

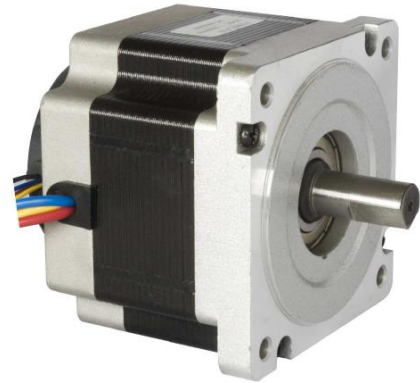
# Brushless DC Motor

## 86BLF 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	750 VAC 1 minute

**Customized solutions on request.**

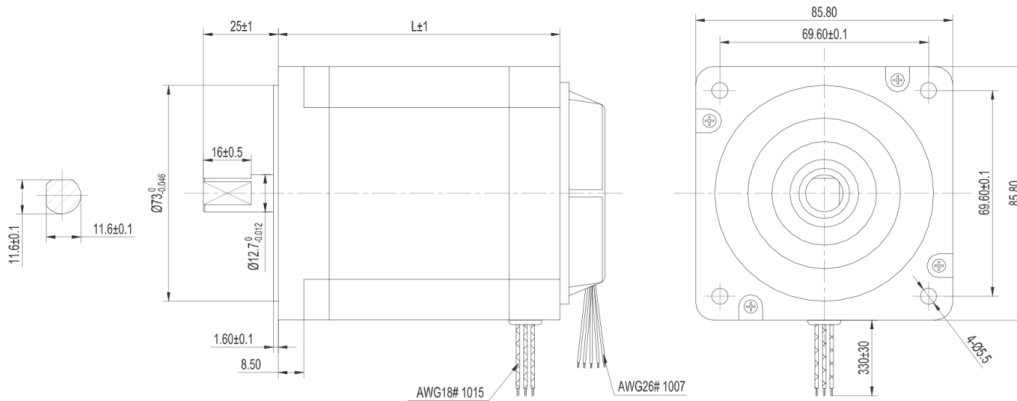


### Electrical Specifications

Model	86BLF01	86BLF02	86BLF03	86BLF04	86BLF06	86BLF07
Number of Poles	8	8	8	8	8	8
Number of Phases	3	3	3	3	3	3
Rated Voltage	VDC 48	48	48	48	48	48
Rated speed	RPM 3000	3000	3000	3000	3000	3000
Rated Torque	Nm 1.4	1.05	0.7	0.35	1.8	2.1
Rated Current	A 14	9.6	6.6	3.9	18	22
Output Power	W 440	330	220	110	550	660
Peak Torque	Nm 4.2	3.2	2.1	1.05	5.4	6.3
Peak Current	A 38.0	29.0	19.8	10.8	46	55
Torque constant	Nm/A 0.115	0.115	0.112	0.11	0.115	0.116
Back EMF	V/KRPM 12.0	12.0	11.8	11.5	12.0	12.2
Rotor inertia	gcm <sup>2</sup> 1250	950	650	350	1550	1850
Body Length	mm 94	81	67	57	109	124
Mass	kg 2.75	2.2	1.75	1.1	2.75	2.75

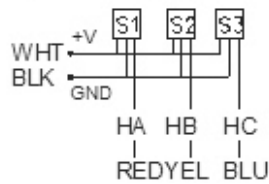
Caution: Peak Torque is provided for the purpose of performance calculations only. Operating near, or at this condition can result in motor damage.

### Mechanical Dimensions

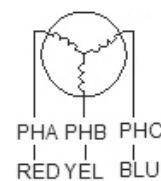


### Connection diagram

Hall Sensor Cable



Wiring Cable



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