开维喜阀门集团
Kaiweixi valve group
https://www.kaiweixi.com
E-mail：sales@kaiweixi.com

D342H 双偏心蝶阀系列

D342H Double Eccentric Butterfly Valve Series

使用说明书

Instruction Manual

开维喜阀门集团有限公司

Kaiweixi Valve Group Co.,LTD.

地址：中国 浙江省温州市瓯北街道三桥工业区林下路 1 号　电话：0577-67038872　传真：0577-67198981　邮编：325100

开维喜阀门集团
Kaiweixi valve group
https://www.kaiweixi.com
E-mail: sales@kaiweixi.com

D342H 双偏心蝶阀

D342H Double Eccentric Butterfly Valve

型号： D342H　　规格：DN100-DN3000
公称压力：PN10~PN16　　适用介质：水、油品及类似液体、气体
适用温度：≤ 80 ℃　　阀体材质：铸钢、不锈钢、双相不锈钢
连接方式：法兰　　驱动方式：蜗轮蜗杆、电动、气动、液动

Model: D342H
Size: DN100 - DN3000
Nominal Pressure: PN10 - PN16
Applicable Medium: Water, oil and similar liquids, gas
Applicable Temperature: ≤ 80 ℃
Body Material: Cast steel, stainless steel, duplex stainless steel
Connection Type: Flange
Drive Mode: Worm gear, electric, pneumatic, hydraulic

概述

D342H 双偏心蝶阀是一种通过圆盘形蝶板绕其固定轴（阀杆）旋转来开启、关闭和调节介质通道的阀门。其阀杆轴线采用双偏心设计，即阀杆轴线在垂直阀体通道中心线的基础上，同时偏离蝶板中心与密封面中心，使蝶板开启瞬间迅速脱离阀座密封面。阀门采用法兰式连接，即阀体自带法兰，通过螺栓与管道法兰直接对接。阀座与蝶板密封副通常采用金属对金属的组合形式，即阀座为金属密封环，蝶板密封面堆焊硬质合金，阀座可为本体堆焊或镶嵌结构，适用于高温、高压差及磨损性较强的介质工况。该阀门通过手动、电动或气动装置驱动阀杆旋转，通常为 90°，以实现对管道系统中介质通断与流量的严密控制。

Overview

The D342H double eccentric butterfly valve is a valve that opens, closes, and regulates the medium flow passage through the rotation of a disc-shaped butterfly plate around its fixed shaft (stem). Its stem axis features a double eccentric design, meaning the stem axis is offset from both the center of the butterfly plate and the center of the sealing surface, while being perpendicular to the centerline of the valve body passage. This design allows the butterfly plate to quickly disengage from the valve seat sealing surface upon opening. The valve adopts a flanged connection, where the valve body comes with integrated flanges that are directly bolted to the pipeline flanges. The sealing pair between the valve seat and the butterfly plate typically employs a metal-to-metal configuration. Specifically, the valve seat consists of a metal sealing ring, and the sealing surface of the butterfly plate is overlaid with hard alloy. The valve seat can be either an overlay welded onto the body or an inserted structure. This design makes the valve suitable for media conditions involving high temperatures, high pressure differentials, and strong abrasiveness. The valve is operated by rotating the stem, typically by 90 degrees, using manual, electric, or pneumatic actuators, achieving tight shut-off and flow control of the medium within the piping system.

开维喜阀门集团
Kaiweixi valve group
https://www.kaiweixi.com
E-mail：sales@kaiweixi.com

D342H 双偏心蝶阀产品图

D342H Double Eccentric Butterfly Valve Product Image

特点

1、结构坚固，适用性强：采用法兰式连接，阀体结构相对稳固，能更好地承受管道应力与轻微振动。适用于高温、高压差及磨损性较强的介质工况，如蒸汽、热风、含固体颗粒的介质等。

2、启闭轻便，密封性能好：采用双偏心设计，蝶板在开启瞬间迅速脱离阀座密封面，消除了不必要的挤压与刮擦。这种设计显著降低了启闭力矩，使操作更轻便，同时减少了密封副的磨损，延长了阀门的使用寿命，并确保优良的密封性能。

3、流体阻力小：全开时，蝶板厚度为介质流道的主要阻力，流道形状近似圆形，因此对介质的流动阻碍小，压降较低，有利于节能。

4、密封形式可靠：通常采用金属对金属的密封形式，即阀座为金属密封环，蝶板密封面堆焊硬质合金。这种密封结构具有耐高温、耐磨、耐冲刷的特性，能适应较为严苛的工况。

5、维护相对简便：阀门结构相对简单，关键部件如阀杆、轴承座等维护更换较为方便。其密封副设计通常具有较好的耐磨和耐冲刷性，减少了频繁维修的需求。

6、用途专业化：专为高温、高压及磨损性介质的流通控制而设计。阀体材质常为碳钢、不锈钢等，蝶板可采用碳钢、不锈钢或堆焊硬质合金，广泛应用于石油、化工、冶金、电力等行业的管道系统中，用于控制高温气体、蒸汽、油品及磨损性介质的通断与流量。

Features

1、Robust Structure, Strong Applicability: Featuring a flanged connection, the valve body has a relatively sturdy structure that can better withstand pipeline stress and minor vibrations. It is suitable for demanding media conditions involving high temperatures, high pressure differentials, and strong abrasiveness, such as steam, hot air, and media containing solid particles.

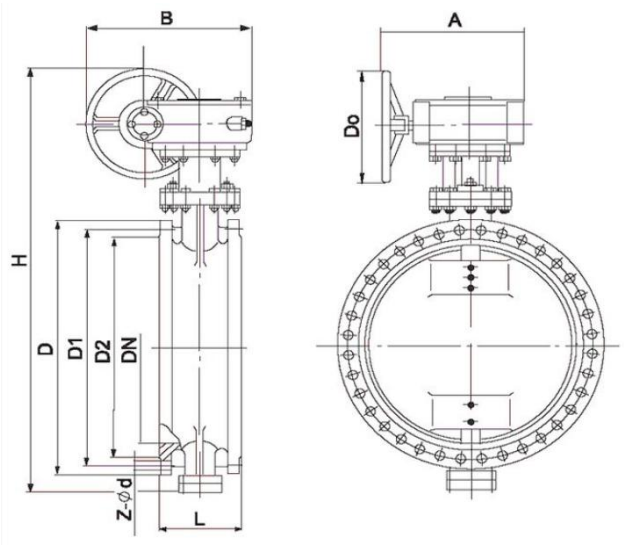
2、Easy Operation, Reliable Sealing: The double eccentric design allows the butterfly plate to quickly disengage from the valve seat sealing surface the moment it opens, eliminating unnecessary compression and scraping. This design significantly reduces the operating torque, making operation easier, while also minimizing wear on the sealing pair, extending the valve's service life and ensuring excellent sealing performance.

3、Low Fluid Resistance: When fully open, the thickness of the butterfly plate is the primary resistance in the media flow path. The flow path shape is approximately circular, thus offering low obstruction to media flow, resulting in low pressure drop and contributing to energy savings.

4、Reliable Sealing Form: It typically adopts a metal-to-metal sealing configuration, where the valve seat is a metal sealing ring and the sealing surface of the butterfly plate is overlaid with hard alloy. This sealing structure possesses characteristics of high-temperature resistance, wear resistance, and erosion resistance, enabling it to adapt to relatively harsh operating conditions.

5、Relatively Simple Maintenance: The valve has a relatively simple structure. Key components such as the stem and bearing housing are convenient to maintain and replace. The sealing pair design generally offers good wear and erosion resistance, reducing the need for frequent maintenance.

6、Specialized Application: Specifically designed for flow control of media under high temperature, high pressure, and abrasive conditions. Body materials are often carbon steel, stainless steel, etc. The butterfly plate can be made of carbon steel, stainless steel, or overlaid with hard alloy. It is widely used in pipeline systems across industries like petroleum, chemical, metallurgy, and electric power for controlling the on-off and flow rate of high-temperature gases, steam, oil, and abrasive media.



D342H 双偏心蝶阀结构图

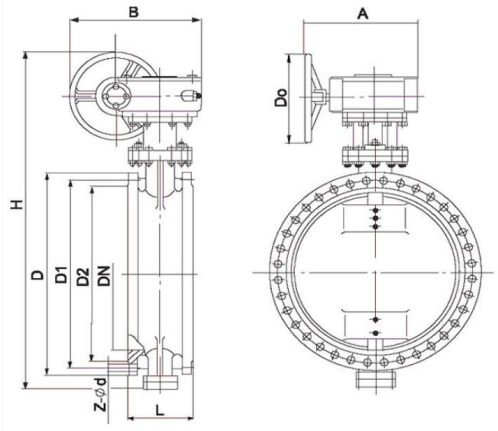
Structure Diagram of D342H Double Eccentric Butterfly Valve

零部件材料表 Part name and material list

阀体 Valve Body	阀轴 Valve Stem	密封胶条 Sealing Rubber Strip	阀体密封圈 Valve Body Sealing Ring
铸钢、不锈钢、双相不锈钢 Cast Steel, Stainless Steel, Duplex Stainless Steel	2Cr132Cr13	NBRNBR	304

性能规范表 Performance Specification Table

性能规范表 Performance Specification Table		
公称压力 Nominal Pressure	1.0/1.6	MPa
强度试验压力 Strength Test Pressure	1.5/2.4	
密封试验压力 Seal Test Pressure	1.1/1.76	
适用温度 Applicable Temperature	≤80	℃



D342H 双偏心蝶阀外形尺寸图

D342H Double Eccentric Butterfly Valve Overall Dimension Drawing

D342H 双偏心蝶阀外形尺寸表
D342H Double Eccentric Butterfly Valve Overall Dimension Table

公称尺寸 Nominal Size			PN10		PN16	
DN	NPT	L	D2	n-d	D2	n-d
100	4″	127	180	8-19	180	8-Φ19
125	5″	140	210	8-Φ19	210	8-Q19
150	6″	140	240	8-Φ22	240	8-Φ22
200	8″	152	295	8-Φ22	295	12-Q22
250	10″	165	350	12-Φ22	355	12-Q28
300	12″	178	400	12-Φ22	410	12-Φ28
350	14″	190	460	16-Φ22	470	16-028
400	16″	216	515	16-Φ28	525	16-Φ31
450	18″	222	565	20-Φ28	585	20-Φ31
500	20″	229	620	20-Φ28	650	20-Φ34
600	24″	267	725	20-Φ31	770	20-Φ37
700	28″	292	840	24-Φ31	840	24-p37
800	32″	318	950	24-Φ34	950	24-Φ40
900	36″	330	1050	28-Φ34	1050	28-Φ40
1000	40″	410	1160	28-Φ37	1170	28-Φ43

1200	48″	470	1380	32-φ40	1390	32-φ49
1400	56″	530	1590	36-φ43	1590	36-Q049
1600	64″	600	1820	40-φ49	1820	40-φ56
1800	72″	670	2020	44-φ49	2020	44-φ56
2000	80″	760	2230	48-φ49	2230	48-φ62
2200	88″	800				
2400	96″	850				
2600	104″	900				
2800	112″	950				
3000	120″	1000				

D342H 双偏心蝶阀安装与维护须知

一、 安装说明

安装前检查：

核对阀门型号、通径、压力等级、阀体/密封面材料及适用介质（如蒸汽、高温烟气、油品、含固体颗粒介质等）是否与管路设计要求一致。

检查阀门外观，确保运输过程中阀体、法兰密封面、蝶板及阀杆无损伤。清除阀腔内及流道内的保护物、油污和杂物。

手动操作蜗轮或执行机构输入轴，确认蝶板启闭灵活、无卡阻，并验证双偏心结构带来的“先脱离后密封”动作特征是否顺畅。

安装位置与方向：

阀门通常可安装于水平或垂直管道上。对于垂直安装，应考虑介质的流向（推荐上进下出），并确保安装位置稳固，便于操作与维护。

注意阀体或铭牌上的流向标识，确保其与介质设计流向一致。双偏心蝶阀通常为单向密封，反向受压可能影响密封性能或导致泄漏。

管道对接要求：

阀门采用法兰式连接，需使用与阀门法兰标准、压力等级匹配的管道法兰，并配用合适的密封垫片（如石墨金属缠绕垫、金属齿形垫等高温高压用垫片）。

安装时，确保阀门法兰与管道法兰对中。严禁通过强行拧紧螺栓来校正管道法兰间的错位或间隙，以免阀体承受过大安装应力，导致变形或密封失效。应逐次、对角、均匀地分步拧紧螺栓，确保法兰面均匀受压。

驱动装置安装：

若配备电动、气动或蜗轮执行机构，应在阀门管道安装就位并确认对中后再行安装。确保执行机构输出轴与阀杆对中，连接牢固可靠。

手动操作阀门至中间或便于调试的位置，再安装执行机构，并严格依据其说明书进行行程（通常为 90°）、扭矩及限位开关的调试与设定。特别注意双偏心阀关闭位置的精确调整，以确保密封副有效接触。

二、 使用与操作说明

开启与关闭：

首次通入介质前，建议再次手动操作阀门数次，确保全程动作顺畅，并验证关闭位置密封是否严实。
操作时应平稳启闭，避免急速冲击。手动操作到达机械限位（全开或全关）后请勿继续强行旋转。使用执行机构时，应确保其电气、气动或机械限位调整正确并有效。

开度调节：
本阀门可用于介质的通断与流量调节，通过控制蝶板旋转角度（通常为 0°-90°）可实现近似百分比的流量控制特性。
若长期用于调节或部分开启状态，建议定期进行数次全行程开关操作，以防介质沉积、结垢或机构卡滞。

注意事项：
本阀门适用于高温、高压差及磨损性介质工况。使用时严禁超出设计压力与温度范围。
用于高温介质（如蒸汽、热风）时，阀门升温后可能导致螺栓热膨胀松弛，必要时应按规程在工况温度稳定后对法兰螺栓进行热态紧固。
如介质中含有磨损性大颗粒或易凝结成分，建议在阀门上游加装过滤或吹扫装置，以保护密封面。

三、 维护与保养说明
日常维护：
定期检查阀门法兰连接处及填料函（如有）有无介质泄漏现象。
保持外部清洁，特别是阀杆、轴承座及执行机构外部。定期对轴承、蜗轮蜗杆及传动部位加注适量耐温润滑脂。
检查配套执行机构（如有）的气源、电源及运行状态是否正常，有无异常声响或振动。

定期检查：
根据使用工况（温度、压力、介质腐蚀性/磨损性）及操作频率，建议每半年至一年进行一次停机全面检查。
检查内容包括：蝶板与阀座密封面的磨损、冲蚀、裂纹或变形情况；阀杆转动是否灵活、有无弯曲或腐蚀；法兰连接螺栓是否松动；轴端密封及填料是否老化失效。
对于高温或含颗粒介质工况，应特别注意检查密封面堆焊层是否完好，轴套部位有无磨损。

存放要求：
阀门长期存放时，建议蝶板处于微开状态（约 5°-10°以释放密封面压力并利于通风防潮），并装好两端法兰保护盖。
存放于干燥、通风的室内环境中，避免与腐蚀性化学物质共同存放，阀杆及加工面应涂防锈油保护。

故障与处理：
内漏量大或密封不严：检查蝶板是否关闭到位，执行机构限位是否漂移；检查密封面是否严重磨损、剥落或有异物卡阻；如果是单向阀，检查是否长期反向受压。
操作扭矩过大或卡涩：检查阀腔内是否有异物堆积或介质板结；检查阀杆与轴承是否缺油、锈蚀或损坏（高温下可能因热膨胀间隙过小）；检查执行机构是否匹配或存在故障。
外漏（阀杆处）：尝试压紧或更换填料；检查阀杆是否磨损或腐蚀。
如需更换阀座、阀杆、轴承等内部零件，或遇到无法自行排除的故障，建议联系专业技术人员或生产厂家处理。

重要提示：

本说明为通用性技术指导。若用于高温、高压、有毒有害、易燃易爆介质，或作为关键工艺设备及安全保护系统的一部分，必须严格遵循相关行业安全规范及制造商提供的专项技术协议进行操作与维护。

D342H Double Eccentric Butterfly Valve Installation and Maintenance Instructions

I. Installation Instructions

Pre-Installation Inspection:

Verify that the valve model, size, pressure rating, body/seat sealing surface materials, and applicable media (e.g., steam, high-temperature flue gas, oil, media containing solid particles) conform to the pipeline design requirements.

Inspect the valve appearance to ensure no damage to the body, flange sealing surfaces, disc, or stem during transport. Remove protective covers, oil, and debris from the valve cavity and flow passage.

Manually operate the worm gear or actuator input shaft to confirm the disc opens and closes flexibly without jamming. Verify the smooth operation of the "disengage before sealing" characteristic inherent to the double eccentric design.

Installation Position and Direction:

The valve can typically be installed on horizontal or vertical pipelines. For vertical installation, consider the medium flow direction (top-entry is recommended) and ensure a stable position convenient for operation and maintenance.

Note the flow direction arrow on the body or nameplate and ensure it aligns with the intended medium flow direction. Double eccentric butterfly valves are typically unidirectional seals; reverse pressure may affect sealing performance or cause leakage.

Pipeline Connection Requirements:

The valve uses a flanged connection. Matching pipeline flanges conforming to the same standard and pressure rating are required, along with appropriate gaskets (e.g., graphite spiral wound gaskets, metal serrated gaskets for high-pressure/high-temperature applications).

During installation, ensure the valve flanges align centrally with the pipeline flanges. It is strictly forbidden to correct misalignment or gaps between pipeline flanges by forcibly tightening bolts, as this can subject the valve body to excessive installation stress, leading to deformation or seal failure. Tighten bolts sequentially, diagonally, and evenly in steps to ensure uniform pressure on the flange faces.

Actuator Installation:

If equipped with an electric, pneumatic, or worm gear operator, install it after the valve is positioned in the pipeline and alignment is confirmed. Ensure the actuator output shaft aligns centrally with the valve stem and the connection is secure and reliable.

Manually operate the valve to an intermediate or convenient position before installing the actuator. Strictly follow the actuator manual for debugging and setting the travel (typically 90°), torque,

and limit switches. Pay special attention to precisely adjusting the closed position of the double eccentric valve to ensure effective contact of the sealing pair.

II. Operation Instructions

Opening and Closing:

Before introducing media for the first time, it is recommended to manually operate the valve several times to ensure smooth full-stroke action and verify tight sealing in the closed position.
Operate smoothly, avoiding rapid impacts. Do not continue forcing rotation manually after reaching the mechanical limit (fully open or fully closed). When using an actuator, ensure its electrical, pneumatic, or mechanical limits are correctly and effectively adjusted.

Opening Adjustment:

This valve can be used for on-off control and flow regulation. By controlling the disc rotation angle (typically 0° -90%), approximate percentage flow control characteristics can be achieved.
If used for regulation or left partially open for extended periods, it is recommended to perform full-stroke opening/closing operations periodically to prevent media deposition, scaling, or mechanism jamming.

Precautions:

This valve is suitable for high-temperature, high-pressure differential, and abrasive media conditions. Do not use beyond the designed pressure and temperature ranges.
When used for high-temperature media (e.g., steam, hot air), bolt relaxation may occur due to thermal expansion after temperature increase. If necessary, perform hot tightening of flange bolts according to procedures after the operating temperature stabilizes.
If the media contains highly abrasive particles or easily condensable components, it is recommended to install filtration or purging devices upstream of the valve to protect the sealing surfaces.

III. Maintenance Instructions

Routine Maintenance:

Regularly check the valve flange connections and the gland packing (if any) for any signs of media leakage.
Keep the exterior clean, especially the stem, bearing housing, and actuator. Regularly apply appropriate high-temperature grease to bearings, worm gears, and transmission parts.
Check the air supply, power supply, and operating status of the supporting actuator (if any) for normality, and listen for any abnormal sounds or vibrations.

Periodic Inspection:

Based on operating conditions (temperature, pressure, media corrosiveness/abrasiveness) and frequency of operation, it is recommended to perform a comprehensive shutdown inspection every

开维喜阀门集团
Kaiweixi valve group
https://www.kaiweixi.com
E-mail：sales@kaiweixi.com

six months to one year.
Inspection items include: Wear, erosion, cracks, or deformation on the disc and seat sealing surfaces; smoothness of stem rotation, checking for bending or corrosion; tightness of flange connection bolts; condition of stem seals and packing for aging or failure.
For high-temperature or particulate media conditions, pay special attention to checking the integrity of the hardfacing layer on sealing surfaces and wear on bushing areas.

Storage Requirements:

For long-term storage, it is recommended to leave the disc in a slightly open position (approximately 5° -10° to relieve pressure on the sealing surfaces and facilitate ventilation/moisture prevention), and install protective covers on both flange ends.
Store in a dry, ventilated indoor environment away from corrosive chemicals. Apply rust preventative oil to the stem and machined surfaces.

Troubleshooting:
Excessive Internal Leakage or Poor Sealing: Check if the disc is fully closed and actuator limits have drifted. Check sealing surfaces for severe wear, spalling, or trapped debris. If it's a unidirectional valve, check for prolonged reverse pressure.
Excessive Operating Torque or Sticking: Check the valve cavity for foreign objects or media caking. Check the stem and bearings for lack of lubrication, corrosion, or damage (at high temperatures, thermal expansion may reduce clearances). Check if the actuator is properly sized or malfunctioning.
External Leakage (at Stem): Attempt to tighten or replace the packing. Check the stem for wear or corrosion.
For replacement of internal parts such as seats, stems, bearings, or for faults you cannot resolve yourself, please contact qualified technical personnel or the manufacturer.

Important Note:
These instructions provide general technical guidance. If the valve is used for high-temperature, high-pressure, toxic, hazardous, flammable, or explosive media, or as part of critical process equipment or safety protection systems, operation and maintenance must strictly comply with relevant industry safety codes and the manufacturer's specific technical agreement.

非常感谢您的阅读！
Thank you very much for reading!

开维喜阀门集团有限公司
地址：浙江省温州市永嘉县瓯北街道三桥工业区林下路 1 号
电话：+86 18967796392
网址：https://www.kaiweixi.com
mail：karrie@kaiweixi.com

Kaiweixi Valve Group Co., Ltd
Address: No.1 Linxia Road, Sanqiao Industrial Zone, Oubei Street, Yongjia County, Wenzhou City, Zhejiang Province
Phone:+86 18967796392
URL: https://www.kaiweixi.com
E-mail：karrie@kaiweixi.com