

### Applications

- 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.

### Operating Principles

- 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.

### Technical specifications

- 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)



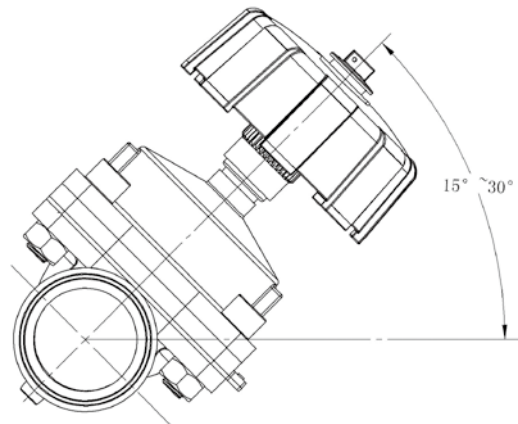
EPDM Silicon  
Viton PTFE+EPDM

### Design and features

- 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.
- Mini diaphragm valve available size: 1/4", 3/8", 1/2", 3/4"
- Diaphragm valve available size: 1", 1 1/4", 1 1/2", 2", 2.5", 3", 4"
- Suitable for CIP/SIP.
- Parts in contact with the product: AISI 316L,
- Other stainless steel parts: AISI 304,
- Internal surface finish bright, Ra ≤ 0.5 μm
- External surface finish satin/bright

### Options

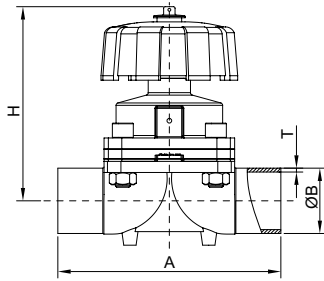
- Connections(standard): clamp, weld, thread, DIN SMS IDF ISO 3A BPE
- Body construction: Straight, Three ways, U type
- Diaphragms in EPDM, SILICON, EPDM+PTFE, all of them according to FDA 177.2600



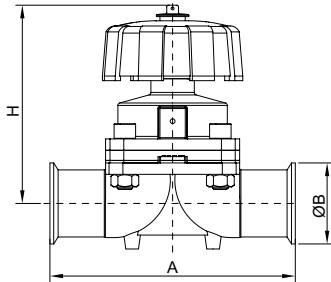
### Optimal Installation Angle Diagram

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

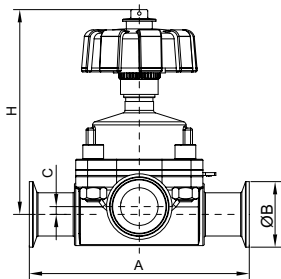



**W5070**
**Welded Diaphragm Valve**

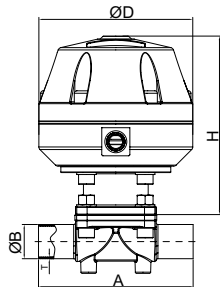
Size	A	B	H	T
1"	118.0	25.4	111.5/122	1.65
1 1/4"	127.0	31.8	144.5/160	1.65
1 1/2"	146.0	38.1	144.5/160	1.65
2"	190.0	50.8	167/190	1.65
2 1/2"	216.0	63.5	199/228	1.65


**W5071**
**Clamped Diaphragm Valve**

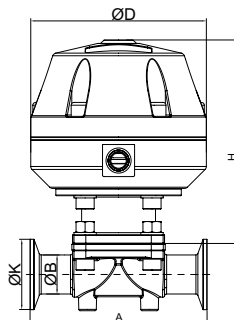
Size	A	B	H
1"	118.0	50.5	111.5/122
1 1/4"	127.0	50.5	144.5/160
1 1/2"	146.0	50.5	144.5/160
2"	190.0	64.0	167/190
2 1/2"	216.0	77.5	199/228


**W5072**
**T-type Three-way Diaphragm Valve**

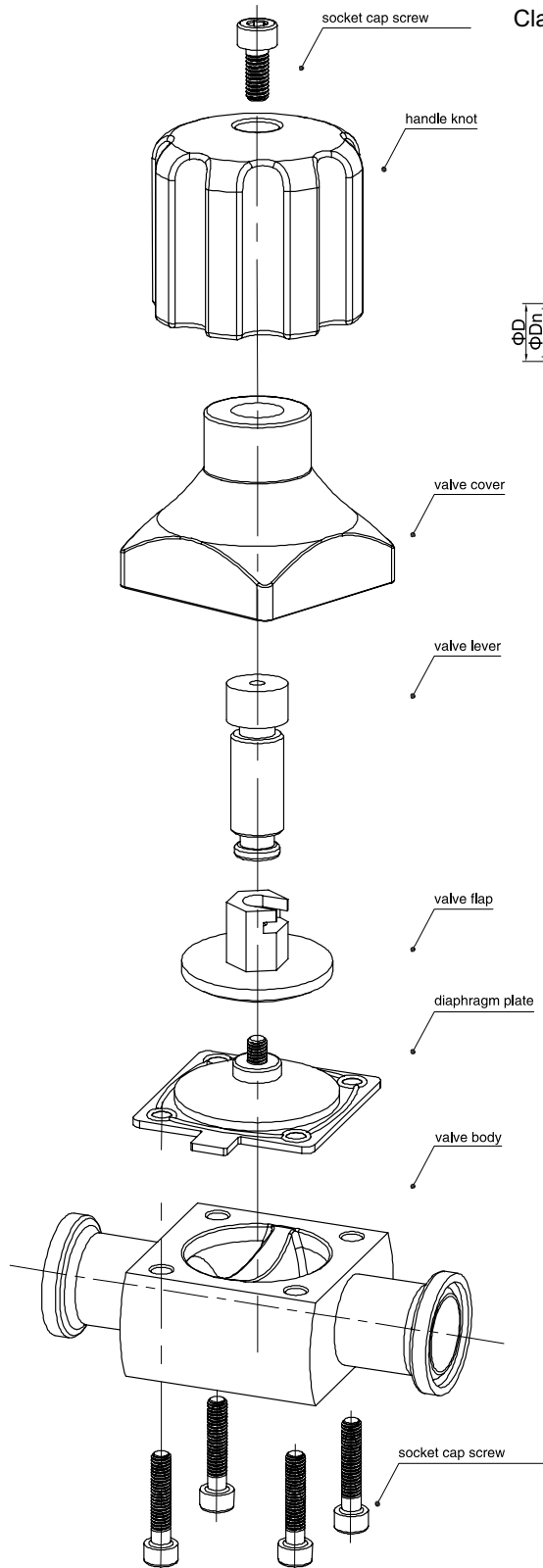
Size	A	B	C	H
1/2"	108.0	25.4	6.0	93.5/102.5
3/4"	108.0	25.4	6.0	93.5/102.5
1"	118.0	50.5	6.0	111.5/122
1 1/4"	127.0	50.5	6.0	144.5/160
1 1/2"	146.0	50.5	6.0	144.5/160
2"	190.0	64.0	6.0	167/190
2 1/2"	216.0	77.5	6.0	199/228


**W5073**
**Welded Pneumatic Diaphragm Valve**

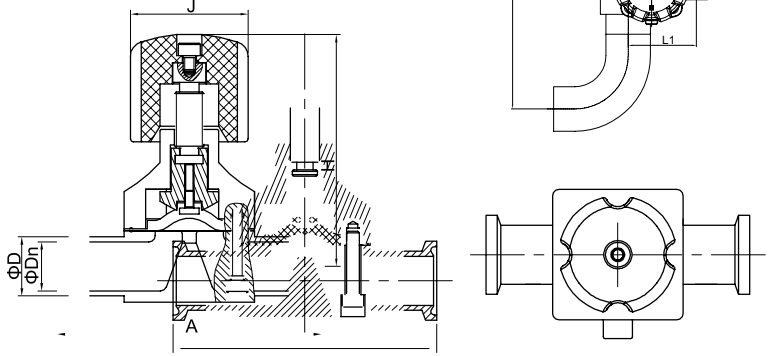
DIN	Size			A	D	H
	3A	SMS	ISO			
DN20				108.0	126.0	146.2
DN25	1"	25	Φ25	118.0	126.0	146.2
DN32	1 1/4"	32	Φ32	127.0	126.0	146.2
DN40	1 1/2"	38	Φ38	146.0	126.0	146.2
DN50	2"	51	Φ51	190.0	126.0	146.2
DN65	2 1/2"	63	Φ63	216.0	126.0	


**W5074**
**Pneumatic Clamped Diaphragm Valve**

DIN	Size			A	D	H
	3A	SMS	ISO			
DN20	3/4"	19	Φ19	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



Clamped Mini-Type Diaphragm Valve



W5075

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

U-Type Three-Way Diaphragm Valve

W5076

DIN

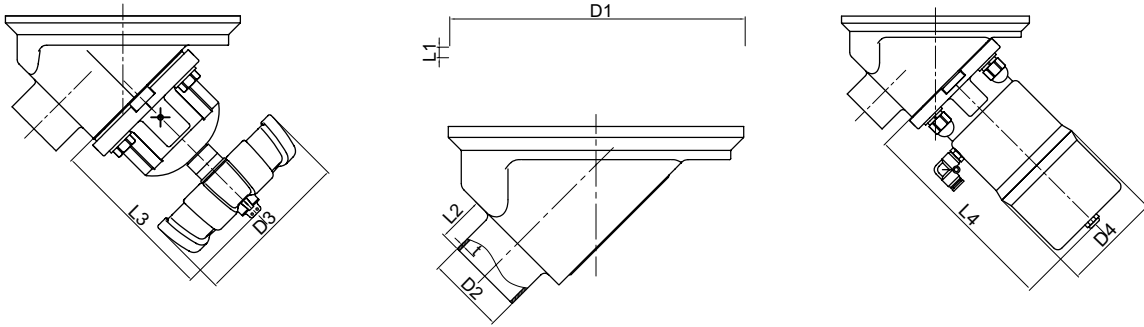
SIZE	L	L1	L2	D	Dn	D1
1"×1"	233	81	70	25.4	22.4	28
1"×3/4"	233	81	70	25.4	22.4	22
1"×1/2"	233	81	70	25.4	22.4	18
1.5"×1 1/4"	264	85.5	85	38	35	34
1.5"×1"	264	85.5	85	38	35	28
1.5"×3/4"	264	85.5	85	38	35	19
2"×1 1/2"	288	92.5	97	50.8	47.8	40
2"×1 1/4"	288	92.5	97	50.8	47.8	34
2"×1"	288	92.5	97	50.8	47.8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

U-Type Three-Way Diaphragm Valve

W5077

Inch, BPE, SMS, 3A

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



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.

W5078

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

W5079

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

Manual diaphragm bottom valve



Pneumatic diaphragm bottom valve

