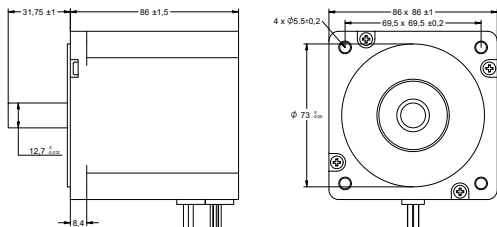


DRAWING (mm)

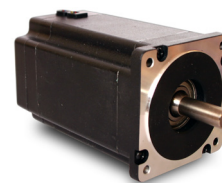


MODEL NO. DESIGNATION

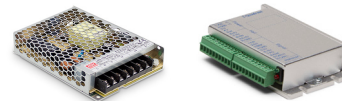
B8686 - VOLTAGE

Example: B8686-24

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		B8686-24	B8686-48	C
Nominal voltage	V	24	48	
Commutator hall voltage	V	5 ~ 24	5 ~ 24	
No load speed	rpm	3900	3800	
No load current	A	1.4	0.95	
Nominal speed	rpm	3000	3000	
Nominal torque	mNm	700	700	
Nominal current	A	12	6.4	
Start/Stall torque	mNm	3200	4000	
Efficiency	%	77	72	
Nominal power	W	220	220	
Terminal resistance	Ω	0.091	0.34	
Terminal inductance	mH	0.23	1	
Torque constant	mNm/A	59	110	
Rotor inertia	gcm ²	800	800	
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 ¹	N	220		

NOTES

1. 10 mm from flange.

OTHER BRUSHLESS DC MOTOR DATA		B8686-24	B8686-48	C
Number of pole pairs		4		
Number of phases		3		
Weight	g	2100		
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		AWM3135 AWG16	UL1332 AWG18	
Hall sensors harness		UL1332 AWG22		
Shaft length from flange	mm	31.75 ●		
Shaft diameter ø	mm	12.7		
Service life	h	10000		
Manufacturing standard		ISO9001 ISO14001 TS16949		

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