

# SANITARY BUTTERFLY VALVE

## 卫生级蝶阀



## 卫生级蝶阀系列

### SANITARY BUTTERFLY VALVE SERIES

#### 概述

蝶阀是一种卫生型开/关阀门,可用于智控系统或手动操作。由于开口面积大,流体阻力小,对低粘度性的产品有比较柔和的处理。该阀用于食品、乳制品以及生物制药等工业的流体产品应用。

#### OVERVIEW

Butterfly valve is a sanitary on/off valve that can be used in intelligent control systems or manual operation. Due to the large opening area and small fluid resistance, it can handle products with medium and low viscosity relatively gently. This valve is used in fluid product applications in the food, dairy, and biopharmaceutical industries.

#### 产品系列

1. 从驱动方式上分3种分别是气动、手动拉杆、手动握把。
2. 从接口连接方式分4种分别是焊接式、卡接式、螺纹式、法兰式。

#### PRODUCT SERIES

1. There are three types of driving methods: pneumatic, manual pull rod, and manual grip.
2. There are 4 types of interface connection methods: welding type, snap-in type, threaded type, and flange type.

#### 工作原理

蝶阀是用圆形蝶板作启闭件并随阀杆转动来开启、关闭和调节流体通道的一种阀门,蝶板安装在蝶阀阀体内,圆形蝶板绕轴线旋转,角度为0~90°之间。当旋转至90°时,阀门则为全开状态。当阀芯与蝶阀的密封圈接触时,执行器的扭矩会增大。控制方式分为手动操作和气动控制。

#### WORKING PRINCIPLE

Butterfly valve is a valve that uses a circular butterfly plate as the opening and closing part and rotates with the valve stem to open, close and adjust the fluid channel. The butterfly plate is installed in the butterfly valve body, and the circular butterfly plate rotates around the axis with an angle of 0~90°. When rotated to 90°, the valve is fully open. When the valve core comes into contact with the sealing ring of the butterfly valve, the torque of the actuator will increase. The control methods are divided into manual operation and pneumatic control.

#### 气动蝶阀有三种标准

状态:常开(NO),常闭(NC),气/气(D/A)。

#### THERE ARE THREE STANDARDS FOR PNEUMATIC BUTTERFLY VALVES

Status: Normally Open (NO), Normally Closed (NC), Air/Air (D/A).

#### 蝶阀特点

- 寿命长、免维修的气动式驱动装置。
- 阀体和蝶板采用316L或304L不锈钢锻造。
- 特殊的密封圈设计,流体无残留,并获得欧洲EHEDG卫生设计认证。
- 产品稳定性及安全性获得欧洲CE及中国TS认证。
- 超过10万次以上的安全测试。
- 蝶阀的驱动方式可根据客户要求选择:手动手柄、气动或电动执行器。
- 根据客户要求装置反馈信号、0-100%智能限位调节。
- 密封阀座两侧增加凸台,本体相应位置开槽,侧面位置做防吸出刻线。
- 锻造柄蝶,加厚,强度更高。

#### BUTTERFLY VALVE CHARACTERISTICS

- Long-life, maintenance-free pneumatic drive.
- The valve body and butterfly plate are forged from 316L or 304L stainless steel.
- Special sealing ring design, no fluid residue, and obtained European EHEDG hygienic design certification.
- Product stability and safety have obtained European CE and Chinese TS certification.
- More than 100,000 safety tests.
- The driving method of the butterfly valve can be selected according to customer requirements: manual handle, pneumatic or electric actuator.
- Device feedback signal and 0-100% intelligent limit adjustment according to customer requirements.
- Bosses are added on both sides of the sealing valve seat, grooves are made at corresponding positions of the body, and anti-suction lines are made on the side positions.
- Forged handle butterfly, thickened, higher strength.

#### 技术参数 TECHNICAL PARAMETER

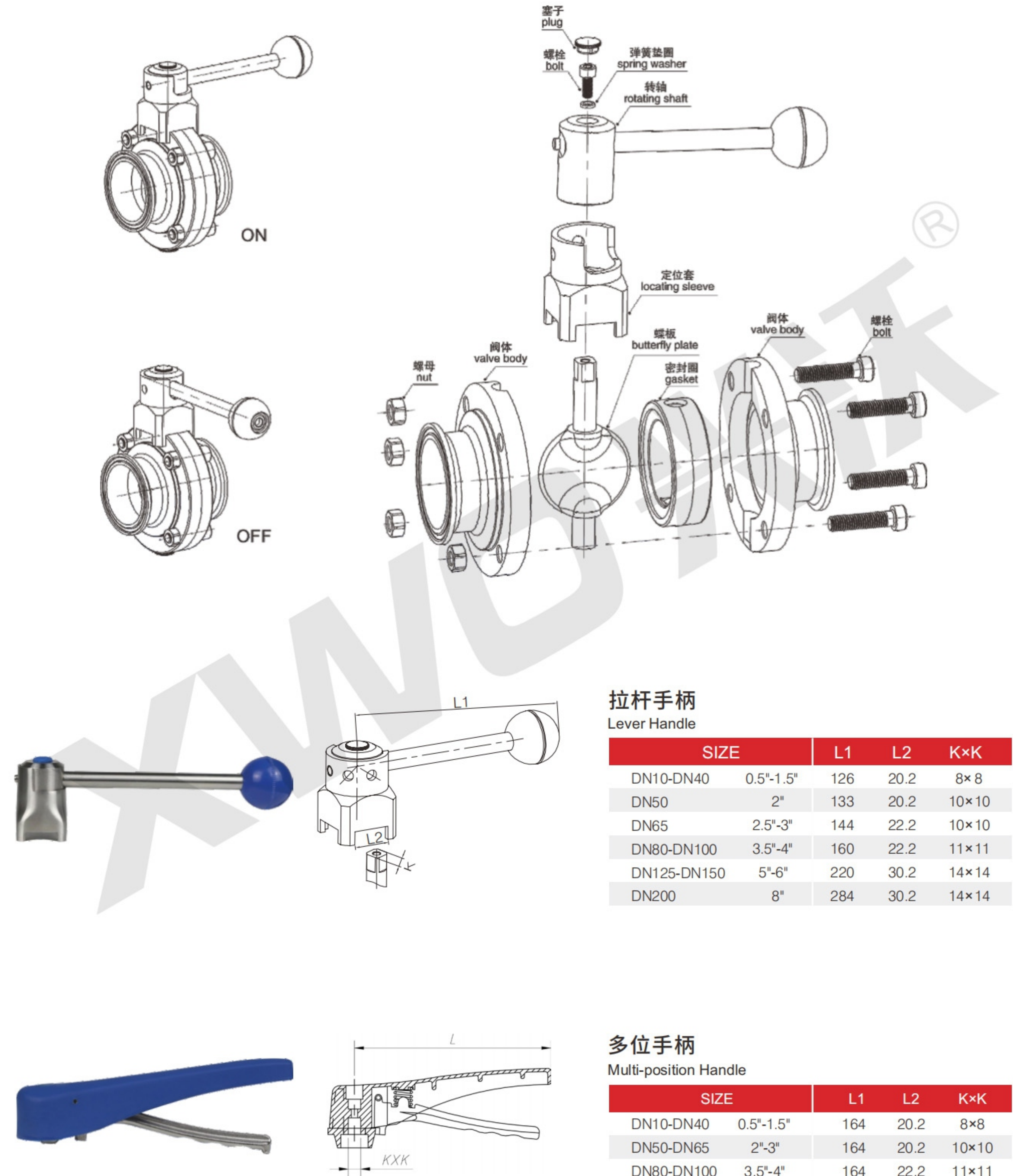
工作温度	EPDM-40°C ~ 130°C FKM-20°C ~ 200°C SILICON-60°C ~ 200°C HNBR-30°C ~ 150°C
环境温度	-10°C ~ +95°C
气动装置	最小开启气压4bar,最大开启气压7bar
阀体材质	F316L、F304L符合ASTM A182
其它钢制部件	304
阀芯衬套	PVDF
表面处理	外表面 Ra < 2.4μm,内表面 Ra < 0.6μm
接口口径	DN10 ~ DN200
接口标准	3A、ISO、DIN、GB

#### 蝶阀最小扭矩范围 (kgf.m)

规格尺寸 Standard sizes	扭矩值			
	EPDM	FKM	Silicon	HNBR
DN20	0.3	0.3	0.4	0.3
DN25	0.3	0.3	0.4	0.3
DN32	0.4	0.4	0.5	4
DN40	0.36	0.44	0.44	0.17
DN50	0.41	0.44	0.44	0.29
DN65	0.72	1.02	1.05	0.46
DN80	1.13	1.35	2.21	0.85
DN100	1.76	1.76	1.35	0.96

# 卫生级蝶阀手柄

## SANITARY BUTTERFLY VALVE HANDLE



拉杆手柄  
Lever Handle

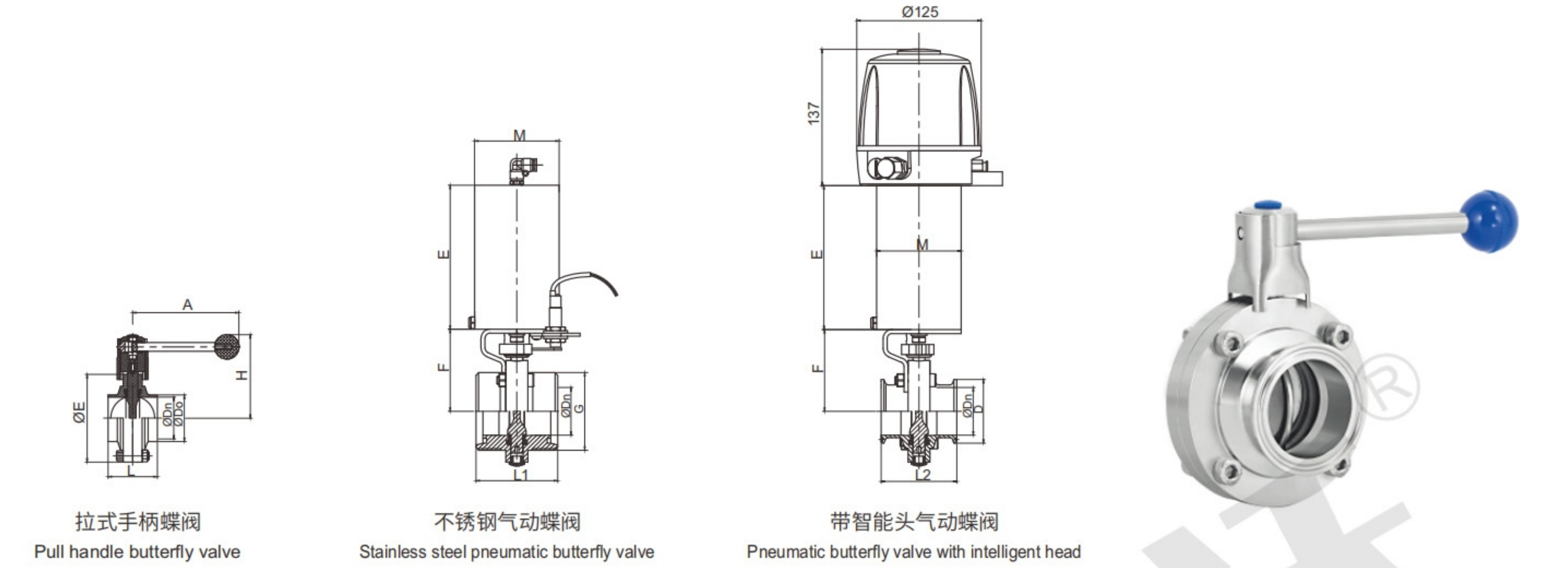
SIZE	L1	L2	K×K	
DN10-DN40	0.5"-1.5"	126	20.2	8×8
DN50	2"	133	20.2	10×10
DN65	2.5"-3"	144	22.2	10×10
DN80-DN100	3.5"-4"	160	22.2	11×11
DN125-DN150	5"-6"	220	30.2	14×14
DN200	8"	284	30.2	14×14

多位手柄  
Multi-position Handle

SIZE	L1	L2	K×K	
DN10-DN40	0.5"-1.5"	164	20.2	8×8
DN50-DN65	2"-3"	164	20.2	10×10
DN80-DN100	3.5"-4"	164	22.2	11×11

# 卫生级蝶阀

## SANITARY BUTTERFLY VALVE



拉手手柄蝶阀  
Pull handle butterfly valve

不锈钢气动蝶阀  
Stainless steel pneumatic butterfly valve

带智能头气动蝶阀  
Pneumatic butterfly valve with intelligent head

### 快装、焊接、螺纹蝶阀(3A, SMS, ISO, IDF)

Triclamp, Welding, Threaded Butterfly Valve (3a, Sms, Iso, Idf)

SIZE	Do	Dn	D	G(ISO, IDF)	G(RJT)	E	F	L	L1	L2	A	M
1/2"	12.7	9.4	25.2/50.5			78	73	50	66	66	126	70
3/4"	19.1	15.8	25.2/50.5			78	73	50	66	66	126	70
1"	25.4	22.1	50.5	37.1*1/8"Acme	45.7*1/8"TWHT	78	73	50	66	66	126	70
1.25"	31.8	28.5	50.5			78	67.5	50	66	70	126	86
1.5"	38.1	34.8	50.5	50.6*1/8"Acme	58.4*1/8"TWHT	86	72	50	70	74	126	86
45	45	41	64			90	74	50	74		126	86
48	48	45	64			95	76	52	76		126	86
2"	50.8	47.5	64	64.1*1/8"Acme	72.7*1/6"TWHT	102	80	52	76	76	133	86
57	57	53	77.5			106	81.5	52	76		144	86
2.5"	63.5	60.2	77.5	77.6*1/8"Acme	85.4*1/6"TWHT	115	86.5	56	80	80	144	86
3"	76.2	72.9	91	91.1*1/8"Acme	98.1*1/6"TWHT	128	93	56	84	84	144	86
3.5"	89	85	106			139	99.5	60	86	84	144	86
4"	97.4	101.6	119	125.9*1/8"Acme	123.8*1/6"TWHT	154	105.5	64	104	104	160	86
108	108	104	119			159	110	64	106		160	86
114	114.3	110.3	130			159	150	80	106	130	220	108
133	133	127	155			185	162.5	90	122		220	108
6"	152.4	146.8	167		174.3*1/6"TWHT	215	145	90	146	150	220	133
159	159	153	183			215	145	90	146		220	133
8"	203.2	197.6	217.4			285	190	90	167		284	133
219	219	211	233.5			285	190	90	167		284	133

### 快装、焊接、螺纹蝶阀(DIN)

Quick Installation, Welding, Threaded Butterfly Valve (din)

SIZE	Do	Dn	D	G	E	F	L	L1	L2	A	M
DN10	12/13	9/10	34	Rd28*1/8"	78	73	50	66	66	126	70
DN15	18/19	15/16	34	Rd34*1/8"	78	73	50	66	66	126	70
DN20	22/23	19/20	34	Rd44*1/6"	78	73	50	66	66	126	70
DN25	28/29	25/26	50.5	Rd52*1/6"	78	73	50	66	66	126	70
DN32	34/35	31/32	50.5	Rd58*1/6"	86	72	50	70	66	126	86
DN40	40/41	37/38	50.5	Rd65*1/6"	90	74	50	74	70	126	86
DN50	52/53	49/50	64	Rd78*1/6"	106	81.5	52	76	76	133	86
DN65	70	66	91	Rd95*1/6"	124	91	56	80	80	144	86
DN80	85	81	106	Rd110*1/4"	139	99.5	60	84	84	160	86
DN100	104	100	119	Rd130*1/4"	159	110	64	104	104	160	86
DN125	129	125	144.5	Rd160*1/4"	185	150	80	130	122	220	108
DN150	154	150	167	Rd190*1/4"	215	161.5	90	150	146	220	133
DN200	204	200	217.4		285	199	90		167	284	133

## 双转子计量阀

### DOUBLE ROTOR METERING VALVE

工作原理:双转子计量阀由两个转子构成,大转子用于粗计量,小转子用于精确计量。本阀操作与使用须与配料称重系统配合使用。卡箍式组装方式方便用户能快速的拆卸及组装。本阀主要用于料体及颗粒物料的分装、计量。

Working principle: The double rotor metering valve is composed of two rotors, the large rotor is used for rough metering, and the small rotor is used for precise metering. The operation and use of this valve must be used in conjunction with the batching weighing system. The clamp-type assembly method is convenient for users to disassemble and assemble quickly. This valve is mainly used for sub-packaging and metering of material and granular materials.

规格: 6.0"、8.0"、10"、12"

工作压力: -0.1~+0.5Mpa

工作温度: -20~+135°C (依密封材料而定)

金属材料: 304、316L (与介质接触部分), 304 (不与介质接触部分)

密封材质: PTFE (标配), 三元乙丙橡胶、硅橡胶(选配)

表面处理: Ra<0.4 (与介质接触部分), 表面抛光或电解(不与介质接触部分)

连接标准: ASME-BPE

连接方式: 焊接、快装等

大转子执行器: 0-90度(蝶形转子), 0-180度(星型转子)

小转子执行器: 0-180度执行器、气动马达、伺服电机

Specifications: 6.0", 8.0", 10", 12"

Working pressure: -0.1~+0.5Mpa

Working temperature: -20~+135°C (depending on the sealing material)

Metal material: 304, 316L (parts in contact with the medium)304,(the parts not in contact with the medium)

Sealing material: PTFE (standard configuration)EPDM rubber, silicone rubber (optional)

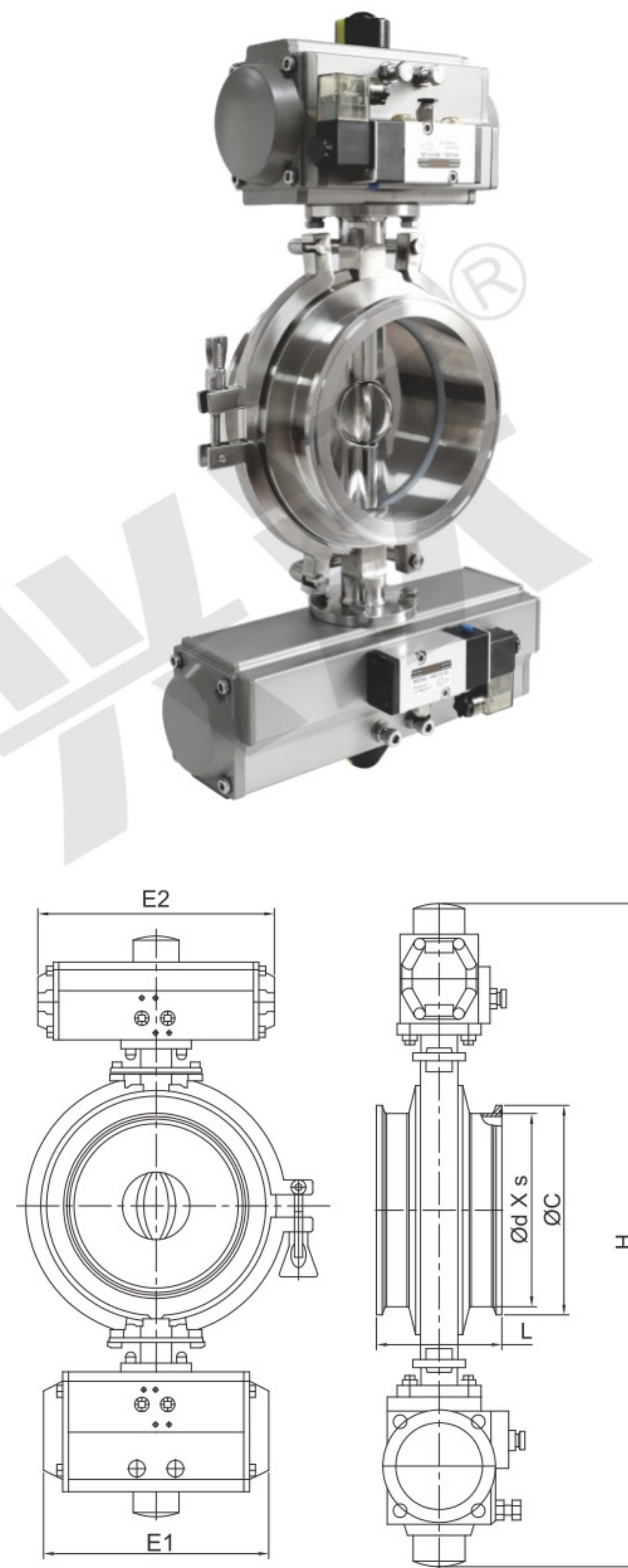
Surface treatment: Ra<0.4 (part in contact with medium), surface polishing or electrolysis (the parts not in contact with the medium)

Connection standard: ASME-BPE

Connection method: welded, clamped, etc.

Large rotor actuator: 0-90 degree (butterfly rotor), 0-180 degree (star rotor)

Small rotor actuator: 0-180 degree actuator, pneumatic motor, and servo motor



DIN	NPS	H	L	E1	E2	C	DIN 11850	ASTM-BPE	ISO 1127	BS 4825	GB/T 17395
							series2		series1		
							ød×s	ød×s	ød×s		
DN150	6.0"	525	100	242	265	166.8	154×2	152.4×2.77	168.3×2.6	139.7×2	159×2
DN200	8.0"	578	100	242	265	217.7	204×2	203.2×2.77	219.1×2.6	168.3×2.6	219×2
DN250	10.0"	751	100	275	265	268.2	254×2	254×2.77	273×2.9	219.3×2.9	273×2
DN300	12.0"	890	120	332	290	319.3	304×2	304.8×2.77	323×2.9	273×2.9	324×2

## 星型分料阀

### STAR DISCHARGE VALVE



工作原理:当上部料仓的物料靠自重落下充填在叶片之间的空隙中,随叶片的旋转或往复运动而在下部卸出,因此,星型分料阀可以定量而连续地卸料。星型卸料阀常用于散料、颗粒及其粉状物料输送中;同时对于压力输出系统或负压输出系统,星型分料阀可以均匀、连续不断地向输料管供料,以保证输出管内的物料比较稳定,从而使散状物料输送能正常工作。粉体星形阀作为一种简便快捷的输送设备,其性能稳定适用于粉体、颗粒等介质,广泛应用于食品、生物制品、奶粉、制糖等行业。

Working principle: When the material in the upper silofalls under its own weight and fills the gap between the blades, it is discharged at the lower part with the rotation orreciprocating movement of the blades. Therefore, the star-shaped discharge valve can discharge quantitatively andcontinuously. The star-shaped discharge valve is commonlyused in the transportation of bulk, granular and powderymaterials; at the same time, for the pressure output systemor negative pressure output system, the star-shapeddischarge valve can uniformly and continuously supplythe material to the conveying pipe to ensure the materialin the output tube is relatively stable, so that the bulkmaterial transportation can work normally. The powder stardischarge valve is a simple and fast conveying equipmentwith stable performance and suitable for powder, granuleand other media, and is widely used in food, biologicalproducts, milk powder, sugar and other industries.

规格: 3.0"~10.0"

工作压力: -0.1Mpa~+0.5Mpa

控制气源压力: 0.4~0.8Mpa

执行器选择: 0-180度执行器(标配), 0-90度执行器、气动旋转马达、伺服电机(选配)

工作温度: -20°C ~+150°C

金属材料: 304、316L (与介质接触部分), 304 (不与介质接触部分)

密封材质: 氟橡胶.符合FDA 21 CFR 177.2660(标配)

表面处理: Ra<0.4 (与介质接触部分), Ra<0.8 (不与介质接触部分)

密闭压力: 非密闭式(标配)

灭菌方式: SIP

防爆等级: ATEX II 2 GD T4

连接标准: DIN11850系列2、ASME-BPE、ISO1127 系列1

连接方式: 快装、焊接

Specification: 3.0"~ 10.0"

Working pressure: -0.1Mpa~ +0.5Mpa

Control air source pressure: 0.4~0.8Mpa

Actuator selection: 0-1 80 degree actuator (standard configuration)0-90 degree actuator, pneumatic rotary motor, servo motor (optional)

Working temperature: -20°C ~+ 150°C

Metal material: 304, 316L (parts in contact with the medium)304 (part snot in contact with the medium)

Seal material: Viton, accordance with FDA 21 CFR 177.2660 (standard configuration)

Surface treatment: Ra <0.4 (parts in contact with medium)Ra<0.8 (the parts not in contact with the medium)

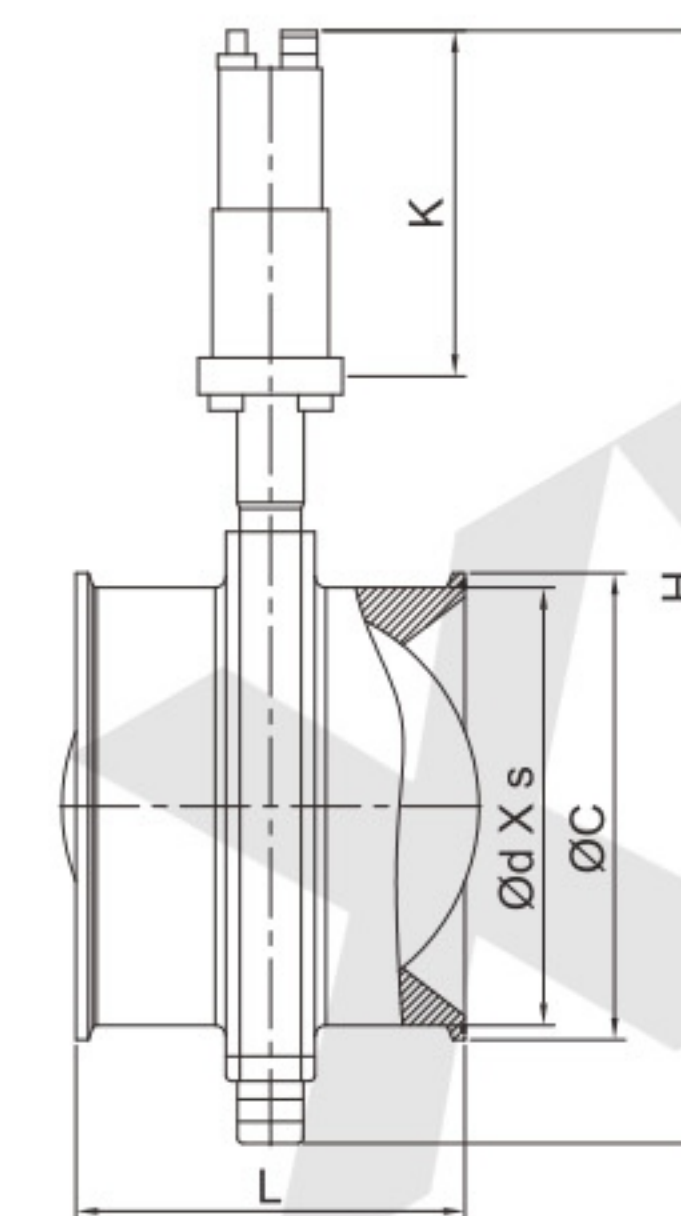
Airtight pressure: non airtight (standard)

Sterilization method: SIP

Explosion-proof grade: ATEX II 2 GD T4

Connection standard: DIN11850 series 2, ASME-BPE, ISO1127 series 1

Connection method: clamped ,welded



DIN	NPS	H	L	k	C	DIN 11850	ASTM-BPE	ISO 1127	BS 4825	GB/T 17395
						series2		series1		
						ød×s	ød×s	ød×s		
DN80	3.0"	361	100	160	91	85×2	76.2×1.65	88.9×2.6	76.2×1.6	89×2
DN100	4.0"	382	100	188	119	104×2	101.6×2.11	114.3×2.6	101.6×2	108×2
DN120	5.0"	446	130	235	155	129×2	127×2.11	139.7×2.6	114.3×2	133×2
DN150	6.0"	446	130	235	166.8	154×2	152.4×2.77	168.3×2.6	139.7×2	159×2
DN200	8.0"	520	180	295	217.7	204×2	203.2×2.77	219.1×2.6	168.3×2.6	219×2
DN250	10.0"	675	200	390	268.5	254×2	254×2.77	273×2.9	219.3×2.6	273×2