

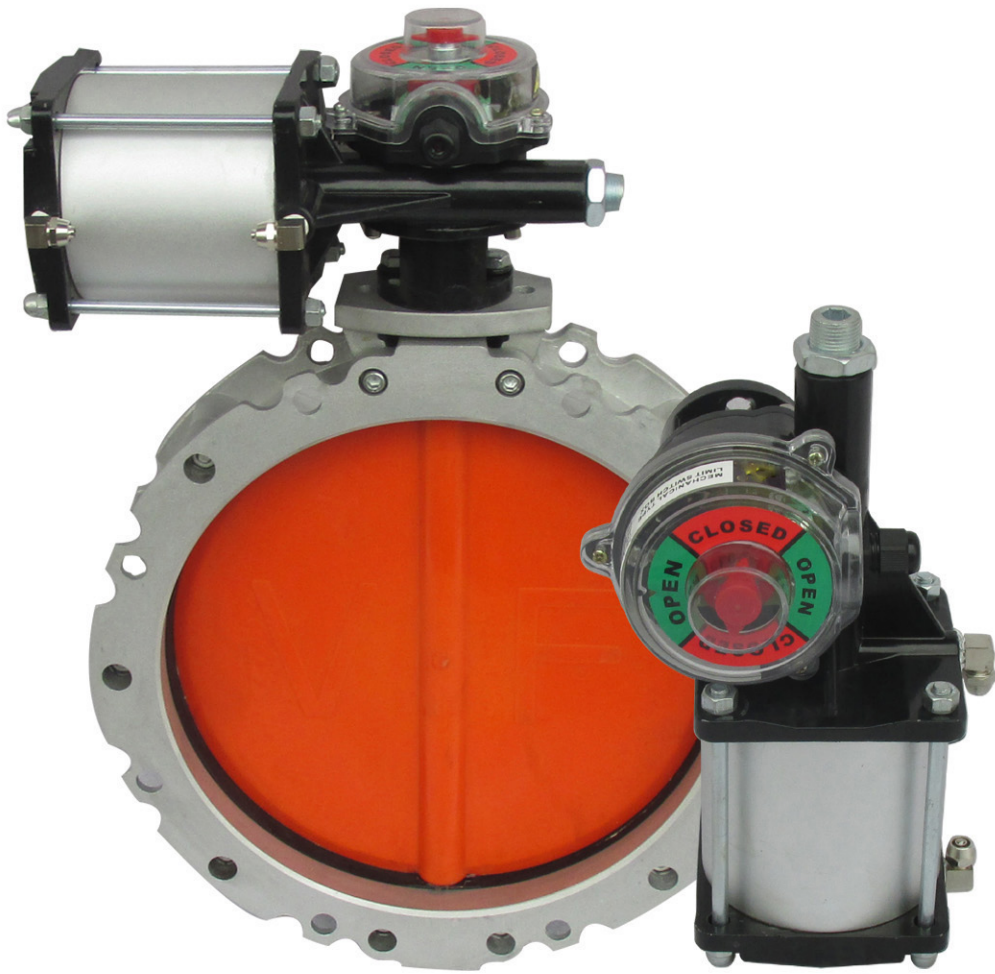
# 气动粉尘颗粒专用蝶阀

Pneumatic butterfly valve for cement

《选型使用手册》

Selection of manual

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## 产品简述 Product Brief

气动粉尘蝶阀是由本公司设计的一种特殊侧推式气缸和铝合金蝶阀组成，本产品已获得国家多项专利。蝶阀本体由高压铝合金阀体、可变形耐磨胶圈、高分子复合蝶阀组成。是关闭料箱、料斗以及装有粉状或颗粒状物料等筒仓的理想产品，被广泛应用于混凝土搅拌站水泥粉传输、钢厂重力除尘等领域。由于此阀门的特殊结构以及工程材料的运用，它始终是一个非常经济且极高效的选择。

Pneumatic dust butterfly valve is a special design of side by the company to push the cylinder and aluminum alloy butterfly valve, the product has obtained national patents. Butterfly valve body by a high pressure aluminum alloy body, deformation wear aprons, polymer composite butterfly valve. It is an ideal product for closing hopper, hopper and a powdery or granular material silo, is widely used in cement, concrete mixing station transmission steel gravity dust etc.. Because of the special structure of the valve and the use of engineering materials, it is always a very economical and efficient selection.

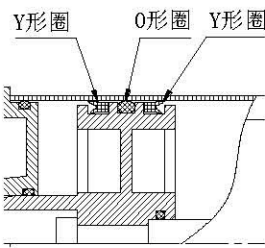
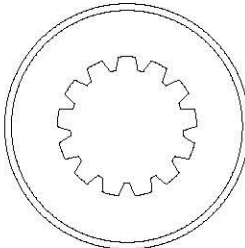
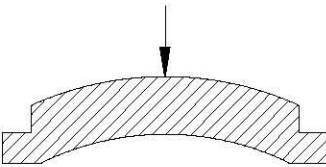
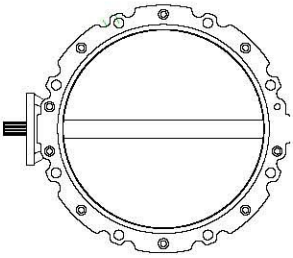
## 主要特点 Main features

- 气动粉尘蝶阀整体设计精巧，80%以上的零部件均采用铝合金材料，重量轻。  
Pneumatic butterfly valve butterfly design overall dust delicate, more than 80% parts evenly using aluminum alloy materials, light weight.
- 采用本公司设计的粉尘蝶阀专用气缸，对料仓、料斗的物料迅速切断或开启。  
The dust butterfly valve for cylinder design company, to the bunker, hopper materials quickly cut or open.
- 气缸采用 Y 型圈+O 型圈组合性密封结构，大大增加了气缸的使用寿命。  
The cylinder is made of Y type +O type ring combined seal structure, greatly increasing the service life of the cylinder.
- 阀体由两个高压印模压铸的半阀体组成，半阀体为铝合金材料。  
The body consists of two high pressure die-cast half body composition, half body for aluminum alloy material.
- 阀圈设计为 U 形状，增强了其变形密封能力，具有磨损自动补给功能，耐磨、高效、可达零泄漏。  
Valve coil design for U shape, enhance the deformation of the sealing ability, with automatic recharge function wear, wear-resistant, high efficiency, and zero leakage.
- 铝合金旋转蝶板与阀轴采用一体式压铸成型，安装更加方便。  
The aluminium alloy rotating the butterfly plate and the valve shaft adopts the integral casting molding, convenient installation.
- 具有一个顶部法兰以及一个可拆卸管接，适用于连接一根柔性套管，方便连接出料。  
Having a top flange and a removable pipe connection, suitable for the connection of a flexible pipe, convenient connection and discharging.
- 常安装于料斗，料箱，筒仓，螺旋泵或其他类型的输送机的下方，以及连接气动输送管道。  
Usually installed in the hopper, hopper, silos, below the conveyor screw pump or other types of connections, and pneumatic conveying pipeline.
- 根据现场使用工况，驱动机构可选用气动、电动、液动、蜗轮传动等多种控制方式  
According to the field work, driving mechanism choice of pneumatic, electric, hydraulic, gear and other control mode

## 技术参数 Technical parameter

|                                     |   |                             |                     |                            |                             |
|-------------------------------------|---|-----------------------------|---------------------|----------------------------|-----------------------------|
| 型号 Model                            | BVF100 BVF150 BVF200 BVF250 BVF300 BVF350 BVF400            |                             |                     |                            |                             |
| 工作压力 working pressure               | 0.4-0.7MPa MAX1.0MPa  |                             |                     |                            |                             |
| 驱动方式 Drive mode                     | 气动、电动、手动、蜗轮传动等 Pneumatic, electric, manual, worm gear drive |                             |                     |                            |                             |
| 适用温度 Temperature                    | -20℃ ~ +80℃   |                             |                     |                            |                             |
| 适用介质 Medium                         | 水泥、物料等粉体介质 Cement, material powder medium                   |                             |                     |                            |                             |
| 阀体 Body                             | 压铸铝合金 die-casting aluminium                                 |                             |                     |                            |                             |
| 蝶板 Butterfly                        | 耐磨复合材料 Resistant composite material                         |                             |                     |                            |                             |
| 阀杆 Stem                             | 2Cr13、45#、不锈钢 stainless steel ;                             |                             |                     |                            |                             |
| 阀座 Seat                             | 耐磨橡胶 abrasive rubber  |                             |                     |                            |                             |
| 执行标准<br>Implementation<br>standards | 设计规范<br>Design<br>specification                             | 结构长度<br>structure<br>length | 法兰尺寸<br>Flange size | 检验试验<br>Inspection<br>test | 气动装置<br>Pneumatic<br>device |
|                                     | ITALY   | ITALY                       | ITALY               | GB/T13927                  | JB/T 8864                   |

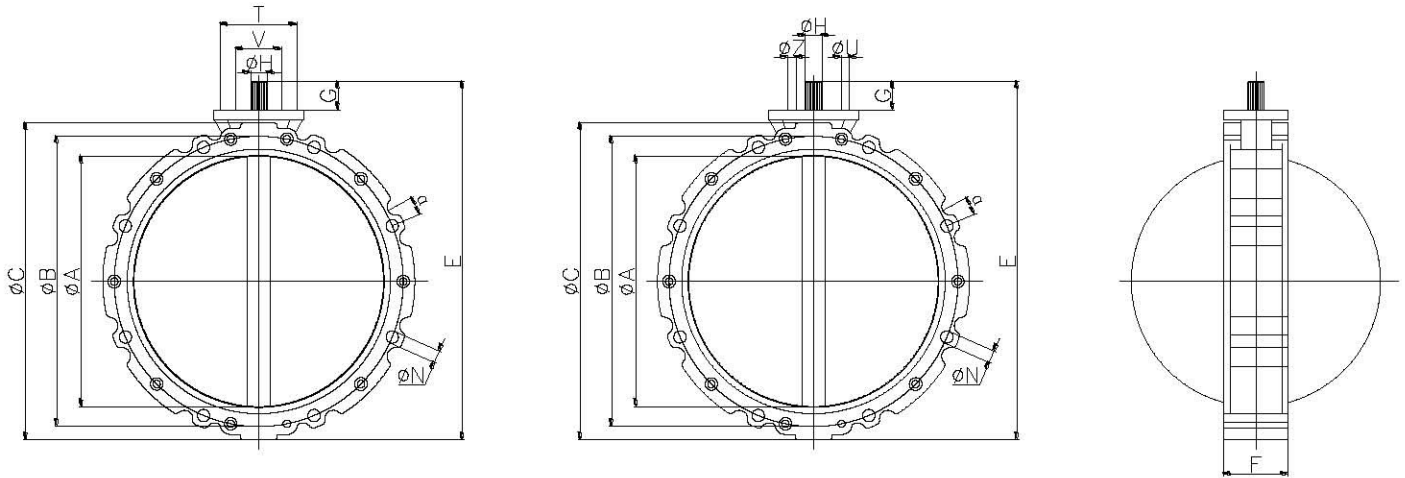
## 独特结构 Unique structure

|   |   |  |  |
|---|---|--|--|
|  <p>Y形圈 O形圈 Y形圈</p> | <p>气缸采用 Y 型圈和 O 型圈组合使用，使气缸密封更加可靠耐用。</p> <p>The cylinder is made of Y rings and O rings used in combination, greatly improving the service life of the cylinder.</p> |   | <p>连接处采用花键连接，坚固耐用，方便调节。</p> <p>The connection with the spline connection, sturdy and durable, convenient adjustment.</p>             |
|                    | <p>阀座采用弓形设计，确保密封的可靠性，耐磨性，并具有自动补偿性。</p> <p>Seat with arch design, to ensure the reliability of sealing, wear resistance, and with automatic compensation.</p>        |  | <p>铝合金阀体采用一体式压铸成型，使产品整体更加轻便。</p> <p>Aluminum alloy body with one type of die casting, so that the overall more portable products</p> |

## 产品应用 Application

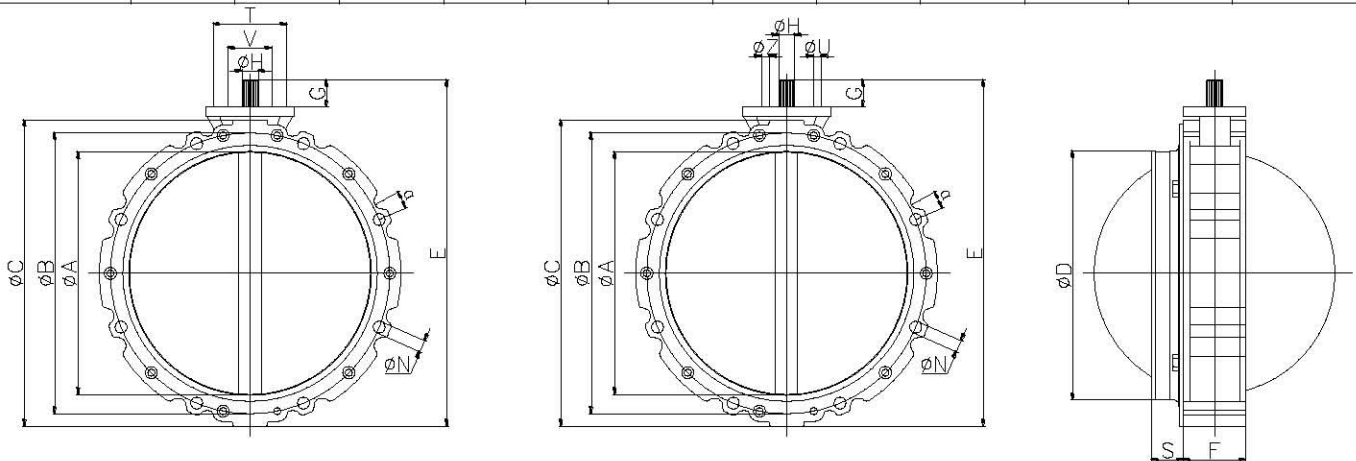


## 外形连接尺寸 Connecting flange size



BV2F 双法兰蝴蝶阀 Double flanged butterfly valve

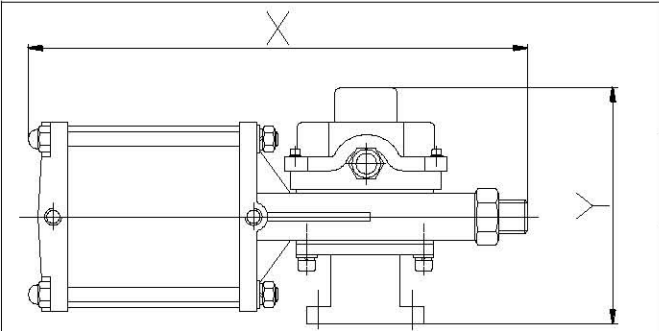
| MODEL   | $\Phi A$ | $\Phi B$ | $\Phi C$ | E   | F  | V  | T  | $\Phi H$ | G  | $\Phi Z$ | $\Phi U$ | $\Phi N$ |
|---------|----------|----------|----------|-----|----|----|----|----------|----|----------|----------|----------|
| BV2F100 | 95       | 180      | 220      | 250 | 77 | 50 | 80 | 22       | 35 | M10      | M12      | 4-14     |
| BV2F150 | 150      | 200      | 228      | 290 | 77 | 50 | 80 | 22       | 35 | M10      | M12      | 4-14     |
| BV2F200 | 200      | 250      | 278      | 340 | 77 | 50 | 80 | 22       | 35 | M10      | M12      | 4-14     |
| BV2F250 | 250      | 300      | 328      | 390 | 77 | 50 | 80 | 22       | 35 | M10      | M12      | 8-14     |
| BV2F300 | 300      | 350      | 378      | 440 | 77 | 50 | 80 | 22       | 35 | M10      | M12      | 8-14     |
| BV2F350 | 350      | 400      | 440      | 530 | 85 | 50 | 80 | 28       | 35 | M10      | M12      | 8-14     |
| BV2F400 | 400      | 470      | 530      | 580 | 85 | 50 | 80 | 28       | 35 | M10      | M12      | 8-14     |



BV1F 单法兰蝴蝶阀 Single flanged butterfly valve

| MODEL   | $\Phi A$ | $\Phi B$ | $\Phi C$ | E   | F+S | V  | T  | $\Phi H$ | G  | $\Phi Z$ | $\Phi U$ | $\Phi N$ |
|---------|----------|----------|----------|-----|-----|----|----|----------|----|----------|----------|----------|
| BV1F100 | 95       | 180      | 220      | 250 | 115 | 50 | 80 | 22       | 35 | M10      | M12      | 4-14     |
| BV1F150 | 150      | 200      | 228      | 290 | 115 | 50 | 80 | 22       | 35 | M10      | M12      | 4-14     |
| BV1F200 | 200      | 250      | 278      | 340 | 115 | 50 | 80 | 22       | 35 | M10      | M12      | 4-14     |
| BV1F250 | 250      | 300      | 328      | 390 | 115 | 50 | 80 | 22       | 35 | M10      | M12      | 8-14     |
| BV1F300 | 300      | 350      | 378      | 440 | 115 | 50 | 80 | 22       | 35 | M10      | M12      | 8-14     |
| BV1F350 | 350      | 400      | 440      | 530 | 123 | 50 | 80 | 28       | 35 | M10      | M12      | 8-14     |
| BV1F400 | 400      | 470      | 530      | 580 | 123 | 50 | 80 | 28       | 35 | M10      | M12      | 8-14     |

## 气动驱动器 Pneumatic Actuator

|  |       |     |     |
|--|-------|-----|-----|
|  | MODEL | X   | Y   |
|  | CP101 | 290 | 136 |
|  | CP126 | 380 | 160 |

## 安装维护 Installation maintenance

- 阀门出厂前已经预装好并通过了测试。The valve is factory has equipped and passed the test.
- 由于此阀门为铝合金阀体，故运输、存放时不要将重物置于阀门上。Because of this valve is the aluminum alloy body, so the transportation, storage don't put weight on the valve.
- 正常工作温度小于 80°C，物料密度小于 1.3T/m<sup>3</sup>。Normal working temperature less than 80 °C, the material density is less than 1.3T/m<sup>3</sup>.
- 在安装前请用一层薄液体来密封法兰。Before installing please seal flange with a thin layer of liquid.
- 安装时，要将阀门固定在（螺旋泵、输送带、振动进料仓或类似装置）上，请使用足够长的柱头螺栓连接上部连接法兰、阀门自身以及下部连接法兰，不得使阀门内部螺栓受力，否则可能会造成两个阀体分裂、损坏阀门。
- When installed, should be fixed in the valve (screw pump, the conveyor belt into the hopper, vibration or similar device), please use the studs is long enough, the valve connecting flange connecting the upper and lower connecting flange itself, not the internal valve bolt force, otherwise it may cause a split, damage to the valve body two.
- 电气连接线的工作以及阀门的维护必须由专门的技术人员完成。Electrical connection line and maintenance of the valve must be completed by the specialized technical personnel.
- 安全注意事项：阀门工作期间，请勿将手伸入阀门内！在设备上安装安全铁格等，以免造成损伤！Safety precautions: valve during the work, not to extend a hand valve! In the equipment installation safety grilles, lest cause injury!
- 维护：每周检查一次，物料输送是否顺利，是否有淤积。必要时彻底清洁接触部分！Maintenance: check once a week, material conveying is smooth, whether the deposition. When necessary to thoroughly clean the contact part!
- 在拆卸维护前，请确认气源、电源全部断开！In the disassembly maintenance, please confirm the source, power disconnect all!
- 如有任何不明确的事项，请与我们联系及时联系，以免造成不必要的损失。If there is any unclear issues, please contact us in time, so as to avoid unnecessary losses.

## 常见故障及解决方案 **Fault and solutions**

|  |   |
|--|---|
| 一、 阀门不能开启或一直开启 The valve can not open or has been turned               |   |
| 1.1 物料凝结成团块<br>Materials condense into clumps                          | 拆除阀门彻底清洁并重新安装<br>Removed from the valve clean and reinstall                               |
| 1.2 阀板承受的重量过大<br>Valve plate is exposed to the excessive weight        | 减轻料箱中的物重<br>Mitigate matter weight in the hopper  |
| 1.3 气动执行机构使用空气压力过低<br>Pneumatic actuator operating pressure is too low | 检查压缩空气管路、设备等是否有泄漏<br>Check the compressed air piping, equipment leaks                     |
| 1.4 电磁阀损坏<br>Solenoid valve is damaged                                 | 线圈是否烧坏，更换线圈。或更换电磁阀<br>The coil is burned out, replace the coil. Or replace solenoid valve |
| 二、 阀门泄漏关不严 Valve leakage is not closed tightly                         |   |
| 2.1 阀门不能完全关闭<br>The valve can not be completely closed                 | 把限位螺栓松出 1 圈，或多圈。<br>The limit bolt loose 1 circle, or circle.                             |
| 2.2 阀座密封件磨损 The valve seat seal wear                                   | 更换密封件 Replace seals   |
| 2.3 执行器寿命用尽 Actuator life exhaustion                                   | 更换密封件或执行器 Replace seal or actuator  |
| 三、 阀位信号失常 The valve position signal.                                   |   |
| 3.1 阀位无信号<br>The valve position without signal                         | 查看反馈装置是否调整到位<br>Check the feedback device is adjusted in place                            |
| 3.2 阀位信号开、关相反<br>The valve position signal, the opposite               | 调换接线顺序<br>Change the order of connection  |
| 3.3 反馈装置损坏<br>The feedback device damage                               | 更换反馈装置<br>The replacement of feedback device  |
| 如有上述未提及的故障请与我们联系。If a fault not mentioned above please contact us.     |   |