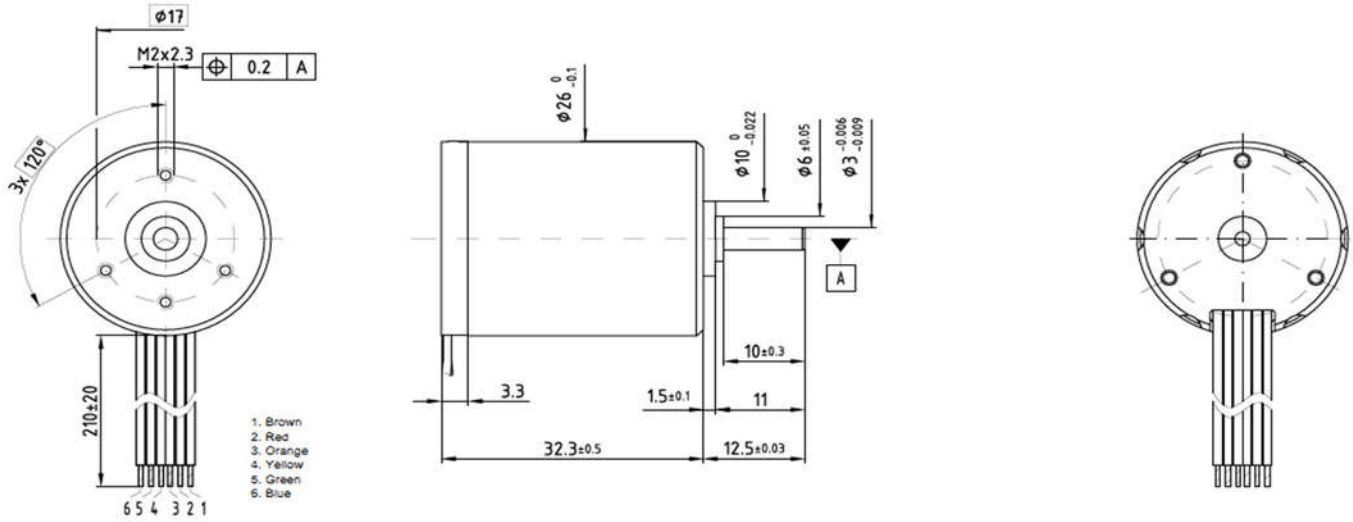
26BC 6A Brushless Slotless Ø26mm 4.5 W



26BC 6A - **

Electrical Data	**	119	113	110	107	
1 Nominal Voltage	U_N	7.5	7.5	15	15	Volt
2 Optimization direction	-	symmetrical	symmetrical	symmetrical	symmetrical	-
3 No-Load Speed	n_0	12,500	7,250	9,300	4,700	rpm
4 Typical no-load current	I_0	250.0	170.0	120.0	50.0	mA
5 Max continuous mechanical power (@ 25°C)	P_{max}	4.2	4.4	4.6	4.2	W
6 Max continuous current	$I_{e\ max}$	1.2	0.6	0.4	0.2	A
7 Max continuous torque	$M_{e\ max}$	4 (0.57)	4.2 (0.6)	4.4 (0.63)	4 (0.57)	mNm (oz-in)
8 Back EMF Constant	K_E	0.56	0.96	1.40	2.66	V/1000 rpm
9 Torque Constant	k_M	5.4	9.2	13.4	25.4	mNm/A
10 Motor regulation	R/k^2	65.2	80.3	98.0	107.0	10^3/Nms
11 Motor regulation	$k/R^{½}$	3.92 (0.56)	3.53 (0.5)	3.19 (0.46)	3.06 (0.44)	mNm/$W^{½}$ (oz-in/$W^{½}$)
12 Internal resistance - phase to phase	R_I	1.90	6.80	17.60	69.00	ohms
13 Line to line resistance at connectors	R_L	1.90	6.80	17.60	69.00	ohms
14 Inductance phase to phase	L	0.23	0.71	1.65	5.80	mH
15 Mechanical Time Constant	t_m	61.0	75.0	92.0	100.0	ms
16 Electrical Time Constant	t_e	0.12	0.10	0.09	0.08	ms

General Data			
17 Maximum motor speed	n_{max}	14,000	rpm
18 Ambient working temperature range	-	0 to + 70 (32 to 158)	°C (°F)
19 Ambient storage temperature range	-	0 to + 70 (32 to 158)	°C (°F)
20 Ball bearings preload	-	5.0	N
21 Axial static force without shaft support (max)	-	120.0	N
22 Maximum winding temperature	-	125 (257)	°C (°F)
23 Thermal Resistance	R_{th}	14.0	°C/W
24 Thermal time constant	t_w	0	s
25 Weight	-	72 (2.54)	g (oz)
26 Rotor Inertia	J	9.400	$g.cm^2$
27 Hall sensor electrical phasing	-	n.a.	Electrical °

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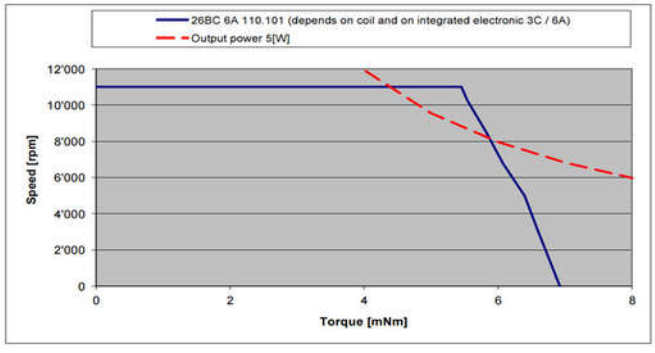
integrated electronics

Wire	Description
Bown	Ground
Red	Power supply voltage (2.5 - 18 V)
Orange	Direction CCW/CW
Yellow	Enable start / stop
Green	Logic supply voltage (5 - 18 V)
Blue	Speed signal



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