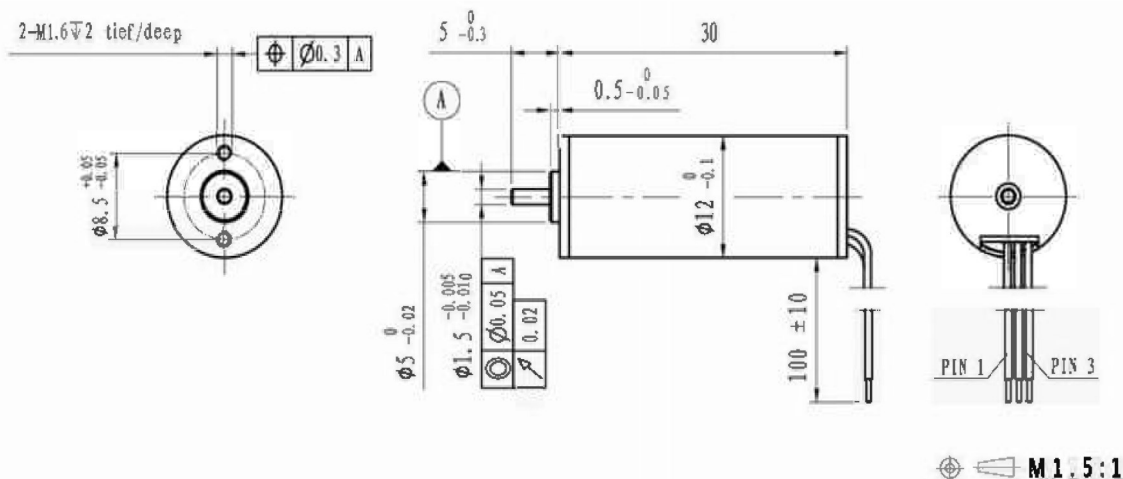


12mm Slotless BLDC motor

6, 9 & 12 volt

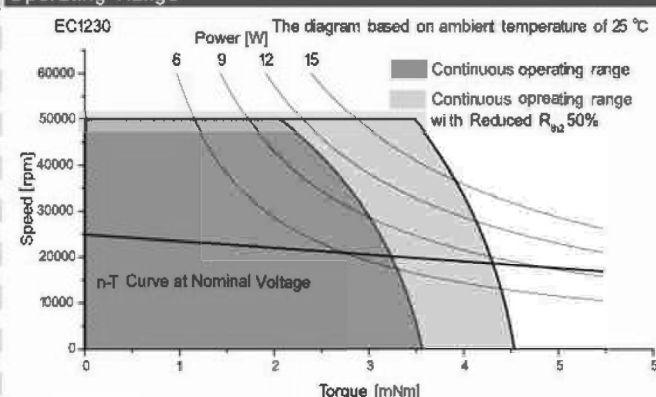
P/N: MFU-3311-S006 / S009 / S012



Sensorless					
Motor data					
Values at nominal voltage					
1	Nominal voltage	V	6	9	12
2	No load speed	rpm	25310	25100	24930
3	No load current	mA	122	90	72
4	Nominal speed	rpm	20719	20565	20449
5	Nominal torque	mNm	3	3	3
6	Nominal current	A	1.47	0.98	0.74
7	Stall torque	mNm	16.5	16.6	16.7
8	Stall current	A	7.55	5.03	3.77
9	Max. efficiency	%	76.2	75	74.3
10	Terminal resistance	Ω	0.8	1.79	3.18
11	Terminal inductance	mH	0.02	0.04	0.06
12	Torque constant	mNm/A	2.23	3.36	4.51
13	Speed constant	rpm/V	4288	2840	2118
14	Speed/torque gradient	rpm/mNm	1530	1512	1494
15	Mechanical time constant	ms	5.1	5.1	5.0
16	Rotor Inertia	gcm ²	0.32	0.32	0.32

17	Thermal resistance housing-ambient	28.4 K/W
18	Thermal resistance winding-housing	7.1 K/W
19	Thermal time constant winding	4 s
20	Thermal time constant motor	240 s
21	Ambient temperature	-30...+100°C
22	Max. permissible winding temperature	+125°C
23	Max. permissible speed	50000 rpm
24	Axial play at axial load <0.6 N	0 mm
	> 0.6 N	max. 0.3 mm
25	Radial play	preloaded
26	Max. axial load (dynamic)	0.3
27	Max. force for press fits (static)	11 N
	(static, shaft supported)	200 N
28	Max. radial loading, 5mm from flange	4.3 N
29	Number of pole pairs	1
30	Number of phases	3
31	Weight of motor	16.3 g

Operating Range



Connection

Conection	PVC	
Pin 1 Motor winding MA	AWG28	yellow
Pin 2 Motor winding MB	AWG28	green
Pin 3 Motor winding MC	AWG28	blue

Configuration

Performance: Customized in the continuous operating range
 Ball bearing: Preload
 Flange: Standard frange front&back/customize the frange
 Shaft: Length/Diameter/Cut face/double shaft/hollow shaft
 Leadwire: PVC/Silicon/Teflon/UL No/Dimension/length
 Connector: JST/MOLEX/TE