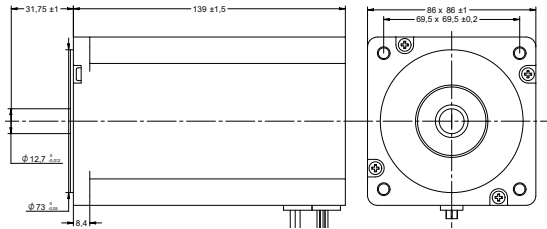


**DRAWING (mm)**

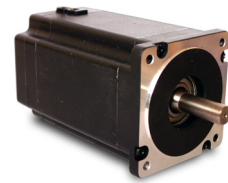


**MODEL NO. DESIGNATION**

B86139 - VOLTAGE

Example: B86139-48

**PHOTO**



**ACCESSORIES**



● C = customizations are offered on demand even for smaller quantities. Typical customizations are indicated with a green dot at column end. Please contact us for any customization request.

BRUSHLESS DC MOTOR DATA		B86139-48	C
Nominal voltage	V	48	
Commutator hall voltage	V	5 ~ 24	
No load speed	rpm	3500	
No load current	A	1.8	
Nominal speed	rpm	3000	
Nominal torque	mNm	2100	
Nominal current	A	19	
Start/Stall torque	mNm	6300	
Efficiency	%	72	
Nominal power	W	660	
Terminal resistance	Ω	0.1	
Terminal inductance	mH	0.31	
Torque constant	mNm/A	110	
Rotor inertia	gcm <sup>2</sup>	2400	
Bearing type		Ball bearing	
Axial play at axial load < 3.5 N	mm	0.08	
Axial play at axial load > 3.5 N	mm	0.08	
Radial play	mm	0.02	
Max. dynamic axial load	N	60	
Max. radial load <sup>1</sup>	N	220	

**NOTES**

1. 10 mm from flange.

OTHER BRUSHLESS DC MOTOR DATA		B86139-48	C
Number of pole pairs		4	
Number of phases		3	
Weight	g	4200	
Operating temperature	°C	-20 to 50	
Max. winding temperature	°C	130	
Motor insulation class		B	
IP rating		IP40	
Hall sensors and power harness length	mm	300	
Power harness		UL1332 AWG18	
Hall sensors harness		UL1332 AWG22	
Shaft length from flange	mm	31.75	●
Shaft diameter φ	mm	12.7	
Service life	h	10000	
Manufacturing standard		ISO9001   ISO14001   TS16949	

**CABLE AND PIN CONFIGURATION**

Power		Hall	
Phase	Cable color	Phase	Cable color
U	YEL	HU	BLU
V	RED	HV	GRN
W	BLK	HW	WHT
		+5V	RED
		GND	BLK