

# BO1709NB2B $\varnothing 17\text{mm} \times 9.5\text{mm}$ , 外转子无传感器 Outer Rotor, Sensorless

应用领域: 无人机云台、激光雷达、激光扫描、手持云台。

Applications: UAV gimbals, LiDAR, laser scanner, handheld gimbals.

	02-260-5.0	01-260-10.0	03-260-15.0
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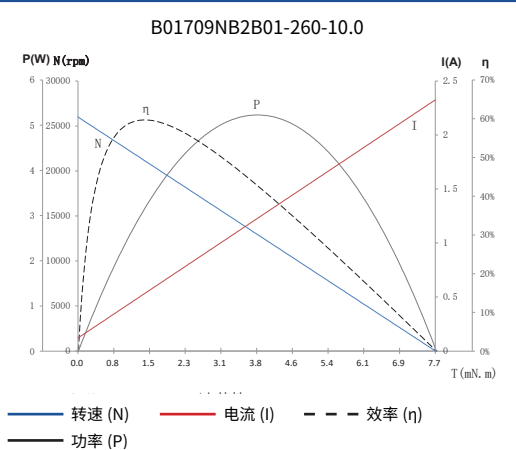
电机参数 / Motor Data			
1 电压	Voltage	V	5.0
2 端电阻	Terminal resistance	$\Omega$	1.1
3 空载转速	No-load speed	rpm	26000
4 空载电流	No-load current	mA	240
5 堵转转矩	Stall torque	mNm	7.5
6 堵转电流	Stall current	mA	4550
7 额定转矩	Nominal torque	mNm	1.9
8 额定转速	Nominal speed	rpm	16250
9 额定电流	Nominal current	mA	1370
10 最大输出功率	Max. output power	W	5.1
11 最大效率	Max. efficiency	%	59
12 反电势常数	Back-EMF constant	mV/rpm	0.182
13 转矩常数	Torque constant	mNm/A	1.7
14 KV 值	KV Value	rpm/V	5200
15 转速 / 转矩斜率	Speed/torque gradient	rpm/mNm	3460
16 转子惯量	Rotor inertia	$\text{gcm}^2$	1.2
17 重量	Weight	g	8.8

热参数 / Thermal Data			
18 热阻 (机壳 - 环境)	Thermal resistance housing-ambient	K/W	15.4
19 热阻 (线圈 - 机壳)	Thermal resistance winding-housing	K/W	13.6
20 热时常数 (电机)	Thermal time constant motor	s	128
21 热时常数 (线圈)	Thermal time constant winding	s	43
22 工作温度范围	Operating temperature range	$^{\circ}\text{C}$	-40~+120
23 绕组耐温等级	Thermal class of winding	$^{\circ}\text{C}$	155

机械参数 / Mechanical Data			
24 轴向间隙	Axial play	mm	0.012
25 径向间隙	Radial play	mm	0.008
26 动态轴向载荷	Axial load dynamic	N	1.5
27 静态轴向载荷	Axial load static	N	37
28 径向载荷 (距安装面 3mm)	Radial load at 3 mm from mounting face	N	12

其它参数 / Other Specifications			
29 极对数	No. of pole pairs		4
30 滚珠轴承	Ball bearings		2
31 换向结构	Commutation structure	sensorless	
32 防护等级	Protection class	IP20	

### 特性曲线 / Characteristics Curve



仅供参考, 详细了解请以产品规格书为准。  
For reference only, please refer to the product specification.

### 可选配置 / Options 端子定义 / Connection

齿轮箱: 行星齿轮  
Gearbox: planetary gearbox

性能 Special coils: 连续运行范围内可定制 customizable in continuous operation range

编码器 Encoder/ 驱动器 Driver: 可定制 customizable upon request

法兰 Flange: 标准前后法兰 standard front and rear flanges / 定制法兰 custom flanges

轴 Shaft: 长度 length / 异形 shape

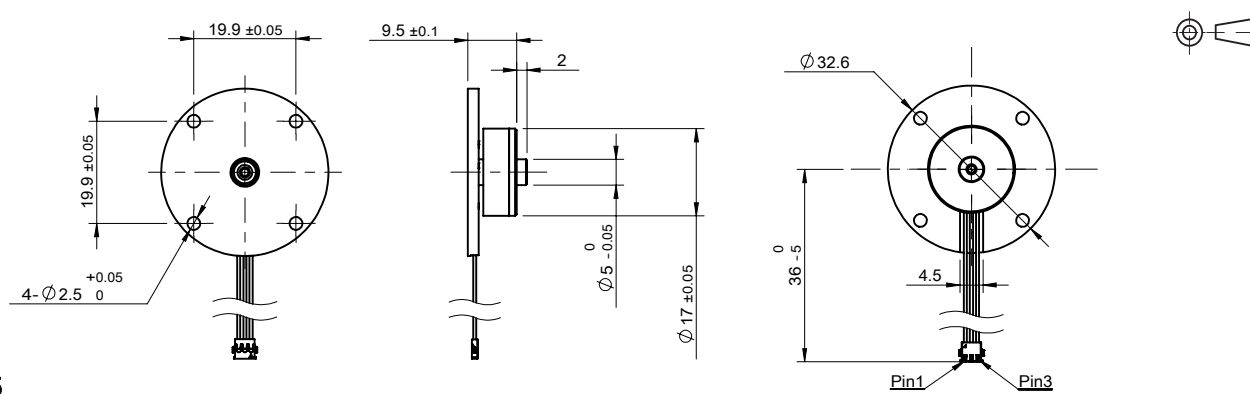
轴承类型 Bearing type: 含油轴承 sleeve bearings / 滚珠轴承 ball bearings

电气连接 Electrical connection: 端子或导线 connector or wire / 导线长度 lead wires length

无传感器 / sensorless  
AWG 30

Pin1	U	white
Pin2	V	red
Pin3	W	black

### 外观图 / Outline Drawing



M 1:1.5

规格如有变更, 恕不另行通知。Specification subject to change without notice.

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