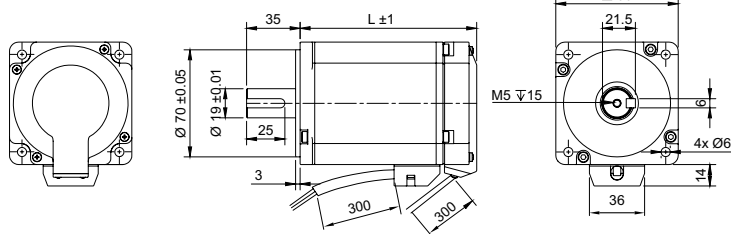
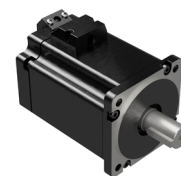


DRAWING (mm)



PHOTO



MODEL NO. DESIGNATION

B80 LENGTH - VOLTAGE - IP65

Example: B80116-48-IP65

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	B80116-48-IP65	B80134-48-IP65	C
Nominal voltage	V	48	48
No load speed	rpm	4000	4000
No load current	A	2	2
Nominal speed	rpm	3000	3000
Nominal torque	Nm	2.4	3.2
Nominal current	A	21	28
Peak current	A	63	84
Peak torque	Nm	7.2	9.5
Efficiency	%	74	74
Nominal power	W	750	1000
Terminal resistance ¹	Ω	0.086	0.06
Terminal inductance ²	mH	0.28	0.21
Insulation resistance ³	MΩ	100	100
Dielectric strength ⁴	V	600	600
Back EMF	V/rpm	0.009	0.009
Torque constant	Nm/A	0.12	0.12
Rotor inertia	kgcm ²	1.6	2.1
Bearing type		Ball bearing	
Axial play ⁵	mm	0.08	
Radial play ⁵	mm	0.02	
Max. dynamic axial load	N	150	
Max. radial load ⁶	N	390	

NOTES

1. Measured at 20°C.
2. Measured at 1 kHz.
3. Measured at 500 V.
4. At a duration of 1 second.
5. Max. 4 N.
6. 20 mm from flange.
7. In storage, relative humidity less than 85%.

OTHER BRUSHLESS DC MOTOR DATA	B80116-48-IP65	B80134-48-IP65	C
Number of pole pairs		10	
Number of phases		3	
Weight	kg	2.5	3.2
Operating temperature	°C	-20 to 50	
Storage temperature ⁷	°C	-20 to 85	
Winding type		Star connection	
Motor insulation class		B	
IP rating		IP65	
Hall sensors and power harness length	mm	300	
Power harness		AWG13	
Hall sensors harness		AWG26	
Motor length	mm	116	134
Shaft length from flange	mm	35	
Shaft diameter	mm	19	
Service life	h	10000	
Manufacturing standard		ISO 9001:2015 ISO 14001 IATF 16949	

CABLE AND PIN CONFIGURATION

Wire	Definition	Color
U		Yellow
V	Power	Red
W		Black
HU		Blue
HV		Green
HW	Hall	White
Vcc		Red
GND		Black