

# Brushless DC Motor

## 80BL 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	1000 VAC 1 minute

**Customized solutions on request.**

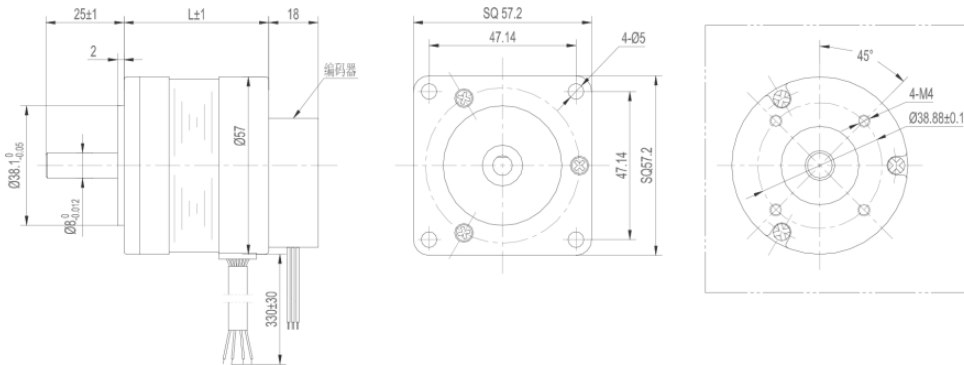


### Electrical Specifications

Model		80BL01	80BL02	80BL03
Number of Poles		4	4	4
Number of Phases		3	3	3
Rated Voltage	VDC	48	310	310
Rated Speed	RPM	3000	3000	3000
Rated Torque	Nm	0.7	1.1	1.6
Rated Current	A	8.5	1.9	2.2
Output Power	W	220	350	500
Peak Torque	Nm	2.45	3.5	6.6
Peak Current	A	25	6.5	7
Torque Constant	Nm/A	0.115	0.741	0.74
Back EMF	V/KRPM	1.2	77.5	77.5
Body Length	mm	111	131	161
Mass	kg	3	4.5	6

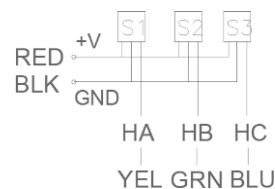
Caution: Peak Torque is provided for the purpose of performance calculations only. Operating near, or at this condition can result in motor damage.

### Mechanical Dimensions



### Connection diagram

#### Hall Sensor Cable



#### Wiring Cable



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