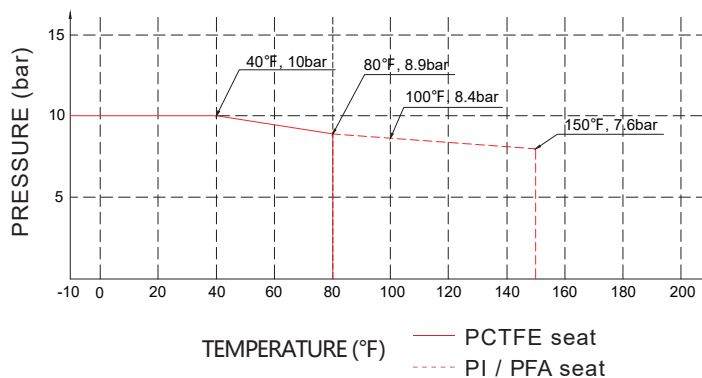


Product Feature

- Suitable for ultra-pure, flammable or toxic fluid lines in semiconductor manufacturing equipment and facilities
- Direct diaphragm construction with superior sealing performance, remarkable durability, compactness and particle and dead-space-free performance
- Valve open and closed position is easily visible at a glance
- Excellent gas displacement characteristics
- EP treatment is standard for all wetted surfaces
- Standard seat material is PCTFE, Polyimide / PFA is option

Temperature / Pressure Rating



1/4 Type



1/4 Type (IS option)



1/2 Type



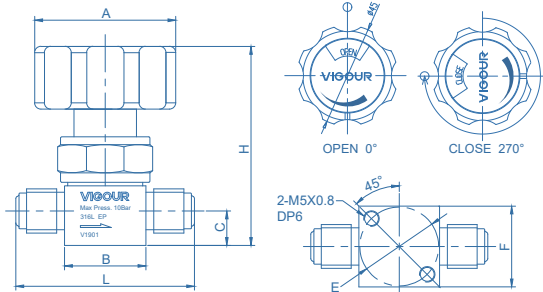
1/2 Type

Technical Data

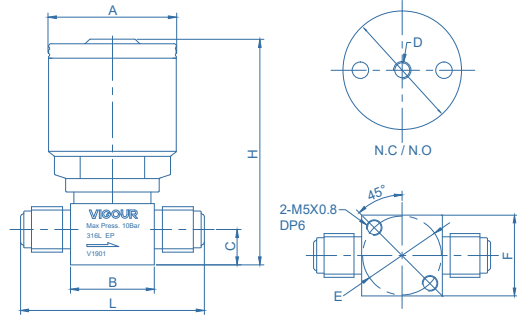
Max. Working Pressure:	150 psig (10bar)
Actuation Pressure:	58~87psig (4~6bar)
Max. Working Temp.:	14°F ~ 176°F (-10°C ~ 80°C)
Surface finish:	10µin. Ra
Materials	
Body:	see ordering info
Diaphragm:	Elgiloy®
Seat packing:	PCTFE
Handle:	AL
Internal Leakage Allowance:	1x10 ⁻⁹ mbar·l/s He
External Leakage Allowance:	1x10 ⁻⁹ mbar·l/s He
Flow capacity:	1/4" Cv=0.3 3/8" 1/2" 3/4" Cv=0.65
Weight:	approx. 0.27kg (depending on connections or options)



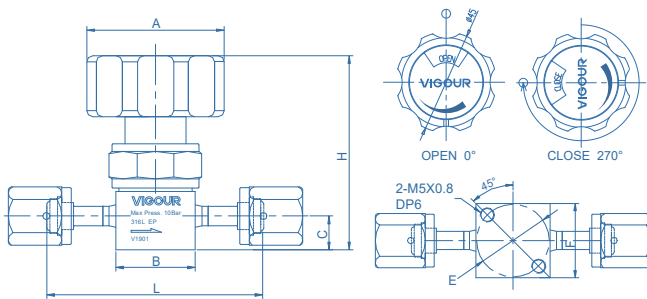
Dimensions (mm)



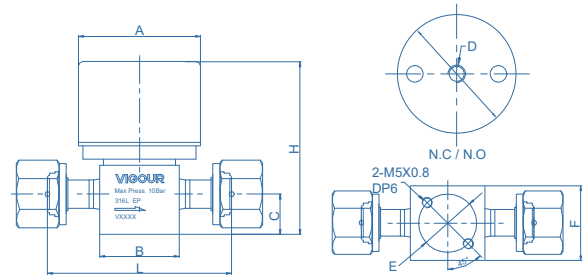
1/4, 3/8, 1/2 manual actuator (VFS male)



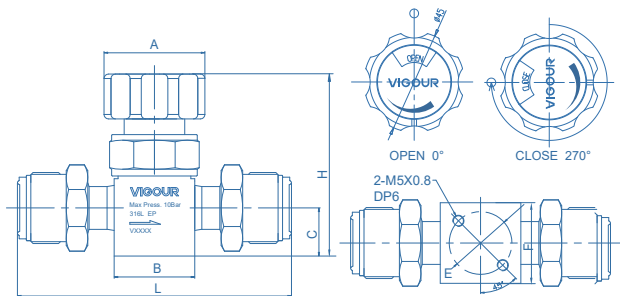
1/4 pneumatic actuator (VFS male)



1/4, 1/2, 3/4 manual actuator (VFS female)



1/2 pneumatic actuator (VFS female)



3/4 manual actuator (VFS male)

manual actuator

End Connections	Orifice (mm)	Dimensions (mm)						
		A	B	C	E	F	L	H
1/4" VFS male	4.4	Φ45	26	11	Φ25.4	26	57	64
1/4" VFS female	4.4	Φ45	26	11	Φ25.4	26	71	64
3/8" VFS male	7	Φ45	36	18.2	Φ28	36	77	78
1/2" VFS male	7	Φ45	36	18.2	Φ28	36	77	78
1/2" VFS female	7	Φ45	36	18.2	Φ28	36	83	78
3/4" VFS male	7	Φ45	36	21.5	Φ28	36	122.3	82
3/4" VFS female	7	Φ45	36	21.5	Φ28	36	106.3	82

pneumatic actuator, normally opened / normally closed

End Connections	Actuator	Orifice (mm)	Dimensions (mm)							
			A	B	C	D	E	F	L	H
1/4" VFS male	N.C / N.O	4.4	Φ39.6	26	11	M5x0.8	Φ25.4	26	57	70
1/4" VFS female	N.C / N.O	4.4	Φ39.6	26	11	M5x0.8	Φ25.4	26	71	70
3/8" VFS male	N.C / N.O	7	Φ55	36	18.2	RC 1/8	Φ28	36	77	78
1/2" VFS male	N.C / N.O	7	Φ55	36	18.2	RC 1/8	Φ28	36	77	78
1/2" VFS female	N.C / N.O	7	Φ55	36	18.2	RC 1/8	Φ28	36	83	78

Ordering information

VDV32UBS - M - A - MV4 - MV4 - PA - LOTOC - IS - P

Materials

S: 316L

Actuator

M: manual actuator
PO: pneumatic actuator, normally opened
PC: pneumatic actuator, normally closed

Flow Circuit Diagram

For details, refer to the flow circuit diagram on page 67.

End Connection

MV4: 1/4" VFS male	TW6: 3/8" tube weld
FV4: 1/4" VFS female	MV8: 1/2" VFS male
TW4: 1/4" tube weld	FV8: 1/2" VFS female
MV6: 1/2" VFS male 3/8" O.D.	TW8: 1/2" tube weld
FV6: 1/2" VFS female 3/8" O.D.	MV12: 3/4" VFS male
	FV12: 3/4" VFS female

* Other connection standard, consult factory

Valve Seat Option

None: PCTFE (standard)
VS: Vespel®
PA: PFA

Process Specification

none: VS001B
P: VS001A

* For details, please refer to the appendix.

Option

None: Standard
IS: Switch Position Indicator

Option

None: standard
LOTO: Closed Position Lock*
LOTOC: Open Position Lock*
LOTOC: Open / Closed Position Lock*

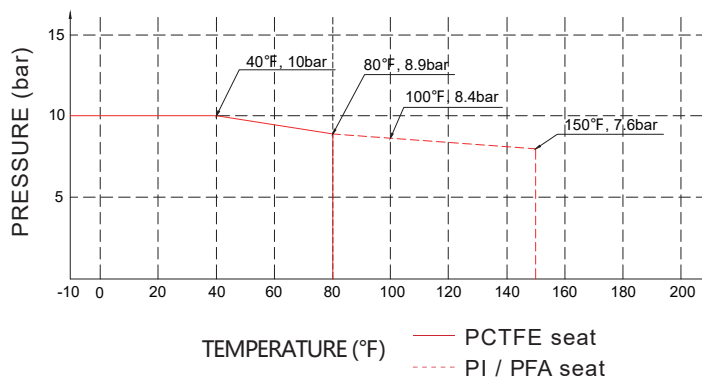
* Manual only



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Temperature / Pressure Rating



1/4 Type



1/4 Type (IS option)



1/2 Type



1/2 Type

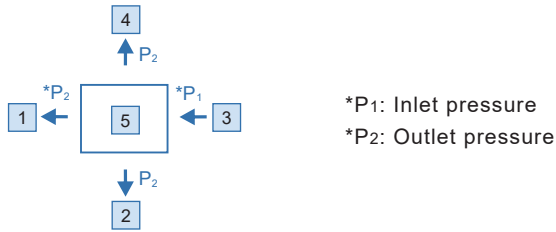
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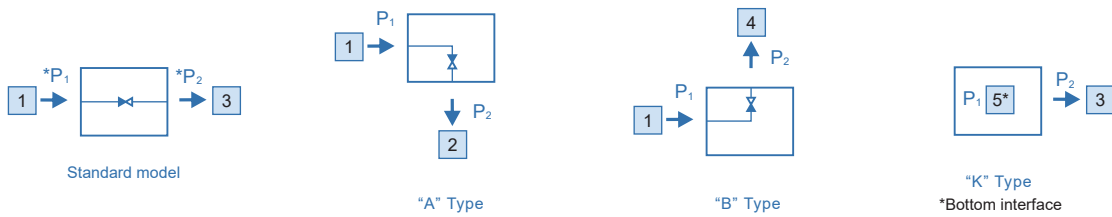


Diaphragm Valve Flow Circuit Diagram

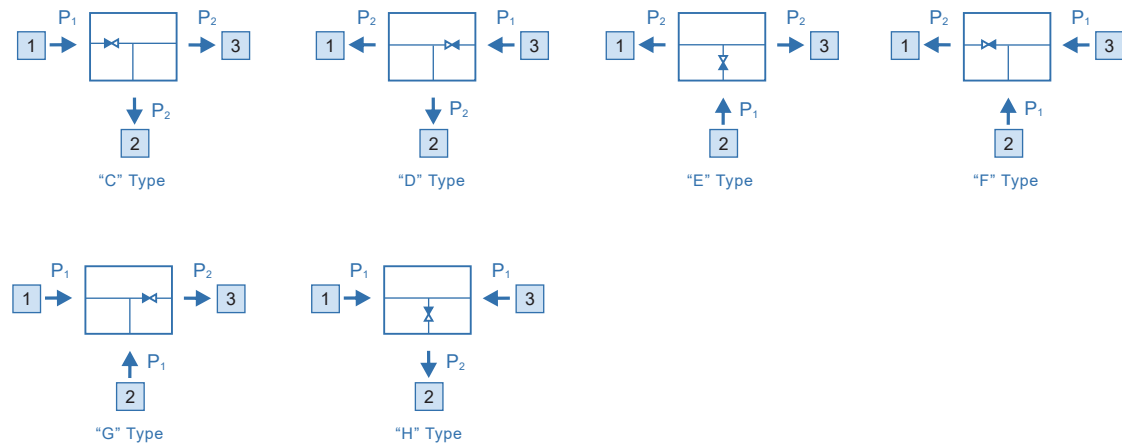
Ports Diagrammatic Drawing:



Two ports flow circuit diagram:



Three ports flow circuit diagram:



Four ports flow circuit diagram:

