diagram**

Hall Sensor Cable



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

#### Wiring Cable





Datasheet-42BLF Series-15A-JB



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