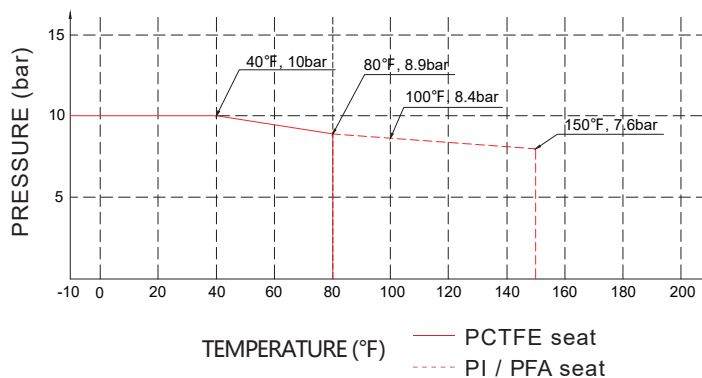


## Product Feature

- 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



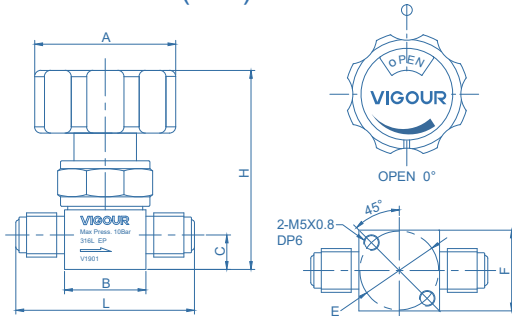
1/2 Type

## Technical Data

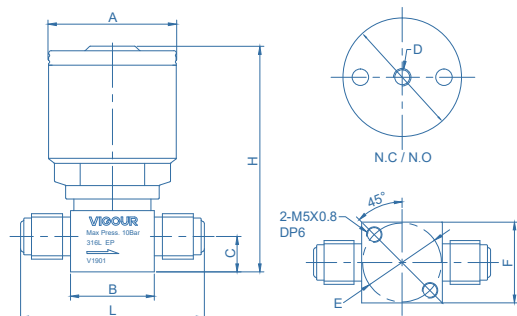
Max. Working Pressure:	150 psig (10bar)
Actuation Pressure:	58~87psig (4~6bar)
Max. Working Temp.:	14°F ~ 176°F (-10°C ~ 80°C)
Surface finish:	10µin. Ra
Materials	
Body:	see ordering info
Diaphragm:	Elgiloy®
Seat packing:	PCTFE
Handle:	AL
Internal Leakage Allowance:	1x10 <sup>-9</sup> mbar l/s He
External Leakage Allowance:	1x10 <sup>-9</sup> 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)



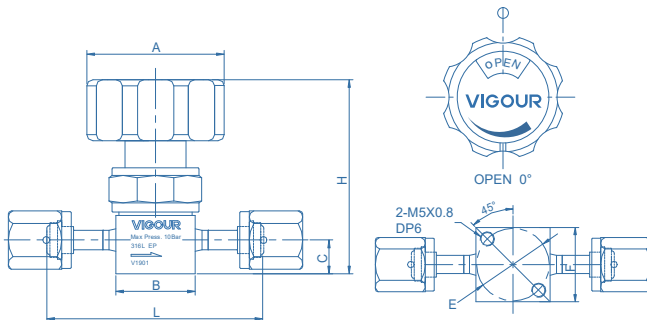
## Dimensions (mm)



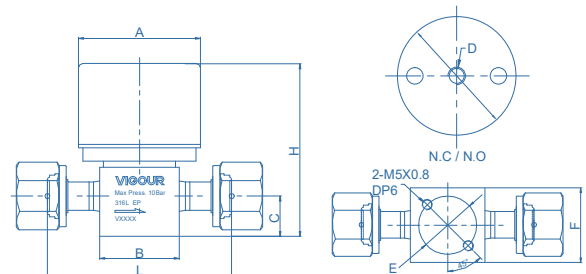
1/4, 3/8, 1/2 manual actuator (VFS male)



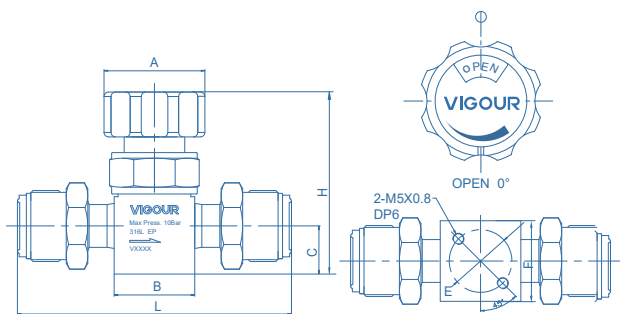
1/4 pneumatic actuator (VFS male)



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 Conections	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 Conections	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 65.

#### 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

\* 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

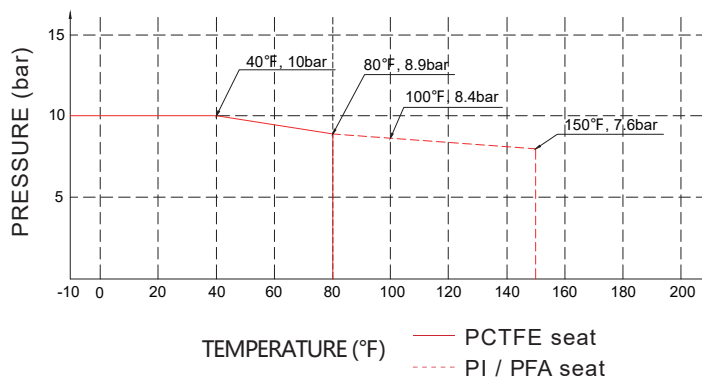
None: standard  
LOTO: Closed Position Lock  
LOTC: Open Position Lock  
LOTOC: Open / Closed Position Lock



## 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



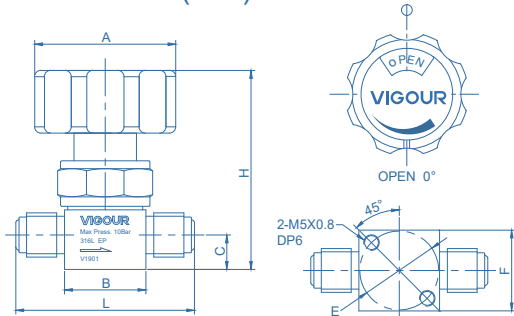
1/2 Type

## Technical Data

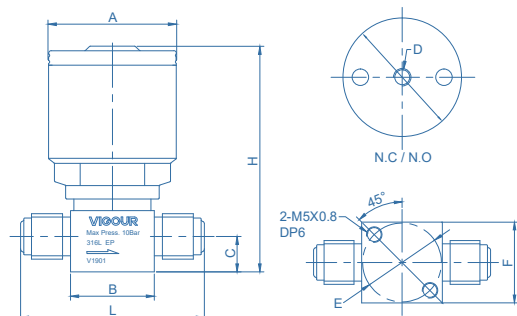
Max. Working Pressure:	150 psig (10bar)
Actuation Pressure:	58~87psig (4~6bar)
Max. Working Temp.:	14°F ~ 176°F (-10°C ~ 80°C)
Surface finish:	7μin. Ra
<b>Materials</b>	
Body:	see ordering info
Diaphragm:	Elgiloy®
Seat packing:	PCTFE
Handle:	AL
Internal Leakage Allowance:	1x10 <sup>-9</sup> mbar l/s He
External Leakage Allowance:	1x10 <sup>-9</sup> 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)



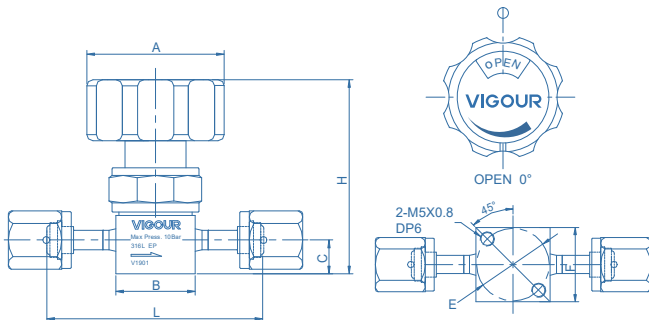
## Dimensions (mm)



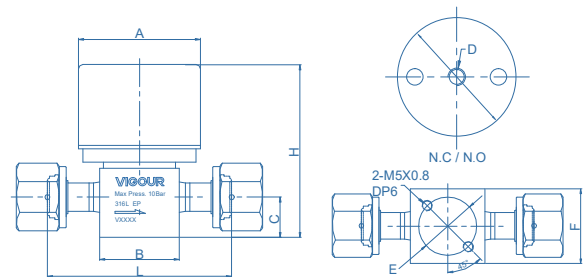
1/4, 3/8, 1/2 manual actuator (VFS male)



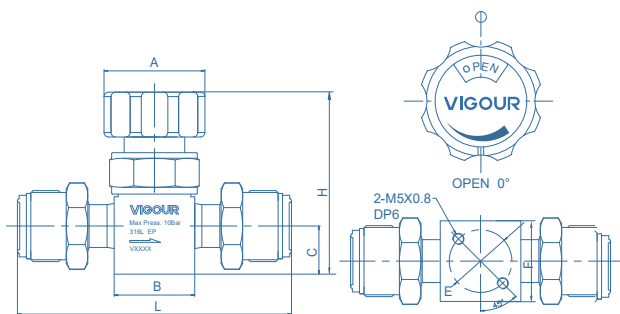
1/4 pneumatic actuator (VFS male)



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

### VDV32UCSLV - M - A - MV4 - MV4 - PA - LOTOC - IS - P

#### Materials

SLV: 316L secondary remelt

#### 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 65.

#### End Connection

MV4: 1/4" VFS male

FV4: 1/4" VFS female

TW4: 1/4" tube weld

MV6: 1/2" VFS male 3/8" O.D.

FV6: 1/2" VFS female 3/8" O.D.

TW6: 3/8" tube weld

MV8: 1/2" VFS male

FV8: 1/2" VFS female

TW8: 1/2" tube weld

MV12: 3/4" VFS male

#### Valve Seat Option

None: PCTFE (standard)

VS: Vespel®

PA: PFA

#### Process Specification

P: VS001A

\* For details, please refer to the appendix.

#### Option

None: Standard

IS: Switch Position Indicator

#### Option

None: standard

LOTO: Closed Position Lock

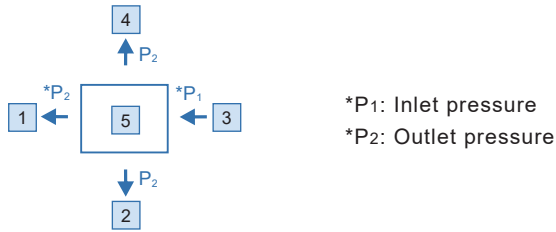
LOTOC: Open Position Lock

LOTOC: Open / Closed Position Lock

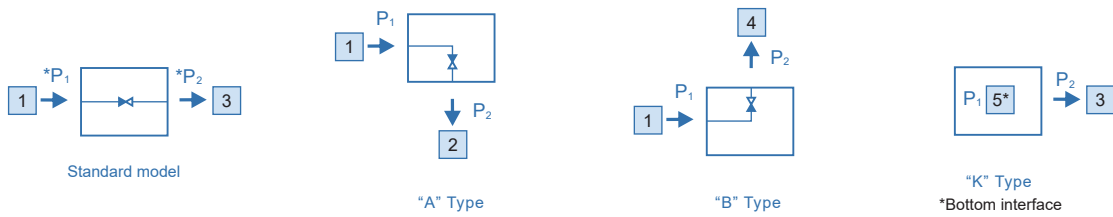
\* Other connection standard, consult factory



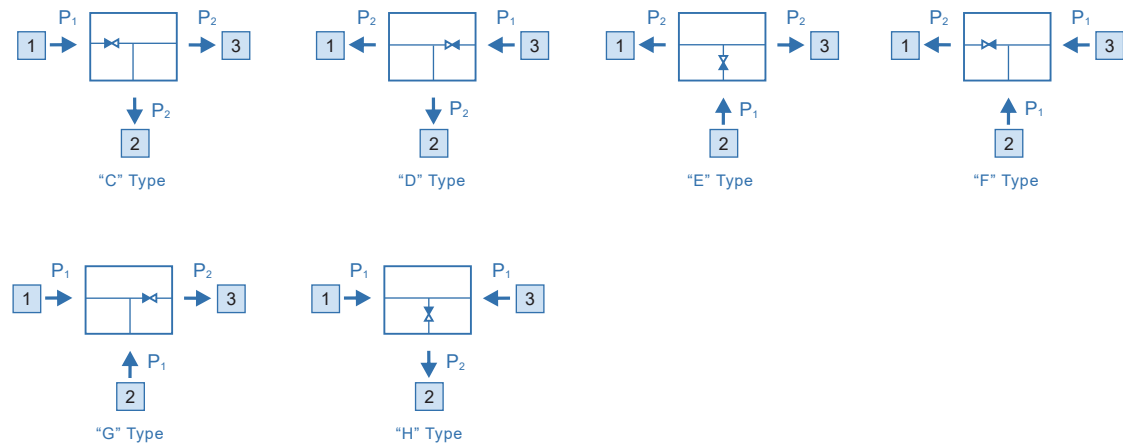
## Ports Diagrammatic Drawing:



## Two ports flow circuit diagram:



## Three ports flow circuit diagram:



## Four ports flow circuit diagram:

