



产品规格书

PRODUCT SPECIFICATION

客户名称Buyer Name	
客户料号Buyer Part No.	
客户承认签章 Buyers Approval & Signatures	

文件编号Spec No.		版本	A/2
品名描述 Product Description	扁平振动马达 Coin type vibration motor		
型号Part No.	VC1026B002F		
送样日期Date			
设计Designed by	审核Checked by	批准Approved by	
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规格书内容

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1. 适用范围/General

本说明书适用于扁平式永磁直流电机 VC1026B 系列.

This specification applies to coin permanent-magnetic motors DC model VC1026B series

2. 使用条件/Operating condition

项目/Item		规格/Specification
2-1	额定电压 Rated voltage	3.0V DC
2-2	使用电压范围 Operating voltage	2.7~3.3V DC
2-3	旋转方向 Rotation	CW(clockwise) or CCW(contrary clockwise)
2-4	使用环境 Operating environment	-20~+60℃, Ordinary Humidity
2-5	保存环境 Storage environment	-30~+70℃, Ordinary Humidity

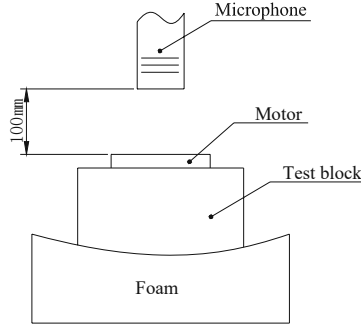
3. 测定条件/Measuring condition

项目/Item		规格/Specification
3-1	温度 Temperature	25±3℃
3-2	湿度 Humidity	65±20% RH
3-3	气压 Air pressure	1013±40 hPa
3-4	电流 Current	稳压直流电流 Stabilized DC current

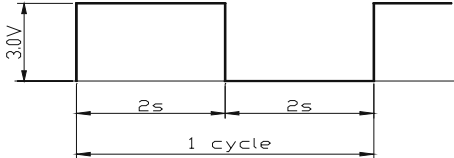
4. 初期电气性能/Electrical initial characteristics

项目/Item		规格/Specification	条件/Condition
4-1	额定转速 Rated speed	9000rpm min	额定电压下 At rated voltage
4-2	额定电流 Rated current	85mA Max	
4-3	起动电流 Starting current	120mA Max	在最小起动电压下起动 Motor is rotating at min starting voltage.
4-4	起动电压 Starting voltage	2.3V DC Max	
4-5	绝缘电阻 Insulation resistance	10MΩ Min	在 100V 直流下，导线和机壳间 At DC 100V between lead wire and case.
4-6	端子阻抗 Terminal resistance	30Ω ±20% (单相) 60Ω ±20% (双相)	在 25℃ 下 At 25℃

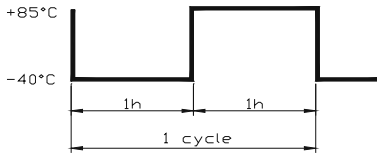
5. 机械性能/Mechanical characteristics

项目/Item		规格/Specification
5-1	底盖偏转强度 Bracket deflection strength	9.8N 以上 9.8N or more
5-2	机械噪音 Mechanical noise	小于 50 分贝. A 计权 50dB (A) Max
	在额定电压下。 At rated voltage 背景噪音：不大于 28dB. A 计权 Back ground noise 28dB (A) Max 	
5-3	振动量 (测试夹具100g) Vibration Strength (Testing Jig 100g)	G 0.8 MIN

6. 耐久性能/Durability characteristics

项目/Item	规格/Specification	判定标准/Judgment
6-1 寿命 Life	 试验循环 /Test cycle: 50,000 cycles	试验后，马达应符合项 7-1 的要求。 After the test, motors shall be approved as specified in item 7-1.

项目/Item		规格/Specification	判定标准/Judgment
6-2	低温放置 Low temp exposure	温度 /Temperature : -30℃ 时间 /Time : 96h	在常温常湿下放置 4h 后, 马达应符合项 7-2 的要求。 After 4 hours exposure in ordinary temperature and humidity, Motors shall be approved as specified in item 7-2.
6-3	高温放置 High temp. Exposure	温度 /Temperature : +70℃ 时间 /Time : 96h	
6-4	湿度放置 Humidity exposure	温度 /Temperature : +40℃ 湿度 /Humidity : 95%RH 放置时间 / Exposure time : 96h 无水气凝结/No condensation of moisture	
6-5	振动 Vibration	全振幅 /Displacement :1.5mm (p-p) 频率 /Frequency :10 ~ 55Hz 加速度 /Acceleration :22m/s ² 周期 /Period :10min 范围内 (10~55~10Hz) /10 Minutes log sweep (10~55~10Hz) 条件 /Condition : 在样机中, 在 3 个垂直的轴方向每个方向做 10 分钟的测试。 /This motion shall be applied for a period of 10 minutes in each of 3 mutuallyperpend axis.	测试结果应符合项 7-2 的要求。 After the test motors shall be approved as specified in item 7-2.
6-6	自然跌落 Free fall	试验状态/Test state:将马达固定在约 100 克(包括马达本身)的物体上, 落向水泥地面。 Set the motor to the approximately 100g (include the motor) weight of block drop the motor on the concrete floor. 高度 /Height :1.5m 方向 /Direction :±x. ±y. ±z 次数 /Number of times:每个 方向 3 次 /Each 3 times 冲击 /Shock :29420m/s ² 相当 /Equivalent (3000G)	测试结果应符合项 7-2 的要求。 After the test motors shall be approved as specified in item 7-2.

6-7	热冲击 Heat stock test	 试验循环 /Test cycle :15 cycles	测试结果应符合项 7-2 的要求。 After the test motors shall be approved as specified in item 7-2.
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7. 要求/Requirements

项目/Item		判定基准 / Requirements	
7-1	表 A Table A	1) 额定转速/Rated speed 2) 额定电流/Rated current 3) 端阻/Terminal resistance : 4) 起动电压/Starting voltage 5) 绝缘电阻/Insulation resistance	: 不低于初始值-30%; 不高于初始值+50% data-30% Initial Min data+50% Initial Max : 不低于初始值-30%; 不高于初始值+50% data-30% Initial Min data+50% Initial Max 不大于初始值±15% /Initial data±15% Max : 不大于 2.5V 直流电压 2.5V DC Max : 大于 10M Ω 10M Ω Min
7-2	表 B Table B	1) 额定转速/Rated speed 2) 额定电流/Rated current 3) 起动电压/Starting voltage 4) 端阻/Terminal resistance :	: 不大于初始值±20% /Initial data±20% Max : 不大于初始值±20% /Initial data±20% Max : 不大于 2.5V 直流电压 2.5V DC Max 不大于初始值±15% /Initial data±15% Max

8. 使用时注意事项/Matters to be paid attention to when using motor

8-1 必须按照规格书标准使用,否则性能和寿命都将受到相当地减少, 必须注意电压的使用范围。

Unless it is used in accordance with the specifications ,the performance and life may be considerably reduced . Due attention should be paid to voltage and range for use .

8-2 建议马达在六个月内使用,不要在以下环境中使用及保存:

1. 高温和高湿的场所;
2. 腐蚀性气体,如: H_2S 、 SO_2 、 NO_2 、 Cl_2 ;
3. 生锈场所。

Advice use this motor within 6 months as avoiding as possible.

Avoid use or save the motor in the following environment.

1. High temperature and high humidity area
2. Corrosive gas such as H_2S 、 SO_2 、 NO_2 、 Cl_2 .
3. Dusty area .

8-3 注意处理马达的工作环境,避免含铁质等物体被马达吸住, 否则马达将会产生噪声, 性能会降低, 从而减少产品可靠性。

Due attention must be paid to the handling and working environments because such objects as iron powder if attracted by the motor magnet,will cause noise,characteristic deterioration thus reducing the reliability.

8-4 应确信本产品不会与相关标准、法律、政令相背。

Please confirm enough no problem of standards and laws and ordinances on your cellular.

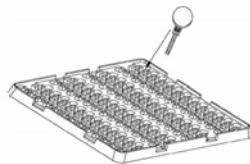
8-5 拿马达时, 要轻拿轻放。

To handle the motor ,hold the motor case softly.

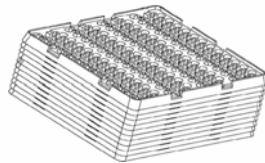
8-6 钢板面或边缘有少许锈斑是允许的。

Rust of plate(steel) and similar edge should be OK.

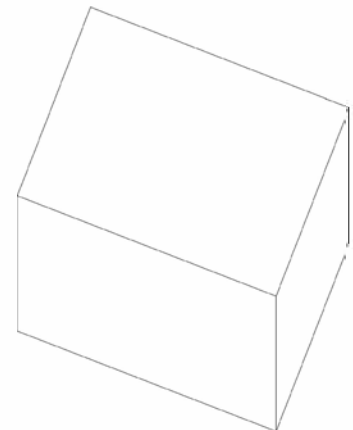
扁平系列马达包装 Pack drawing of coin type



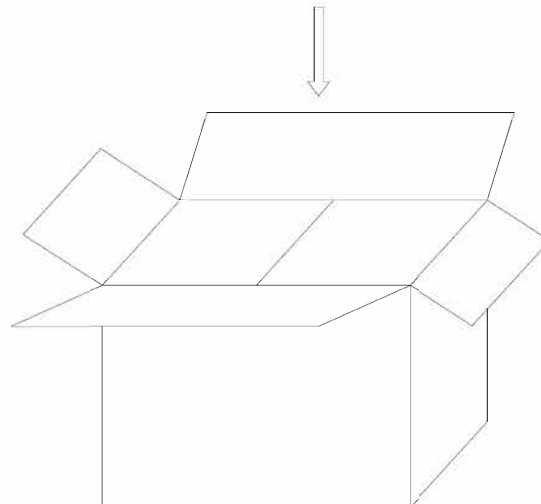
100PCS (1 tray) × 10



1000PCS (1 bundle)



1 box × 2

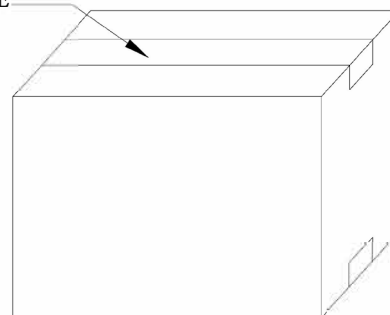


Remarks:

4000PCS/CTN: 45cm × 28cm × 20cm

6000PCS/CTN: 45cm × 28cm × 30cm

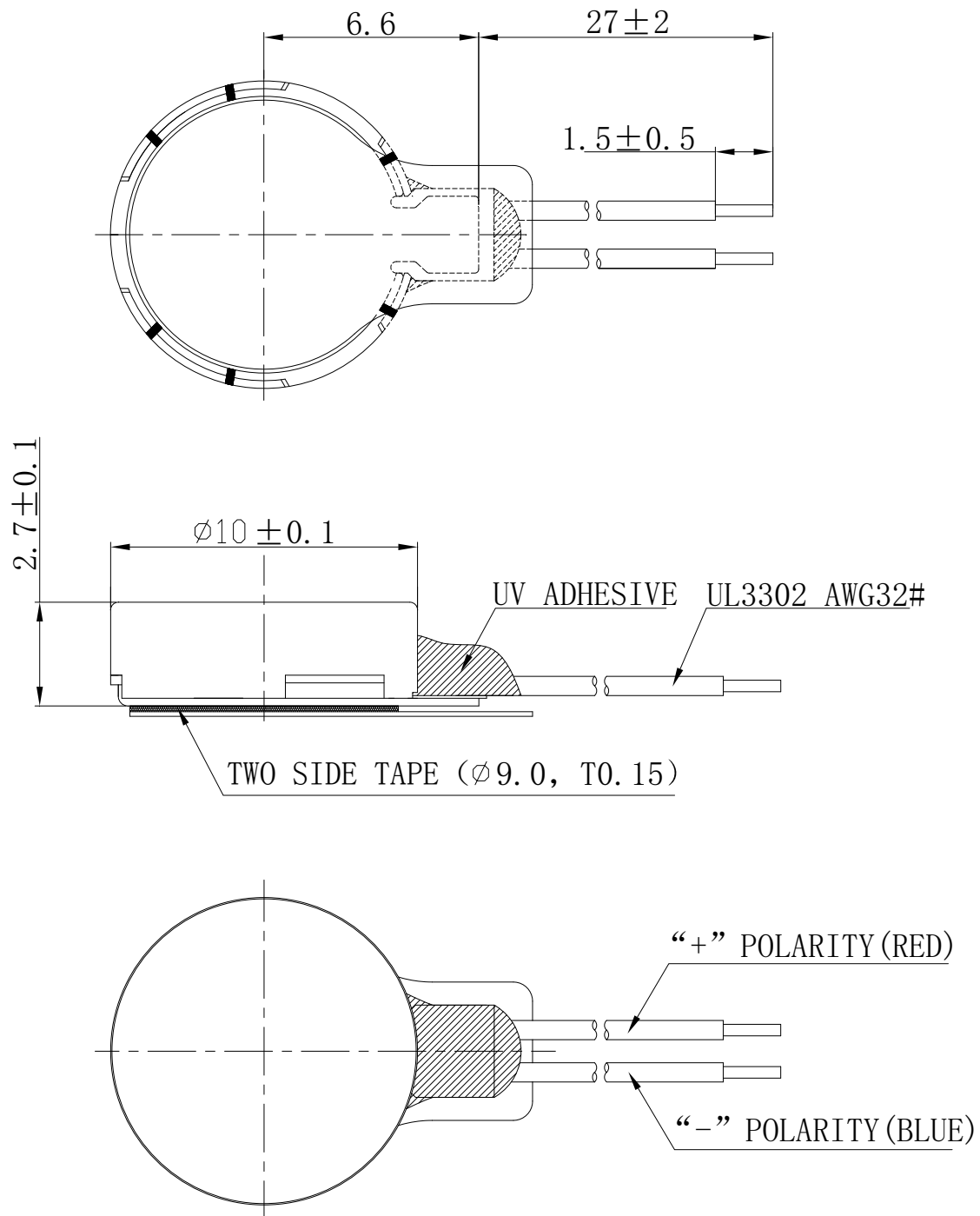
OPP TAPE



包装试验要求:

沿外包装箱±x, ±y和±z方向, 距水泥地面1.5m高度, 各自由跌落2次, 马达应无机械损伤, 电气性能仍符合标准要求。

10. 外形图/Outside view



11. 更改记录/Revised record

修改号 Rev. No.	日期 Rev. Date	页码 Page No.	修改项目 Revised Item	更改原因 Reason
A/0	2007.04.29	/	产品颁布/ Release for Production	
A/1	2012.03.02	/	Added Vibration Strength value and updated specification and drawing	Motor upgrade
A/2	2020.07.01	/	changed company name from JINLONG MACHINERY to VYBRONICS, changed part # from C1026B002F to VC1026B002F	Rebranding