

Brushless DC Motor

57BL 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	700 VAC 1 minute

Customized solutions on request.

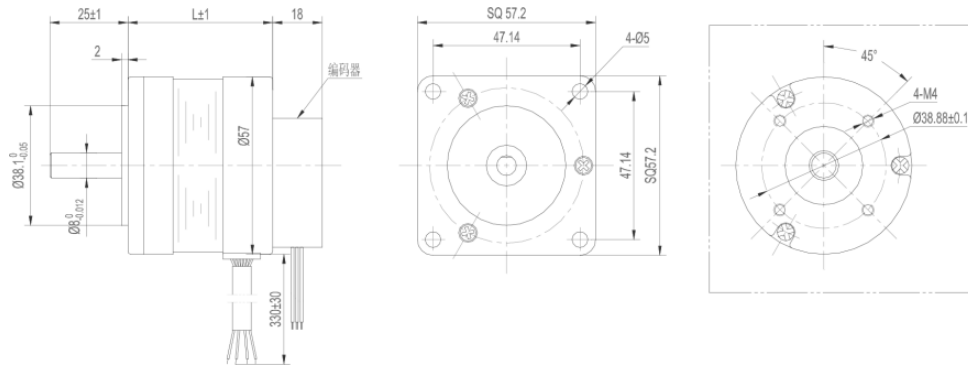


Electrical Specifications

Model	57BL01	57BL02	57BL03	57BL04	57BL05	57BL06
Number of Poles	4	4	4	4	4	4
Number of Phases	3					
Rated Voltage	VDC 24	24	24	24	24	24
Rated Speed	RPM 2500	3000	3000	3000	3000	3000
Rated Torque	Nm 0.057	0.11	0.165	0.22	0.33	0.44
Rated Current	A 1.2	2.3	3.0	4.4	6.6	8.6
Output Power	W 15	34	52	69	103	138
Peak Torque	Nm 0.18	0.38	0.58	0.8	1.2	1.6
Peak Current	A 3.6	6.8	9	13.2	19.8	25.8
Torque Constant	Nm/A 0.074	0.059	0.06	0.062	0.062	0.063
Back EMF	V/KRPM 7.75	6.2	6.3	6.5	6.5	6.6
Rotor Inertia	gcm ² 32	42	58	72	106	140
Body Length	mm 41.5	46.5	56.5	66.5	86.5	106.5
Mass	kg 0.43	0.5	0.67	0.75	1.0	1.25

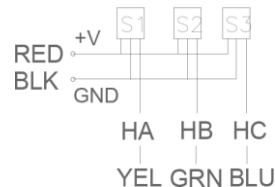
Caution: Peak Torque is provided for the purpose of performance calculations only. Operating near, or at this condition can result in motor damage.

Mechanical Dimensions



Connection diagram

Hall Sensor Cable



Wiring Cable



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