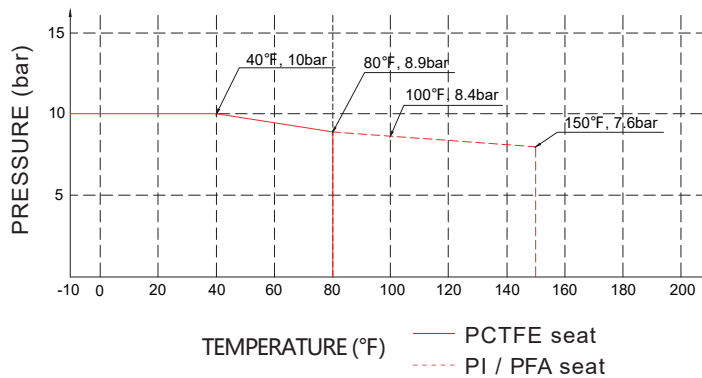


Product Feature

- 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
- The product is fabricated in compliance with the VS001A process specification
- 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



1/2 Type



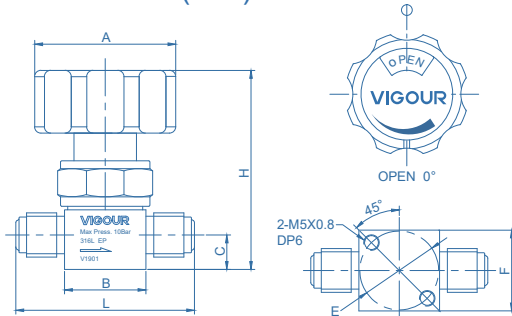
1/2 Type

Technical Data

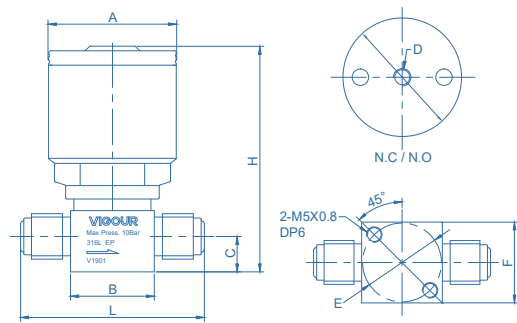
| | |
|-------------------------------|--|
| Max. Working Pressure: | 150 psig (10bar) |
| Pneumatic Operating Pressure: | 58~87psig (4~6bar) |
| Max. Working Temp.: | 14°F ~ 176°F (-10°C ~ 80°C) |
| Surface finish: | 10µin. Ra |
| Materials | |
| Body: | see ordering info |
| Diaphragm: | Elgiloy® |
| 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" Cv=0.65 |
| Weight: | approx. 0.27kg (depending on connections or options) |



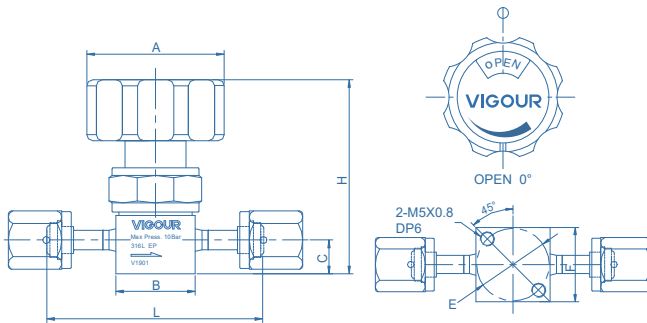
Dimensions (mm)



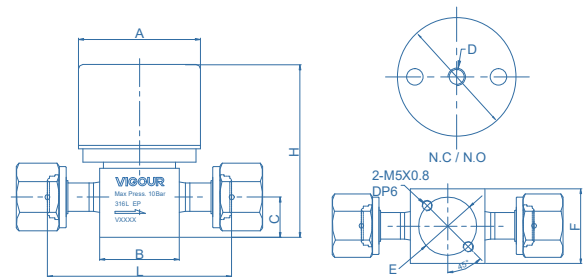
1/4, 3/8, 1/2 manual actuator (VFS male)



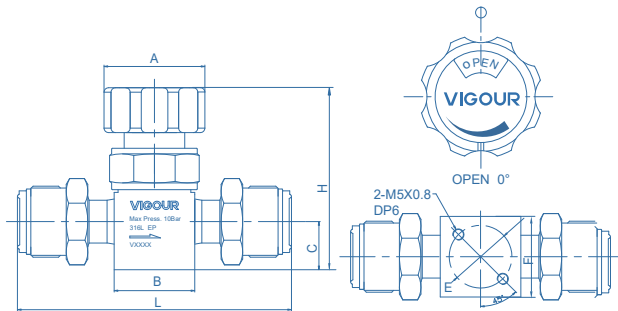
1/4 pneumatic actuator (VFS male)



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 — Valve Seat Option

Materials

S: 316L
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 54.

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

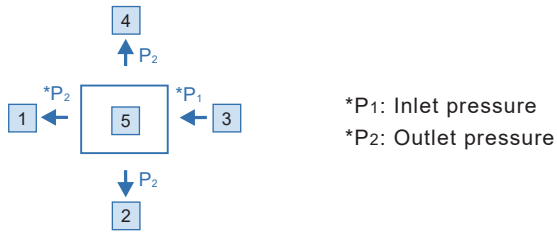
End Connection

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

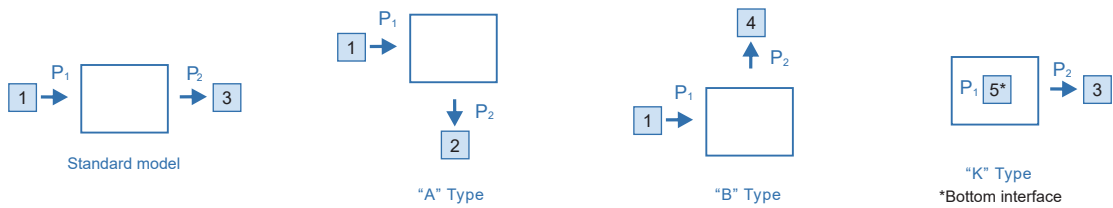
* Other connection standard, consult factory



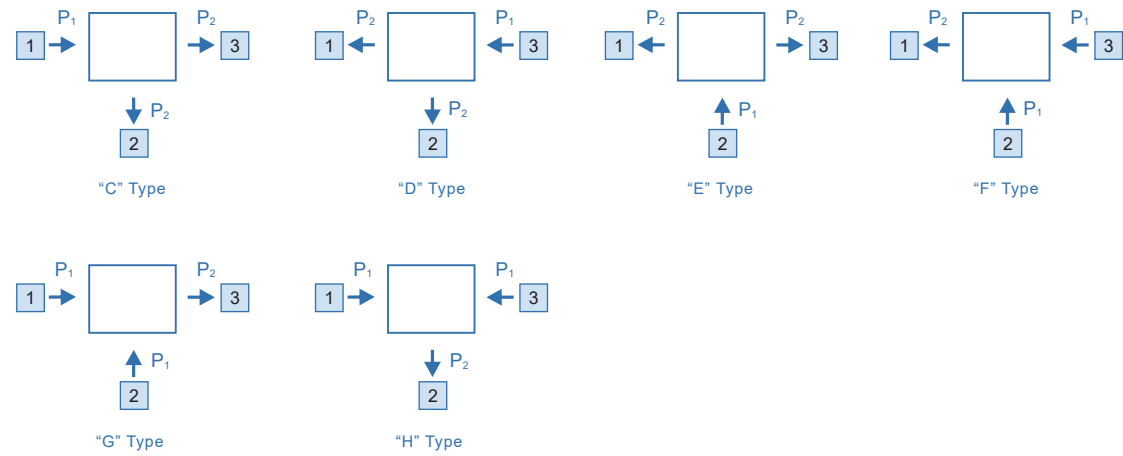
Ports Diagrammatic Drawing:



Two ports flow circuit diagram:



Three ports flow circuit diagram:



Four ports flow circuit diagram:

