

BO1812N2B $\varnothing 17.6\text{mm} \times 12.6\text{mm}$, 外转子无传感器 Outer Rotor, Sensorless

应用领域: 无人机、航模等驱动领域。
Applications: UAV, aeromodelling, etc.

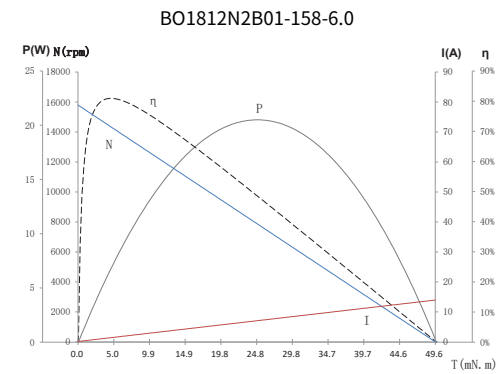
				01-158-6.0	02-158-9.0	03-158-12.0
电机参数 / Motor Data						
1	电压	Voltage	V	6.0	9.0	12.0
2	端电阻	Terminal resistance	Ω	0.43	0.96	1.7
3	空载转速	No-load speed	rpm	15800	15800	15800
4	空载电流	No-load current	A	0.14	0.1	0.08
5	堵转转矩	Stall torque	mNm	49.6	49.9	50.1
6	堵转电流	Stall current	A	14	9.4	7.1
7	额定转矩	Nominal torque	mNm	9.4	10	10
8	额定转速	Nominal speed	rpm	9690	9580	10200
9	额定电流	Nominal current	A	2.1	2.1	1.5
10	最大输出功率	Max. output power	W	20.6	20.7	20.7
11	最大效率	Max. efficiency	%	81.2	80	80.2
12	反电势常数	Back-EMF constant	mV/rpm	0.38	0.56	0.75
13	转矩常数	Torque constant	mNm/A	3.6	5.4	7.2
14	电感	Terminal inductance	mH	2630	1750	1320
15	转速 / 转矩斜率	Speed/torque gradient	rpm/mNm	318.4	316.8	315.5
16	转子惯量	Rotor inertia	gcm^2	2.1	2.1	2.1
17	重量	Weight	g	11	11	11

热参数 / Thermal Data			
18	热阻 (机壳 - 环境)	Thermal resistance housing-ambient	K/W 10.6
19	热阻 (线圈 - 机壳)	Thermal resistance winding-housing	K/W 14.6
20	热时常数 (电机)	Thermal time constant motor	s 142
21	热时常数 (线圈)	Thermal time constant winding	s 99
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	$^{\circ}\text{C}$ 180

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	6
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



— 转速 (N) — 电流 (I) - - - 效率 (η)
—— 功率 (P)

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 齿轮组主要技术指标详见第 156 页
Gearbox: planetary gearbox the main technical parameters are detailed on page 156

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

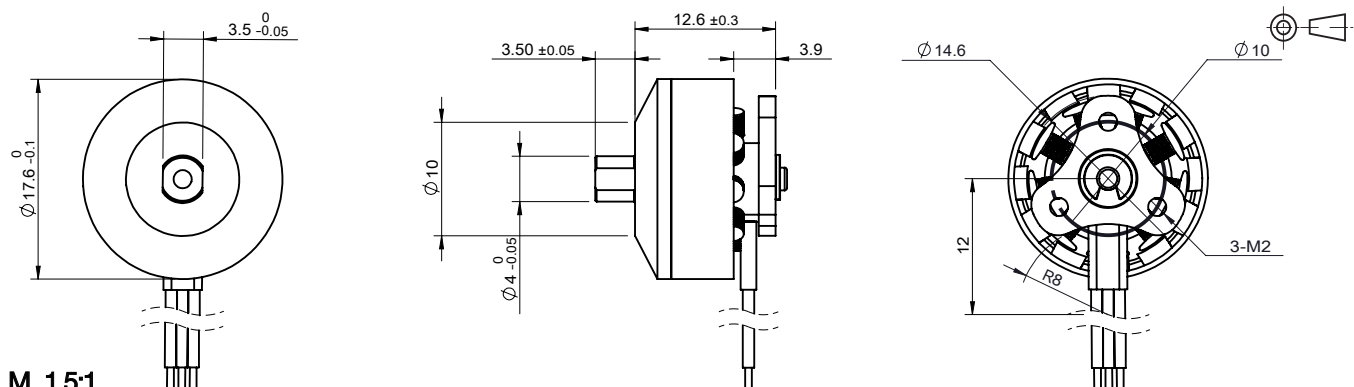
轴承类型 Bearing type: 含油轴承 sleeve bearings / 滚珠轴承 ball bearings

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 red
Pin2 V white
Pin3 W black

外观图 / Outline Drawing



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

www.constarmotor.com