

# Brushless DC Motor

## 28BL 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.**

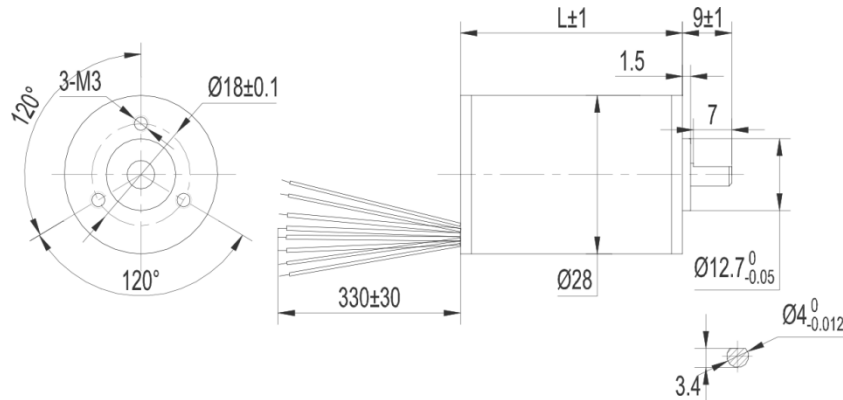


### Electrical Specifications

Model		28BL01	28BL02	28BL03
Number of Poles		4	4	4
Number of Phases		3	3	3
Rated Voltage	VDC	12	24	24
Rated Speed	RPM	3000	3000	3000
Rated Torque	Nm	0.015	0.03	0.05
Rated Current	A	0.9	1	1.5
Output Power	W	11	22	33
Peak Torque	Nm	0.045	0.09	0.15
Peak Current	A	2.7	3	4.5
Torque Constant	Nm/A	0.035	0.058	0.057
Back EMF	V/KRPM	3.37	6.1	6.1
Rotor Inertia	gcm <sup>2</sup>	1.5	2.5	6
Body Length	mm	40.5	53	78
Mass	kg	0.08	0.1	0.3

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



### Wiring diagram

+5V	RED	UL1007 AWG26
HALL A	YELLOW	
HALL B	GREEN	
HALL C	BLUE	
GND	BLACK	UL1015 AWG20
PHASE A	YELLOW	
PHASE B	GREEN	
PHASE C	BLUE	