

Single Stage Pressure Regulators

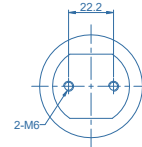
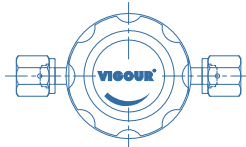
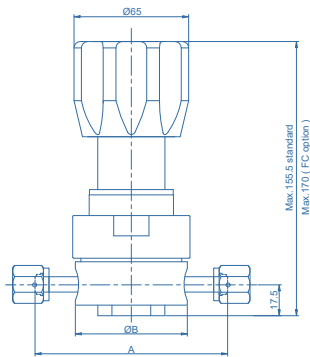
VSR-210UB Series

Product Feature

- Single-stage pressure regulator
- 10µin. Ra surface finish (25µin. Ra optional)
- Minimized internal volume for short purge times
- All gas-wetted parts made of stainless steel SS 316L, Hastelloy C276 and PCTFE respectively
- Internal connectors for pressure gauges
- Force compensation has wider flow capacity
- High control accuracy
- Metal-to-metal seal to atmosphere
- Simple outlet pressure limitation by hand-wheel
- 100% helium-leak-tested
- Cleaned for O₂ service
- Tied-diaphragm design



Dimensions(mm)

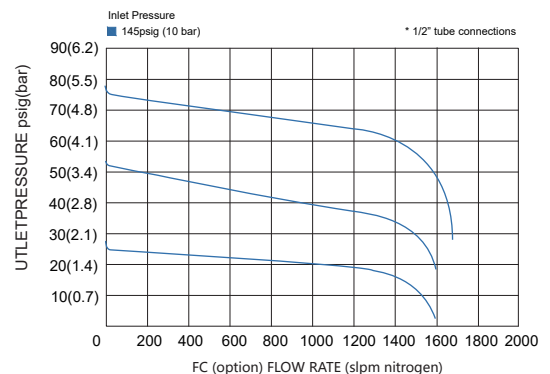
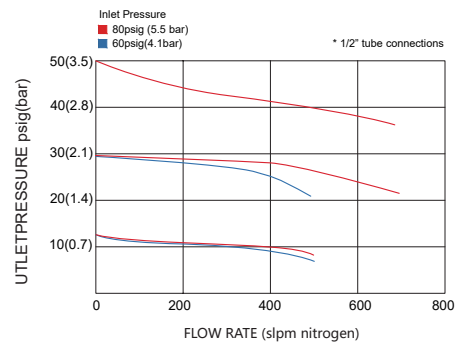


Connections	B	A	
		inch	(mm)
FV4	50.8	3.70	(94.0)
MV4		4.00	(101.6)
TW4		3.46	(87.9)
FV6	63.5	5.22	(132.6)
MV6		4.00	(101.6)
TW6		5.22	(132.6)
FV8	63.5	4.34	(110.2)
TW8		4.34	(110.2)

Technical Data

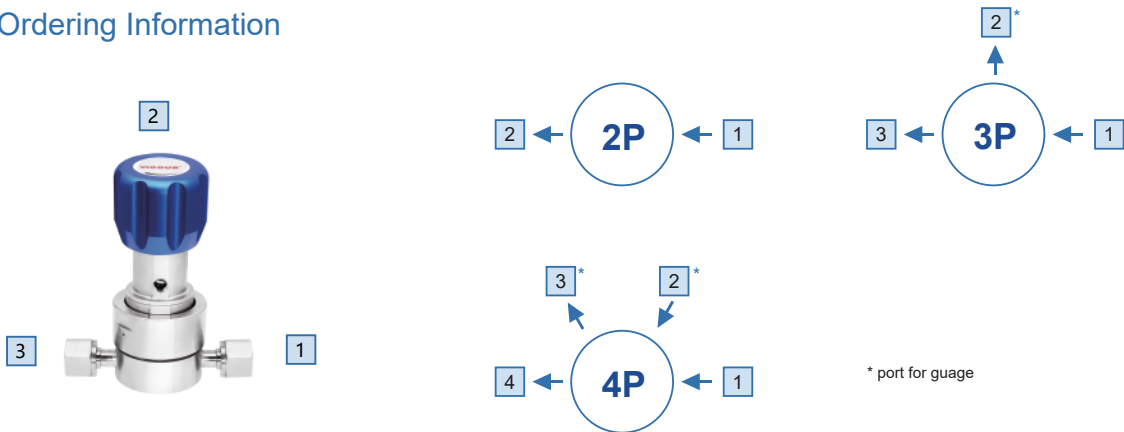
Type	single-stage
Inlet pressure P1	max. 1700 psig
Outlet pressure P2	30/60/100/150 psig
Surface finish	10µin. Ra (25µin. Ra optional)
Materials	
Body	see ordering info
Valve seat	PCTFE (Vespel® optional)
Diaphragm	Hastelloy® C276
Inlets and Outlets	1/4" / 3/8" or 1/2" ace seal or tube weld
Bonnet port	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
Leak rate (via seat)	1x10 ⁻⁸ mbar l/s He
Flow capacity	Cv=0.65
Weight	approx. 2.0kg
Supply pressure effect	3.5 psig rise in delivery pressure per 100 psig source pressure drop 4.2 psig rise in delivery pressure per 100 psig source pressure drop (FC option)

Flowchart



Single Stage Pressure Regulators VSR-210UB Series

Ordering Information



Inlet/Outlet Connection

- | | |
|----------------------------|--------------------------|
| FV4: 1/4" face seal female | MV8: 1/2" face seal male |
| MV4: 1/4" face seal male | TW4: 1/4" tube weld |
| FV6: 3/8" face seal female | TW6: 3/8" tube weld |
| MV6: 3/8" face seal male | TW8: 1/2" tube weld |
| FV8: 1/2" face seal female | P: gauge |

* Other connection standard, consult factory

Port Selection

VSR - 210UBPS - 117 - V4 - 4P - 1 - 2 - 3 - 4 - R7 - FC

Installation

- P: panel mount
- None: bottom mount

* Panel hole Φ 37mm

Materials

S: 316L

Inlet Pressure

- 21: 300 psig
- 117: 1700 psig (standard)
- 200: 3000 psig*

* Not available with outlet pressure:
V2 / V4 / 2 / 4

Port Config

- 2P: 2 ports
- 3P: 3 ports
- 4P: 4 ports

Outlet Pressure

- V2: Vac to 30 psig
- V4: Vac to 60 psig
- V7: Vac to 100 psig
- V10: Vac to 150 psig
- 2: to 30 psig
- 4: to 60 psig
- 7: to 100 psig
- 10: to 150 psig

Option

FC: Force compensation

- * Force compensation feature inlet pressure Max. 300 psig
- * FC option is available with connection size 1/2 inch
- * Not available with outlet pressure:
V2 / V4 / 2 / 4

Surface Finish

- None: 10 μ m Ra
- R25: 25 μ m Ra

Ordering Example

VSR - 210UBS - 117 - V4 - 2P - MV4 - MV4
1 - 2

