

Single Stage Pressure Regulators

VSR-510UC Series

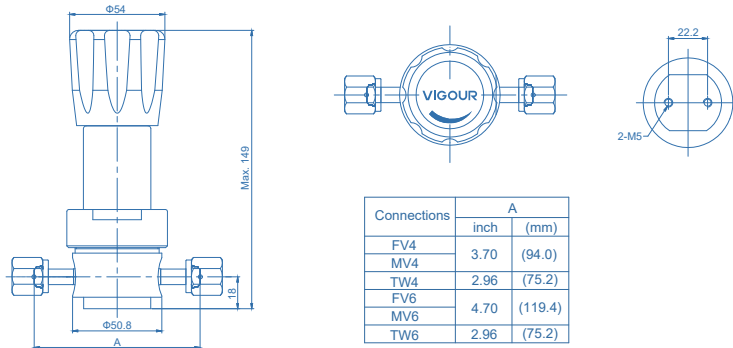
VIGOUR

Product Feature

- Single-stage pressure regulator
- 15µin. Ra max, 10µin Ra average surface finish (10µin. Ra max, 7µin. Ra max. 5µin. Ra max optional)
- Minimized internal volume for short purge times
- All materials used meet ASTM A479 / A484 / A276 standards
- The product is fabricated in compliance with the VS001A process specification
- Internal connectors for pressure gauges
- Flow capacity: to 30 slpm (standard), to 120 slpm (optional)
- High control accuracy
- Metal-to-metal seal to atmosphere
- Simple outlet pressure limitation by hand-wheel
- 100% helium-leak-tested
- Tied-diaphragm design



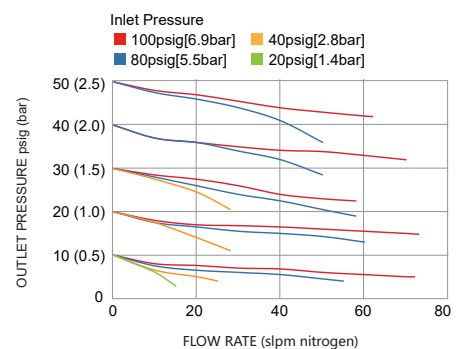
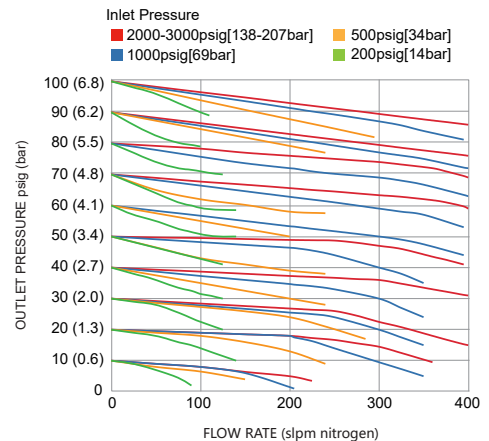
Dimensions (mm)



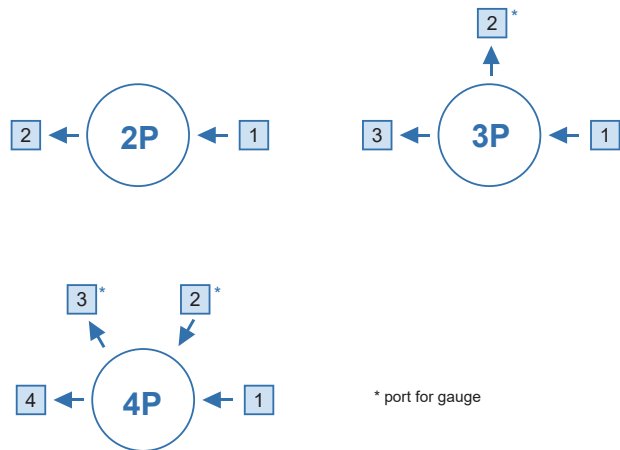
Technical Data

Type:	single-stage
Inlet pressure P1:	Max. 3500 psig (250bar)
Outlet pressure P2:	Vac to 30/60/100/150 psig (2/4/7/10bar)
Surface finish:	15µin. Ra max, 10µin Ra average surface finish (10µin. Ra max, 7µin. Ra max. 5µin. Ra max optional)
Materials	
Body:	see ordering info
Valve seat:	PCTFE (Vespel® optional)
Diaphragm:	Hastelloy® C276
Inlets and Outlets:	1/4" / 3/8" VFS fitting and tube weld
Bonnet port:	1/8" NPT (on panel mount option, bonnet port is not threaded)
Temperature range:	-40°F to +160°F (-40°C to +71°C)
Leak rate: (to atmosphere)	1x10 ⁻⁹ mbar l/s He
(via seat)	1x10 ⁻⁸ mbar l/s He
Flow capacity:	Cv=0.09 (Cv=0.15 optional)
Supply pressure effect:	0.35 psig rise in delivery pressure per 100 psig source pressure drop @Cv=0.09 0.5psig rise in delivery pressure per 100 psig source pressure drop @Cv=0.15
Weight:	approx. 1.35kg (depending on connections or options)

Flowchart



Ordering Information



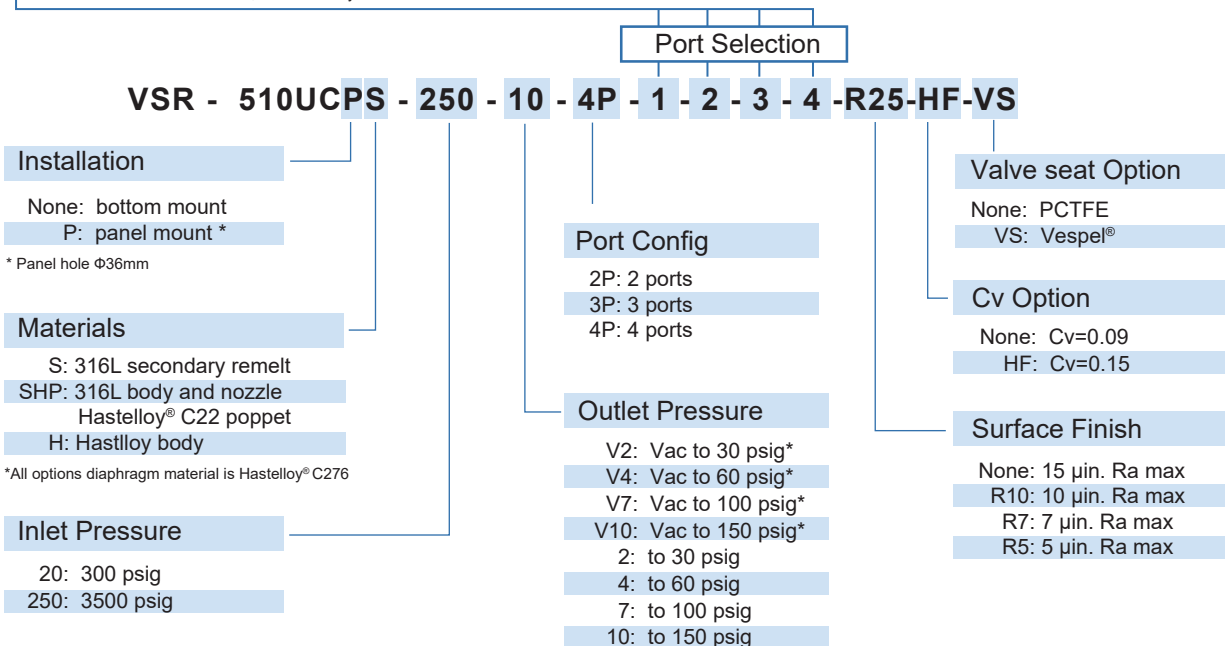
Inlet/outlet Connection

FV4: 1/4" VFS female
MV4: 1/4" VFS male
FV6: 3/8" VFS female
MV6: 3/8" VFS male

IFV4: 1/4" (gauge female threaded connection
machined on the body)
TW4: 1/4" tube weld
TW6: 3/8" tube weld

P: gauge (1/4" VFS fitting)
IP: gauge (IFV4 fitting)

* Other connection standard, consult factory



* With the V option, the negative pressure can not be adjusted, only the pressure gauge shows the negative pressure.

Ordering Example

VSR - 510UCS - 250 - 10 - FV4 - P - P - FV4

1 - 2 - 3 - 4

