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 www.cndonjoy.com



东正一直致力于重大技术进步,是您值得信赖的事业伙伴! Donjoy committing to major technological advances, is your reliable business partner!



东正必将追究法律责任和经济赔偿。

领先源于创新 创新源于专业 东正的专业与品质的邂逅源于创新的精神



现代化工厂已经投产,期待您的光临! 温州空港经济园区生产基地 Wenzhou airport economic zone production bas

占地面积29000m²,总投资**12亿**元、新分进ABB工业机器人、日本马扎克5轴加工中心、ABB机器入热光设备。

Covering an area of 29000 m², with total investment after construction is expected to 120 million yuan, introduces new ABB industrial robot, Japan mazar-e-sharif grams of five axis machining center, ABB machine Polishing equipment.

东正创立于1993年,注册资金5508万,是一家专注于研发高 品质PP过程控制器、阀门定位器、流量控制器,阀门控制单 元、高清净过程控制阀、智能自控阀,高洁净泵、高洁净管 例和管道配件。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。



关于东正 About DONJOY

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 marekt. 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.



创立于2005年现代化工产 温州滨海经济开发区生产基地 Wenzhou binkin economic development zone production base

DONJOY high-putity valve, pump, control system, pipe and accessories, provide the most excellent solution for various business scopes.





Beverage



Water Processing



Brewing



Fine Chemical

制造与检验 Manufacturing and testing



机器人生产线 Robot production line

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。

全自动弯管设备 Automatic pipe bending equipment

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

	3A 东正是美国3A认证组织的金牌赞助商,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55-02-1783、64-00-1784、84-02-1786、85-03-1787 53-06-1782、54-02-1580、68-00-1785,管件(63-03)证书号(1581) 等多种规格型号。
CE	PED/97/23/EC & MD/06/42EC 东正通过了TUV 欧共体压力设备97/23/EC质量 保证模式H&材料(管件)制造认证。 阀门证书 NO.CE 0036 泵类证书 NO.705201402401-00
FDA	FDA177.2600 东正生产的阀门和泵以及流体设备等、复物科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 PINERPTFE橡胶塑料材料等。
	ISO9001/2008 东正通过中国质量认建中心CQC, ISO9001-2008/GB/T19001-2008企业 质量管理体系认证、其证彩编号: 00108Q24215R1M/3302
	卫生许可证 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管理方法证书。
	高新技术企业 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。
	浙江省著名商标 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。
DONLOV天伯根左国 トジ 活動共計	日建远安先尖利共利 剑鉱制 先利示苏 孤步由人,中心同中位用心心笔入多的苏举江北

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



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 Any integration of 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 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 environments of 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 diaphrap.
- 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 全篇合成树
- ◆-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-致性认证 N.O. 54-02-1
- ◆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.N.O.: TUV DGR 0036-QS-1153-14
- All synthetic resin and additive are comply with FDA certification
- Material chemical composition, physical properties and manufacturing process are documented
- All diaphragon 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



流量和隔膜阀通径的关系 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℃

10

20

30

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

40

50

60

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 to 到30℃的水在压差为1Bar情况下阀门的通量。 1bar ◆KV值是表示阀门100%开启状态下的KV值。 KV data is the valve flow open. Δp p2 p1 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) cha 流量Q(M¹//h) Q=KV*,△P 4"(KV205) 210 2.5"(KV97) 100 90 80 2"(KV63) Ť 1.5"(KV37) 40 ; 1.25"(KV26) 30 ; i 1"(KV17) 20 ; 0.75°(KV9.5) 10 : 0.5'(KV3.6) : ÷ ر - نیچ ----5 ŝ . •



DONJOY Biopharmaceutical diaphragm valve www.cndonjoy.com

90

100

开度(%)

70

80

隔膜片 Diaphragm gasket

隔膜

- ◆除了阀体之外, 膿片是唯一与介质直接接触的部件, 隔膜網是靠膜片把 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。即便更换执行 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,无论是是希腊 环,冷循环、还是蒸汽消毒系统。

- ◆规格: 1'-3", DN20-DN80
- ◆粘合膜片-20到120℃

PTFE diaphragm tablet has high chemical resistance, flexibility, long life, high sealing, no cold degeneration by temperature fluctuations excellent performance, w cycle, cold cycle, or steam disinfection system. ◆ Specification: 1 *– 3*, DN20–DN80

- Separate diaphragm 20 to 120 °C



单层離片ERDM/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 好与金属粘结在一起

男比橡胶膜片更适合在真空环境下使用。

- ◆規格: 1'-4",DN20-DN100
- ◆EPDM-10到120℃

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 diar to medium and executive structure and external air apart. Gask also moving parts, diaphragm on the diaphragm valve move to medium flow control and cut off. 126
- 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 fields ear condition. For example, in the automation saturated steam closed loop system testing gasket, the gasket shape, material competition, body design, actuators and the influence of valve assembly elc.
 All the different materials of the gaskets may be assembled to the valve of the same specifications. No need replacement gasket even changing actuator.
- actuator



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 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150℃

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 150 ℃



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℃
- ◆PTFE+EPDM-20到150℃
- 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,在锻造过得中、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 statuless steel ingot, in the forging process, along with the high temperature forging provide, through extrusion blank shape change, through the lorging 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.

寿造阀体 Casting body

法遣阀体是由模具做成石蜡模型,石蜡模型渗入在陶瓷 里,达到让整个阀体腊模表面形成一层坚固的陶瓷。融 化掉腊模后,再注入融化的的不锈钢溶液,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

DONJOY Biopharmaceutical diaphragm valve

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。

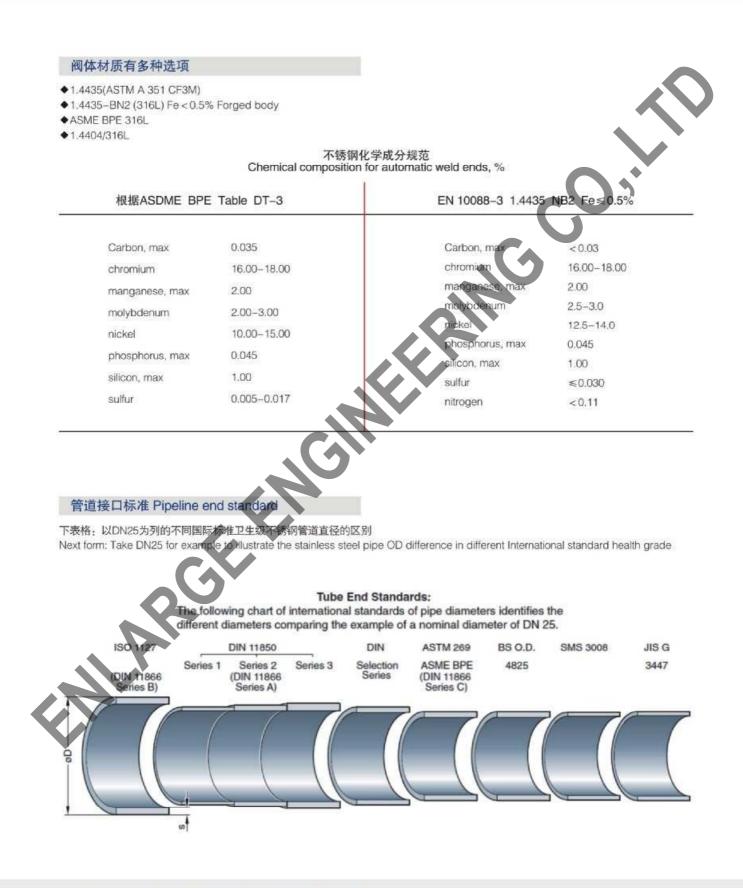
Round steel body chooses ultrapure materials, cut into squares material directly by CNC cutting equipment, To a five axis CNC machining center for precision machining.

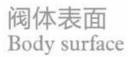
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隔膜阀相关参数 Diaphragm valve relevant specification





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 µ m



and grinded, Ra 0.4 µ m

Surface finish: machined,

Ra 0.8 µ m



Surface finish: fine-machined, and grinded, Ra 0.2 µ m

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次测量相糙度得出的平均值相 糙度Ra值。

按照ASME BPE 表SF-3标准进行

Definition of the codes for Ra-Values Allocation to the standard DIN 11866

	DIN 11866	
FR NW	Hygiene class	E-polished
- 0.6		
0.8	HE3c	•
0.6		
0.6		•
0.4		
0.4	HE4c	•
0.25		
0.25	HE5c	•



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

Allocation to the standard ASME BPE Table SF-6 Mechanically Polished

ASME BPE	Ra Ave	Ra Average*		Fla Max	
Code	µ –Inch		μ –Inch		
SFV3	25	0.625	30	0.75	
SFV2	20	0.5	25	0,625	
SFV1	15	0.375	20	0.5	

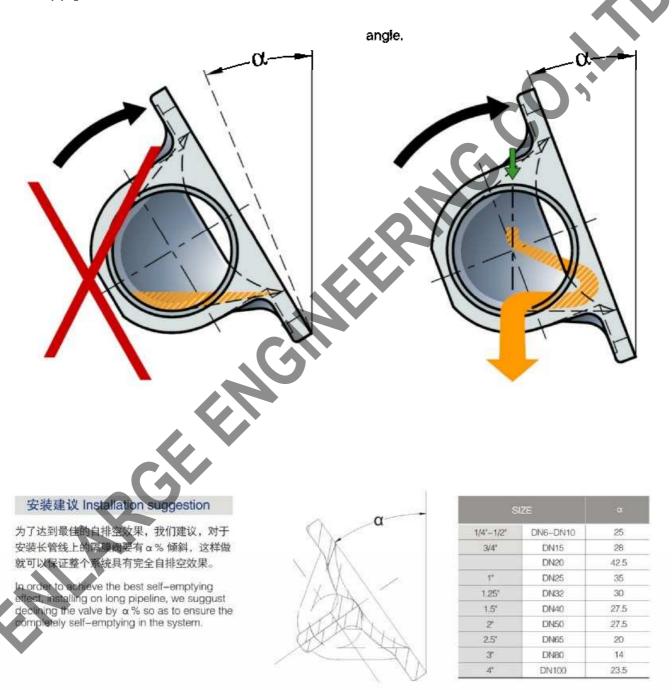
Mechanically polished and electro polished

SFV6	20	0.5	25	0.625
SFV5	15	0,375	20	0.5
SFV4	10	0.25	15	0.375



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 hygenic clean piping system of application of all diaphragm valve should meet the following standard installation Angle and self-emptying fuction.



隔膜系统优势比较 Diaphragm system advantage







各种配置隔膜阀-非常灵活的各种组合 Various configuration of diaphragm valve-Various combinations of very flexible







各种自控气动配置隔膜阀 Various configurations of automatic control of pneumatic diaphragm valve



IL-TOP-1431

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 MODE BUS RS485

总线: DEVICE NET BUS MODE BUS RS485 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 MODE BUS RS485 IP Grade: IP67

Manual Operation Specification: 1"-4", DN25-DN100



C-TOP-1421



単键位置自整定 Position self-adjusting 華键位置自整定 Position self-adjusting 横次信号输出 Analog signal output 4-20mA 数字信号输出 Digital signal output DC24Y+ (PNP) 输入 Input DC 24Y- (NPN) (可选 Option) 数字信号输出 Digital signal Input DC24Y- (NPN) (可选 Option) 总线通讯 Bus communication: AS-Interface BUS(可选 Option) 位置偏移根警(防止阀门微泄漏) Location migration alarm(avoid valve leaking 手动操作功能 Manual function operation 三段灯颜色 Two colour setting(1311) 行程范范: 有两种选择 30MAnG60MM Journey: 2 Option 30Mg and 60MM 电源 Power supply DC24Y ±10% 适用于 Apply 1/2^{*}-4^{*}, DN10-DN100

位置传感器组件 Position Sensor Module

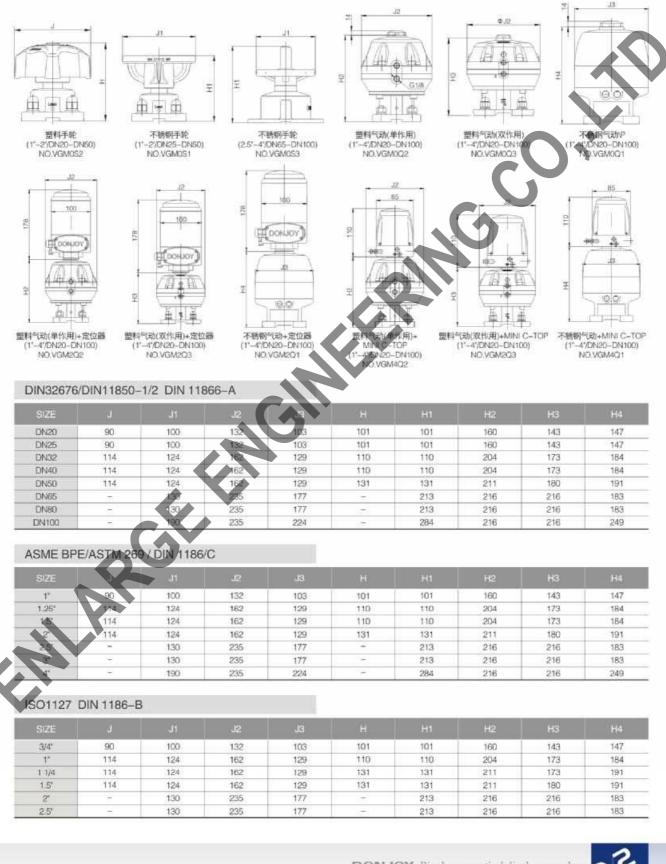
电源: DC24V AC110V/220V PNP/NPN NC/NO 适用规格: 1/2"-4", DN10-DN100 Power supply: DC24V AC110V/220V PNP/NPN NC/NO Specification: 1/2"-4", DN10-DN100

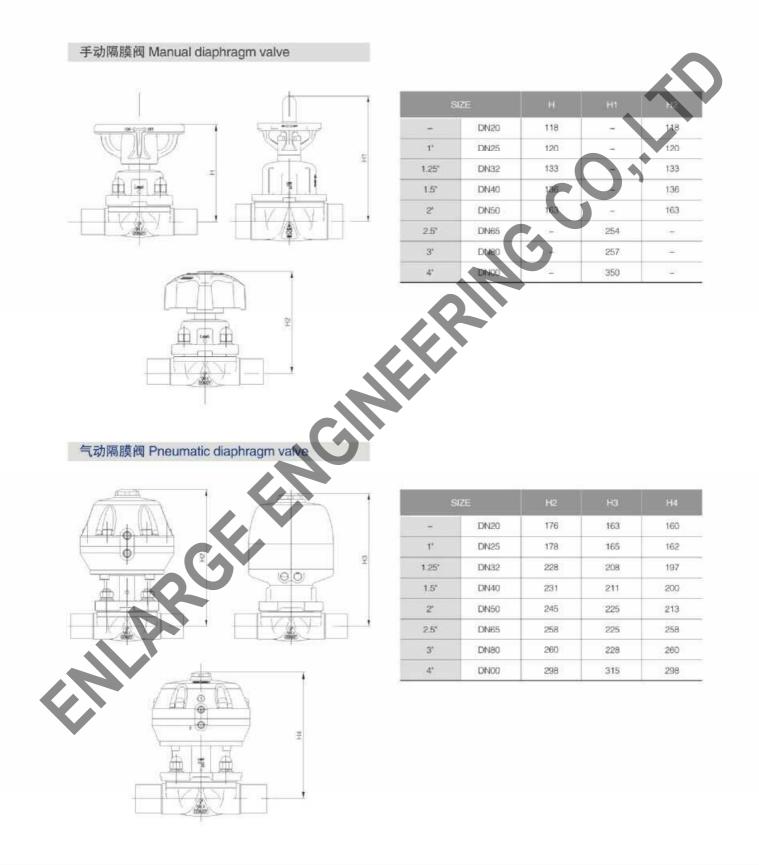
阀位调节器 Valve Position Regulator

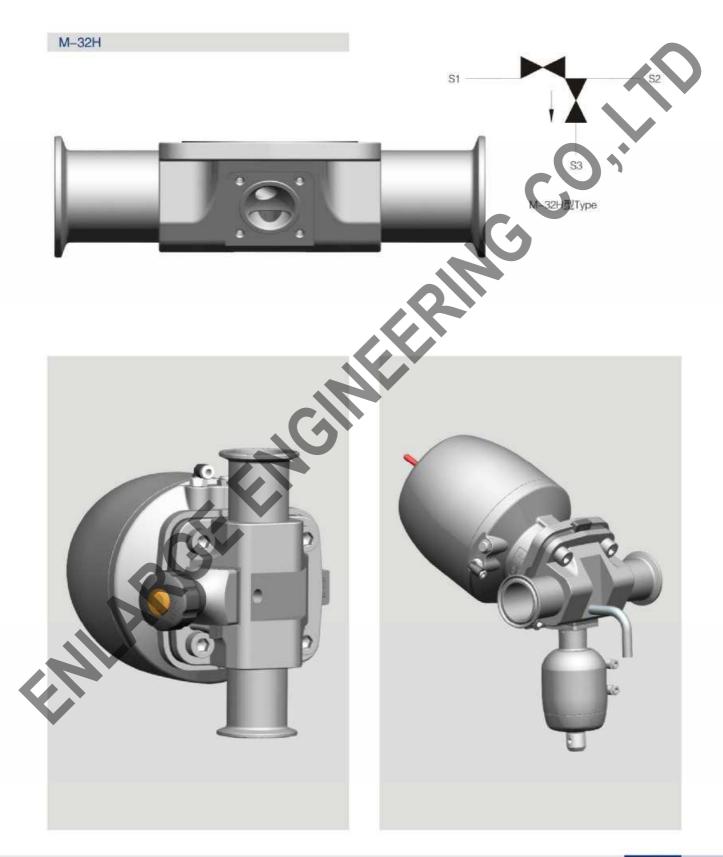
该调节器可以手动 调节阀位,实现流量的调节 适用规格: 1/2"-4", DX8-DN100 Support manual operation Adjust valve position Nongoristic Plow rate Specification: V2-1", DW DN100





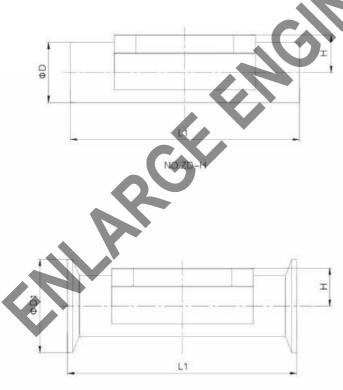












NO.ZD-K

DIN32676/DIN11850-1/2/DIN11866-A

SIZE	D	D1		н
DN20	22/23	34	117	17.2
DN25	28/29	50.5	127	17.2
DN32	34/35	50.5	146	21.2
DN40	40/41	50.5	159	24.2
DN50	52/53	64	190	31.5
DN65	70	91	216	40
DN80	85	106	254	50
DN100	104	119	305	58

ASME BPE/ASTM 269/DIN11866-C

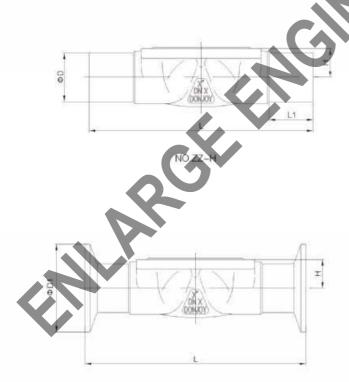
SIZE	Ð	DI	L1	н
-15	25.4	50.5	127	17.2
1.25*	31.8	50.5	146	21.2
1.5	38.1	50.5	159	24.2
2	50.8	64	190	31.5
2.5"	63.5	77.5	216	40
3'	76,2	91	254	43
4	101.6	119	305	58

ISO1127/DIN11866-B

SIZE	D	D1	L1	н
3/4*	26.9	50.5	127	17.2
1*	33.7	50.5	146	21.2
1 1/4*	42.4	50.5	159	24.2
1.5'	48.3	64	190	31.5
1.5' 2'	60.3	77.5	216	40
2.5'	76.2	91	254	43

隔膜阀铸造阀体Diaphragm valve casting body

直通阀体 DN20/1*-DN40/1.5*腔体比值 <= 3D DN50/2*-DN100/4*腔体比值 <=



NO.ZZ-K

DIN32676/DIN11850-1/2/DIN11866-A

SIZE	D	D1		н	L1
DN20	22	34	117	17.2	22
DN25	28	50.5	127	17.2	25
DN32	34	50.5	146	21.2	25
DN40	40	50.5	159	24.2	25
DN50	52	64	190	31.5	30
DN65	70	91	216	40	30
DN80	85	106	254	50	
DN100	104	119	305	58	

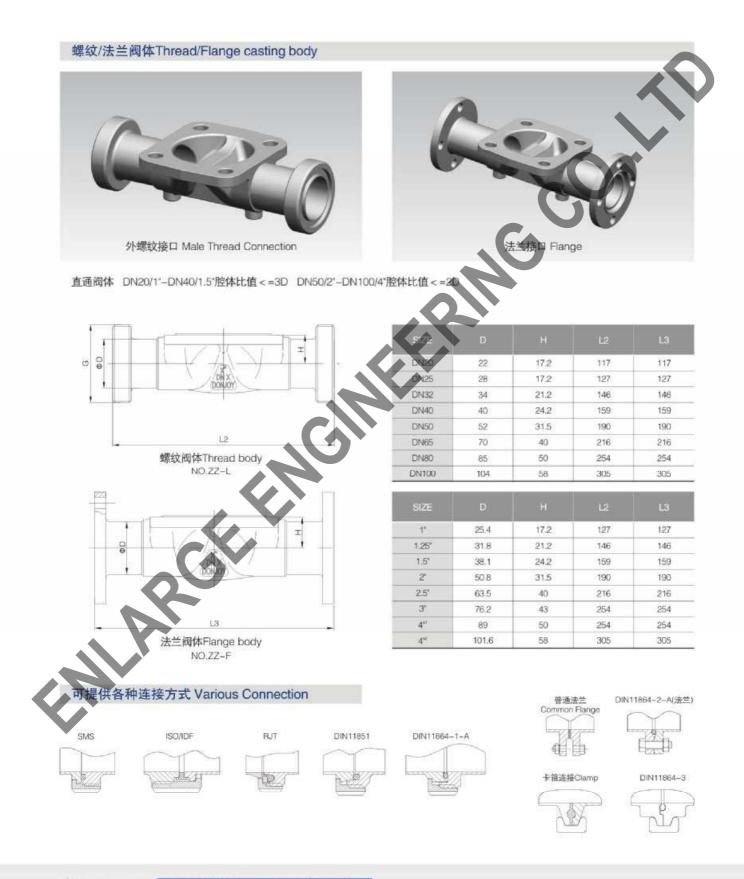
ASME BPE/ASTM 269/DIN11866-C

SIZE	D	D1			L1
1"	25.4	50.5	127	17.2	20
1.25*	31.8	50.5	146	21.2	20
1.5'	38.1	50.5	159	24.2	20
2	50.8	64	190	31.5	30
2.5*	63.5	77.5	216	40	30
31	76.2	.91	254	43	30
3,5"	89	108	254	50	
47	101.6	119	305	58	

ISO1127/DIN11866-B

SIZE	Ð	D1		н
3/4*	26.9	50.5	127	17.2
٣	33.7	50.5	146	21.2
1 1/4	42.4	50.5	159	24.2
1.5*	48.3	64	190	31.5
Z	60.3	77.5	216	40
2.5*	76.2	91	254	43





T型三通隔膜阀 Tee diaphragm valve

T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
	<image/>
	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≥DN50,出口分支机构和阀座1/2'-3/4'

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 \ge DN50, export branches and seat 1/2"-3/4"



U型-C系列 三通隔膜阀 Tee diaphragm valve

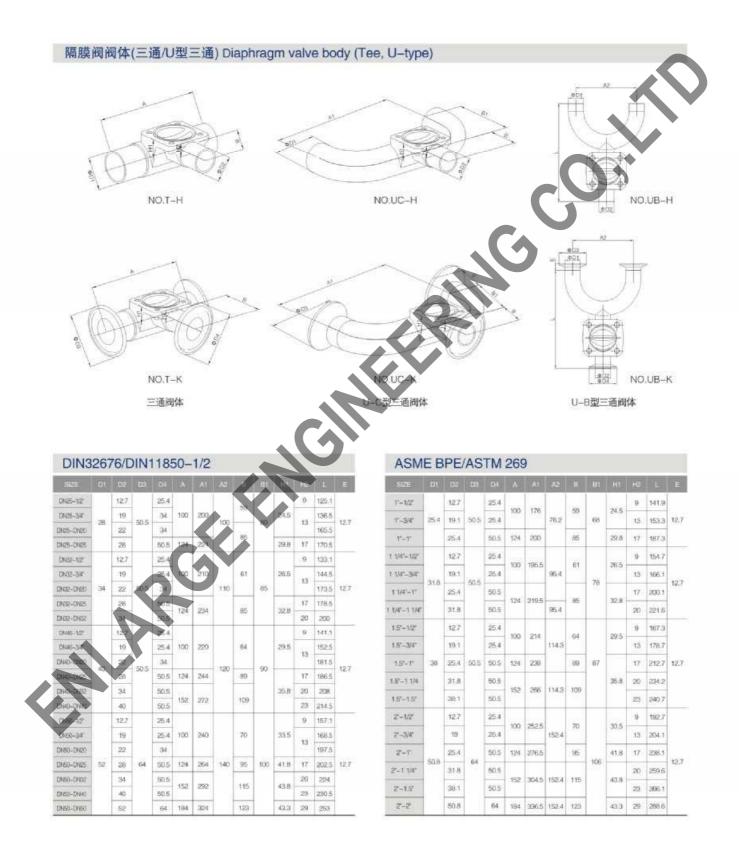


U型-B系列 三通隔膜阀 Tee diaphragm valve





三通隔膜阀 Tee diaphragm valve



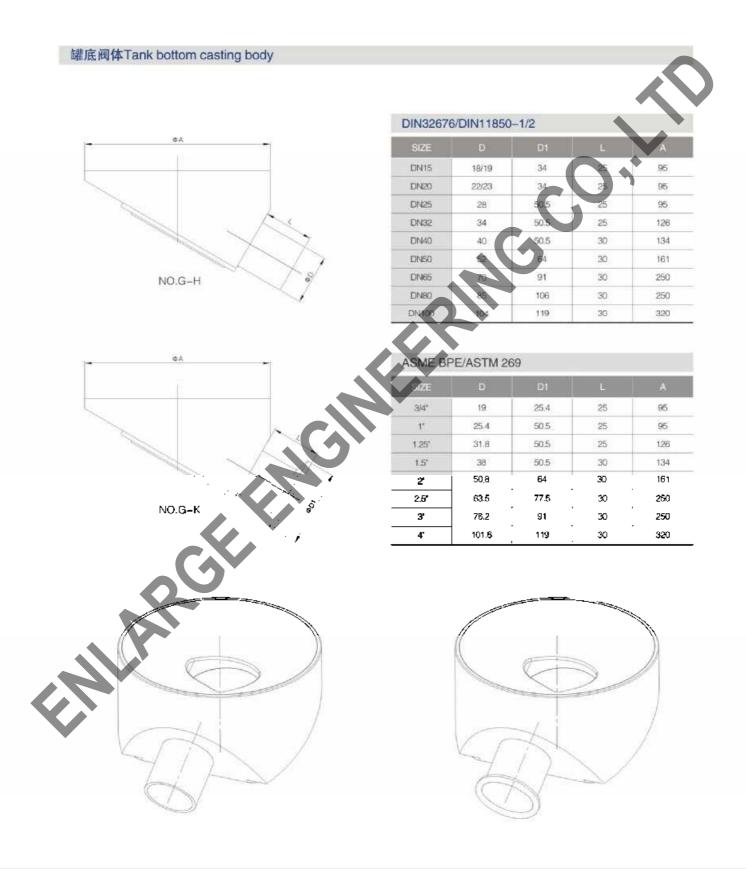
隔膜罐底阀 Diaphragm tank bottom valve



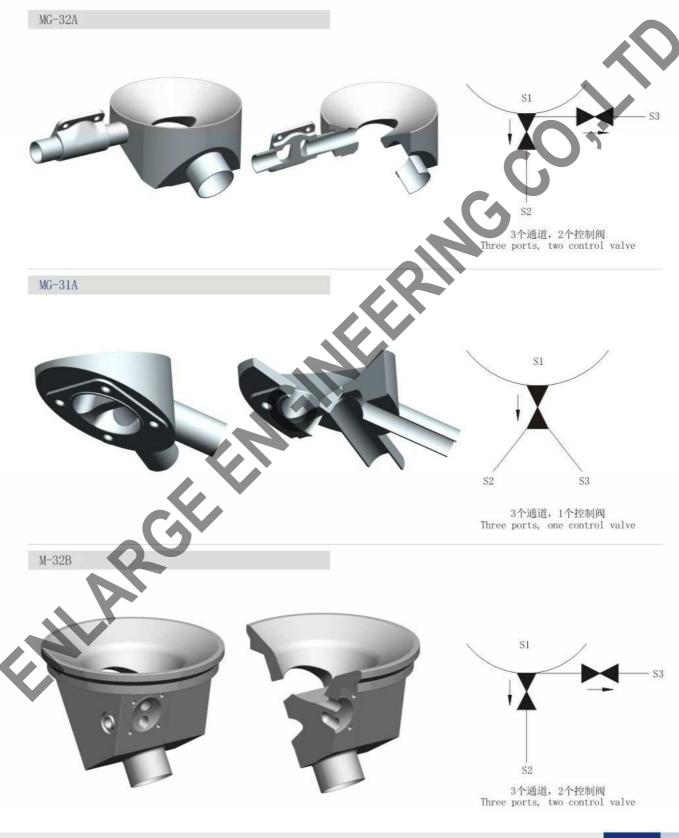
- ◆手动气动均可配置
- ◆出口连接方式:卡箍、焊接、特殊接口

Export connection mode: clamp, welding, special interface





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



DONJOY Biopharmaceutical diaphragm valve www.cndonjoy.com



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,隔膜调节 阀,相比较于其他结构的调节阀具有气穴现象会更少。

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 clear 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

- DO24V
- 24V 0/4-20mA,0-5/10V(标准) 創出: 4-20mA, 0-10V(选项)
- DEVICE NET BUS MODE BUS RS485
- 执行机构: 塑料和不锈钢 ◆防护等级: IP67
- ◆SIZE: 1-4*, DN20-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
- MODE BUS RS485
- 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

隔膜调节阀尺寸图 Dimension of diaphragm regulating valve

隔膜阀流量/选择(开度f)图表 Diaphragm regulating valve KV value curve flow 流量Q(M^P/h) Q=KV* (△P 4"(KV205) 2.5'(KV97) 2"(KV63) 1.5'(KV37) 1.25"(KV28) 1"(KV17) 0.75"(KV9.5) 0.5'(KV3.6) 注意: 上面图表适用于, 介质: 水(20°C) Attention: above diagram suit for the medium water (20°C) DIN11864-2 普通法兰 DIN11864-3 DIN32676/DIN11850-1/2 **DN20** 22/23 Φ 100 **DN25** 28/29 50.5 DN32 34/35 50.5 DN40 40/41 50.5 EE DONJOY DN50 52/53 DN65 풋 DN80 DN100 0.12 ASME BPE/ASTM 269 25,4 50.5 G. 1.25* 31.8 50.5 1.5 38.1 50.5 50.8 塑料气动隔膜阀+定位器 不锈钢气动隔膜阀+定位器 2.5 63.5 77.5 76.2 NO.VGZ103Q2 NO.VGZ103Q1

DONJOY Biopharmaceutical diaphragm valve www.cndonjoy.com

101.6





各种配置隔膜阀 Various configuration of diaphragm valve



传感器, PNP.NPN,DC24V AC220V/110V This device, easy to install, convenient and efficient

Sensor, PNP, NPN, DC24V AC220V / 110 V

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.



气动隔膜阀+位置反馈器 Pneumatic diaphragm valve + position feedback device



隔膜阀 Diaphragm valve





电动调节隔膜阀 Electric adjustment diaphragm valves



直通隔膜阀+电动执行器 Straight diaphragm valve + electric actuator

智能型电动执行器

该执行器是一款直行程运动,具有 PID控制算法的一款智能电动执行器, 它可以在断电时自动返回至设定好的安 全位置。同时具有光学传感器检测人体 或物体感应实现阀门开启和关闭功能。 满足于所有规格的隔膜阀。

技术特点:

- ◆LCD显示 中、英文菜单
- ◆单键自整定
- ◆支持手动操作
- ◆輸入 0/4-20mA
- ◆输出 0/4-20mA
- ◆总线通讯 mode bus rs485
- ◆断电时自动复位至安全位置
- ◆人体感应 自动开启和关闭功

三通隔膜阀+电动执行器

Tee diaphragm valve +

electric actuator

◆电源 DC24V ± 10%

多通隔膜阀+电动执行器 Multi-Port diaphragm value electric actuator

IL-E-ATOP

Ditelligent electric actuator The actuator is a linear stroke movement, with PID control algorithm, which automatically returns to safe position which had be set before once power outage. Also has an optical sensor to detect a person or object induction to achieve valve opening and closing function.

Meet all sizes of the diaphragm

Features:

- ◆LCD with a Chinese, English menu
- Single button auto-tuning
- Support manual operation
- Input 0 / 4–20mA
- Output 0 / 4–20mA
- Bus communication mode bus rs485

 Automatically return to safe position which had be set, before once power outage

 The human body sensors to automatically open and close

Power supply DC24V ± 10%

罐底隔膜阀+电动执行器 Tank bottom valve diaphragm valve + electric actuator



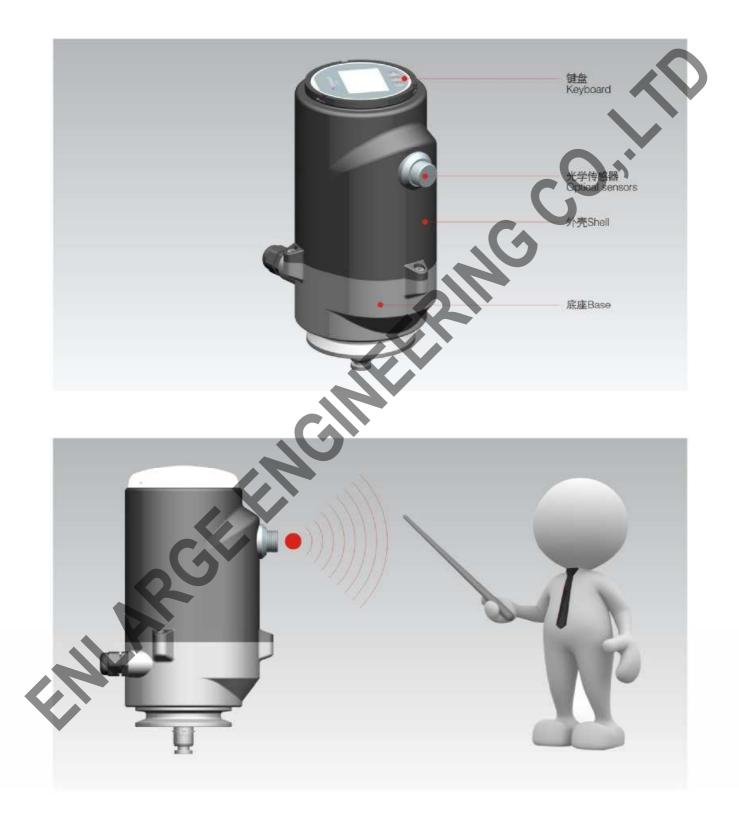
▶ 038 039 DONJOY创新设计,拥有多项专利保护

电动调节隔膜阀 Electric adjustment diaphragm valves





电动调节隔膜阀 Electric adjustment diaphragm valves



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



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





不锈钢气动隔膜阀

2015款不锈钢气动隔膜阀 Stainless steel pneumatic 2015 TYPE Stainless steel pneumatic

迷你型气动隔膜阀

- ◆SIZE:1/4 "-3/4", DN6-DN15
- ◆最高温度: -30到150°C (双层膜片 EPDM+PTFE)
- ◆最高温度: -30到130℃(单层橡胶膜片EPDM) (其他材质,满足更高温度)
- ◆最高压力: 单向(DELTA P=100%)
 - 常闭橡胶8bar, PTFE 6bar() 常闭橡胶6bar, PTFE 4.5bar 标准 PTI

累纹

0.5%

- 常开和双作用橡胶8bar,
- ◆换装不同的执行器可以满足更高压力等
- ◆锻造阀体: 1.4404/316L ASME BPE//
- ◆铸造阀体: 1.4404/316L
- ◆连接方式:焊接、卡箍、法兰
- 多通道阀体、焊接组合 ◆气动执行器适用于阀体: 直通 阀体、罐底阀

pneumatic diaphragm valve

- SIZN: 1/4 "- 3/4", DN6 DN15 Max temperature: 30 to 150 °C (depending on diaphragm)

、锈钢气动隔膜阀

eel pneumatic diaphragm valve

- (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 \blacklozenge Assemble different actuators can meet the higher pressure rating
- ◆Forging body: 1.4404/316 L ASME BPE/1.4435 Nb2 Fe<0.5%
- ◆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/塑料手轮隔膜阀 Diaphragm Valve with Stainless Steel/Plastic Hand Wheel

铝合金气动隔膜阀 Aluminum pneumatic

塑料气动隔膜阀 Plastic pneumatic

迷你多功能罐装隔膜阀 Mini multi-function canned diaphragm valve

技术特点 Technical characteristics

具有高效率、高精度罐装,物料零溢出,超长寿命(压力2bar高达 800万次),流量可调节,双工位气缸设计。

Zero overflow with high efficiency and high precision canning, materials, long life (2 bar pressure up to 8 million times), flow adjustable, double cylinder design.

SIZE: DN6-DN15, 1/4*-3/4*

材质: ASME BPE 316L, 1.4404

1.4435 NB2 Fe < 0.5%

阀体: 直通、三通、多通、U型三通、卡箍、焊接、螺纹、法兰等 执行标准: DIN11866 DIN11850, ASME BPE ASME A269

SIZE: DN6 - DN15, 1/4 "- 3/4" Material: 316 | ASME BPE, 1,4404 1.4435 NB2 Fe < 0.5% The body straight, tee, communication, u-shaped tee, clamp, welding, thread, flange, etc Execution standard: DIN11866 DIN11850, ASME BPE ASME A269



工作原理 Working principle

该隔膜阀具有双工位气缸,流量可调式的准装 对于要求快速灌装且杜绝物料外溢或溅出

1#气缸工作时流量为最大;

2#气缸工作时流量为最小,也可通过流量调节装置,调节2#气缸 工作时的流量。

The diaphragm valve has a double location cylinder, flow adjustable filling value for rapid *film* and prevent spillover spatter material filling bottles. 1 # cylinder work flow as the largest; 2 # cylinder work flow to a minimum, also can through flow control device, regulating the flow of 2 # cylinder at work. rapid filling and prevent spillover or

议设置 Suggest setting

#乞紅开启液体灌装至70%-80%液位时关闭,2#气缸开启灌装 合理的液位。

1 # open cylinder filling liquid level to 70% - 80% when closed, open 2 # cylinder filling to a reasonable level.











DIN32676/DIN11850-1	12
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SIZE					H	Ht	H2	H3
DN6	38	60	54	60	57	104	116	118
DN8	38	60	54	60	57	104	116	118
DN10	38	60	54	60	57	104	116	118
DN15	38	60	54	60	57	104	116	118

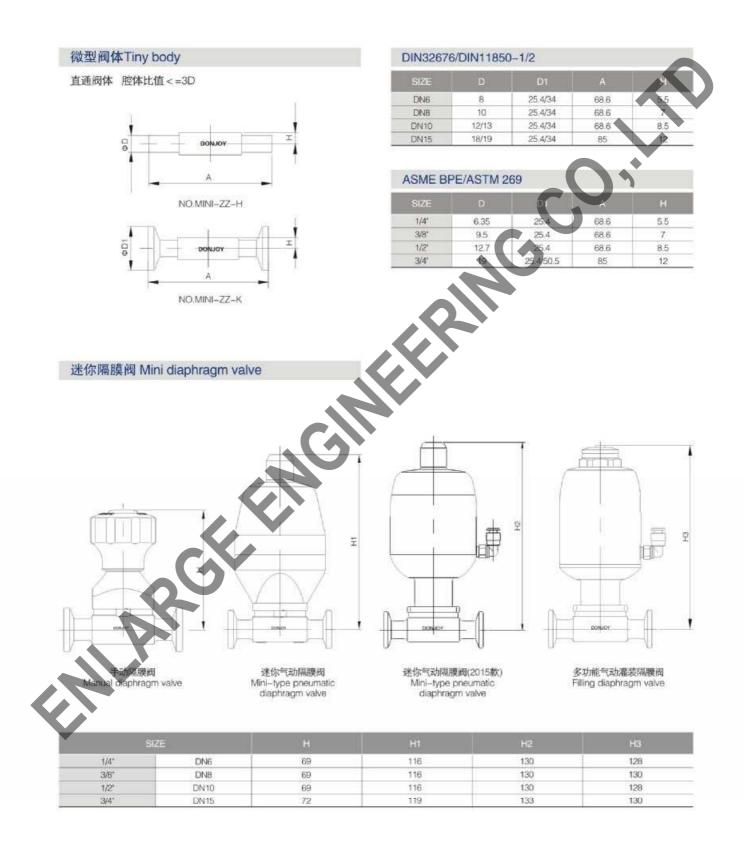
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不銹钢气动-2015款 Stainless Steel Actuator NO.MINI-VGM0Q4

ASME BPE/ASTM 269 1/4" 3/8" 1/2 3/4* 1/4* 3/8" 1/2"

3/4"





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 自拍空角度,通路孔在主阀水路最低的排放点上。

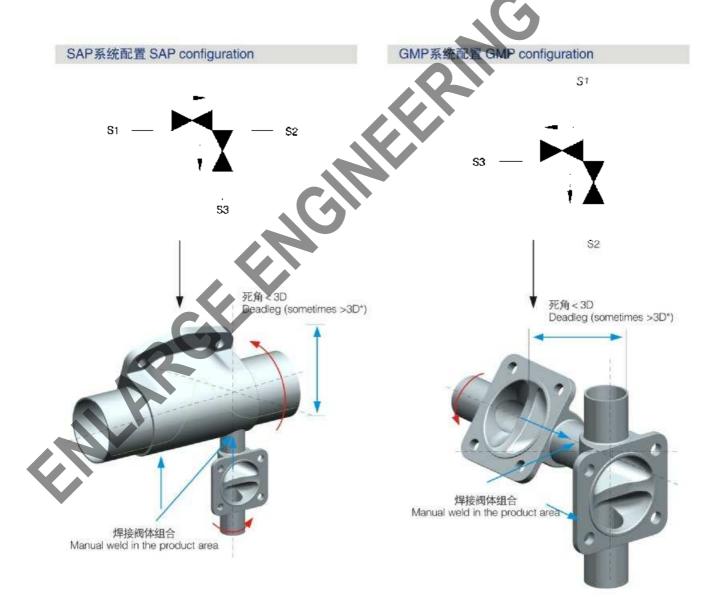
Different welding combinations of host valve

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.





多通道阀门 Multi-port valves



隔膜阀阀阵系统 Diaphragm valve array system





DONJOY Biopharmaceutical diaphragm valve www.cndonjoy.com



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的重要的,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 channels 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 vary 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

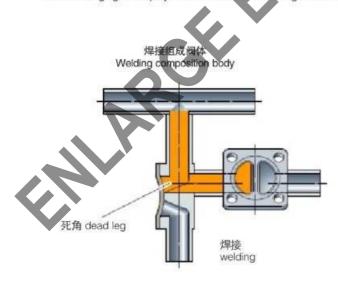
减少所需阀门的各种资质认证可根据客户任意选择执行机构和连接方式

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' requirment 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



多通阀体 Multipass body





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 complicat and with long assembly time. large space occcupied and expensive cost on inspection.

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

安装建议 Installation suggestion

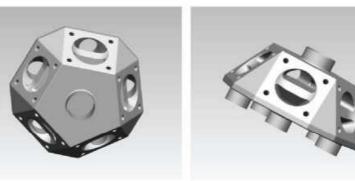
根据通径大小不同,星形设计最多可达7个阀门,另外星形设计也,可有两个对置的多通道阀门组成,他们之间通过公共管相连接,

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

GFF

S3 ... S6 S1 ... S6 S4 ... S5

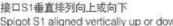
M-65A型Type

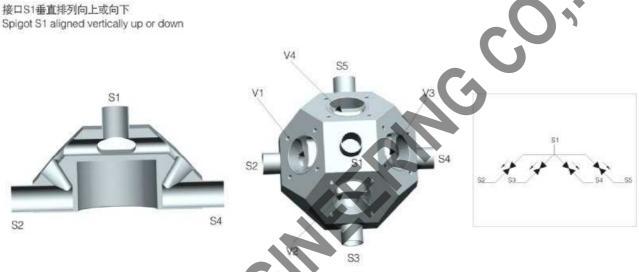


M-54A

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.

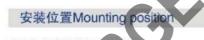
安装位置Mounting position





M-54B

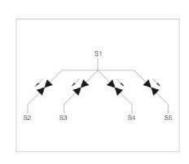
由不锈钢制成的块料,应用,例如无菌阀 车系统或分配器 Sterile valve block is made of staipless ste ock, application, for example, as a collector or distributor



接口S1垂直排列向上或M Spigot S1 aligned y up or down



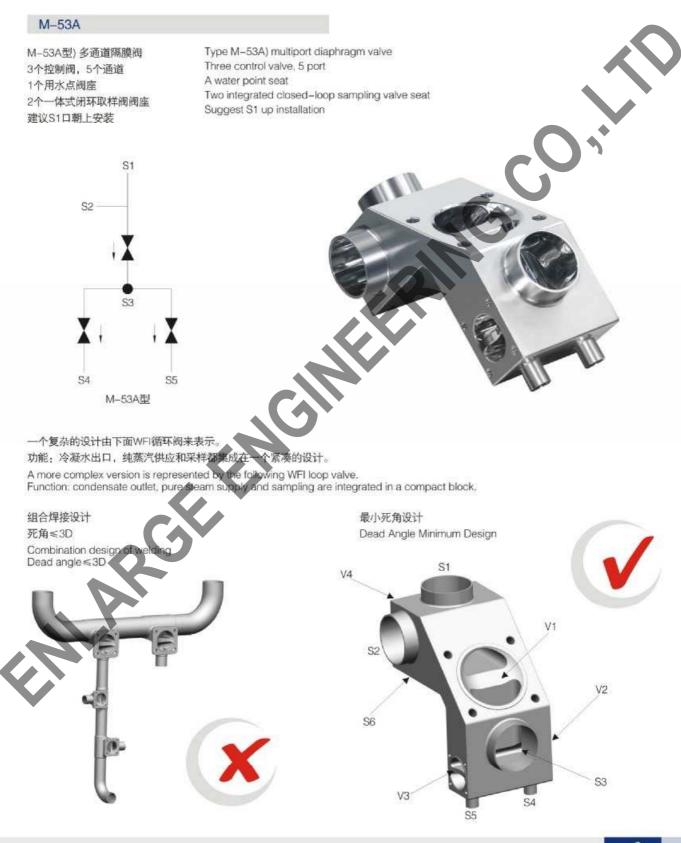




H=水平, V=垂直 H=horizontal, V=vertical







DONJOY Biopharmaceutical diaphragm valve www.cndonjoy.com



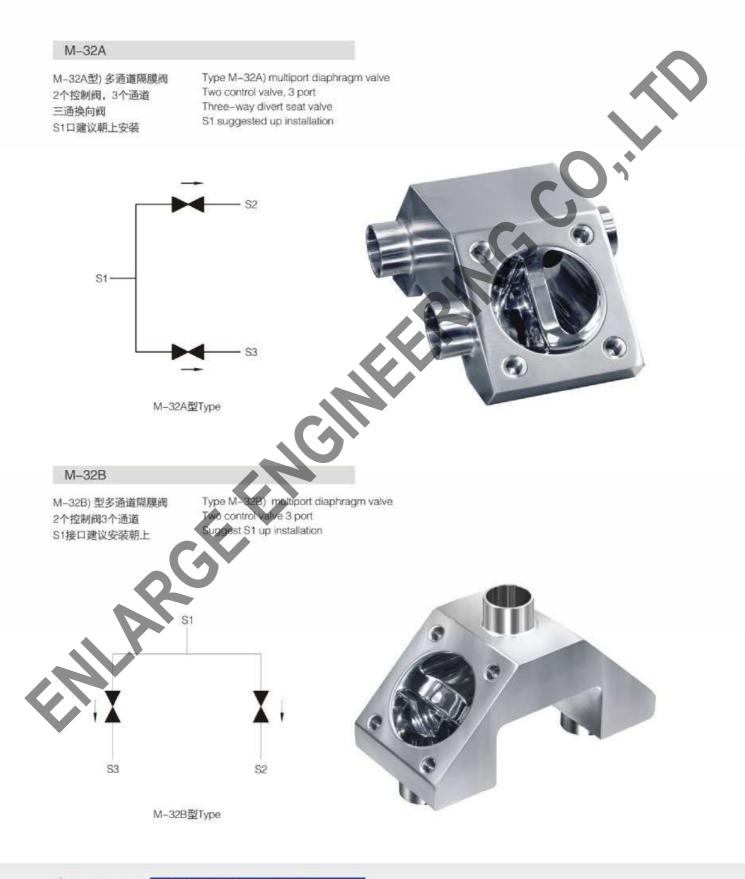
M-64A S1 无菌阀块与多个通道由不锈钢制成的阀座, 多功能模块;使用点注射用水,取样,冷凝水排水管,连接灌装成较大的器皿, I 排水、无菌蒸汽供应SIP。 Sterile valve block and ports are made of stainless steel block, multi-function block with several integrated applications: point of use WFI, sampling, condensate drain, filling into larger vessels, draining, sterile steam supply for SIP. SI V4 SZ V1 V1 V2 V3-\$3 V3 **S**4 **S**5 S5 SI S2 S2 V4 S6 V4 ٧2 S6 V3 **S**4 11 ٧2 \$5 S4

H=水平, V=垂直 H=horizontal, V=vertical

S5









H=水平, V=垂直 H=horizontal, V=vertical



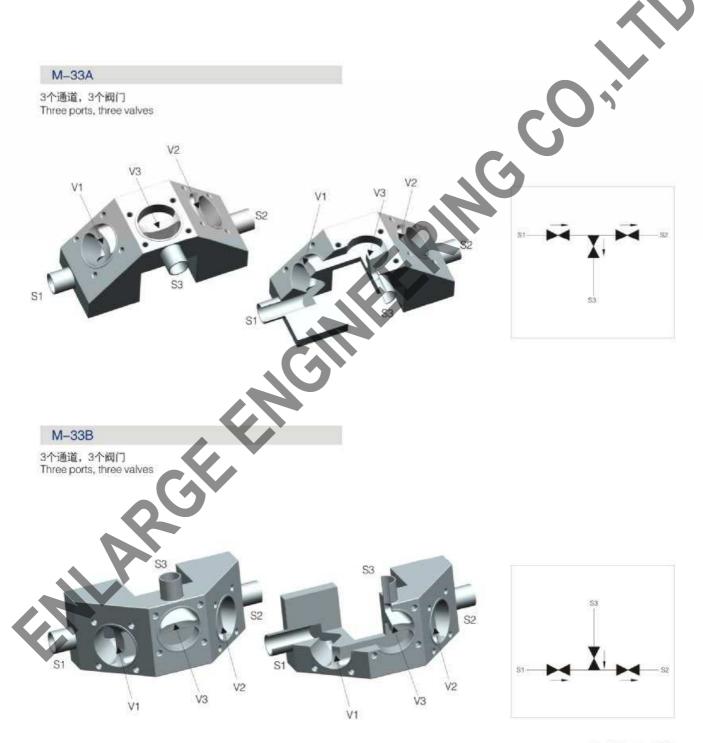
M-32G

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.



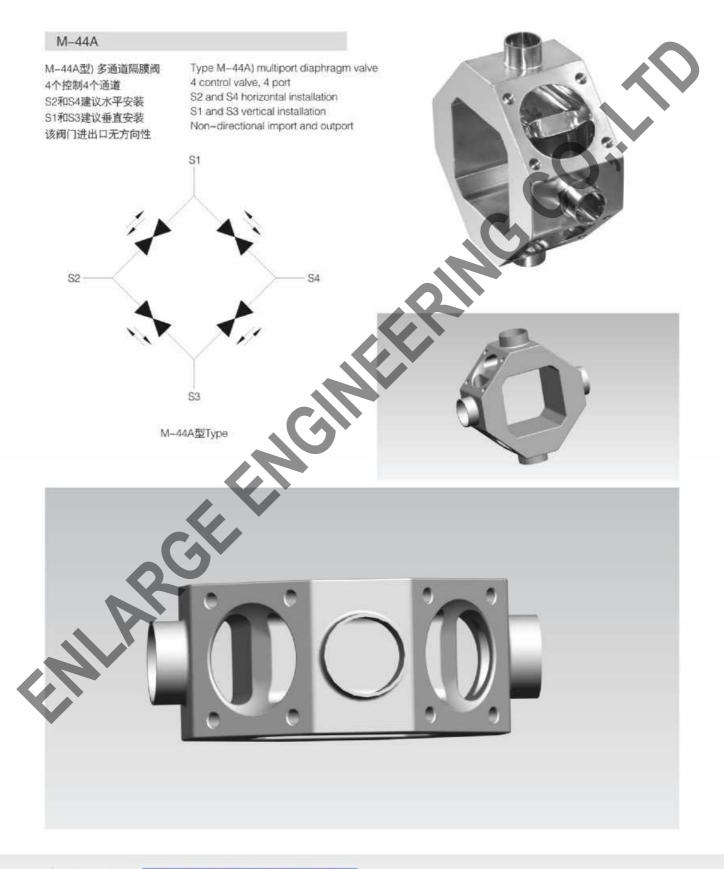
H=水平,V=垂直 H=horizontal,V=vertical

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.



H=水平, V=垂直 H=horizontal, V=vertical



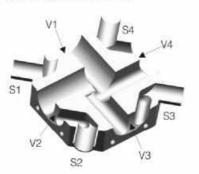


M-44C

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

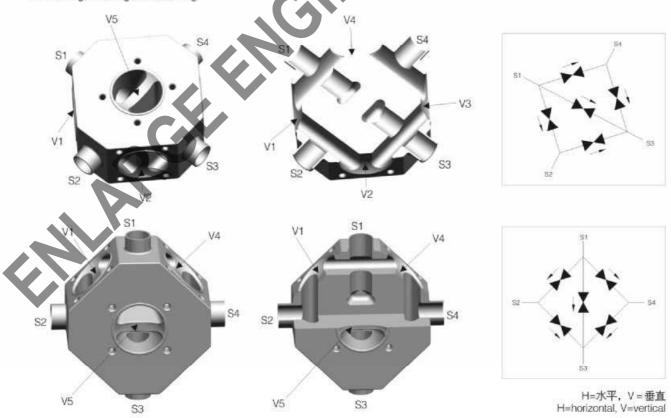






无菌阀块由不锈钢制成的块料, 应用, 例如, 作为色谱块, 进行, 读多和交换。 Sterile valve block is made of stainless steel block, application, for example, as a chromatography block, conducting, diverting and switching.

S



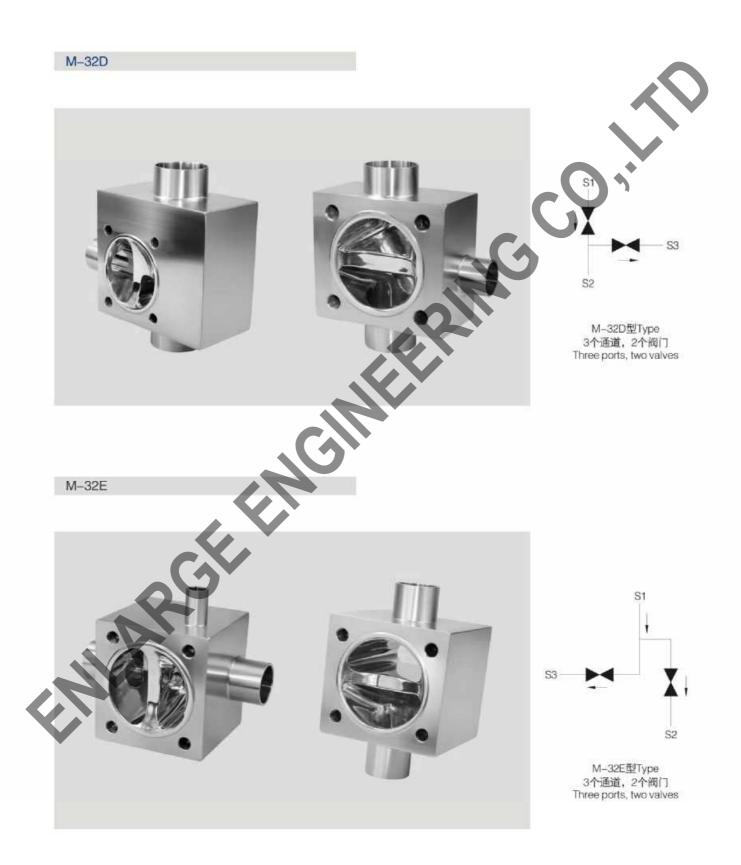


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DONJOY Biopharmaceutical diaphragm valve www.cndonjoy.com



M-32E

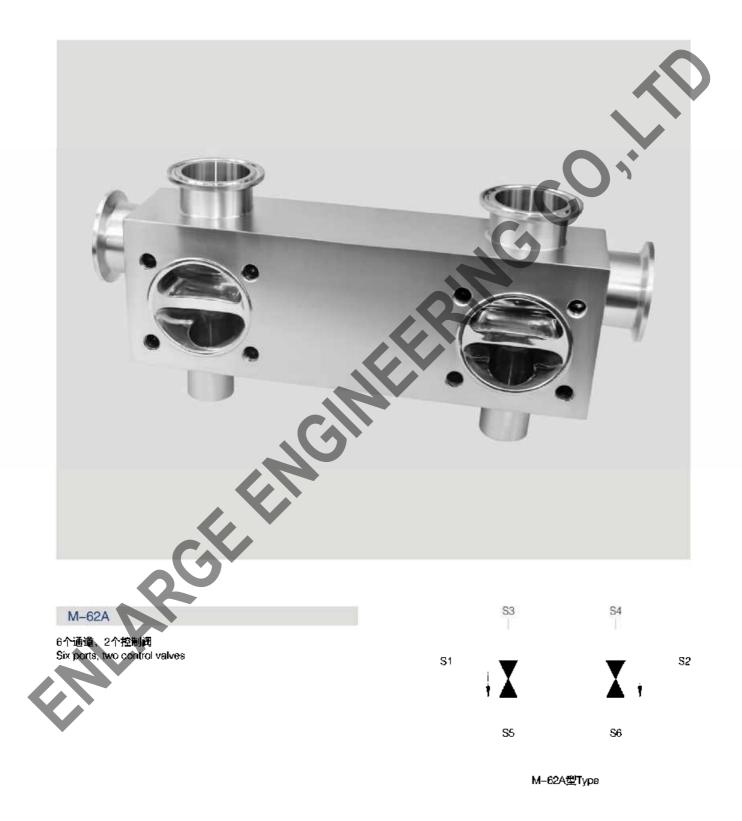




由不锈钢制成的块料, 应用, 例如, 作为分支无菌阀块, 取样阀 在两个介质环。 Sterile valve block is made of stainless steel block, application, for example, as a branch, sampling valve or insulation between two media rings.



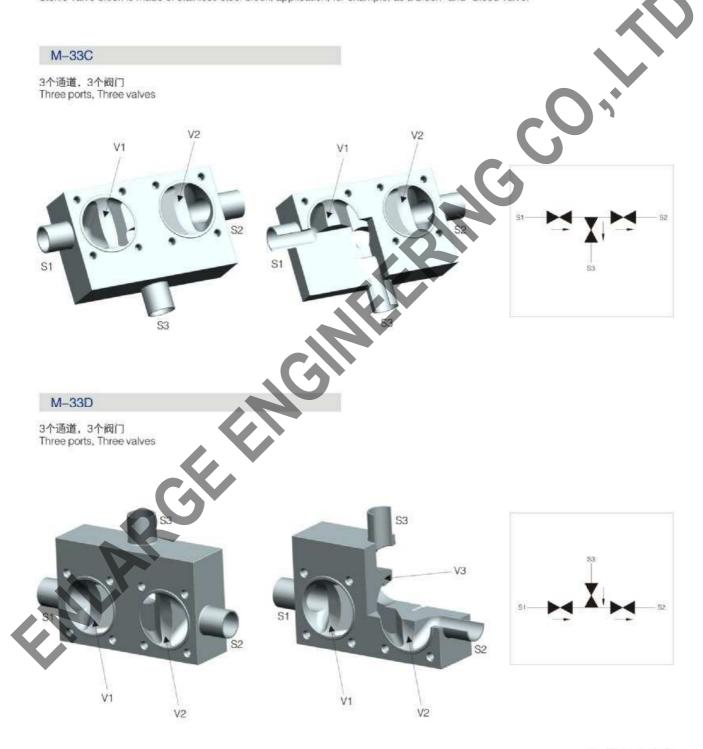
H=水平, V=垂直 H=horizontal, V=vertical





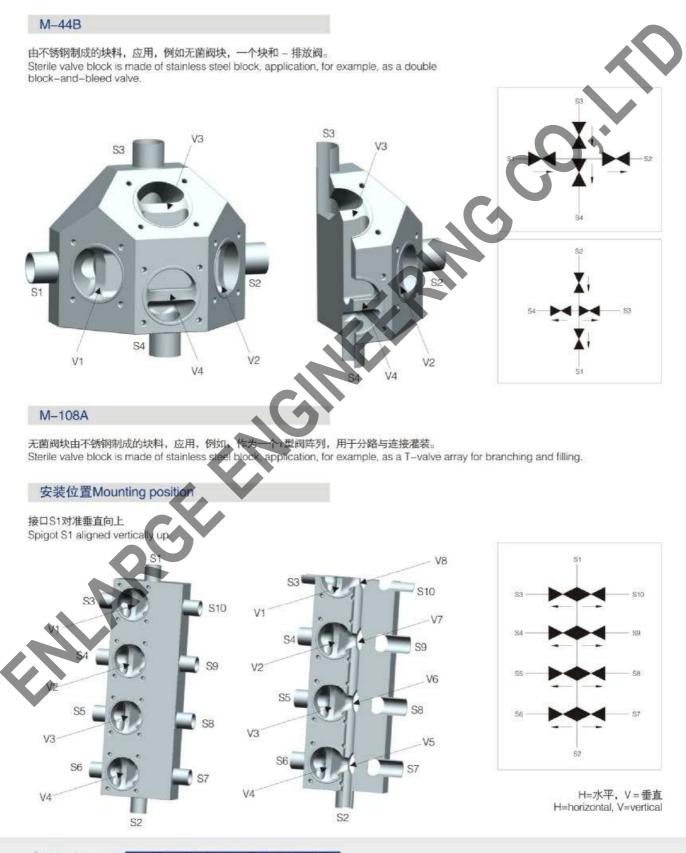


由不锈钢制成的块料, 应用, 例如无菌阀块, 一个块和 – 排放阀。 Sterile valve block is made of stainless steel block, application, for example, as a block-and-bleed valve.



H=水平, V=垂直 H=horizontal, V=vertical









(11)



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

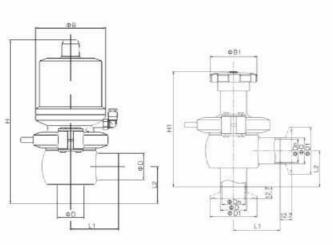
技术规格Technical specifications

- ◆规格: 3/4"-2.5", DN20-DN65
- ◆工作温度: -10℃到120℃(EPDM/Silicon)
- ◆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/Silicon)
- Max pressure: 6 bar
- Operation: manual/pneumatic interchangeable
- Actuator pressure: 5 bar 6 bar
- Connection: welding, clamp, and other special connection







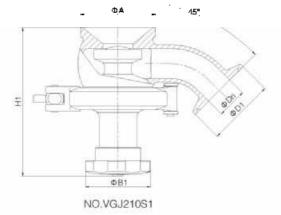


NO VGJ100Q1

NO VGJ100S1

SIZE	Dn	D	D1	L1	12	H		HZ	B
3/4"	16	19	25.4	50	-40	171	73	145	55
t'	22.4	25.4	50.5	50	40	171	73	145	55
1.5°	35	38	50.5	55	43.5	205	100	155	55
2'	47.8	50.8	64	65	55	238	106	160	75
2.5'	59.5	63.5	77.5	80	70	265	130	205	85
DIN					C				
MR(10054)	Dn	D	0	ų		н	в	H1	B1
	Dn 19	D 22	34	59	EZ 40	H 171			
DIN SIZE DN20 DN25		_	34 34				B	HI	B1
SIZE DN20 DN25	19	22		B)	40	171	B 73	H1 145	B1 55
SIZE DIN20 DIN25 DIN32	19 25	22 28	50.5	5) 50	40 40	171 171	B 73 73	H1 145 145	31 55 55
SIZE DN20	19 25 31	22 26 34	50.5 50.5	5) 50 50	40 40 40	171 171 205	B 73 73 100	H1 145 145 156	31 55 55 55

SIZE	Dn	D1		H		HI	B1
3/4"	16	25.4	56	158	73	132	55
ť	22.4	50.5	56	158	73	132	55
1.5*	35	50.5	72	200	100	150	55
z	47.8	64	84	230	106	170	75
2,5*	59.5	77.5	100	253	130	192	85



			11 82	Contraction D			
SIZE	Dn	D1		Ħ		Ht	B
DN20	19	34	56	158	73	132	55
DN25	25	50.5	56	158	73	132	55
DN32	31	50.5	56	200	100	150	55
DN40	37	50.5	72	200	100	150	55
DN50	49	64	84	230	106	170	75
DN60	66	91	100	253	130	192	85



CHINA DONJOY SEE MONTERING TECHNOLOGY CO., LTD.

DONJOY looking forward to your visit! Your telecommunications!

中国·东西 有限公司

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