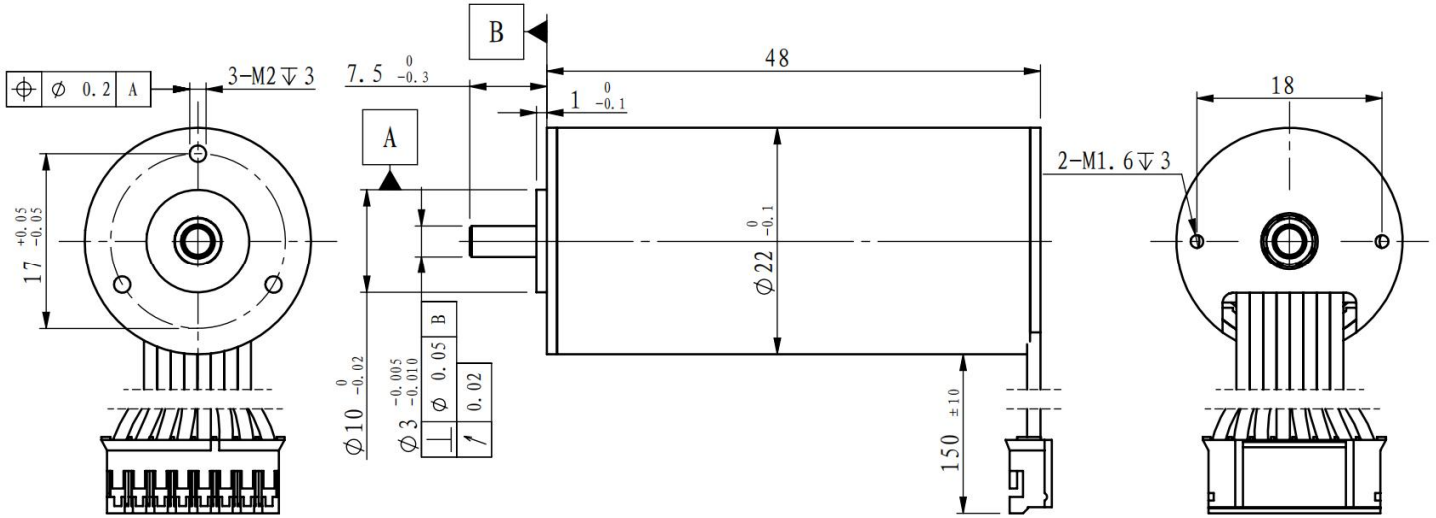




Ø22mm Coreless Brushless motor (Ø22mm L48mm) 25watt

Standard series (high cost performance)



Motor Data

Values at nominal voltage

		22481214	22481814	22482414	22483614	22484814
1 Nominal voltage	V	12	18	24	36	48
2 No-load speed	rpm	14050	14120	14045	14165	14008
3 No-load current	mA	240	150	120	100	80
4 Nominal speed	rpm	12434	12496	12430	12536	12397
5 Nominal torque (Max. continuous torque)	mNm	18.31	18.48	18.69	18.56	18.59
6 Nominal current (Max. continuous current)	A	2.51	1.69	1.28	0.88	0.66
7 Stall torque	mNm	159.23	160.71	162.55	161.43	161.69
8 Stall current	A	20.00	13.50	10.20	6.85	5.10
9 Max. efficiency	%	79	80	79	77	77

Order number

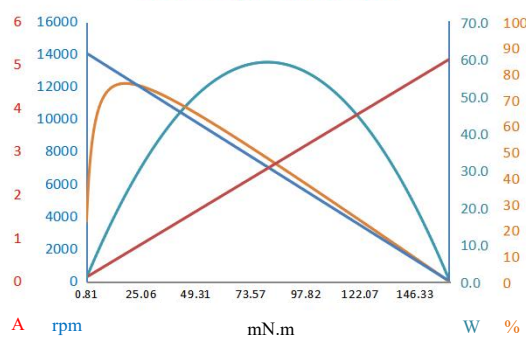
Characteristics

10 Terminal resistance	Ω	0.60	1.33	2.35	5.26	9.41
11 Terminal inductance	mH	0.07	0.17	0.26	0.55	0.90
12 Torque constant	mNm/A	8.06	12.04	16.13	23.92	32.21
13 Speed constant	rpm/V	1171	784	585	393	292
14 Speed / torque gradient	rpm/mNm	88	88	86	88	87
15 Mechanical time constant	ms	2.5	2.6	2.6	2.5	2.5
16 Rotor inertia	gcm ²	2.7	2.7	2.7	2.7	2.7

Mechanical data

17 Ambient temperature	-40...+100°C
18 Max. winding temperature	+155°C
19 Bearing type	ball bearing
20 Max. speed	30000rpm
21 Axial clearance under axial load	< 3.5N 0mm > 3.5N max 0.2mm
22 Radial clearance	ball bearing preloaded
23 Number of pole pairs	1
24 Number of phases	3
25 Weight	88g

22484814 performance curve



Speed/torque slope N:

- Speed increases with torque, linear ratio decreases
- The higher the motor speed, the lower the torque provided

Torque/current slope I:

- The greater the current, the greater the motor output torque

Output power curve:

- The corresponding output power of the motor at any speed and torque

Efficiency η:

- Describe the energy loss in the mechano-mechanical energy conversion process