

# Brushless DC Motor

## 42BLY 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.**

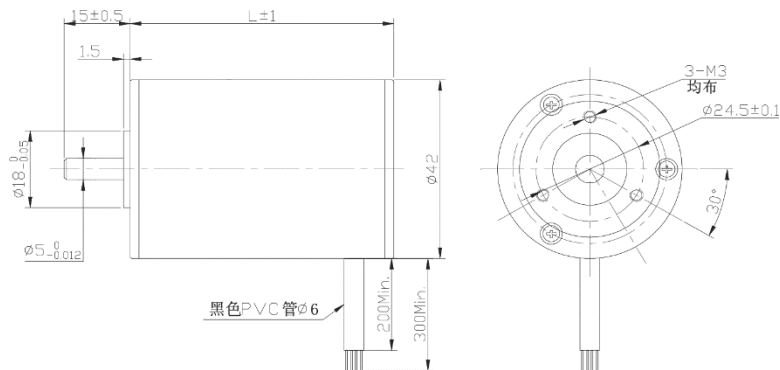


### Electrical Specifications

Model		42BLY01	42BLY02	42BLY03
Number of Poles		4	4	4
Number of Phases		3	3	3
Rated Voltage	VDC	24	24	24
Rated speed	RPM	3000	3000	3000
Rated Torque	Nm	0.035	0.07	0.105
Rated Current	A	0.9	2.1	3
Output Power	W	11	22	33
Peak Torque	Nm	0.11	0.21	0.315
Peak Current	A	2.7	6.3	9
Torque constant	Nm/A	0.035	0.035	0.036
Back EMF	V/KRPM	3.37	3.37	3.38
Rotor inertia	gcm <sup>2</sup>	25	35	45
Body Length	mm	42	60	78
Mass	kg	0.35	0.5	0.8

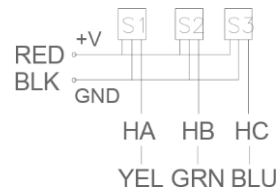
Caution: Peak Torque is provided for the purpose of performance calculations only. Operating near, or at this condition can result in motor damage.

### Mechanical Dimensions



### Connection diagram

#### Hall Sensor Cable



#### Wiring Cable



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

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