

生物制药隔膜阀  
Biopharmaceutical diaphragm valve



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国家高新技术企业 浙江省著名商标  
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0.1	自控调节阀+控制器 Automatic control regulating valve + Control head
0.2	生物制药隔膜阀 Biopharmaceutical diaphragm valve
0.3	高洁净泵 High purity pumps
0.4	防混蝶阀+蝶阀 Mixing proof butterfly valve + Butterfly valve
0.5	球阀 Ball valve
0.6	截止换向阀+防混阀+罐底阀 Divert seat valve + Mixing proof valve + Tank bottom valve
0.7	角座阀+截止阀 Angle seat valve + Globe valve
0.8	止回阀+恒压阀+安全阀+减压阀 Check valve + constant pressure valve + safety valve + air release valve
0.9	清洁技术+取样阀+视镜+照明技术 Clean technology + sample valve + sight glass + lighting technology
0.10	过滤器+人孔 Filter + man hole cover (manway)
0.11	卫生管件 Sanitary fittings ASME BPE DIN 11852 Bs4825 SMS ISO IDF 3A



注意：  
目录技术资料仅供设计参考，  
设计更新和技术升级恕不另行通知！

不断革新的技术、日新月异的市场发展和客户需求是当今我们面临的巨大挑战。面对这些挑战我们信心十足，因为东正高度专业化的产品和技术创新，是我们未来将以更高、更优的产品来满足不断增长的市场需求。

Technological innovation, rapid development of the market and customer needs are the greatest challenges facing us today. Facing with these challenges we are confident, because of highly professional products and technological innovation, we will meet the growing demand of market and customer with our better and better products.

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# 关于东正 About DONJOY



温州滨海经济开发区生产基地  
Wenzhou binhai economic development zone production base

东正创立于1993年，注册资金5508万，是一家专注于研发高品质PID过程控制器、阀门定位器、流量控制器，阀门控制单元，高洁净过程控制阀、智能自控阀，高洁净泵、高洁净管材和管道配件。公司高度专业化的产品和技术专注于生物制药、食品饮料、酿酒、精细化工等工业领域。东正众多的创新解决方案，对满足全球，尤其是新兴市场不断增长生物制药和食品饮料行业的需求起到了积极作用。

东正制造的产品母材料、加工技术、焊接技术、表面处理等技术指标均已达到国内外先进水平。且符合ASME BPE、EHEDG、FDA、3A等一系列国际标准和规范要求，先后通过了由德国TÜV机构实施的欧盟承压设备指令(PED-97/23/EC)和(MD-06/42/EC)认证、美国3A机构实施的3-A卫生标准认证、中国安全阀特种制造设备(TS)许可证和中国质量认证中心CQC ISO9001:2008质量管理体系认证等多项国际权威认证。

东正凭借先进的技术、优异的品质和完善的售后服务体系，先后被评定为国家高新技术企业，省著名商标、省科技型企业、创新型企业、专利示范企业、研发中心企业，守合同重信用AAA企业等众多荣誉。

温州空港经济园区生产基地  
Wenzhou airport economic zone production base

占地面积29000m<sup>2</sup>，总投资1.2亿元，该基地建成后预计年可实现销售额5亿元。生产基地，新引进ABB工业机器人、日本马扎克5轴加工中心、ABB机器人抛光设备。

Covering an area of 29000 m<sup>2</sup>, with total investment after construction is expected to 120 million yuan, the base to achieve sales of 500 million yuan. Production base, introduces new ABB industrial robot, Japan mazar-e-sharif grams of five axis machining center, ABB machine Polishing equipment.

Donjoy was built up in 1993, with registered capital RMB 55,08 millions. We focus on developing high quality PID process controller, the valve positioner, the flow controller, the valve control unit, high purity process control valve, intelligent self-control valve, high purity pump, high purity tubing fitting and pipeline accessories. Donjoy's products and technologies are widely used in biopharmaceutical, food, drink, wine fine chemicals and other industrial fields. Donjoy's innovation solutions meet the growing demand of the industry of biopharmaceutical, food and beverage from the whole world, especially the emerging market.

Raw material, processing technology, welding technology, surface treatment from Donjoy have achieved advanced levels of domestic and foreign market. Donjoy productions according to ASME BPE, EHEDG, FDA and 3A standard, get certificate of PED-97/23/EC and MD-06/42/EC issued by TUV, 3A issued by 3A organization, TS licence and ISO9001:2008.

Donjoy with advanced technology, excellent quality and perfect after-sales service system, has been assessed as the national high-tech enterprises, the Provincial Famous Trademark, the Trovincial Science and Ttechnology Enterprises, Innovative Enterprises, Patent Model Enterprises, R & D Center, AAA Credit Enterprises.



# 制造与检验 Manufacturing and testing



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机器人生产线

DONJOY以科学技术是第一生产力，也是企业核心竞争力，只有不断投入核心技术研发和创新，不断追求卓越，精益求精、以先进生产设备，严格的质量管理体系，精密的生产检测流程，保证每一款产品优良的性能。

Science and technology constitute a primary productive force, also the core competitive strength of the enterprise. Continuously intensifying the research, development and innovation of core technology, pursuing prominence and keeping improving, ensuring the excellent quality and performance of every single product by advanced production equipment, strict quality control and precise production and inspection procedures.

# 荣誉与资质

## Honor and qualification

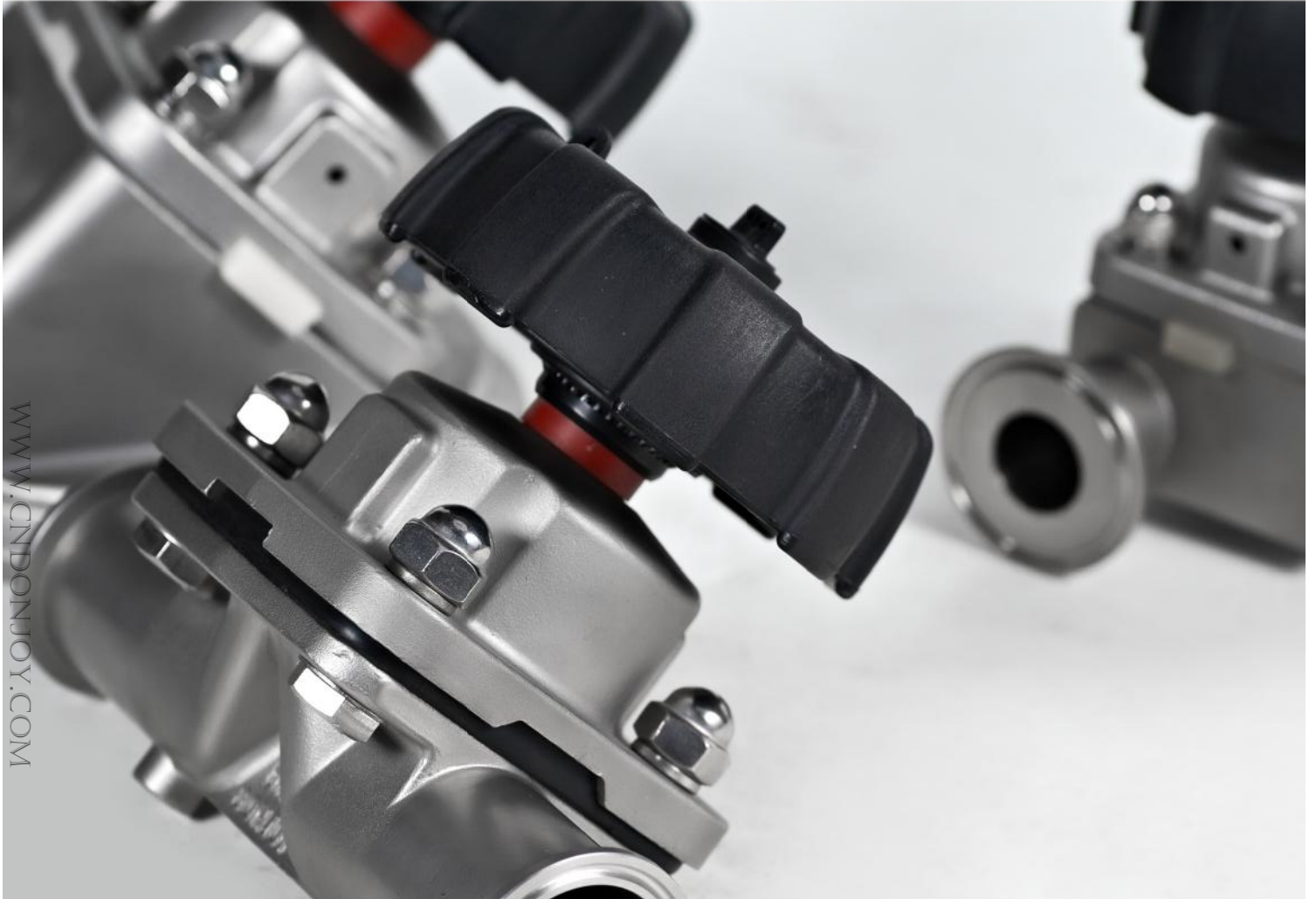
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	<p><b>3A</b></p> <p>东正是美国3A认证组织的成员，3A是一个自愿组织，致力于维护公共卫生和奶制品产品质量通过独特的行业监管程序的设备，用于处理乳制品的卫生标准3A认证。东正通过认证产品，阀门系列(54-02)证书号(1580)，泵系列(02-10)证书号(1579)，管件(63-03)证书号(1581)等多种规格型号。</p>
	<p><b>PED/97/23/EC &amp; MD/06/42EC</b></p> <p>东正通过了TUV NORD欧共体压力设备97/23/EC质量保证模式H&amp;材料(管件)制造认证。 阀门证书 NO.CE 0036 泵类证书 NO.705201402401-00</p>
	<p><b>FDA177.2600</b></p> <p>东正生产的阀门和泵以及流体设备等，与物料接触密封圈全部通过或符合美国食品和药品管理局和联邦法规第21条即，CRF 21 FDA177.2600和FDA177.1550认证，其涵盖： EPDM VITON(FPM) SILICON HNBRTFE橡胶塑料材料等。</p>
	<p><b>ISO9001/2008</b></p> <p>东正通过中国质量认证中心CQC，ISO9001-2008/GB/T19001-2008企业质量管理体系认证。其证书编号: 00108Q24215R1M/3302</p>
	<p><b>卫生许可证</b></p> <p>东正通过了省卫生厅卫生阀门、卫生管件等检验，且获得了其颁发的证书，其编号: So083。 其许可证为国家出台的生活饮用水卫生监督方法证书。</p>
	<p><b>高新技术企业</b></p> <p>东正通过多年发展和技术创新已获得了多项国家发明专利，100多项实用新型专利，现已成为国家高新技术企业。</p>
	<p><b>浙江省著名商标</b></p> <p>东正09年获得了温州市著名商标，2012年获得了浙江省著名商标。</p>

DONJOY不但拥有以上认证和荣誉，且被评定为省科技型、创新型、专利示范、研发中心、守合同守信用企业等众多的荣誉证书。

# 隔膜阀

## Diaphragm valve

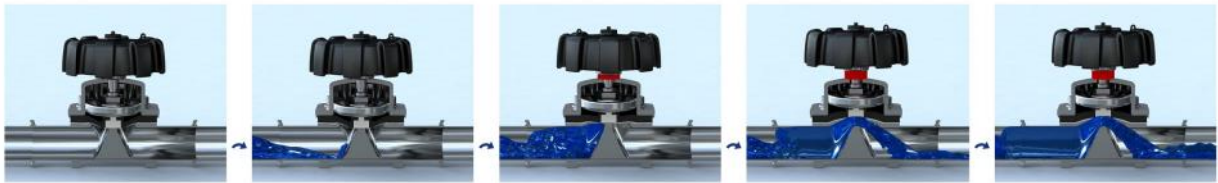


### 应用 Applications

- ◆ 隔膜阀，手动或气动操作，专门应用于制药工业中的卫生和无菌过程。
- ◆ 该阀门非常适用于流体控制和开/关的任务。
- ◆ 该隔膜阀同其他阀门设计相比，更容易清洁，很好的处理带颗粒的物料，在流量控制的应用上，气穴现象也更少些。
- ◆ Diaphragm valves, manually or pneumatically operated, and specifically designed for use on hygiene and aseptic processes in the pharmaceutical industries.
- ◆ The valve is excellent for flow control as well as for open/ close duties.
- ◆ The diaphragm valves are better in feature of flow in comparison with other valves. It is easier to clean up and better to process the substance with particles. The phenomenon of air pocket is rare during application of flow control.

## 工作原理 Operating principles

- ◆ 膜片提供阀体密封和阀座密封。里面没有路径通到外部环境，所以该阀门适用于无菌过程。
  - ◆ 当阀门关闭时，支撑膜片的压力垫朝阀体上的密封面移动。当压力板移动时，膜片弯曲，被迫推向阀体中心的阀座区域，因此关闭了通向阀体的流体路径。
  - ◆ 阀体和压力板的相互关系，防止了膜片的挤压。
  - ◆ 该阀门可以手动也可以气动操作，也可以通过控制器和电磁阀控制。
- ◆ The diaphragm provides the body seal as well as the seat seal. There are no paths to the outside environment so it suitable for aseptic processes.
  - ◆ When the valve is closed a pressure pad which supports the diaphragm moves towards the sealing face on the body. When the pressure plate moves, the diaphragm flexes and is forced down onto the seat area in the centre of the body thus closing off the flow path through the body.
  - ◆ The inter relationship of body to the pressure plate prevents over compression of the diaphragm.
  - ◆ The valve can be manual operation and pneumatic operation control tops of solenoid valves.



## 隔膜阀认证 Certificates

- ◆ 制造工艺中用到的所有合成树脂和添加剂都符合FDA认证
  - ◆ 材料化学成分、物理性能和制造工艺都备有证明文件
  - ◆ 所有隔膜片FDA一致性认证
  - ◆ -21-CFR-FDA 177.1550 全氟合成树脂
  - ◆ -21-CFR-FDA-177.2600 橡胶
  - ◆ USP 28CLASS VI CHAPTER 87 IN VITON和CHAPTER 88 IN-VITON一致性认证
  - ◆ 3-A一致性认证
  - ◆ EN 10204-3.1关于不锈钢化学成分合成追溯性证书
  - ◆ CE-PED/97/23/EC
- ◆ All synthetic resin and additive are comply with FDA certification
  - ◆ Material chemical composition, physical properties and manufacturing process are documented
  - ◆ All diaphragm seal consistency with FDA certificate
  - ◆ -21-CFR-FDA 177.1550 perfluorocarbon synthetic resin
  - ◆ -21-CFR-FDA-177.2600 rubber
  - ◆ USP 28 class VI CHAPTER 87 IN VITON and CHAPTER 88 IN - VITON consistency the authentication
  - ◆ 3 - A consistency the authentication
  - ◆ EN 10204-3.1
  - ◆ CE-PED/97/23/EC

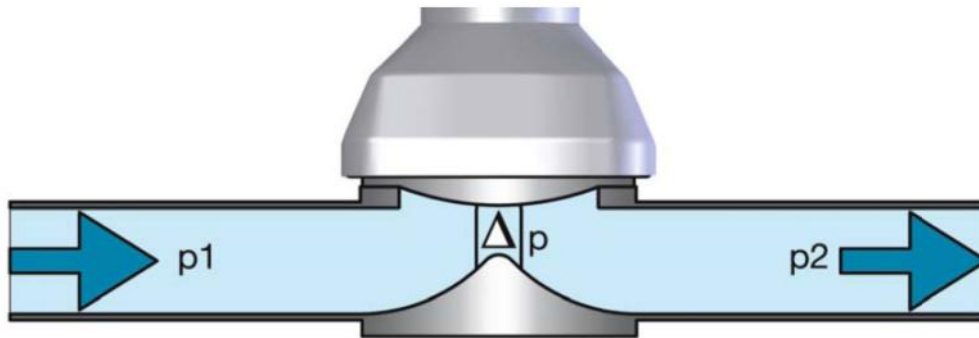


# 流量和隔膜阀口径的关系

## Relations between flow rate and o.d

- ◆KV值是用来定义阀门流量的一个技术参数。该数据描述了5°C到30°C的水在压差为1Bar情况下阀门的流量。
- ◆KV值是表示阀门100%开启状态下的KV值。

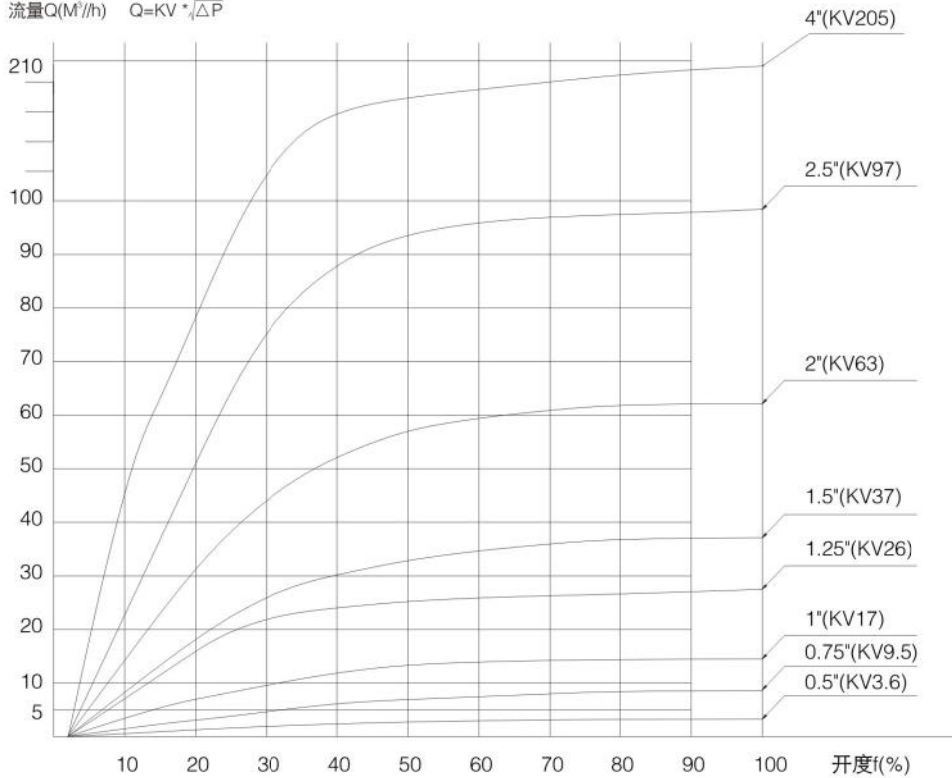
- ◆KV is a data of the flow rate. The data describes valve flux when the water of 5°C to 30°C in the pressure difference for 1bar
- ◆KV data is the valve flow open.



注意：开关量KV曲线仅供参考，100%开度为精确KV值  
 Note: On-off KV curve for reference, 100% open is accurate KV value

隔膜阀流量/选择(开度f)图表  
 The diaphragm valve flow/choice (opening f) chart

流量Q(M<sup>3</sup>/h)  $Q=KV \cdot \sqrt{\Delta P}$



注意：上面图表适用于，介质：水(20°C)  
 Note: the above chart suitable for, medium: water (20 °C)



# 隔膜片

## Diaphragm gasket

### 隔膜

- ◆除了阀体之外，膜片是唯一与介质直接接触的部件，隔膜阀是靠膜片把介质和执行结构以及外部空气隔离开来。膜片也是运动部件，膜片靠隔膜阀的上下移动实现介质流量的控制和切断。
- ◆DONJOY膜片根据自己的测试方式和标准以及第三方的严格测试规范下经过多年的研发和测试，这些试验是模拟现场真实的工况。例如，用自动化饱和蒸汽闭环系统测试膜片，对膜片形状，材质成分，阀体设计，执行机构以及阀门装配等产生的影响。
- ◆所有的不同材质的膜片，安装到相同规格上都是通用的。即使更换执行机构也无需更换膜片。



一片粘合膜片 PTFE+EPDM

PTFE 隔膜片具有高抗化学腐蚀性，极高的稳定性，弹性好，寿命长，密封性高，无冷变性，以及不受温度的波动影响的极佳性能，无论是热循环，冷循环、还是蒸汽消毒系统。

- ◆规格：1"-3", DN20-DN65
- ◆粘合膜片-20到130°C

PTFE diaphragm tablet has high chemical resistance, high stability, good flexibility, long life, high sealing, no cold degeneration, and not affected by temperature fluctuations excellent performance, whether it is thermal cycle, cold cycle, or steam disinfection system.

- ◆Specification: 1" - 3", DN20-DN65
- ◆Separate diaphragm - 20 to 130 °C



单层膜片 EPDM/Silicone/FPM Single diaphragm gasket EPDM/Silicone/FPM

橡胶膜片内嵌一层硫化纤维层增强其机械性能，该膜片在压力和温度升高具有较高的密封稳定性，加强纤维硬化在不锈钢螺栓上，从而保证橡胶更好与金属粘在一起。

因此橡胶膜片更适合在真空环境下使用。

- ◆规格：1"-4", DN20-DN100
- ◆EPDM-10到120°C

Rubber diaphragm embedded a layer of vulcanized fiber layer enhance its mechanical properties, the diaphragm in pressure and temperature has high seal stability, reinforcing fiber hardening in stainless steel bolt, so as to ensure better rubber and metal bond together.

Therefore rubber diaphragm more suitable for use in vacuum environment.

- ◆Specification: 1" - 4", DN20-DN100
- ◆EPDM - 10 to 120 °C

### Diaphragm

- ◆In addition to outside the valve body, the gasket is the only direct contact with the media parts, diaphragm valve is to rely on diaphragm to medium and executive structure and external air apart. Gasket is also moving parts, diaphragm on the diaphragm valve move to realize medium flow control and cut off.
- ◆DONJOY diaphragm valve gaskets according to their testing methods and standards and third party under strict test specification after many years of research and test, these tests are simulated field real condition. For example, in the automation saturated steam closed loop system testing gasket, the gasket shape, material composition, body design, actuators and the influence of valve assembly, etc.
- ◆All the different materials of the gaskets may be assembled to the valve of the same specifications. No need replacement gasket even changing actuator.



推荐

二片式/双层膜片 PTFE+EPDM Two type/double diaphragm PTFE + EPDM

由EPDM和PTFE组成的膜片，该膜片的特点在于阀门处于关闭状态时，膜片本身形状就能和阀体密封，从而降低了膜片承受力，延长了膜片的寿命。该膜片可耐受更高的温度和各种恶劣工况。

- ◆规格：1/2"-4", DN10-DN100
- ◆分离式膜片-20到160°C

By EPDM and PTFE composed of diaphragm, the characteristics of the diaphragm is the valve is in the closed position, diaphragm itself shape can and body sealing, which reduces the diaphragm tolerance and prolong the service life of the diaphragm.

- ◆Specification: 1/2" - 4", DN10-DN100
- ◆Separate diaphragm - 20 to 160 °C

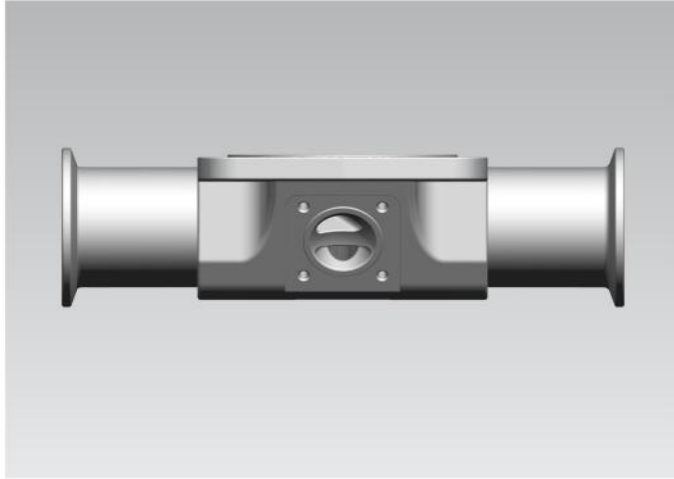


迷你型隔膜阀膜片 Mini-type diaphragm gasket

- ◆规格：1/4"-3/4" DN6-DN15
- ◆单层：EPDM SILCON PFM
- ◆双层：PTFE+EPDM
- ◆EPDM-10到120°C
- ◆PTFE+EPDM-20到150°C

- ◆Specification: 1/4" - 3/4" DN6 - DN15
- ◆Single: EPDM SILCON PFM
- ◆Double: PTFE + EPDM
- ◆Suitable temperature (°C)
- ◆EPDM - 10 to 120 °C
- ◆PTFE + EPDM - 20 to 150 °C

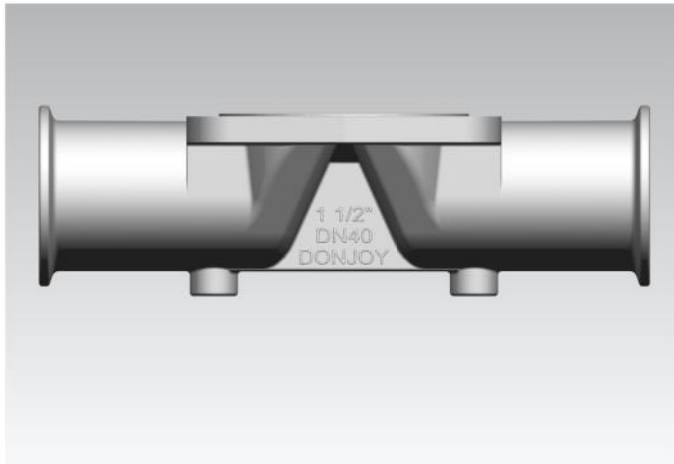
# 阀体 Valve body



## 锻造阀体 Forging body

锻造阀体毛坯是通过一块不锈钢锭，在锻造过程中，随着锻压高温的提供，通过挤压毛坯外形改变，通过锻压后阀体密度更高，结构更加均匀，无沙孔以及其他的杂质。再通过加工中心对其进行高精度加工。

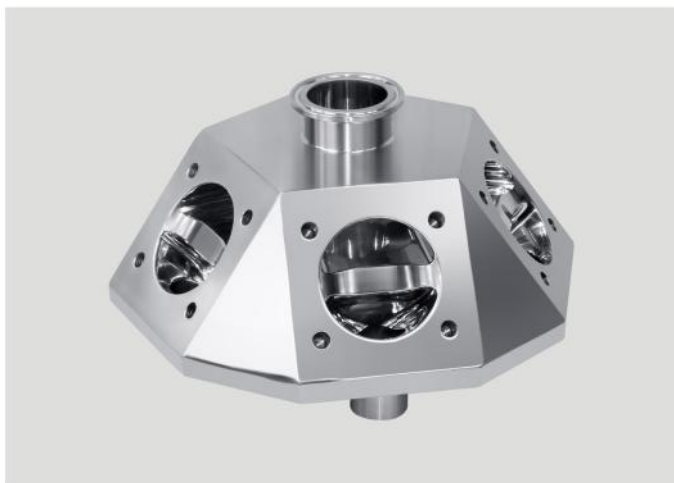
Forging body blank is through a piece of stainless steel ingot, in the forging process, along with the high temperature forging provide, through extrusion blank shape change, through the forging after body density higher, the structure is more uniform, no sand hole and other impurities. Then through the processing center carry on the high precision machining.



## 铸造阀体 Casting body

铸造阀体是由模具做成石蜡模型，石蜡模型渗入在陶瓷里，达到让整个阀体蜡模表面形成一层坚固的陶瓷。融化掉蜡模后，再注入融化的不锈钢溶液，冷却后敲掉外表的陶瓷后，毛坯阀体就成型了。铸造的尺寸非常的精确，外观较光滑，整洁。

Casting body is made by the mould paraffin wax model, paraffin wax model infiltration in ceramic, to let the whole body wax mold surface form a layer of strong ceramic. Melt wax mold, then into the melting of the stainless steel solution, after cooling knock off the appearance of ceramic, blank body is made up. Casting size is very accurate, the outward appearance is a smooth, clean and tidy.



## 圆钢阀体 Round steel body

圆钢阀体选用超纯材料，通过CNC切割设备直接切成块状材料，再能过CNC五轴加工中心对其进行高精度加工。

Round steel body chooses ultrapure materials, cut into squares material directly by CNC cutting equipment, To a five axis CNC machining center for precision machining.

# 隔膜阀相关参数

## Diaphragm valve relevant specification

### 阀体材质有多种选项

- ◆ 1.4435 (ASTM A 351 CF3M) ◆ ASME BPE 316L ◆ 1.4435 (316L) Forged body
- ◆ 1.4435-BN2 (316L) Fe < 0.5% Forged body

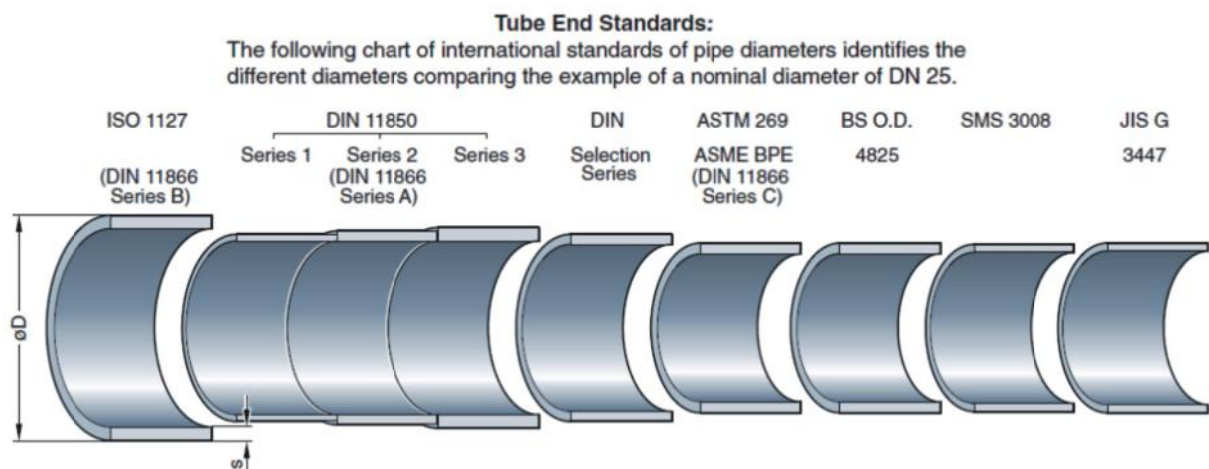
根据ASME BPE 不锈钢化学成分规范  
Table DT-3 chemical composition for automatic weld ends, %

Carbon, max	0.035
chromium	16.00-18.00
manganese, max	2.00
molybdenum	2.00-3.00
nickel	10.00-15.00
phosphorus, max	0.045
silicon, max	1.00
sulfur	0.005-0.017

### 管道接口标准 Pipeline end standard

下表格：以DN25为列的不同国际标准卫生级不锈钢管道直径的区别

Next form: Take DN25 for example to illustrate the stainless steel pipe OD difference in different International standard health grade



# 阀体表面 Body surface

## 表面处理 Surface treatment

对高洁净的工艺管路系统来说，表面的粗糙度是极其重要的技术指标  
For high clean process piping system, the roughness of the surface is an extremely important technique index



Surface finish: machined,  
Ra 1.2 μm



Surface finish: machined,  
Ra 0.8 μm



Surface finish: fine-machined,  
and grinded, Ra 0.4 μm



Surface finish: fine-machined,  
and grinded, Ra 0.2 μm



## 表面抛光 Surface polishing

Ra=粗糙度  
平均粗糙度Ra值被作为衡量一个阀体内表面光洁度的一个参数。  
LT5.6mm 长度/测量Lc0.8mm进行5次测量粗糙度得出的平均值粗糙度Ra值  
按照ASME BPE 表SF-3标准进行分类

Ra = roughness  
Average roughness Ra data is used as a measure of valve body surface finish of a parameter.  
LT5.6 mm length/measurement Lc0.8 mm for five measuring roughness obtained average roughness Ra data  
According ASME BPE table to classified

按照ASME BPE光洁度规范  
Table SF-3  $R_a$  Readings for Product Contact Surfaces

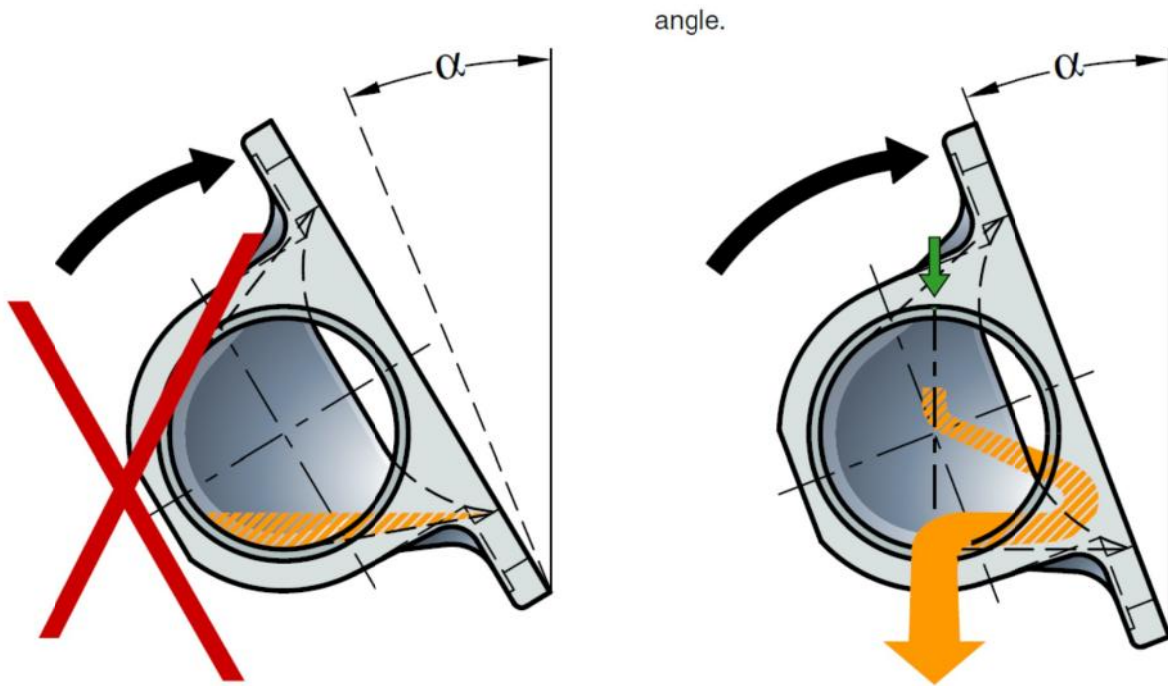
Surface Designation	Mechanically Polished [Note (1)] (机械抛光)	
	$R_a$ Max.	
	μ-in.	μm
SF0	No finish requirement	No finish requirement
SF1	20	0.51
SF2	25	0.64
SF3	30	0.76
Surface Designation	Mechanically Polished [Note (1)] and Electropolished (电抛光)	
	$R_a$ Max.	
	μin.	μm
SF4	15	0.38
SF5	20	0.51
SF6	25	0.64

# 自排空安装角度

## Self-emptying installation angle

在卫生洁净管路系统上应用的所有隔膜阀应符合以下标准的安装角度也是重要的准则之一就是阀门具有自排空功能。  
 In hygienic clean piping system of application of all diaphragm valve should meet the following standard installation Angle and self-emptying function.

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### 安装建议 Installation suggestion

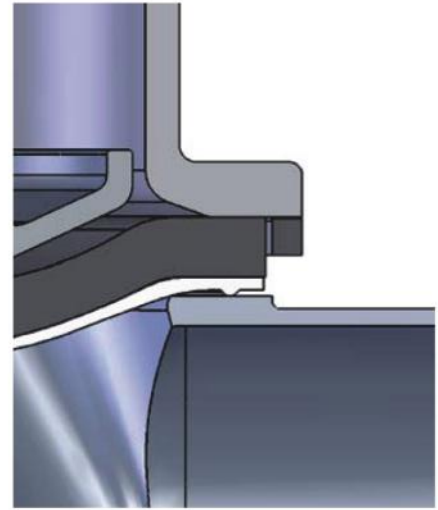
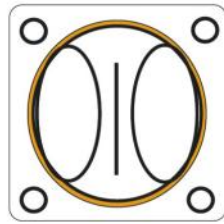
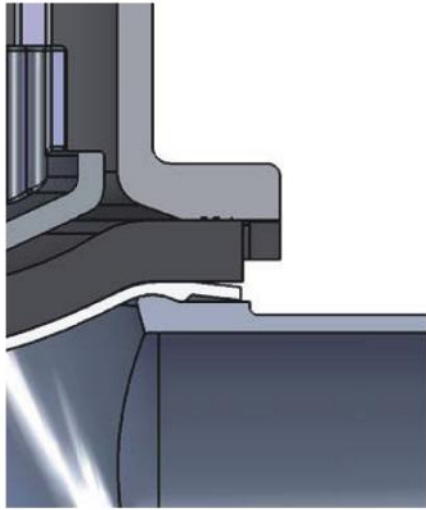
为了达到最佳的自排空效果，我们建议，对于安装长管线上的隔膜阀要有  $\alpha$  % 倾斜，这样做就可以保证整个系统具有完全自排空效果。

In order to achieve the best self-emptying effect, installing on long pipeline, we suggest declining the valve by  $\alpha$  % so as to ensure the completely self-emptying in the system.

SIZE		$\alpha$
1/4" - 1/2"	DN6 - DN10	22
3/4"	DN15	28
1"	DN25	21
1.5"	DN40	21
2"	DN50	30
2.5"	DN65	30

# 隔膜系统优势比较

## Diaphragm system advantage



东正隔膜系统  
Donjoy seal system



传统隔膜系统  
Conventional seal systems

DONJOY 作为一家先进隔膜阀供应商，我们的隔膜系统有着非常良好死角处理，并且符合EHEDG要求  
As a supplier of advanced diaphragm, diaphragm system we have a very good deal with the dead angle and in line with EHEDG requirements



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# 各种配置隔膜阀 Various configuration of diaphragm valve

DONJOY创新设计 专利保护



## 定位器/过程控制器(IL-TOP) Positioner/Process Controller(IL-TOP)

电源: DC 24V  
 输入信号: 0/4-20mA, 0-5/10V  
 反馈输出: 0/4-20mA, 0-5/10V  
 总线: DEVICE NET BUS  
 防护等级: IP67  
 支持手动操作  
 适用规格: 1"-4", DN25-DN100

Power Supply: DC 24V  
 Signal Input: 0/4-20mA, 0-5/10V  
 Signal Output: 0/4-20mA, 0-5/10V  
 Bus Line: DEVICE NET BUS  
 IP Grade: IP67  
 Manual Operation  
 Specification: 1"-4", DN25-DN100

## 控制单元(C-TOP) Control Unit(C-TOP)

电源: DC 24V  
 反馈输出: 4-20mA/电信号(24V)  
 总线: AS-I BUS  
 自整定阀位点反馈  
 支持手动操作  
 适用规格: 1/2"-4", DN10-DN100

Power Supply: DC 24V  
 Signal Output: 4-20mA/电信号(24V)  
 Bus Line: AS-I BUS  
 Self-adjusting Valve Position Feedback  
 Manual Operation  
 Specification: 1/2"-4", DN10-DN100



## 阀位调节器 Valve Position Regulator

该调节器可以手动  
 调节阀位, 实现流量的调节  
 适用规格: 1"-4", DN25-DN100

Support manual operation  
 Adjust valve position to regulate flow rate  
 Specification: 1"-4", DN25-DN100

## 位置传感器组件 Position Sensor Module

电源: DC24V AC110V/220V  
 PNP/NPN NC/NO  
 适用规格: 1/2"-4", DN10-DN100

Power supply: DC24V AC110V/220V  
 PNP/NPN NC/NO  
 Specification: 1/2"-4", DN10-DN100





# 迷你型隔膜阀-非常灵活的各种组合

## Mini-type diaphragm valve-Flexible various combinations

DONJOY创新设计 专利保护

执行机构  
Actuator



膜片  
Gasket



阀体  
Body



适用规格: DN6-DN20, 1/4"-3/4"  
Applicable specifications: DN6-DN20, 1/4"-3/4"

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# 迷你型隔膜阀 Mini-type diaphragm valve

DONJOY创新设计  
专利保护  
DONJOY Innovative Design  
Patent Protection



不锈钢气动隔膜阀  
Stainless steel pneumatic diaphragm valve



塑料气动隔膜阀  
Plastic pneumatic diaphragm valve

## 迷你型气动隔膜阀

- ◆ SIZE: 1/4" - 3/4", DN6 - DN15
- ◆ 最高温度: -30到150°C(取决于膜片)(不锈钢执行器)
- ◆ 最高温度: -30到130°C(取决于膜片)(塑料执行器)
- ◆ 最高压力: 单向(DELTA P=100%)  
常闭橡胶8bar, PTFE 6bar(选项)  
常闭橡胶6bar, PTFE 4.5bar(标准)  
常开和双作用橡胶8bar, PTFE 6bar
- ◆ 换装不同的执行器可以满足更高压力等级
- ◆ 锻造阀体: 1.4404/316L
- ◆ 铸造阀体: 1.4404/316L
- ◆ 连接方式: 焊接、卡箍、法兰、螺纹
- ◆ 气动执行器适用于阀体: 直通、三通、多通道阀体、焊接组合阀体、罐底阀

## Mini-type pneumatic diaphragm valve

- ◆ SIZE: 1/4" - 3/4", DN6 - Dn15
- ◆ Max temperature: - 30 to 150 °C (depending on diaphragm) (stainless steel actuator)
- ◆ Max temperature: - 30 to 130 °C (depending on diaphragm) (plastic actuator)
- ◆ Max pressure: one way (DELTA P = 100%)  
Normally close EPDM 8 bar, PTFE 6 bar (option)  
Normally close EPDM 6 bar, PTFE 4.5 bar (standard)  
Normally open and double action EPDM 8 bar, PTFE 6 bar
- ◆ Assemble different actuators can meet the higher pressure rating
- ◆ Forging body: 1.4404/316 L
- ◆ Casting body: 1.4404/316 L
- ◆ Connection: welding, clamp, flange, thread
- ◆ Pneumatic actuator suitable for body: straight, tee, multichannel body, welding combination valve, tank bottom valve



不锈钢手轮隔膜阀  
Diaphragm Valve with Stainless Steel Hand Wheel



塑料手轮隔膜阀  
Diaphragm Valve with Plastic Hand Wheel



三通隔膜阀  
Tee Diaphragm Valve

迷你型隔膜阀  
Mini-type diaphragm valve

- ◆ SIZE: 1/4" - 3/4"
- ◆ 最高温度: -30到150°C(取决于膜片)
- ◆ 最高压力: 10bar/146PSI
- ◆ 手动适用于阀体: T型三通/L型三通/直通/多通道
- ◆ SIZE: 1/4" - 3/4"
- ◆ Max temperature: - 30 to 150 °C (depending on diaphragm)
- ◆ Max pressure: 10 bar / 146 psi
- ◆ Manual applies to body: T port/L port/direct-way/multiport



多通隔膜阀  
4个通道, 3个控制阀  
Multiport Diaphragm Valve  
Four ports, three control valves



三通隔膜阀  
Tee Diaphragm Valve



三通隔膜阀  
3个通道, 2个控制阀  
Tee Diaphragm Valve  
Three ports, two control valves



U型三通隔膜阀  
U Type Tee  
Diaphragm Valve

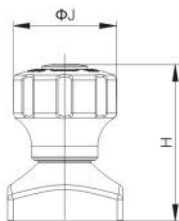
# 迷你型隔膜阀

## Mini-type diaphragm valve

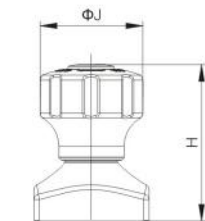


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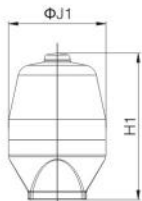
### 微型执行机构Micro actuators



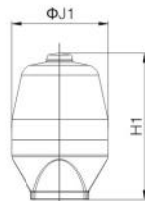
塑料手动  
Plastic Hand Wheel  
NO.MINI-VGM0S2



不锈钢手动  
Stainless Steel Hand Wheel  
NO.MINI-VGM0S1



塑料气动  
Plastic Actuator  
NO.MINI-VGM0Q2



不锈钢气动  
Stainless Steel Actuator  
NO.MINI-VGM0Q1

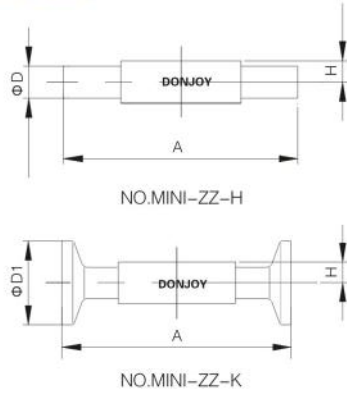
#### DIN32676/DIN11850-1/2

SIZE	J	J1	H	H1
DN6	38	60	57	104
DN8	38	60	57	104
DN10	38	60	57	104
DN15	38	60	57	104

#### ASME BPE/ASTM 269

SIZE	J	J1	H	H1
1/4"	38	60	57	104
3/8"	38	60	57	104
1/2"	38	60	57	104
3/4"	38	60	57	104

### 微型阀体Tiny body



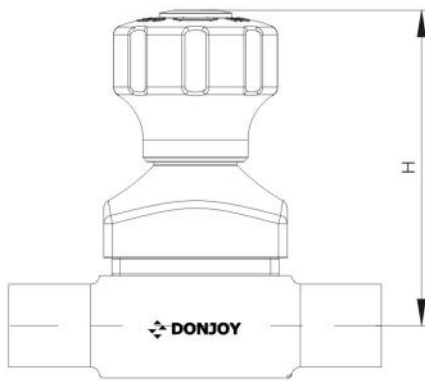
### DIN32676/DIN11850-1/2

SIZE	D	D1	A	H
DN6	8	25.4/34	68.6	6
DN8	10	25.4/34	68.6	6
DN10	12/13	25.4/34	68.6	9
DN15	18/19	25.4/34	85	12

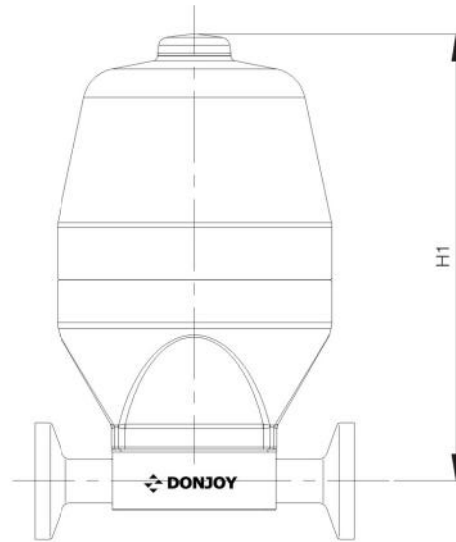
### ASME BPE/ASTM 269

SIZE	D	D1	A	H
1/4"	6.35	25.4	68.6	6
3/8"	9.5	25.4	68.6	6
1/2"	12.7	25.4	68.6	9
3/4"	19	25.4	85	12

### 迷你隔膜阀 Mini diaphragm valve



手动Hand Wheel



气动Actuator

SIZE	H	H1
1/4"	68.2	110.5
3/8"	68.2	110.5
1/2"	68.2	110.5
3/4"	74.3	116.5

SIZE	H	H1
DN6	68.2	110.5
DN8	68.2	110.5
DN10	68.2	110.5
DN15	74.3	116.5

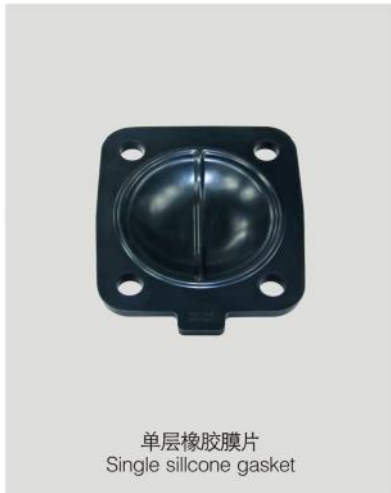
# 各种配置隔膜阀-非常灵活的各种组合

## Various configuration of diaphragm valve-Variou combinations of very flexible

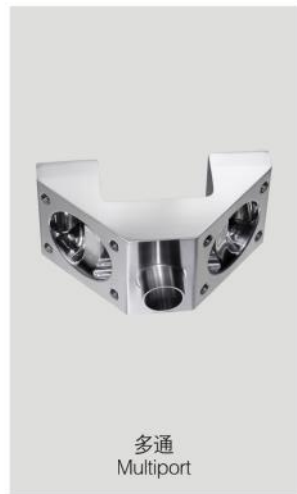
执行机构  
Actuator



膜片  
Gasket

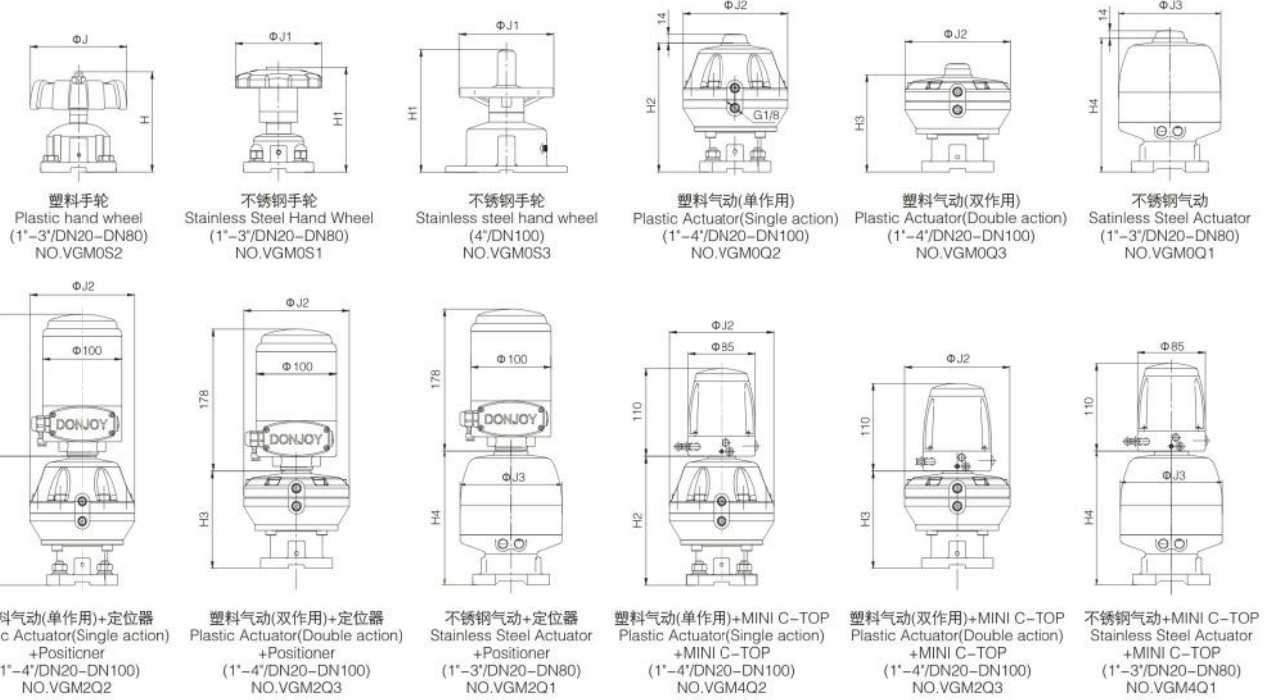


阀体  
Body



# 隔膜阀尺寸图

## Dimension of diaphragm valve



### DIN32676/DIN11850-1/2

SIZE	J	J1	J2	J3	H	H1	H2	H3	H4
DN20	90	90	132	102	111	111	153	118	134
DN25	90	90	132	102	111	111	153	118	134
DN32	114	90	162	129	120	120	196	157	177
DN40	114	90	162	129	120	120	196	157	177
DN50	140	90	162	129	153	148	203	164	177
DN65	140	120	215	167	164	158	235	174	207
DN80	140	120	215	167	164	158	235	174	207
DN100	-	190	258	-	-	245	329	250	-

### ASME BPE/ASTM 269

SIZE	J	J1	J2	J3	H	H1	H2	H3	H4
1"	90	90	132	102	111	111	153	118	134
1.25"	114	90	162	129	120	120	196	157	177
1.5"	114	90	162	129	120	120	196	157	177
2"	140	90	162	129	153	148	203	164	177
2.5"	140	120	215	167	164	158	235	174	207
3"	140	120	215	167	164	158	235	174	207
4"	-	190	258	-	-	245	329	250	-

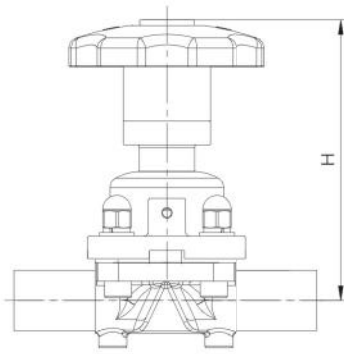
### ISO1127

SIZE	J	J1	J2	J3	H	H1	H2	H3	H4
3/4"	90	90	132	102	111	111	153	118	134
1"	114	90	162	129	120	120	196	157	177
1 1/4"	114	90	162	129	120	120	196	157	177
1.5"	140	90	162	129	153	148	203	164	177
2"	140	90	162	129	153	148	203	164	177
2.5"	140	120	215	167	164	158	235	174	207

# 隔膜阀尺寸图

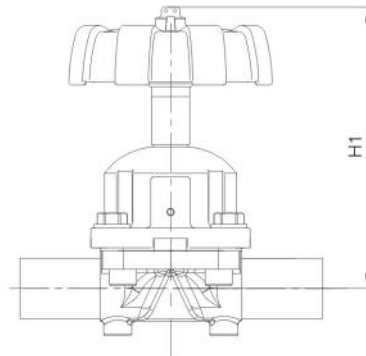
## Dimension of diaphragm valve

### 手动隔膜阀 Manual diaphragm valve



不锈钢手动  
Stainless steel hand wheel

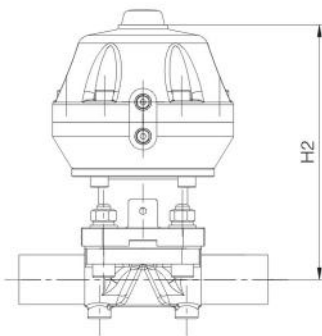
SIZE	H	H1
-	128.5	128.5
1"	128.5	128.5
1.25"	142.5	142.5
1.5"	142.5	142.5
2"	184.5	179.5
2.5"	207	201
3"	214	208
4"	-	321



塑料手动  
Plastic Hand Wheel

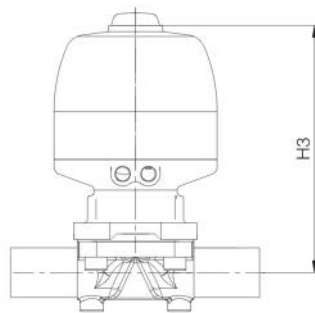
SIZE	H	H1
DN20	128.5	128.5
DN25	128.5	128.5
DN32	142.5	142.5
DN40	142.5	142.5
DN50	184.5	179.5
DN65	207	201
DN80	214	208
DN100	-	321

### 气动隔膜阀 Pneumatic diaphragm valve



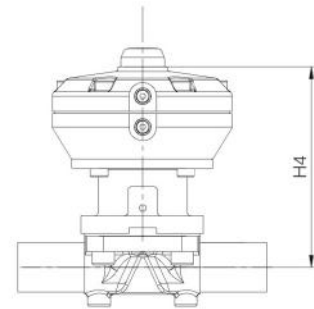
塑料气动  
Plastic Actuator

SIZE	H2	H3	H4
-	170.5	151.5	135.5
1"	170.5	151.5	135.5
1.25"	218.5	199.5	179.5
1.5"	218.5	199.5	179.5
2"	234.5	208.5	195.5
2.5"	278	250	217
3"	285	257	224
4"	405	-	326



不锈钢气动  
Stainless steel Actuator

SIZE	H2	H3	H4
DN20	170.5	151.5	135.5
DN25	170.5	151.5	135.5
DN32	218.5	199.5	179.5
DN40	218.5	199.5	179.5
DN50	234.5	208.5	195.5
DN65	278	250	217
DN80	285	257	224
DN100	405	-	326



气动双作用  
Double-acting Actuator



# 隔膜调节阀

## Diaphragm regulating valve

调节式隔膜阀主要应用在生物制药流体控制系统中，起到流量调节的作用，该调节阀具有标准隔膜阀所有高洁净特点，调节后液体输送气穴现象会更少。

具体详细资料请查阅自控调节阀目录资料

Adjustable diaphragm valve is mainly used in biomedical fluid flow control system, the flow rate adjustment the effect of section, the regulator has high standard diaphragm valve all clean characteristics, fluid after adjustment body conveying cavitation will be less.

For more details please refer to the automatic control valve catalog information



### 技术规格 Technical specifications

- ◆ SIZE: 1"-4", DN20-DN100
- ◆ 电源: DC24V
- ◆ 信号输入: 0/4-20mA, 0-5/10V(标准)
- ◆ 反馈输出: 4-20mA, 0-10V(选项)
- ◆ 总线: DEVICE NET BUS
- ◆ 执行机构: 塑料和不锈钢
- ◆ 防护等级: IP67
- ◆ SIZE: 1" to 4", 3/4" - Dn100
- ◆ Power supply: DC24V
- ◆ Signal input: 0/4-20 ma, 0-5/10 v (standard)
- ◆ Output feedback: 4-20 ma, 0 to 10 v (option)
- ◆ BUS: DEVICE NET BUS
- ◆ Actuator: plastic and stainless steel
- ◆ Protection grade: IP67



简单清晰的操作界面  
自整定功能  
操作和自动单键切换

Simple and clear user interface  
Self-tuning function  
Operation and automatic switch single bond

# 各种配置隔膜阀

## Various configuration of diaphragm valve

### 气动隔膜阀+迷你型C-TOP Pneumatic diaphragm valve + Mini C-TOP

迷你型C-TOP是一款控制单元，与PLC连接可以实现自动化控制。  
 阀门开启-绿灯亮  
 阀门关闭-红灯亮  
 设计有点动按钮(手动操作)  
 电源：DC 24V ± 10%  
 气源：M5/Φ4

Mini C - TOP is a section control unit, and PLC connection can achieve automation control.  
 The valve opens - the green light  
 The valve closed - the red light  
 Design with dynamic button (manual design)  
 Power supply: DC 24 V ± 10%  
 Source: M5 / Φ 4

绿灯亮开启  
Green light

红灯亮关闭  
Red-light

按钮Button



### 气动隔膜阀+位置传感器 Pneumatic diaphragm valve + position sensor

该装置，安装简单、方便、高效  
 传感器，PNP.NPN,DC24V AC220V/110V  
 This device, easy to install, convenient and efficient  
 Sensor, PNP. NPN, DC24V AC220V / 110 V



### 气动隔膜阀+流量调节器 Pneumatic diaphragm valve + flow regulator

优点，与安装定位器比较成本较低，运动速度快  
 缺点，不能自动调节流量  
 Advantages, the cost of installation flow regulator is lower  
 compair with locator, running speed is faster.  
 Faults, can not automatically adjust flow.

# 隔膜阀 Diaphragm valve

DONJOY创新设计  
专利保护



## 气动隔膜阀 Pneumatic diaphragm valve

- ◆ SIZE: 1"-4", DN25-DN100
- ◆ 最高温度: -30到150°C(取决于膜片)(不锈钢执行器)
- ◆ 最高温度: -30到130°C(取决于膜片)(塑料执行器)
- ◆ 最高压力: 单向(DELTA P=100%)  
常闭橡胶8bar, PTFE 6bar(选项)  
常闭橡胶6bar, PTFE 4.5bar(标准)  
常开和双作用橡胶8bar, PTFE 6bar
- ◆ 换装不同的执行器可以满足更高压力等级
- ◆ 锻造阀体: 1.4404/316L /1.4435 NB2
- ◆ 铸造阀体: 1.4404/316L
- ◆ 连接方式: 焊接、卡箍、法兰、螺纹
- ◆ SIZE: 1"-4", DN25-DN100
- ◆ Max temperature: - 30 to 150 °C (depending on diaphragm) (stainless steel actuator)
- ◆ Max temperature: - 30 to 130 °C (depending on diaphragm) (plastic actuator)
- ◆ Max pressure: one way (DELTA P = 100%)  
Normally close EPDM 8 bar, PTFE 6 bar (option)  
Normally close EPDM 6 bar, PTFE 4.5 bar (standard)  
and double action EPDM 8 bar, PTFE 6 bar
- ◆ Assemble different actuators can meet the higher pressure rating
- ◆ Forging body: 1.4404/316 L /1.4435 NB2
- ◆ Casting the body: 1.4404/316 L
- ◆ Connection: welding, clamp, flange, thread



## 手动隔膜阀 Manual diaphragm valve

- ◆ SIZE: 1"-4", DN25-DN100
- ◆ 最高温度: -30到150°C(取决于膜片)(不锈钢手轮)
- ◆ 最高温度: -30到130°C(取决于膜片)(塑料手轮)
- ◆ 最高压力: 10bar
- ◆ 锻造阀体: 1.4404/316L/ASME BPE 316L/1.4435 BN2 Fe≤0.5
- ◆ 铸造阀体: 1.4404/316L/ASTM A351 CF3M
- ◆ 连接方式: 焊接、卡箍、法兰、螺纹
- ◆ SIZE: 1" - 4", DN25-DN100
- ◆ Max temperature: - 30 to 150 °C (depending on diaphragm) (stainless steel wheel)
- ◆ Max temperature: - 30 to 130 °C (depending on diaphragm) (plastic wheel)
- ◆ Max pressure: 10 bar
- ◆ Forging body: 1.4404/316L/ASME BPE 316L/1.4435 BN2 Fe≤0.5
- ◆ Casting the body: 1.4404/316L/ASTM A351 CF3M
- ◆ Connection: welding, clamp, flange, thread

## 各种配置隔膜阀 Various configuration of diaphragm valve



### 电动隔膜阀 Electric diaphragm valve

电源: DC24V/AC110V/220V

执行功能:

开关型: 反馈输出电信号

调节型: 信号输入0-10V, 反馈2-10V

自适应阀位整定

支持手动操作

支持光电传感器, 人体感应或物体感应

Power supply: DC24V/AC110V / 220V

Executive function:

Switch type: feedback output electric signal

External regulation: 0 to 10 v signal input, feedback 2-10V

Adaptive valve position setting

Support manual operation

Support the photoelectric sensor, the human body induction induction or object



### 内螺纹隔膜阀 Female diaphragm valve

◆ SIZE: 1/2"-3", DN10-DN65

◆ 螺纹标准: BSP/BSPT/NPT

◆ 手动/气动均可配置

◆ SIZE: 1/2" - 3", DN10 - Dn65

◆ Thread standard: BSP/BSPT/NPT

◆ Manual/pneumatic

# 阀体组合多通道隔膜阀 Multi-Port diaphragm valve combination

## 主阀定位不同的两种焊接组合

### ◆GMP 阀门

主要运用在高纯水或其它分配系统的用水点垂直管路上，可有效减少管路死角。其中一个阀水平放置，并保持一定自排空角度，另一个阀是主阀，垂直放置，当该阀打开时，其出口就是一个没有细菌滋生或受工艺交叉感染的取样口。

### ◆SAP 阀门

主要运用在水平管路系统中，其中主阀水平放置，并保持一定的自排空角度，通路孔在主阀水路最低的排放点上。

## Different welding combinations of host valve

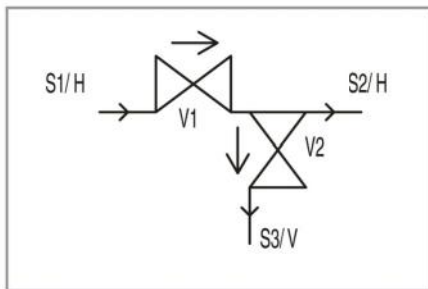
### ◆GMP valve

Mainly used in high pure water or other distribution system of water point vertical tube road, which can effectively reduce pipeline deadleg. One of the valve placed in a vertical position, the export is a no bacterial breeding or process cross infection sample mouth when the valve open.

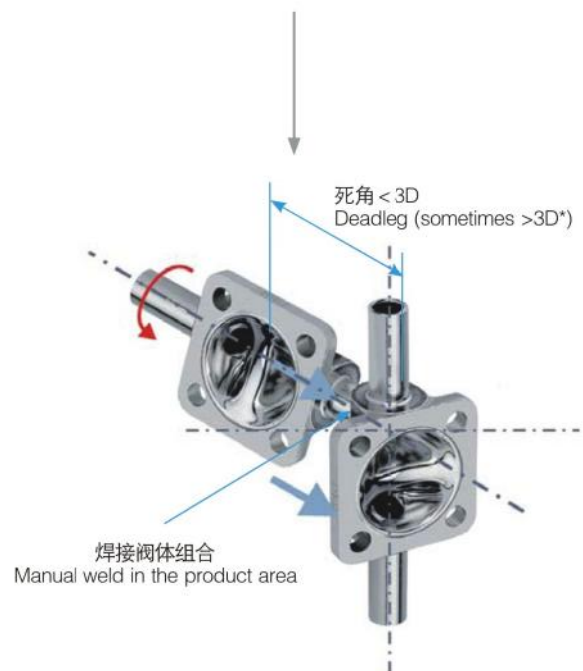
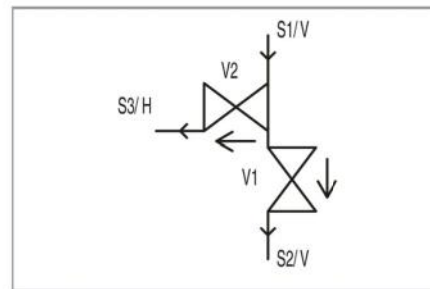
### ◆SAP valve

Mainly used in a horizontal pipeline system, host valve placed in a horizontal position, and maintain a certain self-emptying angle, the passage hole in the lowest discharge point of the host valve waterway.

## SAP系统配置 SAP configuration



## GMP系统配置 GMP configuration



# 多通道阀门 Multi-port valves



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## 各种组合隔膜阀 Various combinations diaphragm valve

GMP结构 GMP structure



SAP结构 SAP structure



隔膜阀阀阵系统  
Diaphragm valve array system

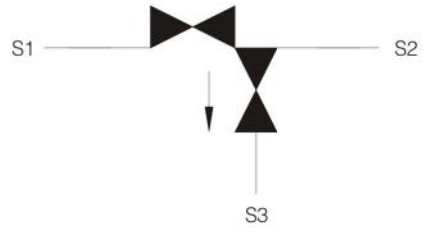


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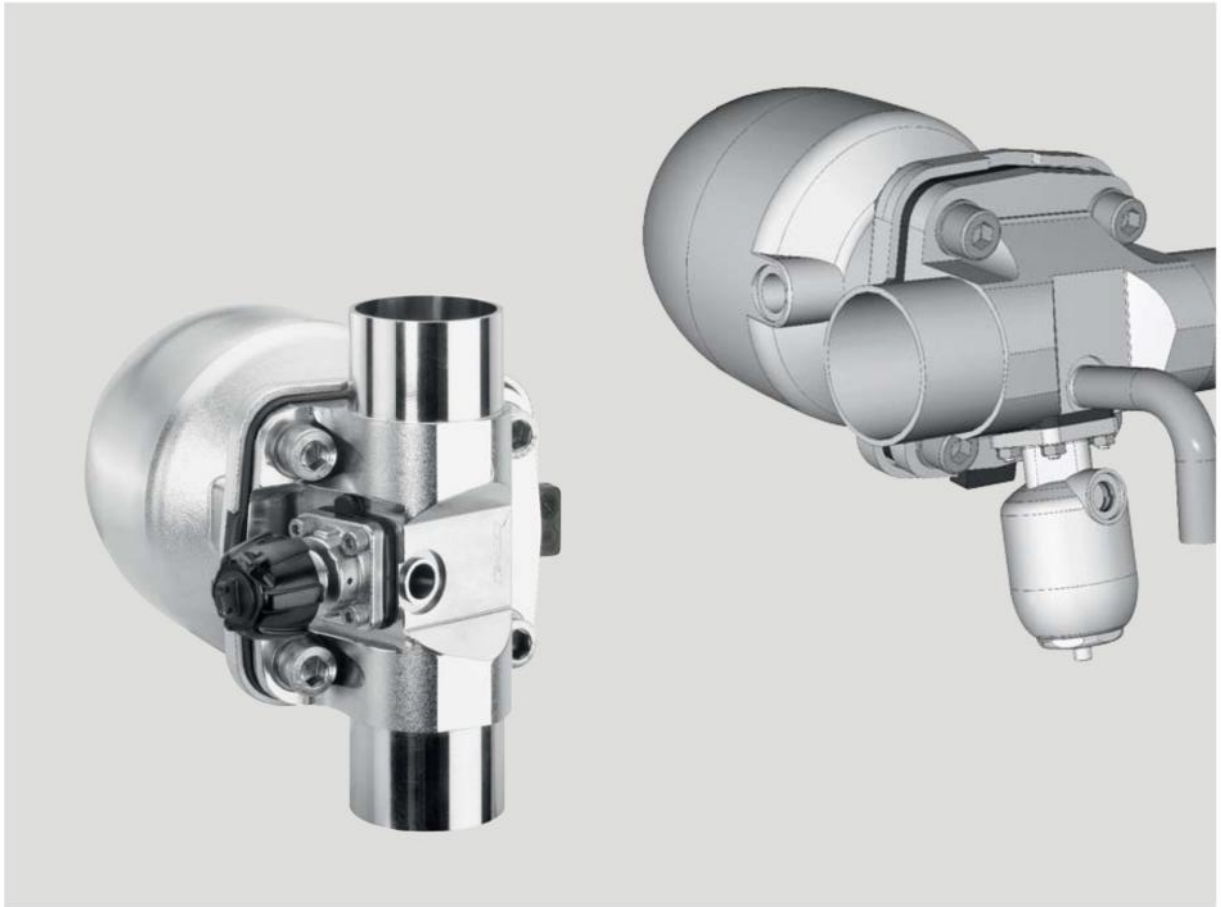
# 隔膜阀尺寸图

Dimension of diaphragm valve

M-32H



M-32H型Type

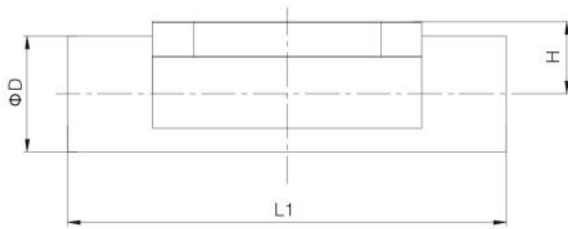




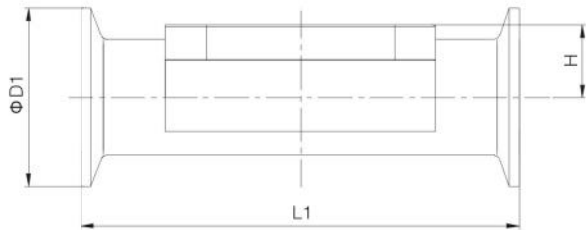
隔膜阀锻造阀体Diaphragm valve forging body



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NO.ZD-H



NO.ZD-K

DIN32676/DIN11850-1/2

SIZE	D	D1	L1	H
DN20	22/23	34	101.6	17.2
DN25	28/29	50.5	114.3	17.2
DN32	34/35	50.5	139.7	22.2
DN40	40/41	50.5	139.7	22.2
DN50	52/53	64	158.5	31.5
DN65	70	91	193.8	43
DN80	85	106	222.3	50
DN100	104	119	292.1	76

ASME BPE/ASTM 269

SIZE	D	D1	L1	H
1"	25.4	50.5	114.3	17.2
1.25"	31.8	50.5	139.7	22.2
1.5"	38.1	50.5	139.7	22.2
2"	50.8	64	158.5	31.5
2.5"	63.5	77.5	193.8	43
3"	76.2	91	222.3	43
4"	101.6	119	292.1	76

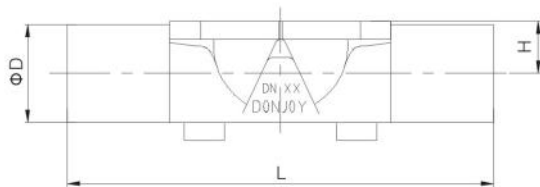
ISO1127

SIZE	D	D1	L1	H
3/4"	26.9	50.5	114.3	17.2
1"	33.7	50.5	139.7	22.2
1 1/4"	42.4	50.5	139.7	22.2
1.5"	48.3	64	158.5	31.5
2"	60.3	77.5	158.5	31.5
2.5"	76.2	91	222.3	43

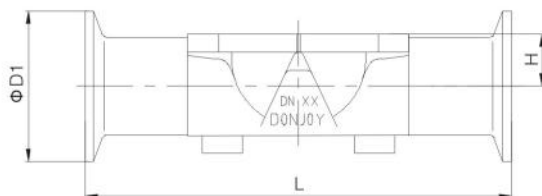
# 隔膜阀尺寸图

## Dimension of diaphragm valve

隔膜阀铸造阀体Diaphragm valve casting body



NO.ZZ-H



NO.ZZ-K

### DIN32676/DIN11850-1/2

SIZE	D	D1	L	H
DN20	22/23	34	145.4	17.2
DN25	28/29	50.5	145.4	17.2
DN32	34/38	50.5	178.4	22.2
DN40	40/42	50.5	178.4	22.2
DN50	52/53	64	198.4	31.5
DN65	70	91	216	43
DN80	85	106	216	50
DN100	104	119	304	76

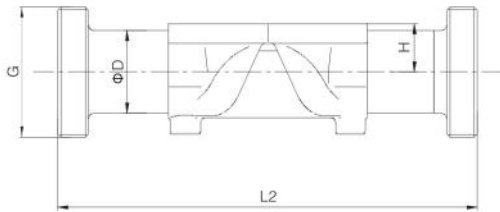
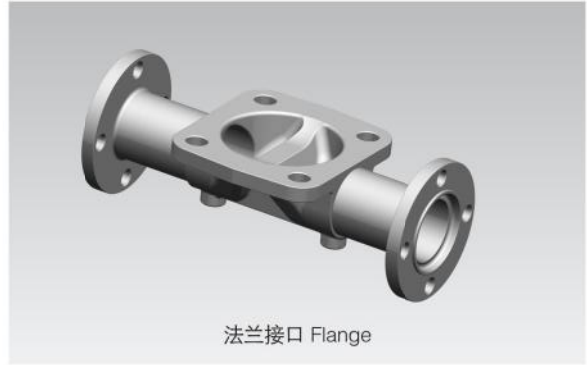
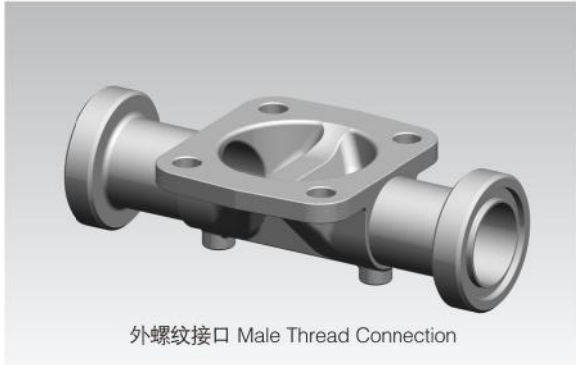
### ASME BPE/ASTM 269

SIZE	D	D1	L	H
1"	25.4	50.5	145.4	17.2
1.25"	31.8	50.5	178.4	22.2
1.5"	38.1	50.5	178.4	22.2
2"	50.8	64	198.4	31.5
2.5"	63.5	77.5	216	43
3"	76.2	91	216	43
4"	101.6	119	304	76

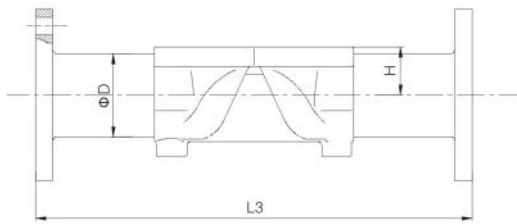
### ISO1127

SIZE	D	D1	L	H
3/4"	26.9	50.5	145.4	17.2
1"	33.7	50.5	178.4	22.2
1 1/4"	42.4	50.5	178.4	22.2
1.5"	48.3	64	198.4	31.5
2"	60.3	77.5	198.4	31.5
2.5"	76.2	91	216	43

螺纹/法兰阀体 Thread/Flange casting body



螺纹阀体 Thread body  
NO.ZZ-L

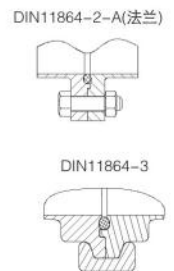
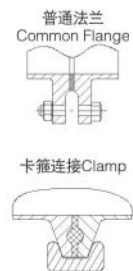
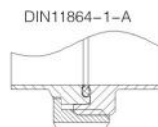
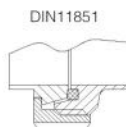
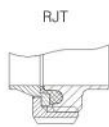
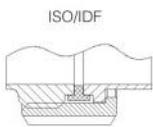


法兰阀体 Flange body  
NO.ZZ-F

SIZE	D	H	L2	L3
DN20	22/23	17.2	145.4	145.4
DN25	28/29	17.2	145.4	145.4
DN32	34/38	22.2	178.4	178.4
DN40	40/42	22.2	178.4	178.4
DN50	52/53	31.5	198.4	198.4
DN65	70	43	216	216
DN80	85	50	216	216
DN100	104	76	304	304

SIZE	D	H	L2	L3
1"	25.4	17.2	145.4	145.4
1.25"	31.8	22.2	178.4	178.4
1.5"	38.1	22.2	178.4	178.4
2"	50.8	31.5	198.4	198.4
2.5"	63.5	43	216	216
3"	76.2	43	216	216
4"	101.6	76	304	304

可提供各种连接方式 Various Connection



# 三通隔膜阀

## Tee diaphragm valve

T型三通  
T Type Tee



T型、U型三通隔膜阀 Tee diaphragm valve

- ◆ SIZE: 1"-4", DN25-DN100
- ◆ 手动气动均可配置
- ◆ 连接方式: 卡箍、焊接、特殊接口
- ◆ SIZE: 1"-4", DN25-DN100
- ◆ Manual/pneumatic
- ◆ Connection: clamp, welding and other special connection

U-C三通隔膜阀  
U-C Tee Diaphragm Valve



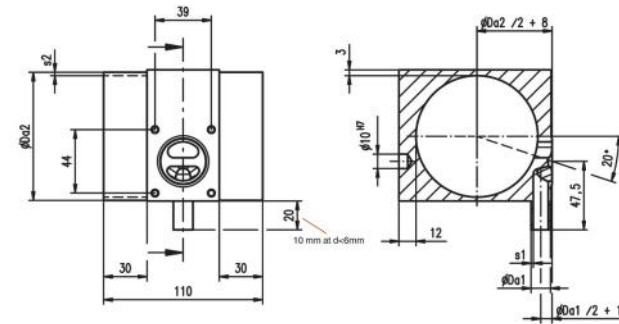
U-B三通隔膜阀  
U-B Tee Diaphragm Valve



U-B三通隔膜阀  
U-B Tee Diaphragm Valve



Dimension example for diaphragm size 10



三通阀体+取样阀, 优化死角设计, 但这些都是  
专为大管道需要小支管。理想的直管道 $\geq$ DN50,  
出口分支机构和阀座1/2"-3/4"

优点

- ◆腔体完全成型, 比值 $<1 = D$
- ◆结构紧凑
- ◆如安装一个角度可自排空

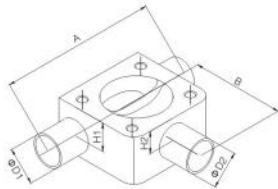
Three-way valve + sampling valve, designed  
to optimize dead angle, but these are special  
needs of small branch pipe for the big pipe.  
Ideal straight pipes  $\geq$ DN50, export branches  
and seat 1/2 "–3/4"

Advantages

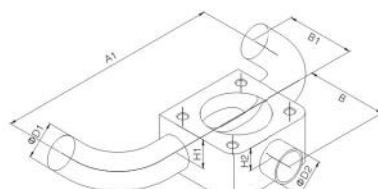
- ◆Cavity fully formed, the ratio  $<1 = D$
- ◆Compact
- ◆If you install an angle can be self-draining

# 三通隔膜阀 Tee diaphragm valve

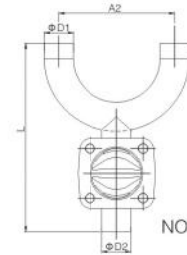
## 隔膜阀阀体(三通/U型三通) Diaphragm valve body (Tee, U-type)



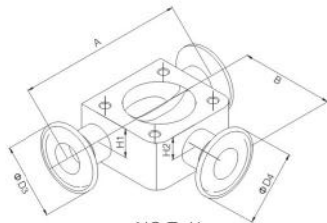
NO.T-H



NO.UC-H

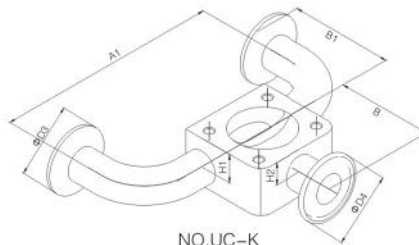


NO.UB-H



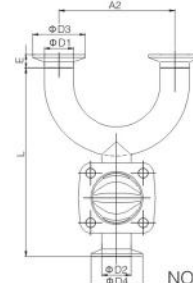
NO.T-K

三通阀体



NO.UC-K

U-C型三通阀体



NO.UB-K

U-B型三通阀体

### DIN32676/DIN11850-1/2

SIZE	D1	D2	D3	D4	A	A1	A2	B	B1	H1	H2	L	E
DN25-1/2"		12.7		25.4								125	
DN25-3/4"	28	18	50.5	34	124	224	100	74	70	25	19	136	12.7
DN25-DN20		22		34				79				179	
DN25-DN25		28		50.5								179	
DN32-1/2"		12.7		25.4				77.5				144	
DN32-3/4"	34	19	50.5	25.4	124	234	110	82.5	78	28.5	19	144	12.7
DN32-DN20		22		34								187	
DN32-DN25		28		50.5								187	
DN32-DN32		34		50.5	152	262	110	96.5	78	31	26	216	
DN40-1/2"		12.7		25.4								141	
DN40-3/4"	40	19	50.5	25.4	124	244	120	85	31	19		153.5	12.7
DN40-DN25		22		34				85.5				240	
DN40-DN25		28		50.5								196.5	
DN40-DN32		34		50.5	152	272	120	100	85	34	26	225	
DN40-DN40		40		50.5								225	
DN50-1/2"		12.7		25.4				87.5				157	
DN50-3/4"	52	19	64	25.4	134	274	140	92.5	97	37.5	19	168	12.7
DN50-DN25		28		50.5				92.5				211	
DN50-DN32		34		50.5	162	302	140	106.5	97	40	26	240	
DN50-DN40		40		50.5	162	302	140	106.5	97	40	26	240	
DN50-DN50		52		64	184	324	140	120.5	97	42.5	32	257	
DN65-1/2"		12.7		25.4				96.5				176	
DN65-3/4"	70	19	91	25.4	134	294	160	101.5	110	46	19	187	12.7
DN65-DN25		28		50.5				101.5				230	
DN65-DN32		34		50.5	162	322	160	115.5	110	48.5	26	259	
DN65-DN40		40		50.5	162	322	160	115.5	110	48.5	26	259	
DN65-DN50		52		64	184	344	160	130.5	110	51	32	276	
DN65-DN65		70		91	225	385	160	152	110	51	51	302	
DN80-1/2"		12.7		25.4				104				193	
DN80-3/4"	85	19	106	25.4	134	314	180	109	118	53.5	19	205	12.7
DN80-DN25		28		50.5				109				248	
DN80-DN32		34		50.5	162	342	180	123	118	56	26	276	
DN80-DN40		40		50.5	162	342	180	123	118	56	26	276	
DN80-DN50		52		64	184	364	180	139	118	58	32	293	
DN80-DN65		70		91	225	405	180	160.5	118	58	51	319	
DN80-DN80		85		106								319	
DN100-1/2"		12.7		25.4				115				211	
DN100-3/4"	104	19	119	25.4	134	334	200	120	140	63	19	223	15.8
DN100-DN25		28		50.5				120				266	
DN100-DN32		34		50.5	162	362	200	134	140	65.5	26	294	
DN100-DN40		40		50.5	162	362	200	134	140	65.5	26	294	
DN100-DN50		52		64	184	384	200	149.5	140	68	32	311	
DN100-DN65		70		91	225	425	200	171	140	72	51	337	
DN100-DN80		85		106								337	
DN100-DN100		104		119	300	500	200	216	140	72	72	425	

### ASME BPE/ASTM 269

SIZE	D1	D2	D3	D4	A	A1	A2	B	B1	H1	H2	L	E
1"-1/2"		12.7		25.4								165	
1"-3/4"	25.4	19.1	50.5	25.4	124	200	120	74	52.4	25	19	176	12.7
1"-1"		25.4		50.5				79				219	
1 1/4"-1/2"		12.7		25.4				77.5	69.7	28.5	19	192	
1 1/4"-3/4"	31.8	19.1	50.5	25.4	124	219	155	82.5				203	12.7
1 1/4"-1"		25.4		50.5				82.5				246	
1 1/4"-1 1/4"		31.8		50.5	152	247	155	96.5	69.7	31	26	275	
1 1/2"-1/2"		12.7		25.4				80.5				195	
1 1/2"-3/4"	38.1	19.1	50.5	25.4	124	238	157	85.5	74.6	31	19	206	12.7
1 1/2"-1"		25.4		50.5				85.5				249	
1 1/2"-1 1/4"		31.8		50.5	152	266	157	100	74.6	34	26	278	
1 1/2"-1 1/2"		38.1		50.5								214	
2"-1/2"		12.7		25.4				87.5	103.2	37.5	19	225	
2"-3/4"	50.8	19.1	64	25.4	134	286	175	92.5				268	12.7
2"-1"		25.4		50.5				92.5				268	
2"-1 1/4"		31.8		50.5	162	314	175	106.5	103.2	40	26	297	
2"-1 1/2"		38.1		50.5				106.5				314	
2"-2"		50.8		64	184	336	175	120.5	103.2	42.5	32	314	
2 1/2"-1/2"		12.7		25.4				96.5	131.8	46	19	247	
2 1/2"-3/4"	63.5	19.1	77.5	25.4	134	324	215	101.5				290	12.7
2 1/2"-1"		25.4		50.5				101.5				290	
2 1/2"-1 1/4"		31.8		50.5	162	352	215	115.5	131.8	48.5	26	319	
2 1/2"-1 1/2"		38.1		50.5				115.5				336	
2 1/2"-2"		50.8		64	184	374	215	130.5	131.8	51	32	336	
2 1/2"-2 1/2"		63.5		77.5	225	415	215	152	131.8	51	51	362	
3"-1/2"		12.7		25.4				104	160.3	53.5	19	229	
3"-3/4"	72.2	19.1	91	25.4	134	362	230	109				272	12.7
3"-1"		25.4		50.5				109				272	
3"-1 1/4"		31.8		50.5	162	390	230	123	160.3	56	26	301	
3"-1 1/2"		38.1		50.5				123				318	
3"-2"		50.8		64	184	412	230	139	160.3	58	32	318	
3"-2 1/2"		63.5		77.5	225	453	230	160.5	160.3	58	51	344	
3"-3"		72.2		91								344	
4"-1/2"		12.7		25.4				115	211.1	63	19	276	
4"-3/4"	101.6	19.1	119	25.4	134	438	305	120				287	15.8
4"-1"		25.4		50.5				120				330	
4"-1 1/4"		31.8		50.5	162	466	305	134	211.1	65.5	26	359	
4"-1 1/2"		38.1		50.5				134				376	
4"-2"		50.8		64	184	488	305	149.5	211.1	68	32	376	
4"-2 1/2"		63.5		77.5	225	529	305	171	211.1	72	51	402	
4"-3"		76.2		91								402	
4"-4"		101.6		119	300	604	305	216	211.1	72	72	490	

# 隔膜罐底阀

## Diaphragm tank bottom valve



### 隔膜罐底阀

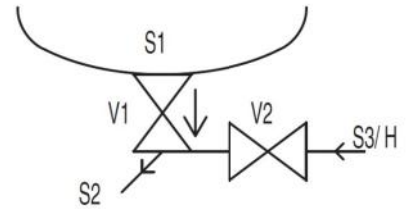
- ◆ SIZE: 1"-4", DN25-DN100
- ◆ 手动气动均可配置
- ◆ 出口连接方式: 卡箍、焊接、特殊接口

### Diaphragm tank bottom valve

- ◆ SIZE: 1" - 4", DN25-DN100
- ◆ Manual pneumatic all can be configured
- ◆ Export connection mode: clamp, welding, special interface

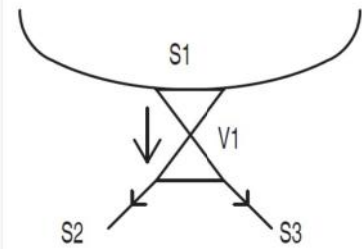
# 多通道罐底隔膜阀 Multipass tank bottom diaphragm valve

MG-32A



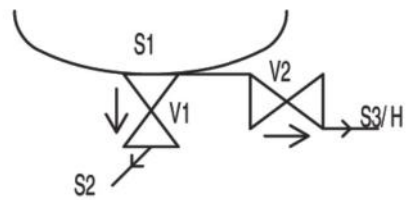
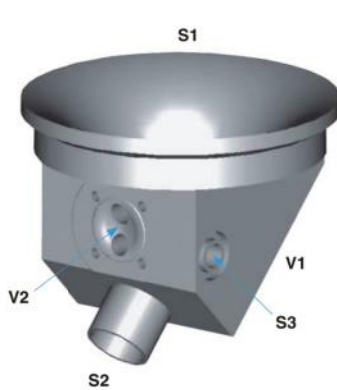
3个通道，2个控制阀  
Three ports, two control valve

MG-31A



3个通道，1个控制阀  
Three ports, one control valve

M-32B



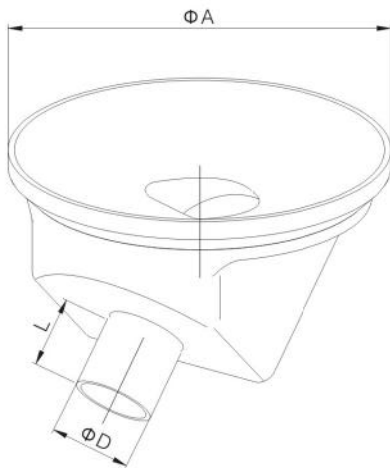
3个通道，2个控制阀  
Three ports, two control valve



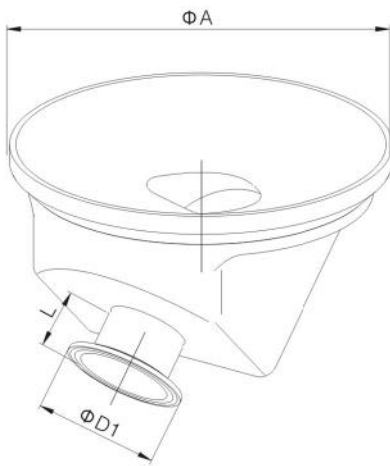
# 隔膜阀尺寸图

## Dimension of diaphragm valve

### 罐底阀体 Tank bottom casting body



NO.G-H



NO.G-K

#### DIN32676/DIN11850-1/2

SIZE	D	D1	L	A
DN15	18/19	34	25	120
DN20	22/23	34	25	120
DN25	28/29	50.5	25	120
DN32	34/38	50.5	25	160
DN40	40/41	50.5	25	160
DN50	52/53	64	30	200
DN65	70	91	30	250
DN80	85	106	30	250
DN100	104	119	30	320

#### ASME BPE/ASTM 269

SIZE	D	D1	L	A
3/4"	19	25.4	25	120
1"	25.4	50.5	25	120
1.25"	31.8	50.5	25	160
1.5"	38.1	50.5	25	160
2"	50.8	64	30	200
2.5"	63.5	77.5	30	250
3"	76.2	91	30	250
4"	101.6	119	30	320



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# 使用多通道隔膜阀的价值和意义

## Value and significance of using multiport diaphragm valve

### 什么是多通道隔膜阀

多通道隔膜阀是由一整块不锈钢材料加工制作而成的，最少加工成3个通道，最多可加工35个通道的和加装20个执行机构的阀门，若加工成数量更多的通道，主要取决于阀体加工的可行性。在卫生领域，多通道隔膜阀的选用和规范是非常重要的，原因在于多通道阀在优化卫生工艺的高纯净和提高产品的生产效率方面具有很大的优势。

### What is the multiport diaphragm valve

Multiport diaphragm valve is made of a whole piece of stainless steel, at least processed into Three channel, most can be processed 35 channel and add 20 actuator valve, if Processed into quantity more channels, mainly depends on the feasibility of the valve processing. In health brought Domain, multiport diaphragm valve selection and standard is very important, the reason is that many channel Valve in optimizing health process of high purity and improve the production efficiency has a lot of Advantage.

### 多通隔膜阀的主要特点

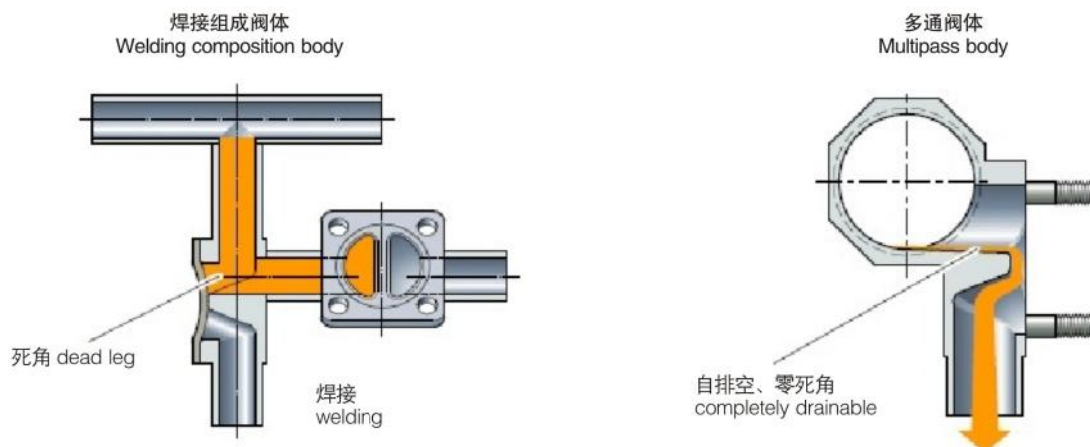
面向客户特殊需求的设计  
结构紧凑，狭小的安装空间  
多个不同的通径的组合  
最优化的自排空功能  
零死角  
减少接触面积、防止介质滞留、防止交叉感染  
省去接头、管道焊接  
减少所需阀门的各种资质认证  
可根据客户任意选择执行机构和连接方式

### Multiport diaphragm valve key features

Facing the customers' special needs of the design  
The structure is compact, small installation space  
Different size can be combination  
Optimization of the self emptying function  
Zero dead Angle  
Reduce the contact area, prevent medium retention, and cross infection  
Save joint, pipe welding  
Reduce the need for valve various qualification certification  
According customers' requirement to choose actuator and connections

下图显示是多通阀体和焊接组合阀体死角对比

The following figure display is contrast between more general body and welding combination body dead leg



# 多通道隔膜阀

## Multiport diaphragm valve

### M-65A

多通道隔膜阀是目前最先进的设计理念为满足生物制药高洁净要求的解决方案。传统焊接组成的阀阵系统安装非常的复杂，实施的工期很长，而且会占用很大的空间，安装和焊接工作验证费用相当高。

Multiport diaphragm valve is the most progressive design for meeting the ultral clean in pharmacy industry. Traditional welding manifold valve is complicated assembly time is long, large space occupied and expensive cost on inspection.

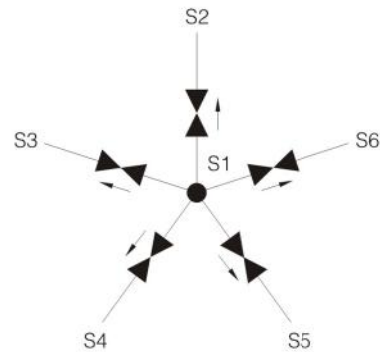
M-65A型) 星形设计	Type M-65A) star design
5个阀门, 6个通道	Five valve, six ports
5个阀门垂直放置	Five valve vertical place



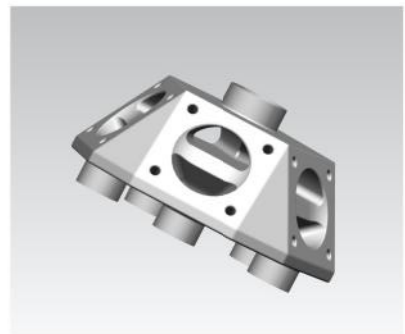
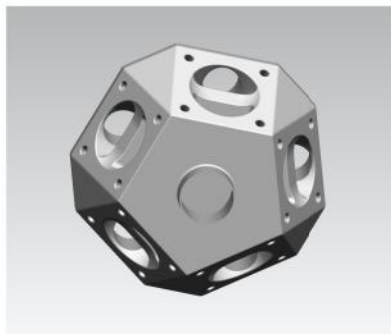
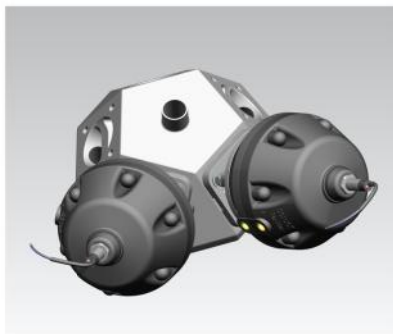
### 安装建议 Installation suggestion

根据通径大小不同，星形设计最多可达7个阀门，另外星形设计也可有两个对置的多通道阀门组成，他们之间通过公共管相连接。

According to different size, star design can almost be seven valve, besides star design can consist of two opposed multiport valve, they are connected by public pipe.



M-65A型Type

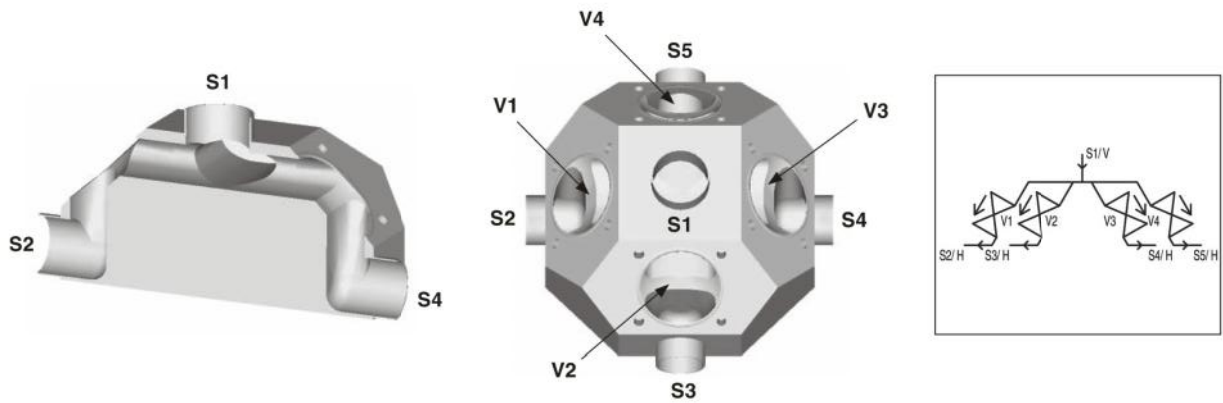


**M-54A**

无菌阀块由不锈钢制成的块料，应用，例如，作为阀阵系统或分配器  
Sterile valve block is made of stainless steel block, application, for example, as a collector or distributor.

**安装位置 Mounting position**

接口S1垂直排列向上或向下  
Spigot S1 aligned vertically up or down

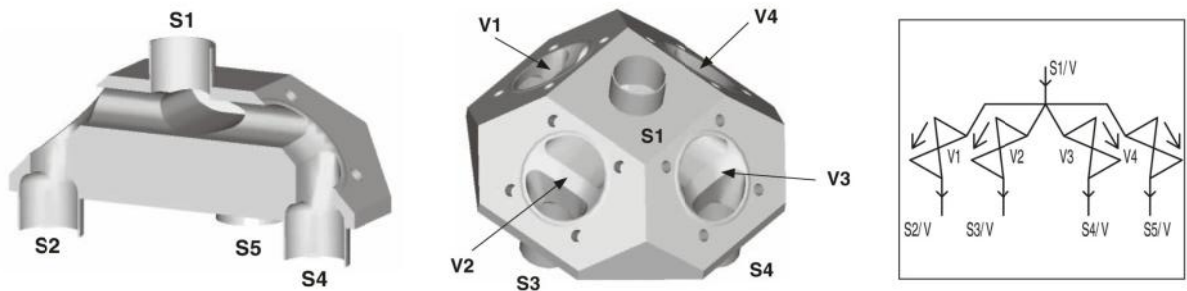


**M-54B**

由不锈钢制成的块料，应用，例如无菌阀块，作为阀阵系统或分配器  
Sterile valve block is made of stainless steel block, application, for example, as a collector or distributor

**安装位置 Mounting position**

接口S1垂直排列向上或向下  
Spigot S1 aligned vertically up or down



H=水平, V=垂直  
H=horizontal, V=vertical

# 多通道隔膜阀 Multiport diaphragm valve

M-53A

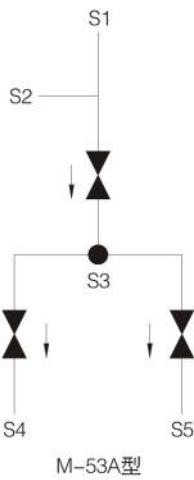


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M-53A

M-53A型) 多通道隔膜阀  
 3个控制阀, 5个通道  
 1个用水点阀座  
 2个一体式闭环取样阀阀座  
 建议S1口朝上安装

Type M-53A) multiport diaphragm valve  
 Three control valve, 5 port  
 A water point seat  
 Two integrated closed-loop sampling valve seat  
 Suggest S1 up installation



一个复杂的设计由下面WFI循环阀来表示。

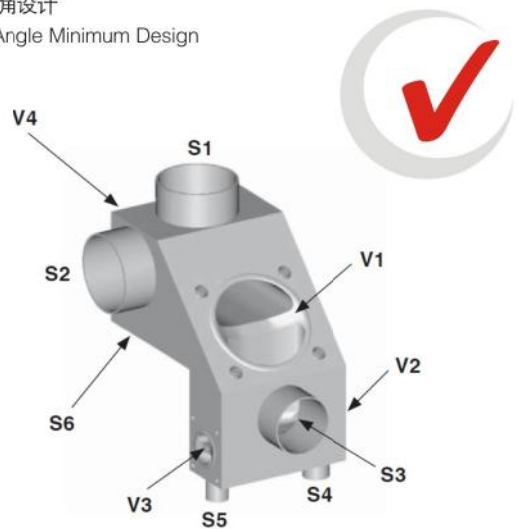
功能: 冷凝水出口, 纯蒸汽供应和采样都集成在一个紧凑的设计。

A more complex version is represented by the following WFI loop valve.  
 Function: condensate outlet, pure steam supply and sampling are integrated in a compact block.

组合焊接设计  
 死角 $\leq 3D$   
 Combination design of welding  
 Dead angle  $\leq 3D$



最小死角设计  
 Dead Angle Minimum Design



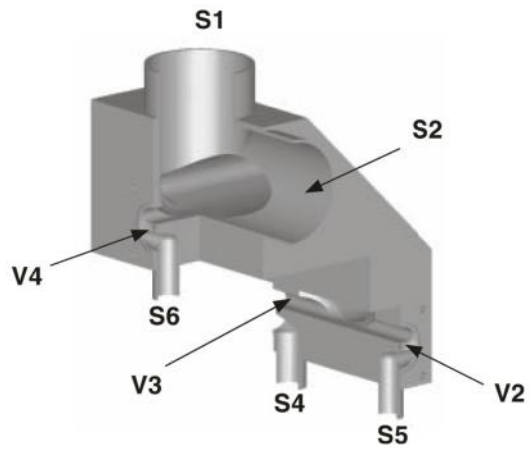
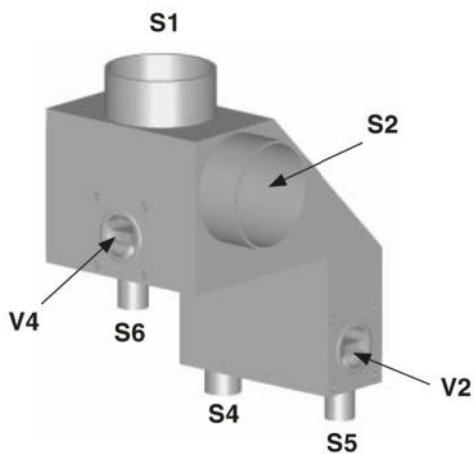
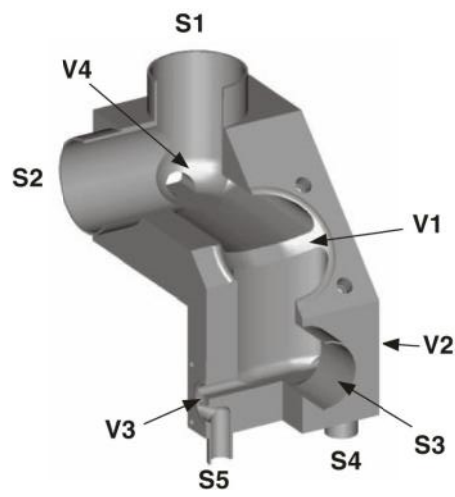
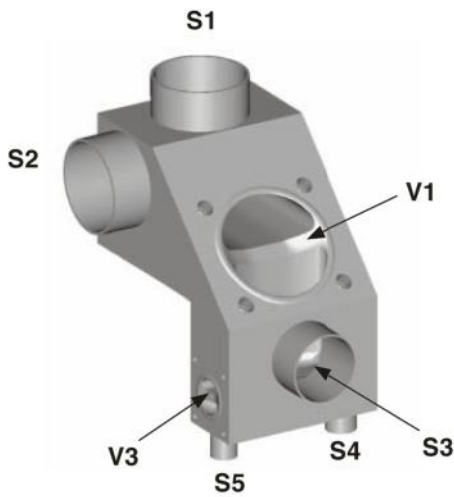
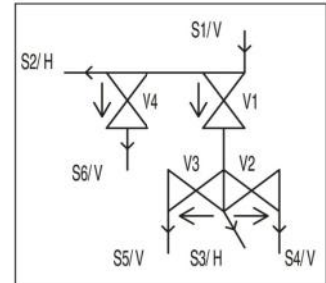
# 多通道隔膜阀

## Multiport diaphragm valve

### M-64A

无菌阀块与多个通道由不锈钢制成的阀座，  
 多功能模块：使用点注射用水，取样，冷凝水排水管，连接灌装成较大的器皿，  
 排水，无菌蒸汽供应SIP。

Sterile valve block and ports are made of stainless steel block,  
 multi-function block with several integrated applications:  
 point of use WFI, sampling, condensate drain, filling into larger vessels, draining,  
 sterile steam supply for SIP.



H=水平, V=垂直  
 H=horizontal, V=vertical



M-32A

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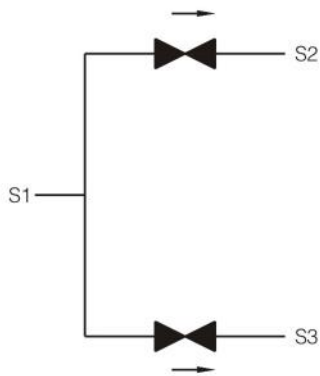
# 多通道隔膜阀

## Multiport diaphragm valve

### M-32A

M-32A型) 多通道隔膜阀  
2个控制阀, 3个通道  
三通换向阀  
S1口建议朝上安装

Type M-32A) multiport diaphragm valve  
Two control valve, 3 port  
Three-way divert seat valve  
S1 suggested up installation



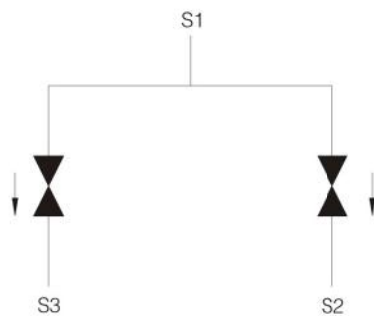
M-32A型Type



### M-32B

M-32B) 型多通道隔膜阀  
2个控制阀3个通道  
S1接口建议安装朝上

Type M-32B) multiport diaphragm valve  
Two control valve 3 port  
Suggest S1 up installation



M-32B型Type

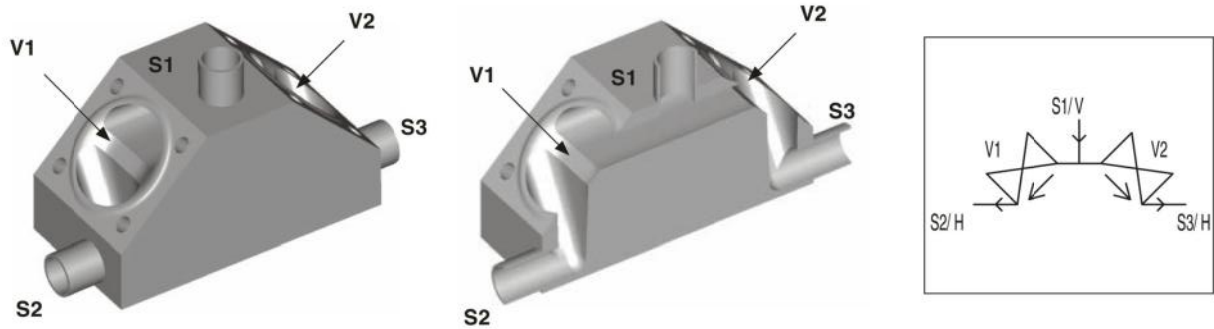


**M-32F**

无菌阀块由不锈钢制成的块料，应用于无菌阀阵系统上，较为理想的选择。  
Sterile valve block is made of stainless steel block, The array system used in aseptic valves, the ideal choice.

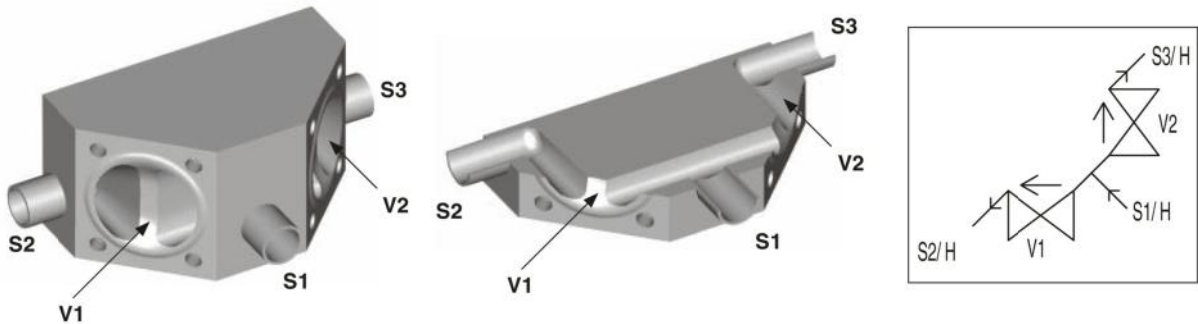
**安装位置 Mounting position**

接口S1垂直排列向上或向下  
Spigot S1 aligned vertically up or down  
3个通道，2个阀门  
Three ports, two valves



**可选安装位置 Alternative mounting position**

所有套管水平对齐  
All spigots aligned horizontally  
3个通道，2个阀门  
Three ports, two valves



H=水平, V=垂直  
H=horizontal, V=vertical

# 多通道隔膜阀

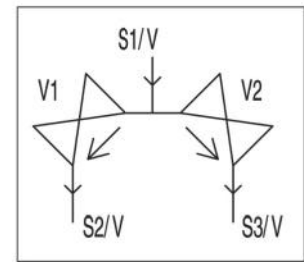
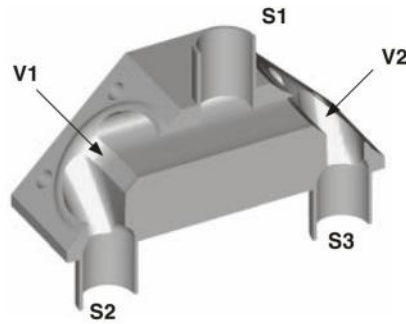
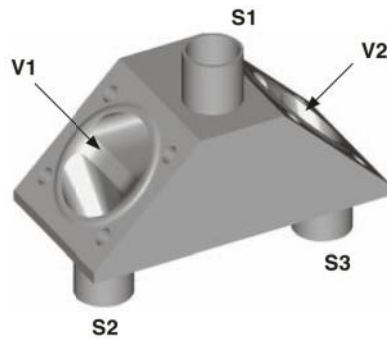
## Multiport diaphragm valve

### M-32G

由不锈钢制成的块体材料的无菌阀块，应用于无菌阀阵系统中。  
Sterile valve block is made of stainless steel bulk materials, the valve array used in a sterile system.

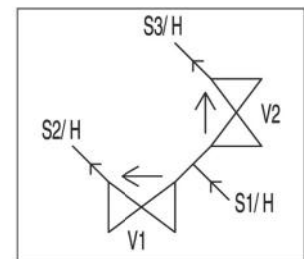
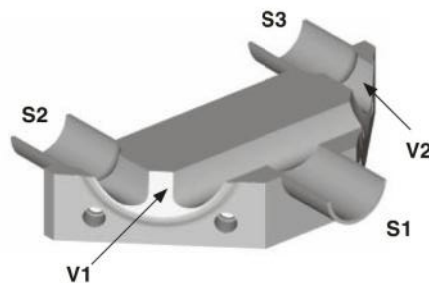
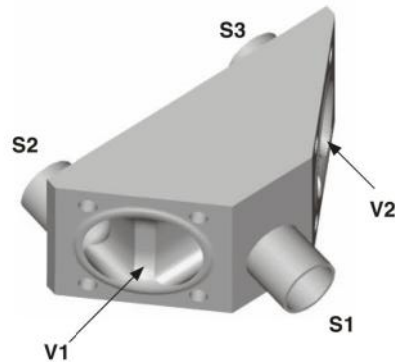
### 安装位置 Mounting position

接口S1垂直排列向上或向下  
Spigot S1 aligned vertically up or down  
3个通道，2个阀门  
Three ports, two valves



### 可选安装位置 Alternative mounting position

所有接口水平对齐  
All spigots aligned horizontally  
3个通道，2个阀门  
Three ports, two valves



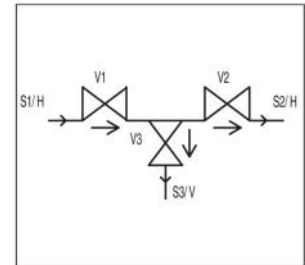
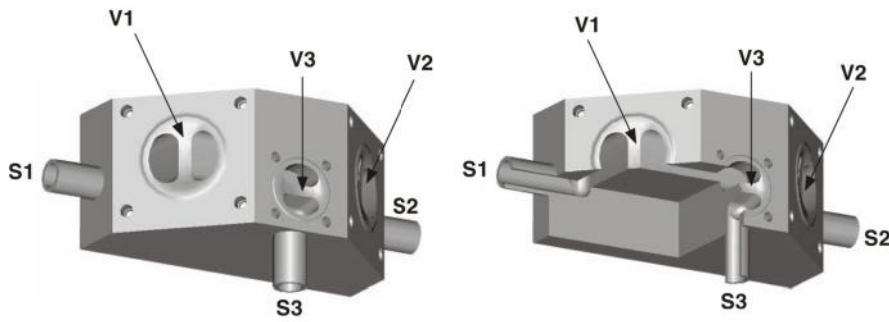
H=水平, V=垂直  
H=horizontal, V=vertical

由不锈钢制成的块料，应用，例如无菌阀块，一个块和 - 排放阀。

Sterile valve block is made of stainless steel block, application, for example, as a block-and-bleed valve.

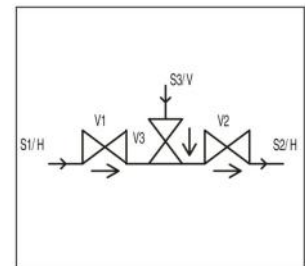
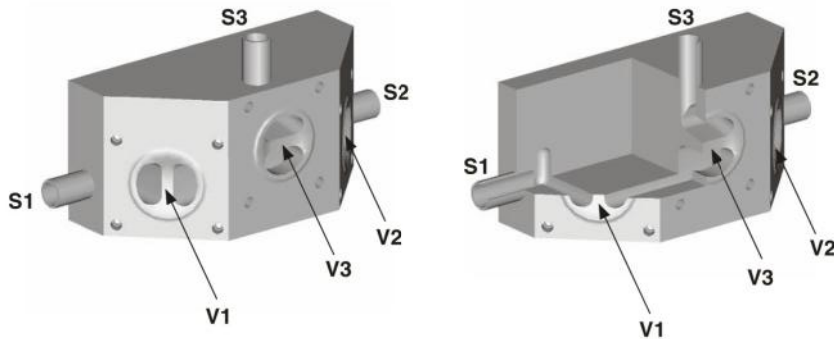
**M-33A**

3个通道，3个阀门  
Three ports, three valves



**M-33B**

3个通道，3个阀门  
Three ports, three valves



H=水平, V=垂直  
H=horizontal, V=vertical

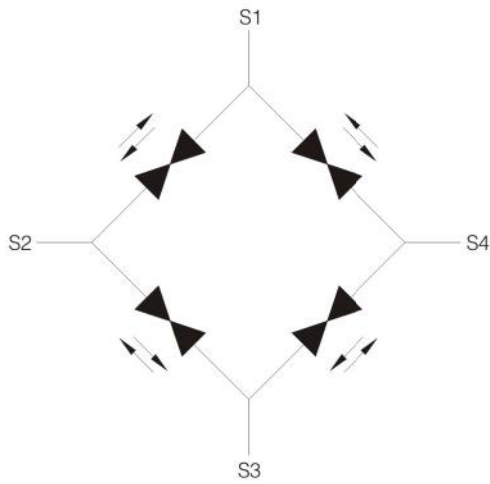
# 多通道隔膜阀

## Multiport diaphragm valve

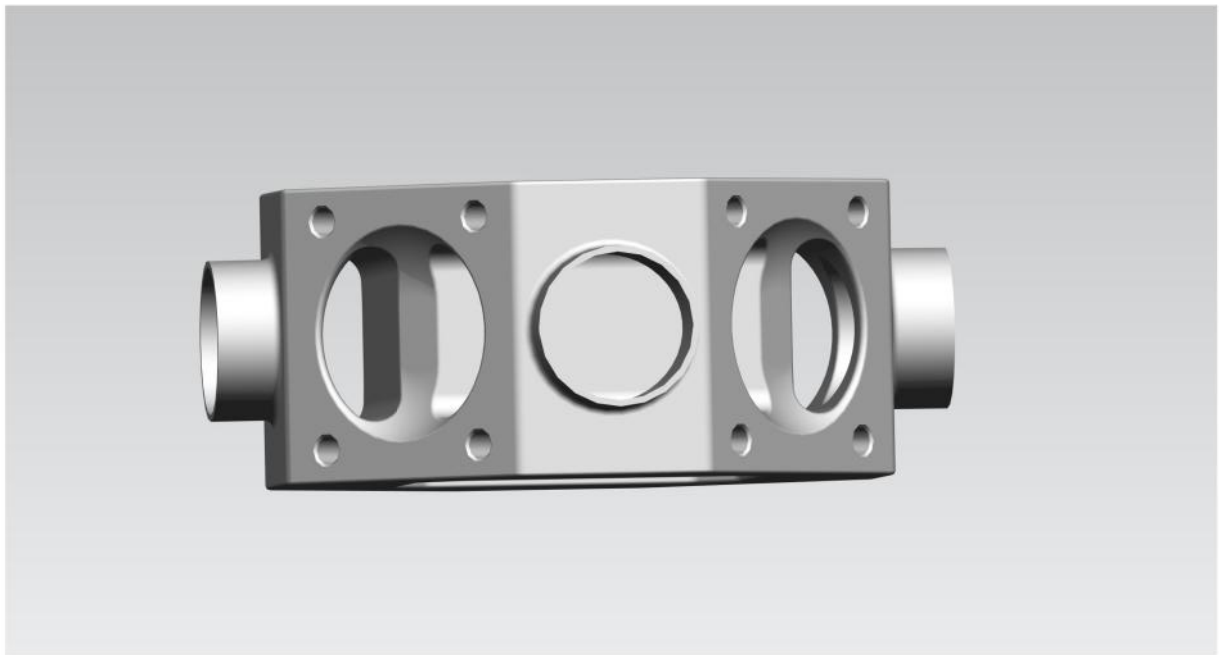
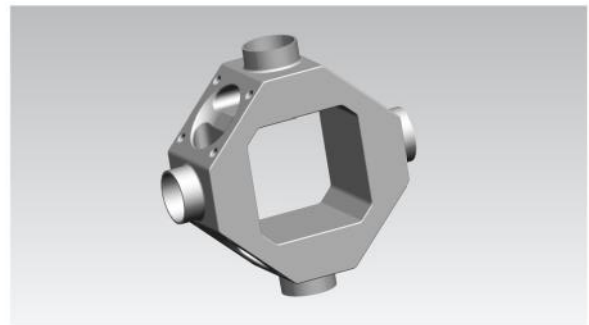
### M-44A

M-44A型) 多通道隔膜阀  
4个控制4个通道  
S2和S4建议水平安装  
S1和S3建议垂直安装  
该阀门进出口无方向性

Type M-44A) multiport diaphragm valve  
4 control valve, 4 port  
S2 and S4 horizontal installation  
S1 and S3 vertical installation  
Non-directional import and output



M-44A型Type

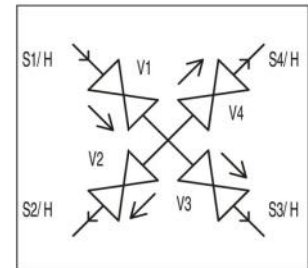
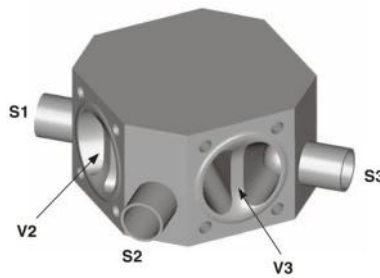
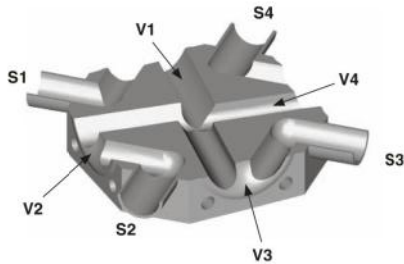


### M-44C

无菌阀块由不锈钢制成的块料，应用，例如，作为一个分配器或收集器。  
Sterile valve block is made of stainless steel block, application, for example, as a distributor or collector.

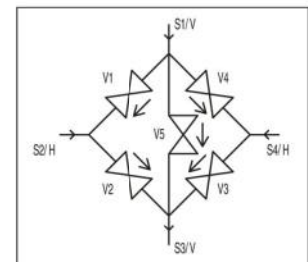
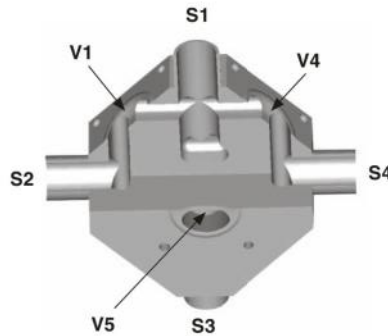
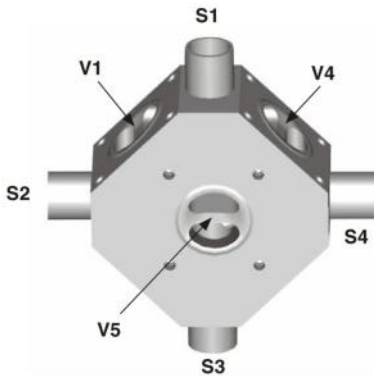
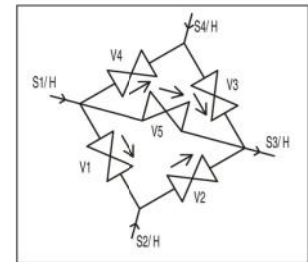
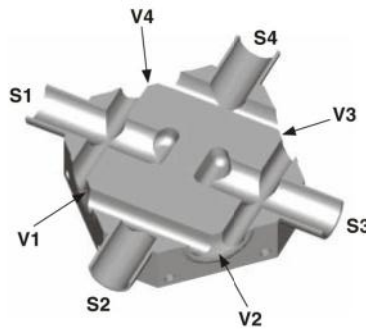
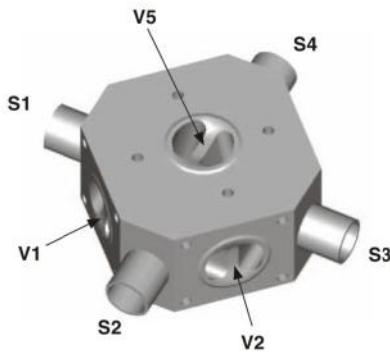
#### 可选安装位置 Alternative mounting position

所有接口水平对齐  
All spigots aligned horizontally



### M-45A

无菌阀块由不锈钢制成的块料，应用，例如，作为色谱块，进行，转移和交换。  
Sterile valve block is made of stainless steel block, application, for example, as a chromatography block, conducting, diverting and switching.



H=水平, V=垂直  
H=horizontal, V=vertical

多通道隔膜阀  
Multiport diaphragm valve

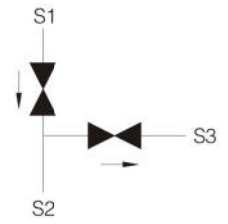


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M-32E

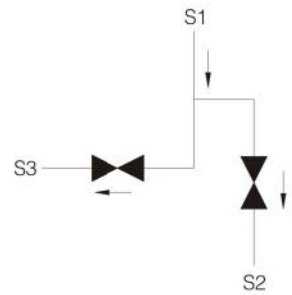


M-32D



M-32D型Type  
3个通道, 2个阀门  
Three ports, two valves

M-32E



M-32E型Type  
3个通道, 2个阀门  
Three ports, two valves

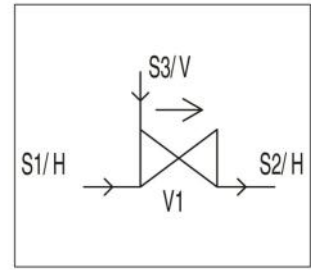
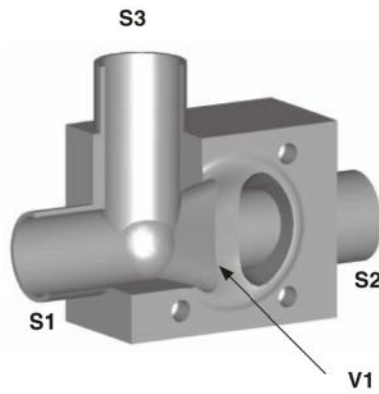
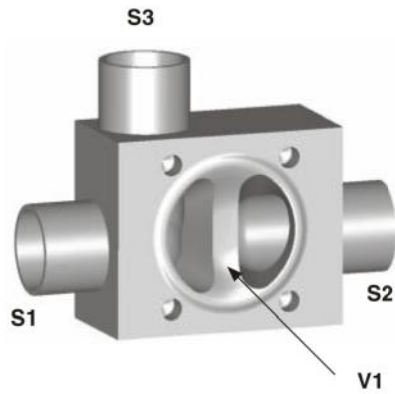
# 多通道隔膜阀

## Multiport diaphragm valve

由不锈钢制成的块料，应用，例如，作为分支无菌阀块，取样阀 在两个介质环。  
 Sterile valve block is made of stainless steel block, application, for example, as a branch, sampling valve or insulation between two media rings.

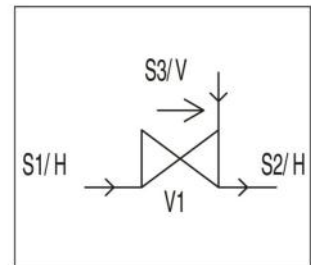
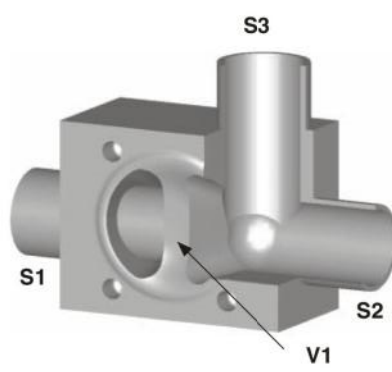
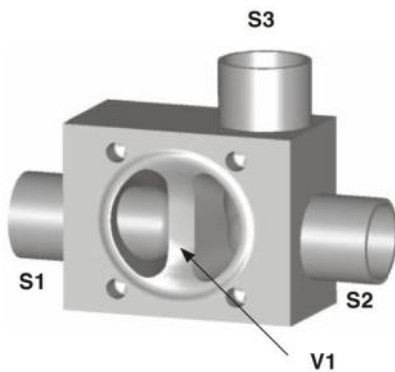
### M-31A

3个通道，1个阀门  
 Three ports, one valve



### M-31B

3个通道，1个阀门  
 Three ports, one valve

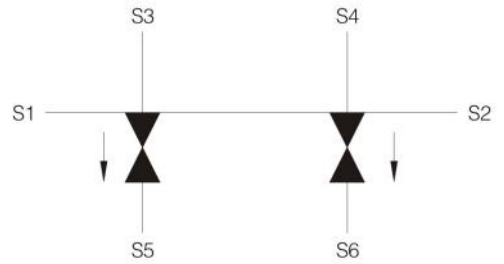


H=水平, V=垂直  
 H=horizontal, V=vertical



M-62A

6个通道, 2个控制阀  
Six ports, two control valves



M-62A型Type

# 多通道隔膜阀

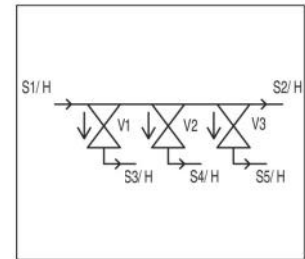
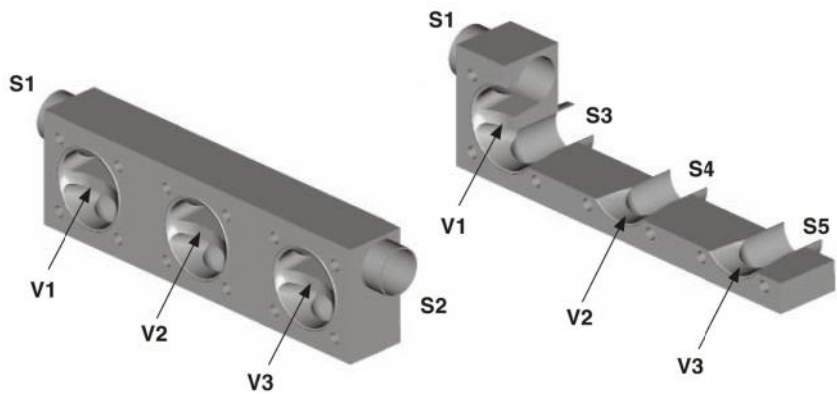
## Multiport diaphragm valve

### M-53A

5个通道, 3个阀门  
Five ports, Three valves

### 安装位置 Mounting position

主管顶部  
Main pipe at top

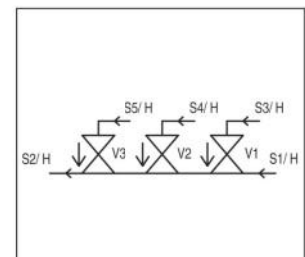
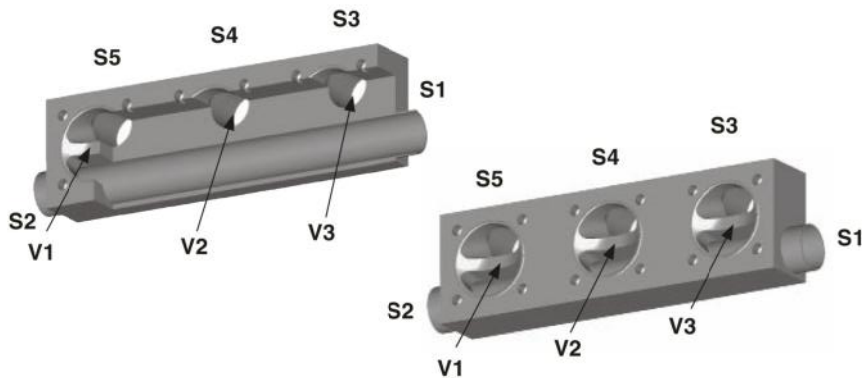


### M-53B

5个通道, 3个阀门  
Five ports, Three valves

### 可选安装位置 Alternative mounting position

主管底部  
Main pipe at bottom



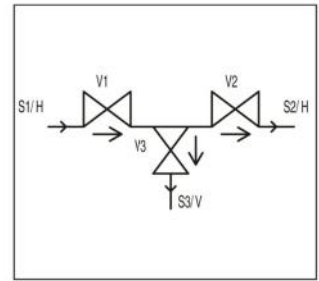
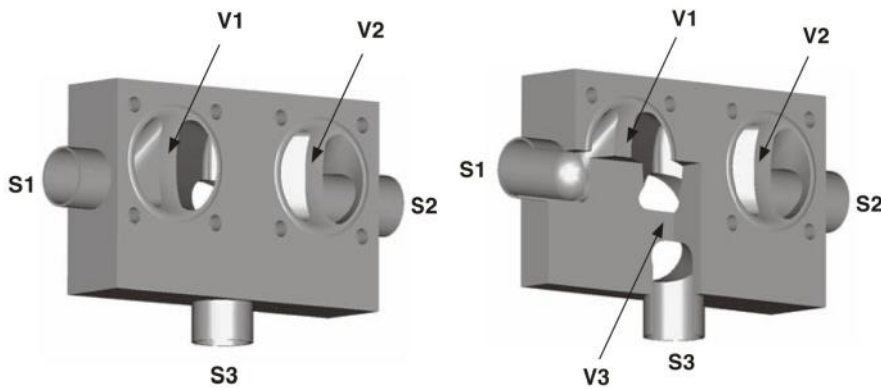
H=水平, V=垂直  
H=horizontal, V=vertical

由不锈钢制成的块料，应用，例如无菌阀块，一个块和 - 排放阀。

Sterile valve block is made of stainless steel block, application, for example, as a block-and-bleed valve.

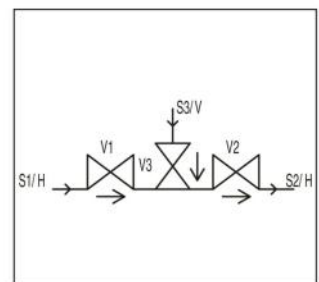
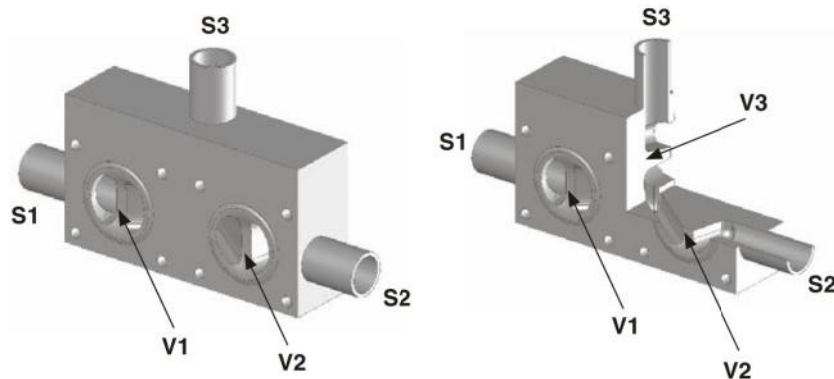
**M-33C**

3个通道，3个阀门  
Three ports, Three valves



**M-33D**

3个通道，3个阀门  
Three ports, Three valves



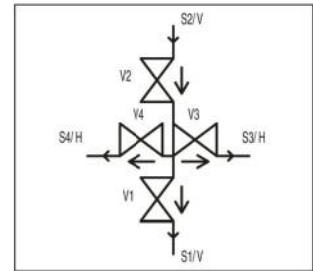
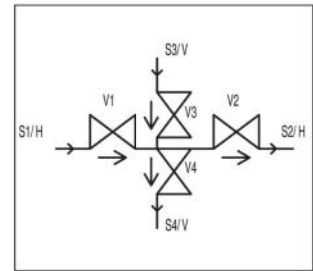
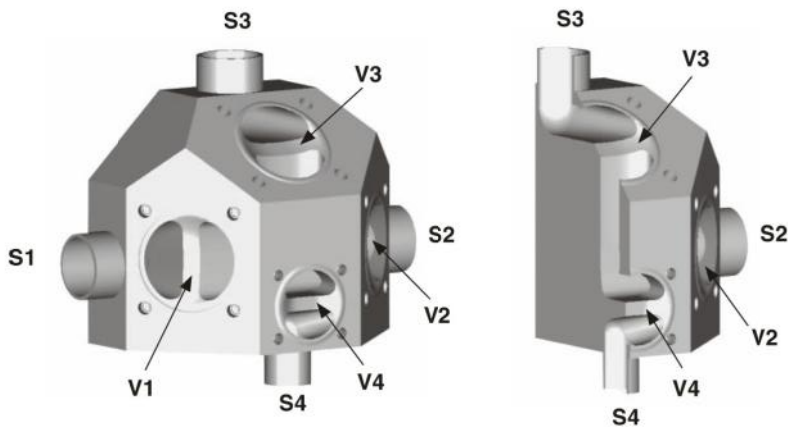
H=水平, V=垂直  
H=horizontal, V=vertical

# 多通道隔膜阀

## Multiport diaphragm valve

### M-44B

由不锈钢制成的块料，应用，例如无菌阀块，一个块和 - 排放阀。  
Sterile valve block is made of stainless steel block, application, for example, as a double block-and-bleed valve.

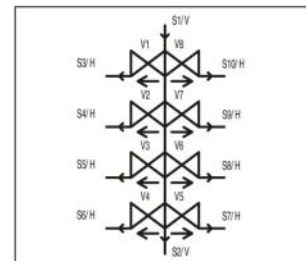
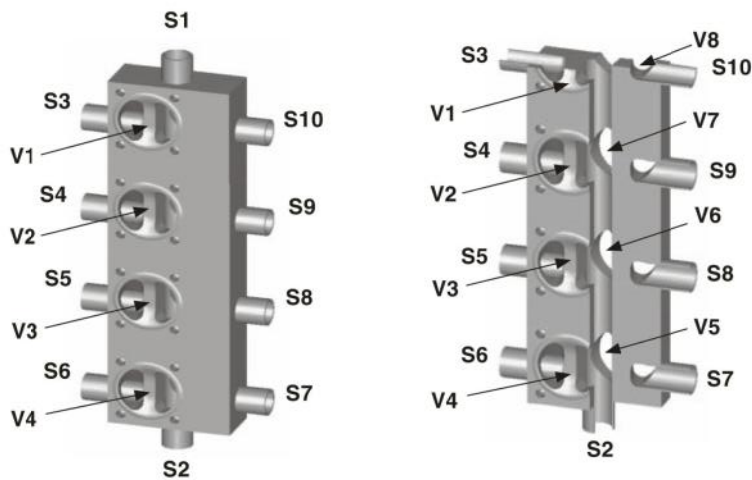


### M-108A

无菌阀块由不锈钢制成的块料，应用，例如，作为一个T型阀阵列，用于分路与连接灌装。  
Sterile valve block is made of stainless steel block, application, for example, as a T-valve array for branching and filling.

### 安装位置 Mounting position

接口S1对准垂直向上  
Spigot S1 aligned vertically up



H=水平, V=垂直  
H=horizontal, V=vertical

# 径向隔膜阀

## Radial diaphragm valve



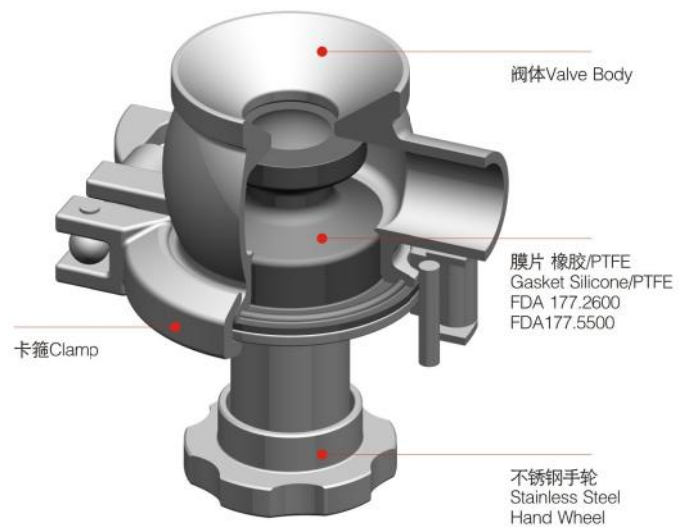
### 应用 Application

- ◆ 主要应用于制药、生物科技、卫生保健、化妆品以及食品等行业。
- ◆ 在制药行业中，该阀门可用作过程控制阀、定量给料阀、取样阀以及无菌排液阀等等。
- ◆ 在食品行业中，该阀门常被用作引导装置，如取样阀、定量给料阀(例如添加CO2/Nitrogen到啤酒中，添加调料到饮料中)。
- ◆ Mainly used in pharmaceutical, biotech, health care, cosmetic and food industries.
- ◆ In the pharmaceutical industry, the valve can be used as process control valve, dosing valve, sampling valve and aseptic drain valve etc.
- ◆ In the food industry, this valve is often used as guide device, such as sampling valve, dosing valve (For example adding CO2/Nitrogen to beer, add seasoning to drink.)

### 产品描述 Product description

径向隔膜阀主要有手动和气动两种型式，阀体内部抛光处理光洁度  $Ra \leq 0.5\mu m$ ，以满足生物制药工业的要求。

Radial diaphragm valve are mainly manual and pneumatic operations, inside body finished  $Ra \leq 0.5 \mu m$ , in order to meet the requirements of biopharmaceutical industry.



# 径向隔膜阀

## Radial diaphragm valve

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### 结构特点 Structure features

- ◆全新的膜片设计
- ◆维护简单、安全，易操作
- ◆自排空功能
- ◆死角最小化
- ◆卓越KV值
- ◆CIP/SIP杀菌和清洗
- ◆New diaphragm design.
- ◆Maintenance is simple, safe, and easy to operate.
- ◆Self-emptying function.
- ◆Dead leg minimization.
- ◆Had excellent KV value
- ◆CIP/SIP sterilization and cleaning

### 技术规格 Technical specifications

- ◆规格：3/4"-2.5"，DN20-DN65
- ◆工作温度：-10°C到120°C（EPDM/Silcon）
- ◆最高压力：6bar
- ◆执行方式：手动/气动可互换
- ◆执行器气压：5bar-6bar
- ◆出口连接方式：焊接、卡箍、特殊接口
- ◆Specification: 3/4"-2.5", DN20-DN65
- ◆Working temperature: -10°C to 120 °C (EPDM/Silcon)
- ◆Max pressure: 6 bar
- ◆Operation: manual/pneumatic interchangeable
- ◆Actuator pressure: 5 bar - 6 bar
- ◆Connection: welding, clamp, and other special connection





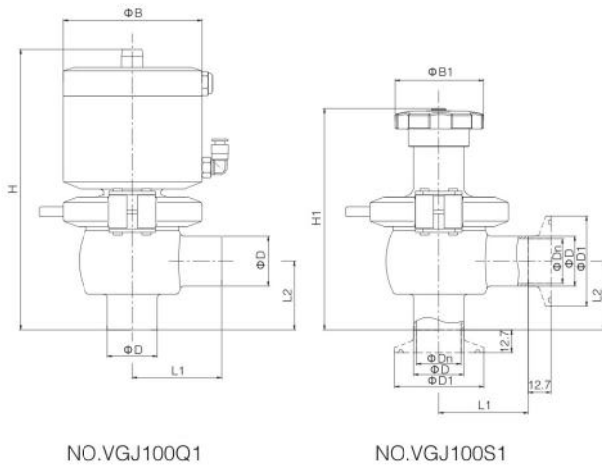
# 径向隔膜阀

## Radial diaphragm valve

非常灵活的阀体组合  
Flexible Valve Body Combination

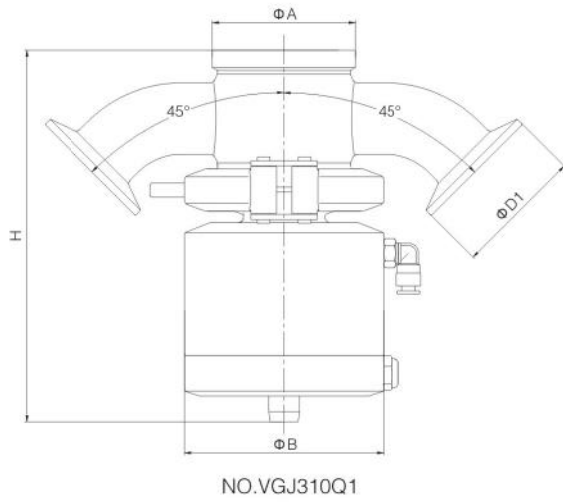


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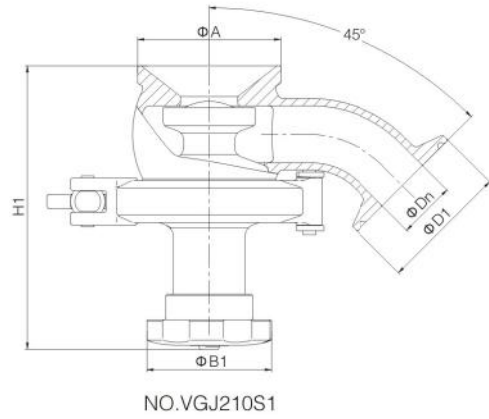


NO.VGJ100Q1

NO.VGJ100S1



NO.VGJ310Q1



NO.VGJ210S1

INCH							
SIZE	Dn	D1	A	H	B	H1	B1
3/4"	16	25.4	56	148	68	122	55
1"	22.4	50.5	56	148	68	122	55
1.5"	35	50.5	72	178	100	141	55
2"	47.8	64	84	196	120	150	70
2.5"	59.5	77.5	100	214	145	168	70

INCH									
SIZE	Dn	D	D1	L1	L2	H	B	H1	B1
3/4"	16	19	25.4	50	40	161	68	135	55
1"	22.4	25.4	50.5	50	40	161	68	135	55
1.5"	35	38	50.5	55	43.5	184	100	147	55
2"	47.8	50.8	64	60	50	201	120	155	70
2.5"	59.5	63.5	77.5	80	65	226	145	180	70

DIN									
SIZE	Dn	D	D1	L1	L2	H	B	H1	B1
Dn20	19	22	34	50	40	161	68	135	55
DN25	25	28	50.5	50	40	161	68	135	55
DN32	31	34	50.5	50	40	184	100	147	55
DN40	37	40	50.5	55	40	184	100	147	55
DN50	49	52	64	60	43.5	201	120	155	70
DN65	66	70	91	80	65	226	145	180	70

DIN							
SIZE	Dn	D1	A	H	B	H1	B1
DN20	19	34	56	148	68	122	55
DN25	25	50.5	56	148	68	122	55
DN32	31	50.5	56	178	100	141	55
DN40	37	50.5	72	178	100	141	55
DN50	49	64	84	196	120	150	70
DN60	66	91	100	214	145	168	70



# CHINA DONJOY TECHNOLOGY CO.,LTD.

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