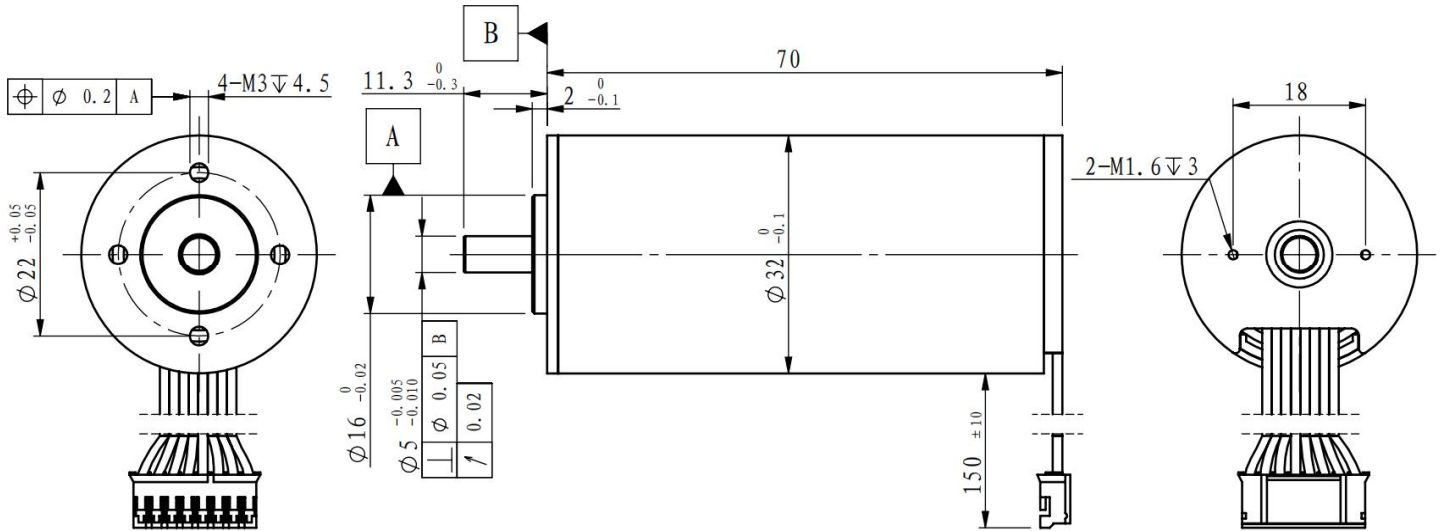


Ø32mm Coreless Brushless motor (Ø32mm L70mm) 70watt

Standard series (high cost performance)



Motor Data

Values at nominal voltage

		32701209	32701809	32702409	32703609	32704809
1 Nominal voltage	V	12	18	24	36	48
2 No-load speed	rpm	9022	9019	9036	9051	9089
3 No-load current	mA	330	230	170	110	90
4 Nominal speed	rpm	8030	8027	8042	8055	8089
5 Nominal torque (Max. continuous torque)	mNm	74.81	74.72	74.66	74.71	74.45
6 Nominal current (Max. continuous current)	A	6.26	4.18	3.13	2.09	1.58
7 Stall torque	mNm	680.06	679.27	678.75	679.14	676.81
8 Stall current	A	54.20	36.10	27.10	18.10	13.60
9 Max. efficiency	%	85	85	85	85	84

Order number

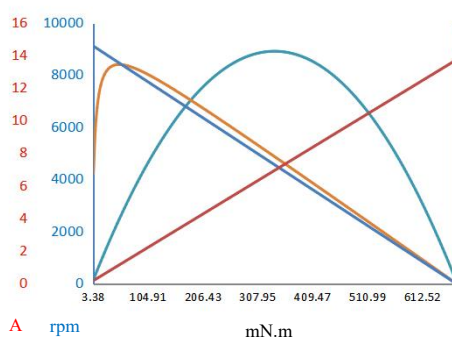
Characteristics

10 Terminal resistance	Ω	0.22	0.50	0.89	1.99	3.53
11 Terminal inductance	mH	0.10	0.25	0.37	0.80	1.40
12 Torque constant	mNm/A	12.62	18.94	25.20	37.75	50.10
13 Speed constant	rpm/V	752	501	377	251	189
14 Speed / torque gradient	rpm/mNm	13	13	13	13	13
15 Mechanical time constant	ms	3.0	3.0	3.0	3.0	3.0
16 Rotor inertia	gem ²	18.8	18.8	18.8	18.8	18.8

Mechanical data

17 Ambient temperature	-40...+100°C
18 Max. winding temperature	+155°C
19 Bearing type	ball bearing
20 Max. speed	25000rpm
21 Axial clearance under axial load	(≤ 8 N 0mm) (> 8 N max 0.2mm)
22 Radial clearance	ball bearing preloaded
23 Number of pole pairs	1
24 Number of phases	3
25 Weight	260g

32704809 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