Brushless DC Motor

57BL Series



General Specifications

Winding Type	Star
Hall Effect Angle	120°C 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

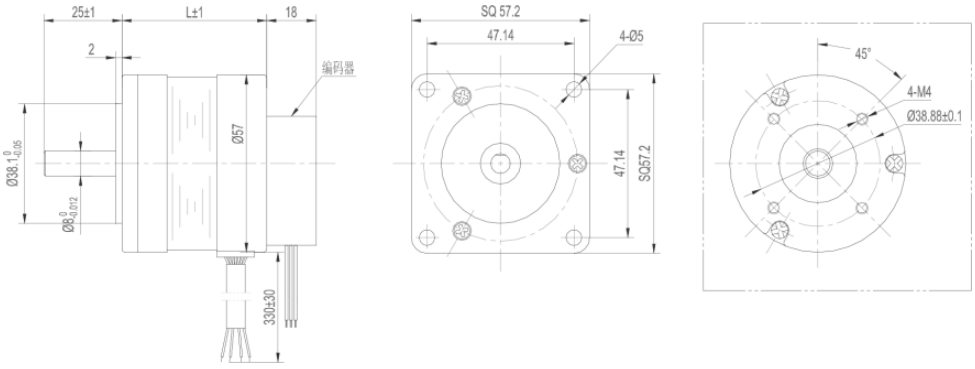
Customized solutions on request.

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	*gcm²*	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

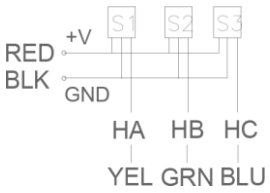
Caution: Peak Torque is provided for the purpose of performance calculations only.
Operating near, or at this condition can result in motor damage.

Mechanical Dimensions



Connection diagram

Hall Sensor Cable



Wiring Cable



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

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The specifications are believed to be accurate and reliable. However, the suitability has to be determined for a specific application. Specifications are subject to change without notice.