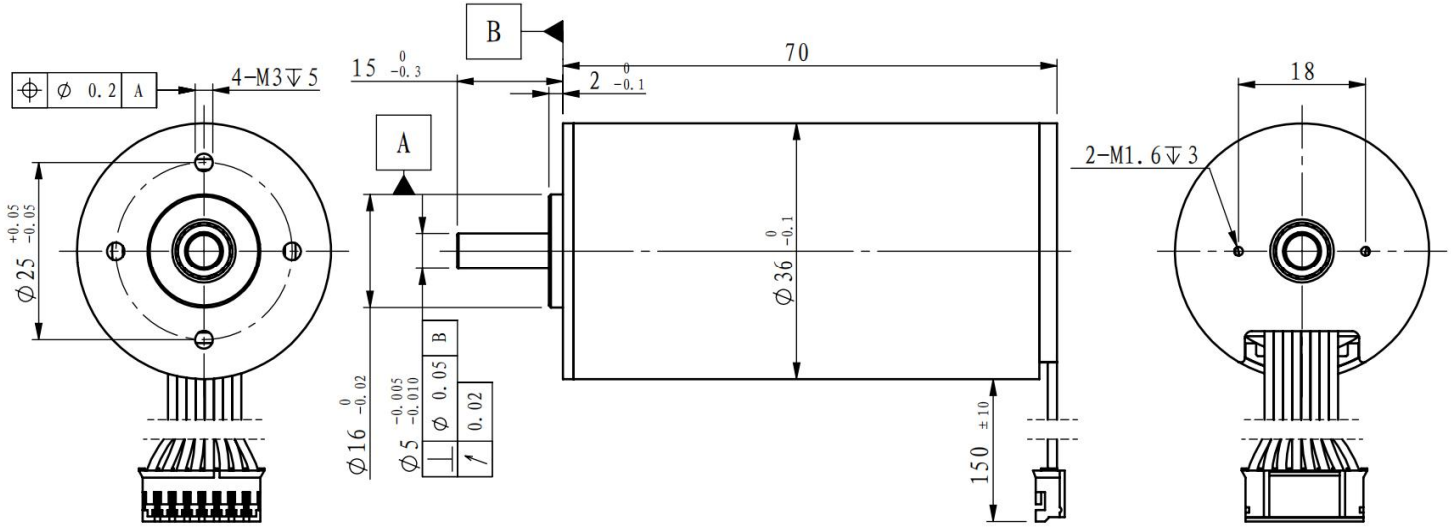


Ø36mm Coreless Brushless motor (Ø36mm L70mm) 90watt

Standard series (high cost performance)



Motor Data

Order number

Values at nominal voltage

36701208 36702408 36702808 36703608 36704808

	V	12	24	28	36	48
1 Nominal voltage	V	12	24	28	36	48
2 No-load speed	rpm	8012	8040	8045	8083	8018
3 No-load current	mA	350	200	170	130	100
4 Nominal speed	rpm	6730	6770	6838	6838	6878
5 Nominal torque (Max. continuous torque)	mNm	121.98	123.7	121.45	123.97	122.27
6 Nominal current (Max. continuous current)	A	8.93	4.56	3.85	3.05	2.26
7 Stall torque	mNm	762.36	798.12	809.66	826.46	843.27
8 Stall current	A	54.00	28.30	24.70	19.60	15.00
9 Max. efficiency	%	85	84	84	84	84

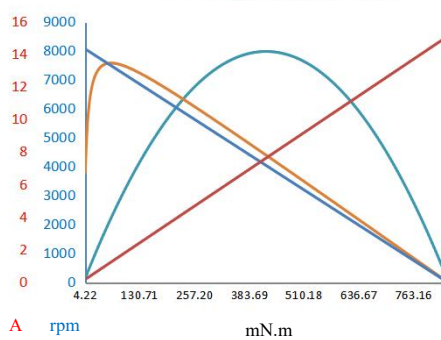
Characteristics

	Ω	0.22	0.85	1.13	1.84	3.20
10 Terminal resistance	Ω	0.22	0.85	1.13	1.84	3.20
11 Terminal inductance	mH	0.08	0.35	0.50	0.79	1.44
12 Torque constant	mNm/A	14.21	28.40	33.01	42.45	56.60
13 Speed constant	rpm/V	668	334	287	223	168
14 Speed / torque gradient	rpm/mNm	11	10	10	10	10
15 Mechanical time constant	ms	2.5	2.5	2.5	2.5	2.5
16 Rotor inertia	gcm ²	21.8	21.8	21.8	21.8	21.8

Mechanical data

17 Ambient temperature	-40...+100°C
18 Max. winding temperature	+155°C
19 Bearing type	ball bearing
20 Max. speed	20000rpm
21 Axial clearance under axial load	< 8N 0mm > 8N max 0.2mm
22 Radial clearance	ball bearing preloaded
23 Number of pole pairs	1
24 Number of phases	3
25 Weight	340g

36704808 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