

Single Stage Pressure Regulators

VSR-410UC Series

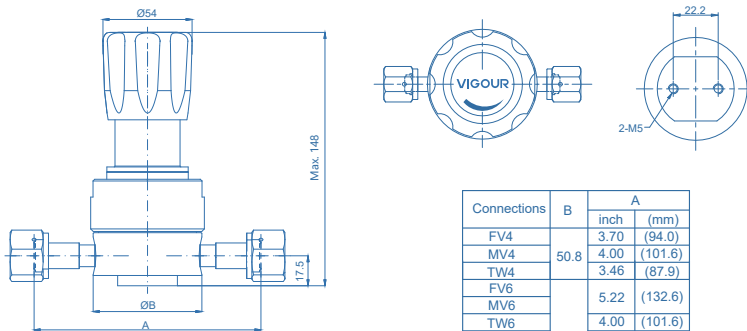
VIGOUR

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
- High control accuracy
- Metal-to-metal seal to atmosphere
- Simple outlet pressure limitation by hand-wheel
- 100% helium-leak-tested
- Tied-diaphragm design
- Sub-atmospheric pressure delivery option



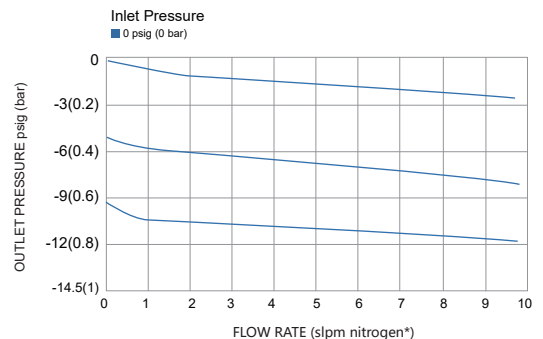
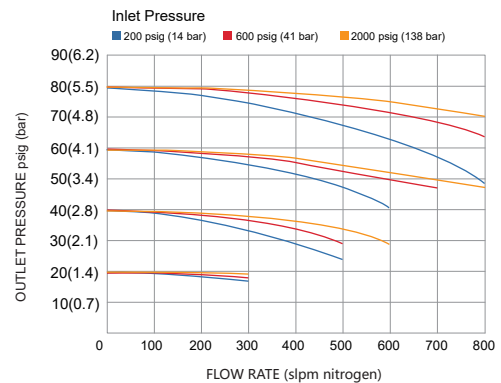
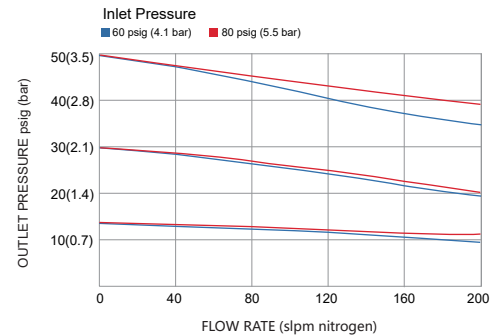
Dimensions (mm)



Technical Data

Type:	single-stage
Inlet pressure P ₁ :	Max. 3000 psig (200bar)
Outlet pressure P ₂ :	Vac to 30/30/60/100/150 psig (2/4/7/10bar)
Surface finish:	15µin. Ra max / 10µin. Ra avg (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" / 1/2" or 3/4" VFS fitting or tube weld
Bonnet port:	1/8" NPT(F) (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=0.45
Supply pressure effect:	1.6 psig rise in delivery pressure per 100 psig source pressure drop
Weight:	approx. 2.1kg (depending on connections or options)

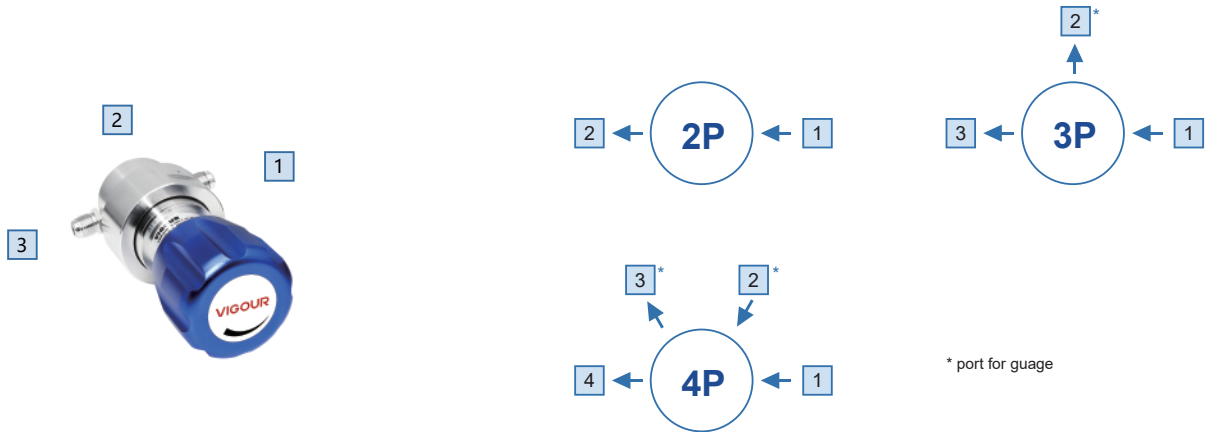
Flowchart



* The volumetric flow rate under normal conditions (0°C, 1 atm) when N₂ gas is flowing.



Ordering Information



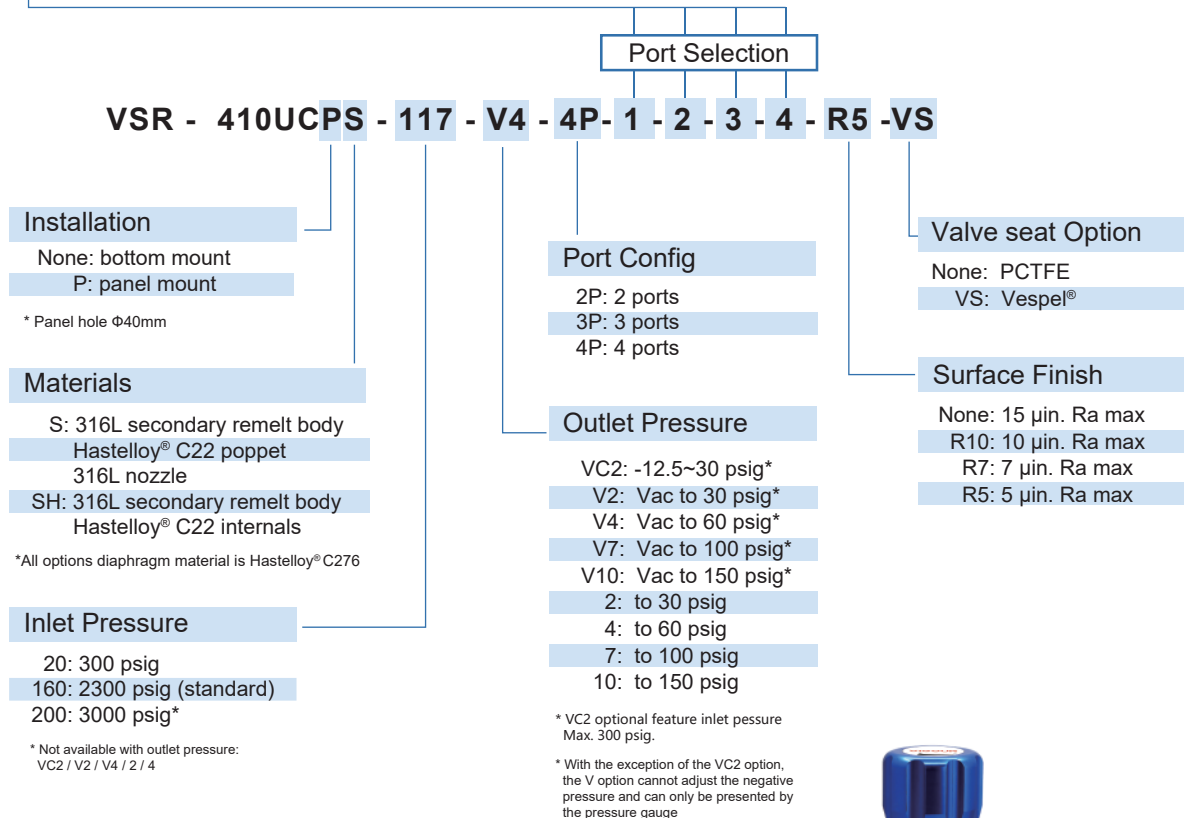
Inlet/outlet Connection

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

FV8: 1/2" VFS female
MV8: 1/2" VFS male
IFV4: 1/4" (gauge female threaded connection machined on the body)

TW4: 1/4" tube weld
TW6: 3/8" tube weld
TW8: 1/2" tube weld
P: gauge (1/4" VFS fitting)
IP: gauge (IFV4 fitting)

* Other connection standard, consult factory



Ordering Example

VSR - 410UCS - 160 - V4 - 2P - MV4 - FV4

1 - 2

