



# 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<br>Buyers Approval & Signatures |  |

|                             |                                     |               |     |
|-----------------------------|-------------------------------------|---------------|-----|
| 文件编号Spec No.                |                                     | 版本            | A/2 |
| 品名描述<br>Product Description | 扁平振动马达<br>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 |     |
| 陳满                          | 陈满                                  |               |     |
| 2020.07.01                  | 2020.07.01                          | 2020.07.01    |     |

[www.vybronic.com](http://www.vybronic.com)

[sales@vybronic.com](mailto:sales@vybronic.com)

规格书内容

Contents of specifications

|                                              |     |
|----------------------------------------------|-----|
| 1. 适用范围/Application                          | 1/8 |
| 2. 使用条件/Operating Condition                  | 1/8 |
| 3. 测试条件/Test Condition                       | 1/8 |
| 4. 初期电气性能/Electrical initial characteristics | 1/8 |
| 5. 机械性能/Mechanical characteristics           | 2/8 |
| 6. 耐久性能/Durability characteristics           | 2/8 |
| 7. 要求/Requires                               | 3/8 |
| 8. 使用注意事项/Caution for use                    | 5/8 |
| 9. 包装/Packing                                | 6/8 |
| 10. 外形图/Outside View                         | 7/8 |
| 11. 更改记录/Revised record                      | 8/8 |

**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<br>Rated voltage         | 3.0V DC                                  |
| 2-2     | 使用电压范围<br>Operating voltage   | 2.7~3.3V DC                              |
| 2-3     | 旋转方向<br>Rotation              | CW(clockwise) or CCW(contrary clockwise) |
| 2-4     | 使用环境<br>Operating environment | -20~+60℃, Ordinary Humidity              |
| 2-5     | 保存环境<br>Storage environment   | -30~+70℃, Ordinary Humidity              |

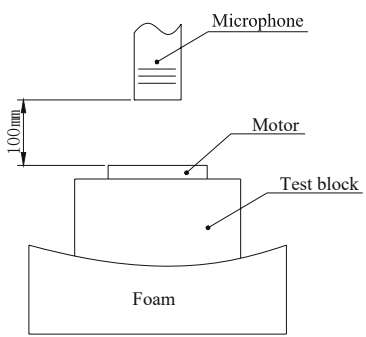
**3. 测定条件/Measuring condition**

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

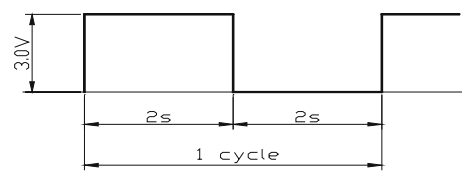
**4. 初期电气性能/Electrical initial characteristics**

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

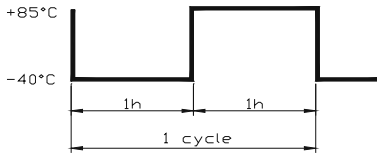
**5. 机械性能/Mechanical characteristics**

| 项目/Item |                                                                                                                                                                                    | 规格/Specification            |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| 5-1     | 底盖偏转强度<br>Bracket deflection strength                                                                                                                                              | 9.8N 以上<br>9.8N or more     |
| 5-2     | 机械噪音<br>Mechanical noise                                                                                                                                                           | 小于 50 分贝. A 计权 50dB (A) Max |
|         | <p>在额定电压下。<br/>At rated voltage<br/>背景噪音：不大于 28dB. A 计权<br/>Back ground noise 28dB (A) Max</p>  |                             |
| 5-3     | 振动量 (测试夹具100g)<br>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<br>Life |  <p>试验循环 /Test cycle: 50,000 cycles</p> | <p>试验后，马达应符合项 7-1 的要求。<br/>After the test, motors shall be approved as specified in item 7-1.</p> |

| 项目/Item |                             | 规格/Specification                                                                                                                                                                                                                                                                                                                            | 判定标准/Judgment                                                                                                                                     |
|---------|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| 6-2     | 低温放置<br>Low temp exposure   | 温度 /Temperature : -30℃<br>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。<br>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<br>High temp. Exposure | 温度 /Temperature : +70℃<br>时间 /Time : 96h                                                                                                                                                                                                                                                                                                    |                                                                                                                                                   |
| 6-4     | 湿度放置<br>Humidity exposure   | 温度 /Temperature : +40℃<br>湿度 /Humidity : 95%RH<br>放置时间 / Exposure time : 96h<br>无水气凝结/No condensation of moisture                                                                                                                                                                                                                           |                                                                                                                                                   |
| 6-5     | 振动<br>Vibration             | 全振幅 /Displacement :1.5mm (p-p)<br>频率 /Frequency :10 ~ 55Hz<br>加速度 /Acceleration :22m/s <sup>2</sup><br>周期 /Period :10min 范围内<br>(10~55~10Hz)<br>/10 Minutes log sweep<br>(10~55~10Hz)<br>条件 /Condition :<br>在样机中, 在 3 个垂直的轴方向每个方向做 10 分钟的测试。<br>/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。<br>After the test motors shall be approved as specified in item 7-2.                                                            |
| 6-6     | 自然跌落<br>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。<br>Set the motor to the approximately 100g (include the motor) weight of block drop the motor on the concrete floor.<br>高度 /Height :1.5m<br>方向 /Direction :±x. ±y. ±z<br>次数 /Number of times:每个<br>方向 3 次<br>/Each 3 times<br>冲击 /Shock :29420m/s <sup>2</sup> 相当<br>/Equivalent (3000G) | 测试结果应符合项 7-2 的要求。<br>After the test motors shall be approved as specified in item 7-2.                                                            |

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

**7. 要求/Requirements**

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

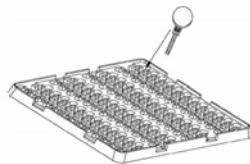
8-5 拿马达时, 要轻拿轻放。

To handle the motor ,hold the motor case softly.

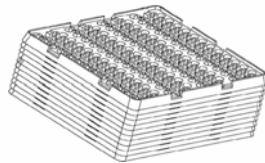
8-6 钢板面或边缘有少许锈斑是允许的。

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

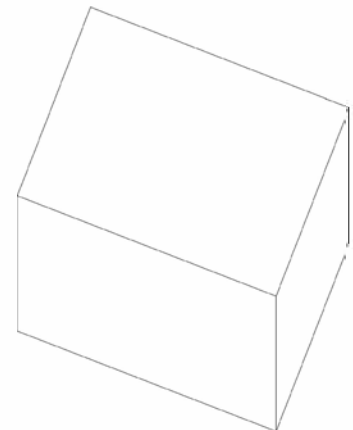
## 扁平系列马达包装 Pack drawing of coin type



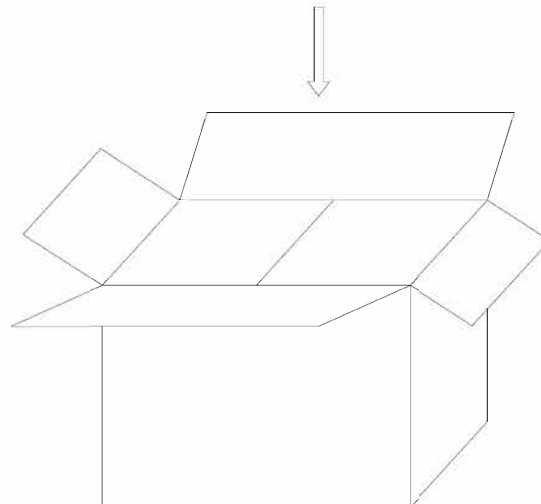
100PCS (1 tray) × 10



1000PCS (1 bundle)



1 box × 2

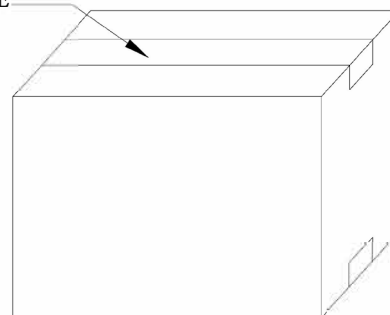


### Remarks:

4000PCS/CTN: 45cm × 28cm × 20cm

6000PCS/CTN: 45cm × 28cm × 30cm

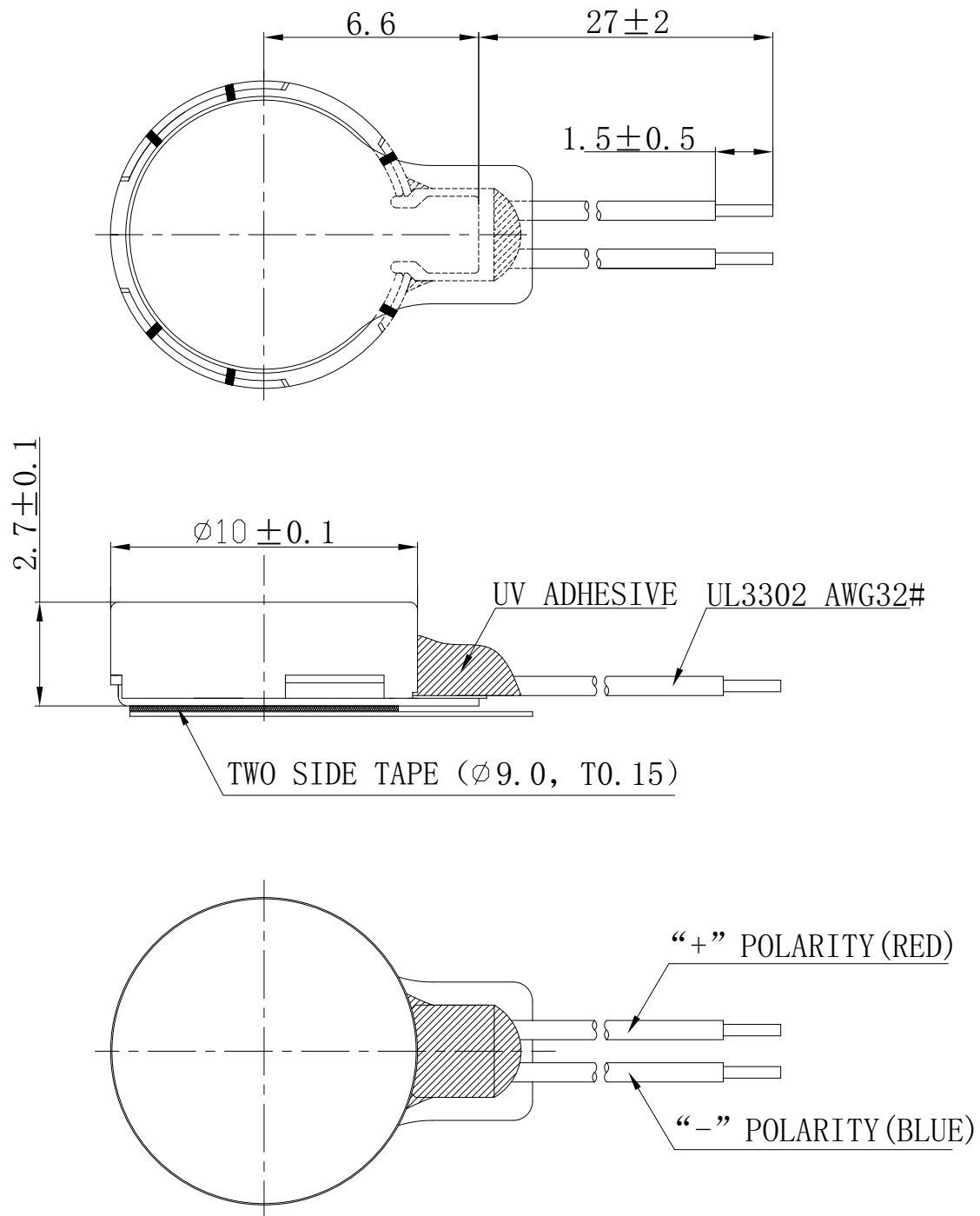
OPP TAPE



### 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<br>Rev. No. | 日期<br>Rev. Date | 页码<br>Page No. | 修改项目<br>Revised Item                                                                                    | 更改原因<br>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     |
|                 |                 |                |                                                                                                         |                |
|                 |                 |                |                                                                                                         |                |
|                 |                 |                |                                                                                                         |                |
|                 |                 |                |                                                                                                         |                |
|                 |                 |                |                                                                                                         |                |
|                 |                 |                |                                                                                                         |                |
|                 |                 |                |                                                                                                         |                |
|                 |                 |                |                                                                                                         |                |
|                 |                 |                |                                                                                                         |                |

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Parallax:](#)

[28821](#)