



弘特流体
HONGTEFLUID

流体阀门管件集成智造商

INTEGRATED INTELLIGENT MANUFACTURER
OF FLUID VALVES AND FITTINGS

卫生级隔膜阀

SANITARY 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。
- Diaphragm valves, manually or pneumatically operated, are specifically designed for use on hygienic and aseptic processes in the pharmaceutical industries.
- The valve is excellent for flow control as well as for open/close duties.

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 and as such the valve is suitable for aseptic processes.
- As the valve is closed a pressure pad which supports the diaphragm moves towards the sealing face on the body. As 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 actuated either manually or pneumatically and controlled by control tops and solenoid valves.



技术规格 Technical specifications

- 最大压力 10bar (145 PSI)
- 最大工作压力 -10°C +120°C (EPDM) -14 ° F +248 ° F (+140 °C (SIP, 30) 284 ° F)
- Max. pressure: 10 BAR(145PSI)
- Working temperature: -10°C to +120°C (EPDM) -14 ° F to 248 ° F (+140 °C (SIP, max. 30 min) 284 ° F)



EPDM Silicon
Viton PTFE+EPDM

设计和特点 Design and features

- 该隔膜阀同其他阀门设计相比，该阀门有着优越的流量特点。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。
- 迷你型隔膜阀规格：1/4", 3/8", 1/2", 3/4"
- 隔膜阀规格：1", 1 1/4", 1.5", 2", 2.5", 3", 4"
- 适用于CIP/SIP
- 和物料接触部分 AISI 316L
- 其他不锈钢部分 AISI 304
- 内表面处理 亮光Ra ≤ 0.5 μ m
- 外表面处理 亚光/亮光

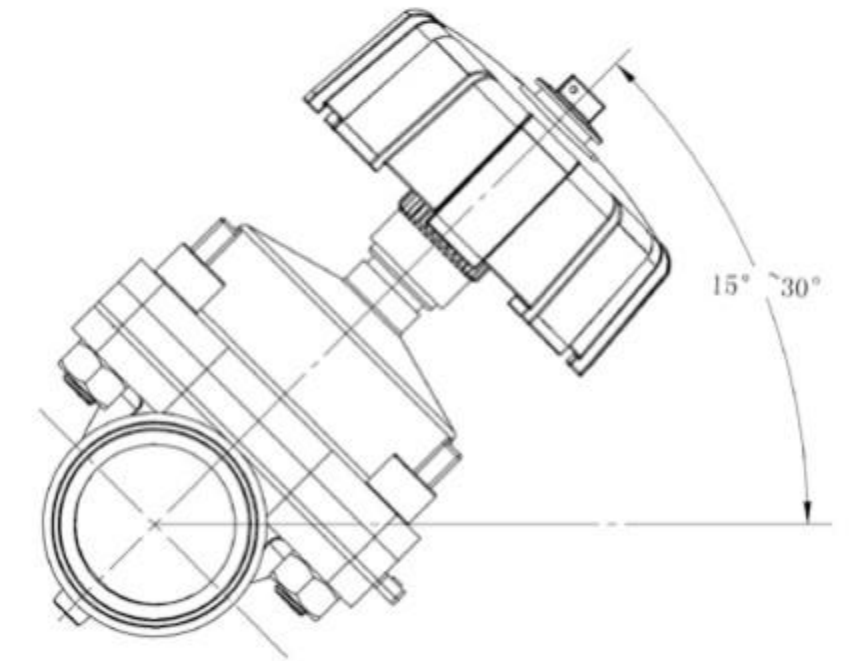
选项 Options

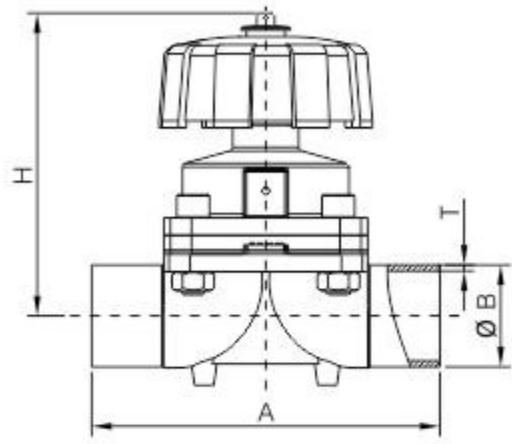
- 连接 (标准) : 卡箍、焊接、螺纹, DIN SMS IDF ISO 3A BPE
- 阀体结构: 直通、三通、U型
- 膜片材料: EPDM,SILICON(硅胶) EPDM+PTFE(双层膜片)符合FDA 177.2600
- Connections(standard): clamp, weld, thread, DIN SMS IDF ISO 3A BPE
- Body construction: Straight, Three ways, U type
- Diaphragms in EPDM, SILICON, EPDM+PTFE, all of them according to FDA 177.2600

隔膜阀最优安装角度示意图 Optimal Installation Angle Diagram

无菌隔膜阀根据其结构特点：推荐15-30度角安装（根据不同的规格而定），有利于阀门清洗后完全排泄，不易造成液体滞留阀内部。

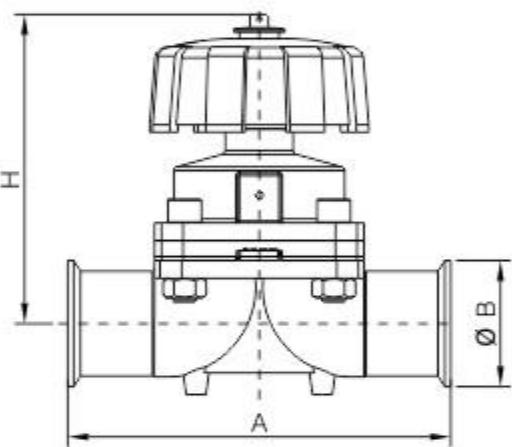
According to the structure feature, fifteen thirty degree is optimal, which makes for complete drain after cleaning and keep no residue.





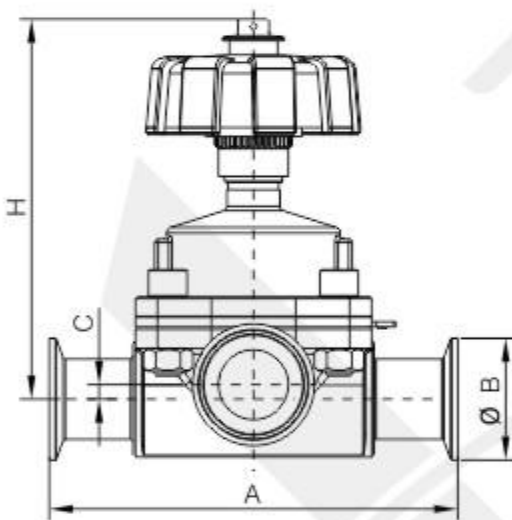
ST-V1030 焊接式隔膜阀
Welded Diaphragm Valve

Size	A	B	H	T
1"	118.0	25.4	111.5/122	1.65
1 1/4"	127.0	31.8	144.5/160	1.65
1 1/2"	146.0	38.1	144.5/160	1.65
2"	190.0	50.8	167/190	1.65
2 1/2"	216.0	63.5	199/228	1.65



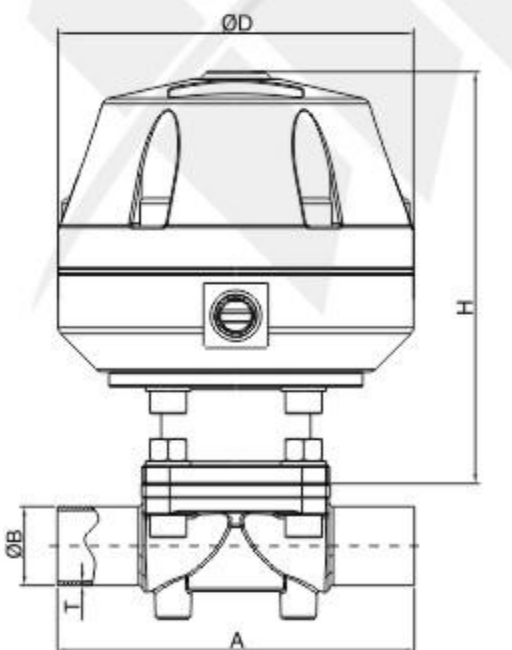
ST-V1031 卡箍式隔膜阀
Clamped Diaphragm Valve

Size	A	B	H
1"	118.0	50.5	111.5/122
1 1/4"	127.0	50.5	144.5/160
1 1/2"	146.0	50.5	144.5/160
2"	190.0	64.0	167/190
2 1/2"	216.0	77.5	199/228



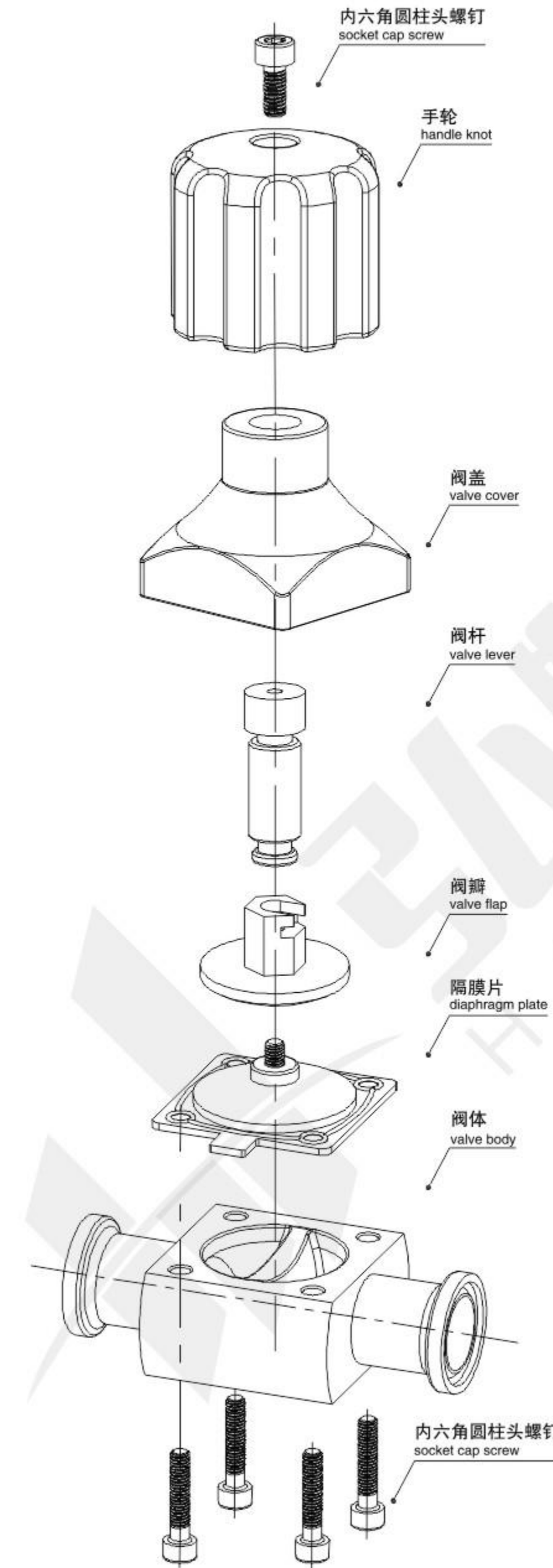
ST-V1032 T型三通隔膜阀
T-type Three-way Diaphragm Valve

Size	A	B	C	H
1/2"	108.0	25.4	6.0	93.5/102.5
3/4"	108.0	25.4	6.0	93.5/102.5
1"	118.0	50.5	6.0	111.5/122
1 1/4"	127.0	50.5	6.0	144.5/160
1 1/2"	146.0	50.5	6.0	144.5/160
2"	190.0	64.0	6.0	167/190
2 1/2"	216.0	77.5	6.0	199/228

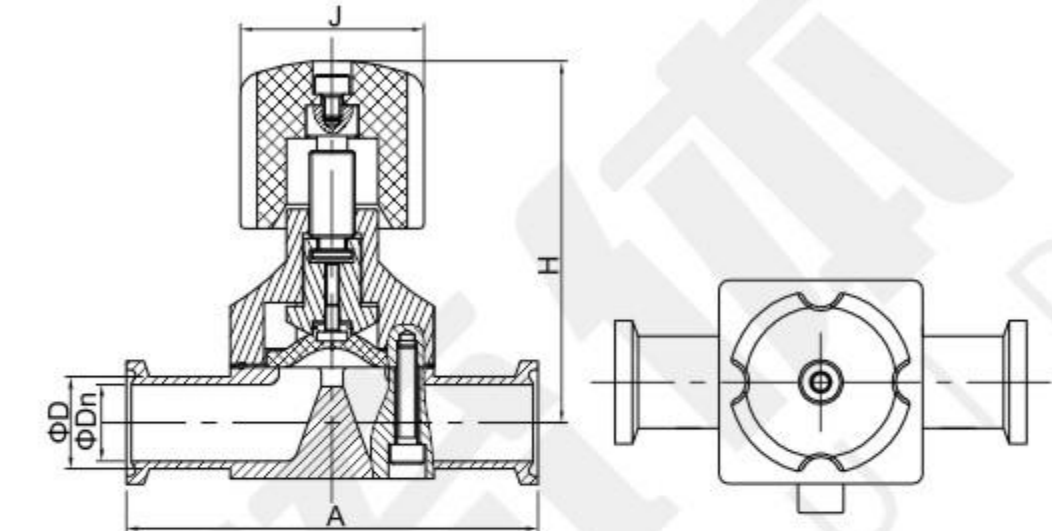


ST-V1033 焊接气动隔膜阀
Welded Pneumatic Diaphragm Valve

DIN	Size			A	D	H
	3A	SMS	ISO			
DN20				108.0	126.0	146.2
DN25	1"	25	Φ25	118.0	126.0	146.2
DN32	1 1/4"	32	Φ32	127.0	126.0	146.2
DN40	1 1/2"	38	Φ38	146.0	126.0	146.2
DN50	2"	51	Φ51	190.0	126.0	146.2
DN65	2 1/2"	63	Φ63	216.0	126.0	146.2



迷你型卡箍隔膜阀
Clamped Mini-Type Diaphragm Valve



ST-V1034

SIZE	Dn	D	A	H	J
DN6 1/4"	4	25.4	68.6	69.4	38
DN8 3/8"	7.1	25.4	68.6	70.3	38
DN10 1/2"	9.4	25.4	68.6	72.2	38
DN15 3/4"	15.7	25.4	85	75.5	38

U型三通隔膜阀
U-Type Three-Way Diaphragm Valve

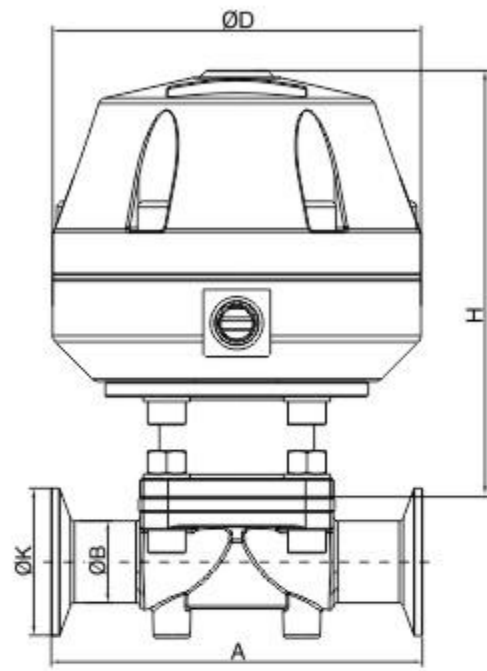
ST-V1035 DIN

SIZE	L	L1	L2	D	Dn	D1
1" x 1"	233	81	70	25.4	22.4	28
1" x 3/4"	233	81	70	25.4	22.4	22
1" x 1/2"	233	81	70	25.4	22.4	18
1.5" x 1 1/4"	264	85.5	85	38	35	34
1.5" x 1"	264	85.5	85	38	35	28
1.5" x 3/4"	264	85.5	85	38	35	19
2" x 1 1/2"	288	92.5	97	50.8	47.8	40
2" x 1 1/4"	288	92.5	97	50.8	47.8	34
2" x 1"	288	92.5	97	50.8	47.8	28

U型三通隔膜阀
U-Type Three-Way Diaphragm Valve

ST-V1036 Inch, BPE, SMS, 3A

SIZE	L	L1	L2	D	Dn	D1
DN25 x DN25	263	81	70	28	25	28
DN25 x DN20	263	81	70	28	25	22
DN25 x DN15	263	81	70	28	25	18
DN40 x DN32	294	85.5	85	40	37	34
DN40 x DN25	294	85.5	85	40	37	28
DN40 x DN20	294	85.5	85	40	37	19
DN50 x DN40	318	92.5	97	52	49	40
DN50 x DN32	318	92.5	97	52	49	34
DN50 x DN25	318	92.5	97	52	49	28

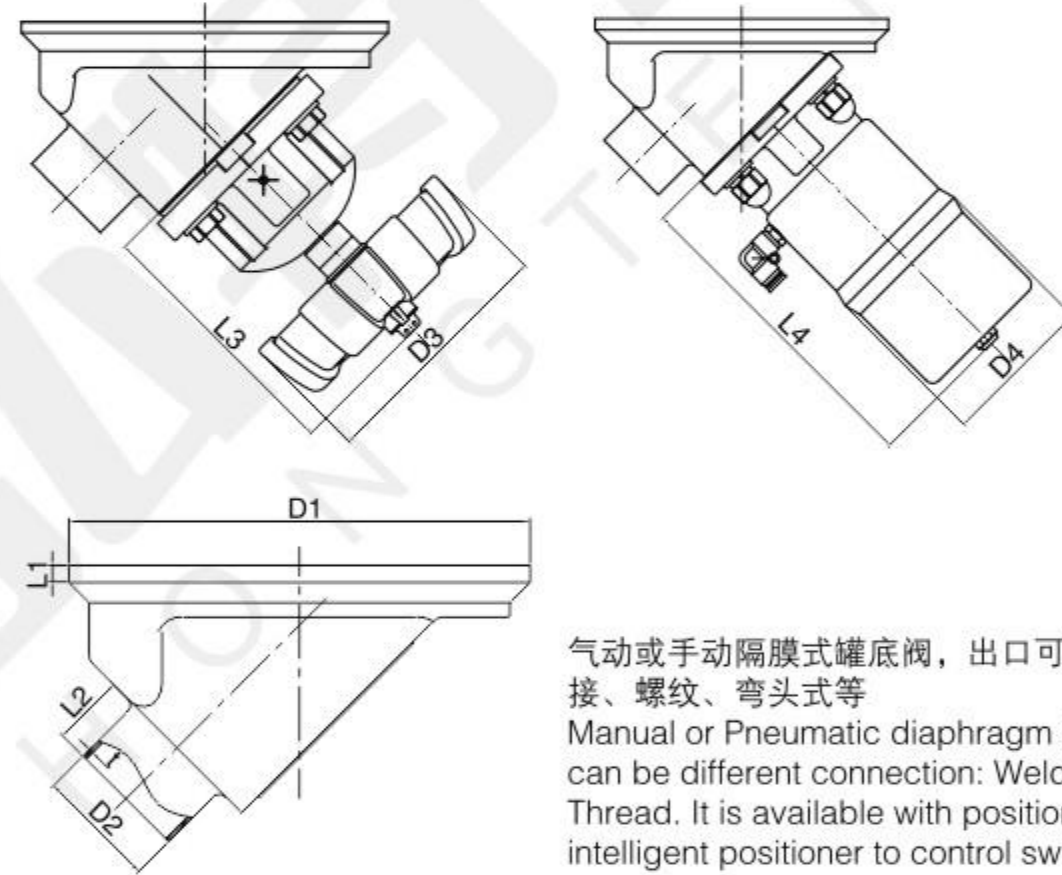


ST-V1037 气动卡箍式隔膜阀
Pneumatic Clamped Diaphragm Valve

DIN	Size		ISO	A	D	H
	3A	SMS				
DN20	3/4"	19	Ø 19	108.0	126.0	146.2
DN25	1"	25	Ø 25	118.0	126.0	146.2
DN32	1 1/4"	32	Ø 32	127.0	126.0	146.2
DN40	1 1/2"	38	Ø 38	146.0	126.0	146.2
DN50	2"	51	Ø 51	190.0	126.0	146.2
DN65	2 1/2"	63	Ø 63	216.0	126.0	146.2



隔膜罐底阀
Diaphragm bottom valve



气动或手动隔膜式罐底阀，出口可选择卡箍、焊接、螺纹、弯头式等
Manual or Pneumatic diaphragm bottom valve can be different connection: Weld, Clamp, Thread. It is available with position sensor and intelligent positioner to control switching value.



ST-V1038 隔膜罐底阀(DIN)
Diaphragm Bottom Valve(DIN)

SIZE	D1	D2		D3	D4	L1	L2	L3	L4	t
		1	2							
DN25	120	28	29	90	85	6	25	103	172	1.5
DN32	160	34	35	114	85	6.4	25	111	165	1.5
DN40	160	40	41	114	85	6.4	25	111	165	1.5
DN50	200	52	53	140	126	6	30	141	216	1.5

ST-V1039 隔膜罐底阀(Inch、BPE、SMS、3A、ISO)
Diaphragm Bottom Valve(Inch、BPE、SMS、3A、ISO)

SIZE	D1	D2	D3	D4	L1	L2	L3	L4	t
1"	120	25.4	90	85	6	25	103	172	1.5
1 1/4"	160	31.8	114	85	6.4	25	111	165	1.5
1 1/2"	160	38.1	114	85	6.4	25	111	165	1.5
2"	200	50.8	140	126	6	30	141	216	1.5