

BDCB Series

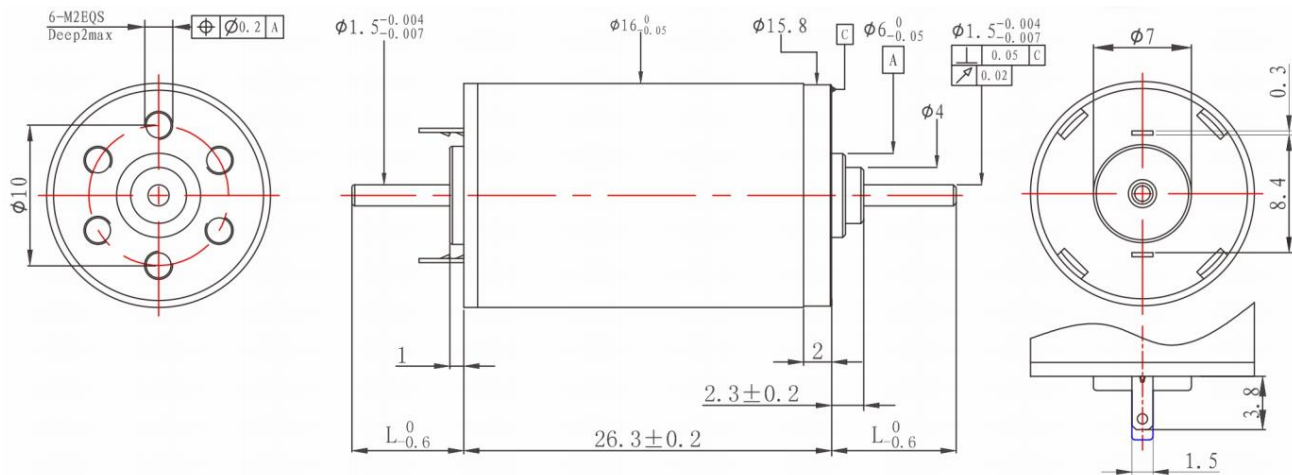
Coreless Graphite Brushed DC Motor



BDCB1626 Motor Data

1.5-4W

Motor Model	Unit	BDCB1626-01	BDCB1626-02	BDCB1626-03	BDCB1626-04
Value at Rated voltage					
At Nominal					
1. Nominal voltage	V/DC	6	9	12	24
2. Nominal speed	rpm	8108	9125	9928	8614
3. Nominal current	A	0.65	0.53	0.44	0.23
4. Nominal torque	mNm	2.71	3.10	3.19	3.64
Free Load					
5. No-load speed	rpm	11500	12500	13600	11800
6. No-load current	mA	80	65	50	32
At Max. Efficiency					
7. Max. efficiency	%	64.0	65.6	66.8	66.2
8. Speed	rpm	9603	10500	11492	9971
9. Current	A	0.40	0.34	0.27	0.17
10. Torque	mNm	1.52	1.84	1.83	2.58
At Max. Output power					
11. Max.output power	W	2.8	3.8	4.2	4.3
12. Speed	rpm	5750	6250	6800	5900
13. Current	A	1.04	0.93	0.78	0.41
14. Torque	mNm	4.59	5.75	5.91	6.20
At Stall					
15. Stall current	A	2.00	1.80	1.50	0.82
16. Stall torque	mNm	9.2	11.5	11.8	13.5
Motor Constants					
17. Terminal resistance	Ω	3.00	5.00	8.00	29.30
18. Terminal inductance	mH	0.10	0.18	0.34	1.10
19. Torque constant	mNm/A	4.78	6.63	8.14	18.75
20. Speed constant	rpm/V	1916.7	1388.9	1133.3	491.7
21. Speed/torque constant	rpm/mNm	1252.3	1087.1	1151.5	708.8
22. Mechanical time constant	ms	12.6	10.7	10.8	7.6
23. Rotor inertia	gcm ²	0.96	0.94	0.90	1.03
24. Number of pole pairs		1			
25. Number of phase		5			
26. Weight of motor	g	24			
27. Typical noise level	dB	≤45			

Motor Drawing (mm)**Φ16*L26mm****Technical Specifications**

1. Axial play: 0–0.1 mm
2. Sintered metal bearing load limits:
 - Max. axial load (dynamic): 0.5 N
 - Max. radial load (5 mm from flange): 15 N
3. Radial play: ≤ 0.015 mm
4. Ambient temperature range: -20 to +80°C
5. Relative humidity: <90% RH (25°C)
6. Maximum rotor temperature: 125°C

Values listed in the table are nominal

Motor terminal definition

1. + Vcc
2. - GND

Optional Parts

1. Planetary gearbox

