

对阀门的维护，可分两种情况；一种是保管维护，另一种是使用维护。  
Maintenance of the valve can be divided into two cases: one is storage maintenance, the other is use maintenance.

#### 1) 保管维护/Storage maintenance

1. 阀门入库前要进行检验, 核对合格证等技术资料与实物是否相符。  
Before placing in storage, valves should be checked whether the certificate of quality and other technical data correspond to physical object.
2. 各种阀门都应整齐地摆放在干燥的仓库里, 严禁堆放或露天存放, 阀门通道两端必须堵塞, 防止杂物进入阀腔内。  
You must put all kinds of valves in dry storage in an orderly manner. It is prohibited to stacking or storing outdoors. To use the cover plate to lock the two ends of the valve channel to prevent things entering into valve cavity.
3. 阀门必须存放在干燥通风的室内, 严禁堆叠放置。  
Valves should be stored in dry and ventilated room. Accumulation is forbade.

#### 2) 使用维护/Use maintenance

使用维护的目的, 在于延长阀门寿命和保证启闭可靠。  
Use maintaining aims extend the life of the valve and protect the opening and closing reliability.

不经常启闭的阀门, 也要定期对阀门做开关。  
To valves that do not open and closed frequently, you must also open and close them periodically.

要经常保持阀门的清洁。  
Valves must be kept clean.

要经常检查并保持阀门零部件完整性。  
Always check valves and other components to maintain integrity.

不要依靠阀门支持其它重物, 不要在阀门上站立。  
Do not rest heavy objects against the valve, or step on the valve.

## 中线软密封蝶阀使用说明书

Manual for concentric Butterfly Valve with Soft Seal

高品质自控阀门供应商

High Quality Automated Valve Supplier

深圳市亚德逊阀门有限公司

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目 录  
INDEX

安装前检查  
Inspection before installation.....1

阀门安装位置  
Valve mounting position and location.....1

连接法兰要求  
Flange connection requirements.....2

介质要求  
Medium requirement.....5

特别声明  
Special declaration.....6

蝶阀管道安装图解说明  
butterfly valve pipe installation diagram  
and specification .....7

常见故障分析  
Analysis of common failures.....9

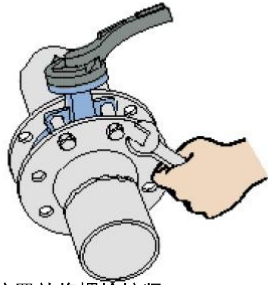
维护  
Maintenance.....10

常见故障分析/Analysis of common failures

中线软密封蝶阀可能发生的故障及消除方法  
Possible faults and solution for butterfly valve with soft seal midline

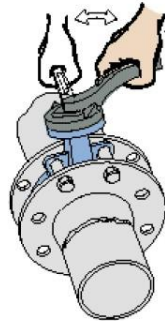
出现的故障 failure	原因分析 causes	处理办法 solution
密封面泄漏 Leaks in the sealing surface	蝶阀的蝶板、密封圈夹有杂物 impurity in the butterfly plate and ring seal.	消除杂质，清洗阀门内腔。 Remove the impurity, and wash the inner cavity of the valve.
	蝶阀的蝶板、密封关闭位置吻 合不正。 The closed position of plate seal and butterfly valve is not aligned	调整蜗轮或电动执行器等执行机 构的限位螺钉，以达阀门关闭位 置正确。 Adjustment Limit screw auger actuator, the electric actuator, etc., to reach the correct closed position of the valve.
	出口侧配装法兰螺栓受力不均 或未压紧。 The flange bolt fitted on the outlet side suffers a nonuniform force or is improperly pressured	查配装法兰平面及螺栓压紧力， 应均匀压紧， Inspect the plane of the flange fitted and pressing force of the bolt, and should pressure evenly
	配对的法兰内径过大，压不住 蝶阀的密封圈。 The flange is fitted with too large internal diameter, and can not press the sealing ring of the butterfly valve	更换与阀门相适配的法兰 Replace with adaptable flange valve
操作扭矩过高 The operating torque is too large	流体温度过高 The fluid temperature is too high	校对材料设计的适应性 Correct the adaptability of material design
	流体粘度过高 The fluid viscosity is too high	校对材料设计的适应性 Correct the adaptability of material design
	介质对橡胶有溶胀腐蚀 The average swells and erodes on rubber	核对橡胶的适应性，更换适应的 Check rubber adaptability, and replace with a suitable one
	气动阀门的气源力不足 The pressure of the air source is insufficient	补充气源压力至正常压力 Recharge pressure air source to its normal pressure

⑦



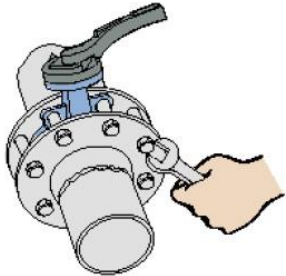
校正蝶阀位置并将螺栓拧紧  
(注: 不要拧得过紧)  
Adjust butterfly valve position and tighten bolts(don't screw too tight)

⑧



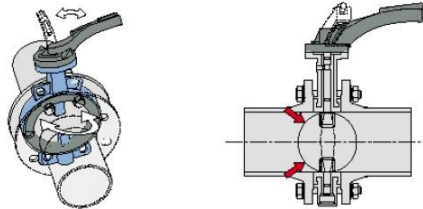
将蝶阀打开, 保证阀板能自由开闭, 然后使阀板轻微开启  
Open the butterfly valve, Guarantee disc opening and closing freely, Then make the disc opened slightly

⑨



交叉均衡将所有螺母拧紧  
Tighten diagonal bolts one by one

⑩



再检查一遍确认蝶阀能自由开闭。  
注意: 请确认阀板没有碰到管道  
Check it again then confirm the butterfly valve can opening and closing freely,  
Note: please make sure disc without touching the pipe

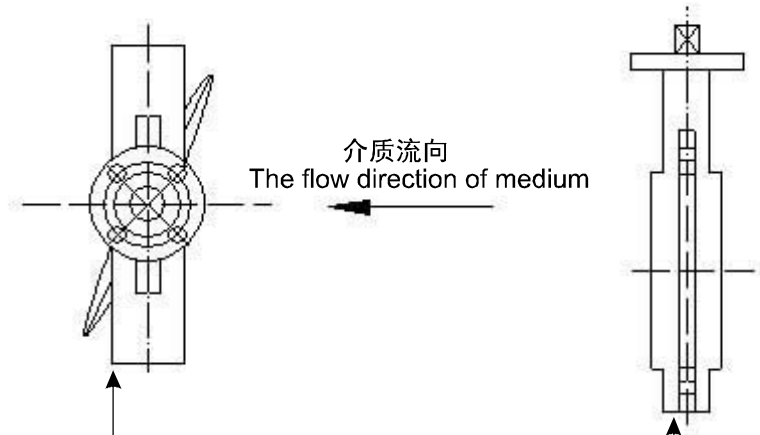
### 安装前检查/Inspection before installation

安装前, 应将阀门作一次检查, 核对规格、型号、使用压力等基本参数和实际工况是否相符, 再鉴定阀门有无损坏, 对能手动的阀门建议转动几下, 检测在运输过程中, 有无损坏。还要清除阀内的杂物。对于大规格阀门, 阀门起吊时, 绳子不要系在驱动上, 以免损坏驱动部件, 应该系在法兰上。

Before installation, you must inspect the valve to see if the specification, model, operating pressure, and other basic parameters correspond to actual operating conditions. Then check if the valve is damaged, we recommend turning the manual valve several times, and detect any damage to the transport process. In addition, you must also remove the unwanted things. For larger valves, you should bundle the cable over the flange, do not bind the cable of the lifting on the driver of the valve, in order to prevent damage to the drive components.

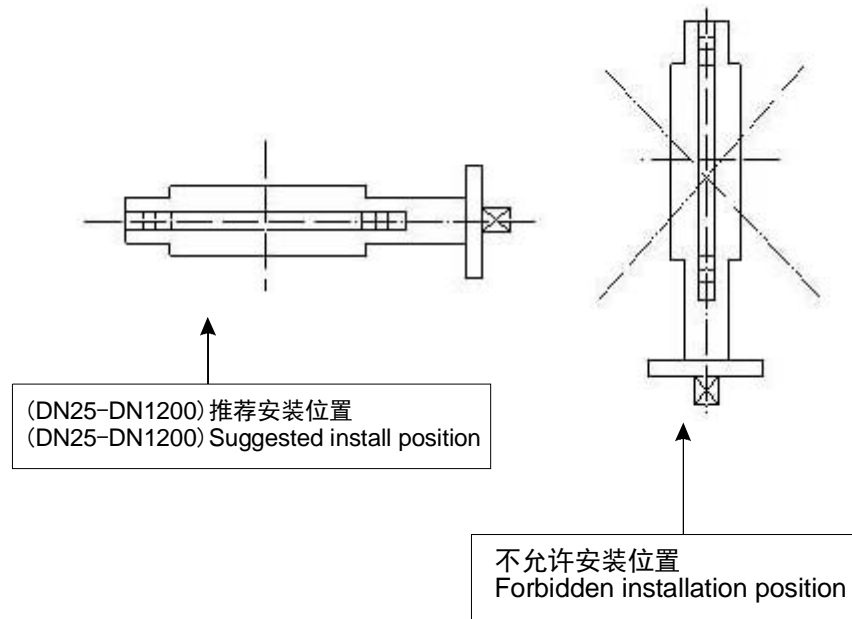
### 蝶阀安装/Installation of Butterfly valve

#### 1、阀门安装位置/Valve mounting position and location



(DN25-300) 推荐安装位置  
(DN25-300)Suggested install position  
(DN350-DN1200) 最佳安装位置  
(DN350-DN1200) Best install position

(DN25-300) 推荐安装位置  
(DN25-300)Suggested install position  
(DN350-DN1200) 不推荐安装位置  
(DN350-DN1200) Not recommended installion position



2、连接法兰要求/Flange connection requirements

蝶阀安装法兰标准要求使用GB9113.1的整体法兰，或蝶阀专用法兰（承插焊法兰）；不得使用平焊法兰或对焊法兰，如有特殊要求，请与亚德逊阀门公司沟通。

The standard mounting flange of the butterfly valve requires the entire flange in GB9113.1, or Special flange for butterfly valve (socket welding flange); please don't use the flat welding flange or butt welding flange. Any special requirements, please contact with ADESUN technical department.

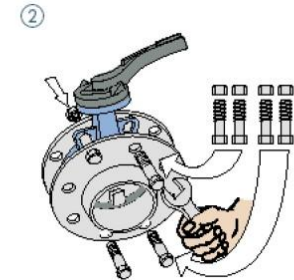
3、安装阀门时，蝶板应处于接近全关的位置。确定管道法兰间有足够的距离将阀门插入法兰中间。橡胶阀座两端突出阀体端面作为法兰密封垫，蝶阀安装时无须再加密封垫。

During the installation of the valve, plate should be close to the fully closed position. Ensure adequate distance between pipe flanges to insert the valve in the middle of the flanges. Both ends of the rubber valve seat projecting from the end surface of the valve body, serving as a flange seal pads, and need not add any cushion seal during installation of the butterfly valve.

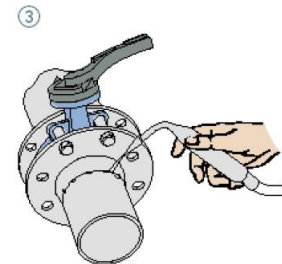
蝶阀管道安装图解说明  
butterfly valve pipe installation diagram and specification



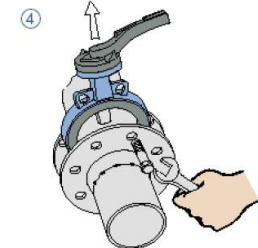
① 将蝶阀放置于预安装的两片法兰间  
Put the butterfly valve into between preinstall two flanges



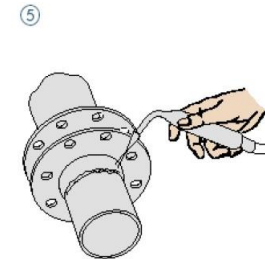
② 按图示将螺栓螺母轻轻插入法兰孔，将螺母稍加拧紧以校正法兰面的平面度  
According to the graphic, The bolt and nut lightly insert flange hole, Tighten nut slightly and adjust the flatness of the flange



③ 将法兰利用点焊固定于管道上  
Fix the flange to pipe for spot welding



④ 将蝶阀移出  
Remove the butterfly valve



⑤ 将法兰完全焊接固定在管道上  
Weld the flange plate and pipe completely



⑥ 待焊口冷却后再安装蝶阀，保证蝶阀在法兰中有足够的活动空间，以防止蝶阀被损坏。并保证阀板有一定的开度  
When the flange is cooled to normal temperature, Then install butterfly valve, Ensure the butterfly valve has enough space in two flanges, Prevent that damage the butterfly valve, Ensure disc has some open angles

## 11、电动执行器要求

## Electric actuator Requirements

- 1) 电动执行器在通电前，必须确认执行器与适用的工况相符，主要参数可以参见电装标牌和《电动执行器使用说明书》。确认无误后方可通电预试阀门开关。

Before energizing the electric actuator, you should ensure that the actuator is applicable in the operating conditions. Please consult the main parameters on the nameplate of the electric actuator and the manual of the electric actuator. Only after confirmation and eliminate error, you can energize the actuator, and conduct the pretest opening and closing of the valve.

## 特别声明/Special declaration

- 1、阀门的驱动限位装置在出厂前已经安装调试完成，客户不得私自对其调整。

Limit Device valve drive is already installed and commissioned before delivery, and the customer can not adjust privately.

- 2、特别声明：安装前，必须仔细阅读此安装指南。违反上述安装要求，将会造成阀门的损伤，甚至报废；其后果由施工方负责。

Special Statement: Before installation, you should read this installation guide. Failure to comply with installation requirements mentioned may damage the valve, and even make it out of service; the consequences will be assumed by the construction side.

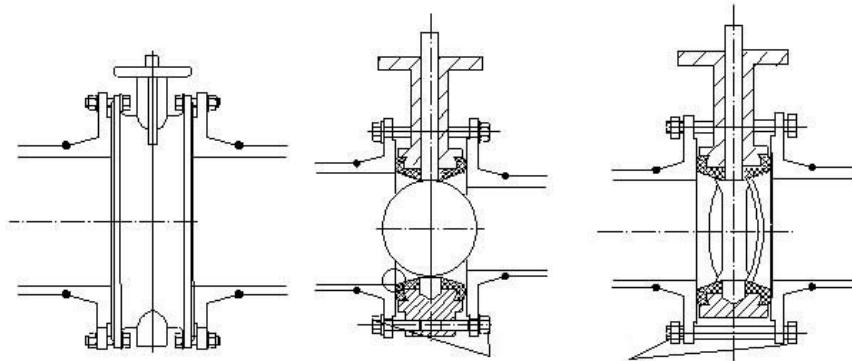
- 4、如果管道属新装法兰，建议先将蝶阀与法兰试装于管道上，然后对接定位点焊，注意在试装时一定要保证法兰盘与蝶阀对中且不要夹的过紧，试装完成后必须将阀门取下，方能将法兰盘与管道满焊，待法兰降至常温后按规范正式安装阀门。阀门在进行安装时，必须确保阀门内腔的清洁。阀门安装上后，不允许再焊接法兰，以免烧伤橡胶件和防腐涂层。

If the flange is newly installed on the pipe, preinstall the butterfly valve and the flange on the pipe, then weld the connected points. Please pay attention that the flange plate and butterfly valve should be aligned and can not be clipped too tight during the preinstallation. The valve must be taken down after pre-installation, only then weld the flange plate and pipe completely. When the flange is cooled to room temperature, install the valve according to the specification formally. During installing the valve, please ensure that the internal chamber of the valve is clean. Please don't weld the flange when the valve has been installed, otherwise the rubber parts and anticorrosive coating will be burned.

- 5、安装螺栓时，管道上两片法兰的法兰孔必须对中；禁止在安装阀门时，靠紧固螺栓来调整对中。用扳手对称轮流预紧螺栓，以法兰盘端面凸台或外圆及阀体外圆为相互参照物，确认阀门是否与法兰盘对中，依次对称均匀、轮流锁紧（见下图），特别注意不要拧的过紧，以防造成阀门严重变形，造成阀门扭矩过大，一般以拧到不漏为准。最后再操作阀门一次，以确定装配的正确性。最后；谨慎地、轻轻地将阀门开启到全开位置，检查阀板是否对中，检查阀板与法兰内孔有无碰撞现象。

When installing the bolts, the holes in the two flanges located on the pipe must be aligned. Please don't adjust alignment through fastening the bolts when installing the valve. Using a spanner symmetry to pre-tighten the bolts in turn, with convex platform or top circle of the flange face and the top circle of the valve body for reference, to make sure the valve and the flange face is aligned, then fastened them in turn (see graphic below), Please don't screw too tight in case causing the valve serious deformation and the torque too high. Generally it is ok to screw to the position that valve is no leaking. And then operate the valve again to confirm the the correctness of the assembly. Finally, twist the

valve to the full open position carefully and gently to check whether the disc is aligned, and there is any collision between the disc and flange holes.

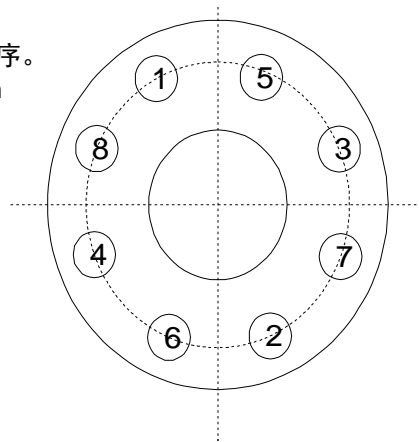


法兰蝶阀  
Flange butterfly valve

单夹蝶阀  
Single flange butterfly valve

对夹蝶阀  
Wafer butterfly valve

法兰双边螺栓同步锁紧，按右图顺序。  
Synchronously tighten the bolts on both sides of the flange according the order in the right Figure



6、介质要求/Medium requirement

阀座材质为EPDM的阀门，管道内不允许含有任何成分的油，如果含油，阀座将会严重损坏及报废。安装阀门前，必须将管道内的杂质及油污清理干净，确保通过阀门的介质中没有油污及硬颗粒。

The material of seat is EPDM, it is not allowed to have any oil composition in the pipeline, and if present, the valve seat will be seriously damaged and out of service. Before installing the valve, you must remove all impurities and greasy dirt in the pipeline to ensure that there is no greasy dirt or hard particle in the middle of the valve

7、蝶阀不得安装于管道拐角处。

The butterfly valve can not be stalled at the corner of the piping.

8、不允许用阀门做撬杠，撬撑法兰。

It is not permitted to use the valve as a lever for extracting or support flange

9、阀门不得在开启情况下安装，以防破坏蝶板表面。

It is not allowed to install the valve in the open state, to prevent damage to the surface of the butterfly plate.

10、气动执行器的气源要求：

Requirements on air source of the pneumatic actuator:

1) 气源压力不得小于5.5bar，不得大于10bar，并通气预测阀门开关。

The pressure of the air source can not be less than 5.5bar, or more than 10 bar and pass the air to predict the opening and closing of the valve.

2) 使用流体：空气，无腐蚀性气体或油。

Fluid use: air, non-corrosive gas or oil.

3) 安装气管前，必须清洁气路，保证气管中无油污、无杂质。

Before installing the air pipe, you must clear the airway, to ensure there is no greasy or impurity in the air tube.