

Single Stage Pressure Regulators

VSR-920UC Series

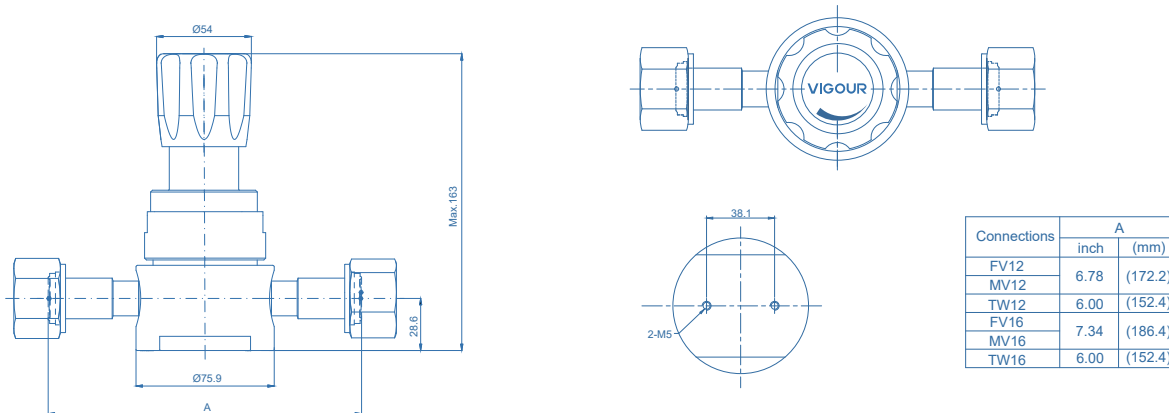
VIGOUR

Product Feature

- Single-stage pressure regulator
- 15µin. Ra max. 10µin 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 2000 slpm
- High control accuracy
- Metal-to-metal seal to atmosphere
- Simple outlet pressure limitation by hand-wheel
- 100% helium-leak-tested
- Tied-diaphragm design



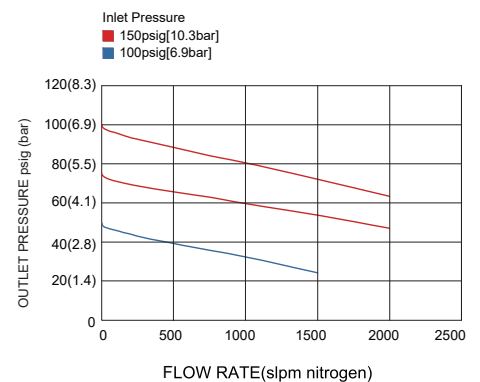
Dimensions (mm)



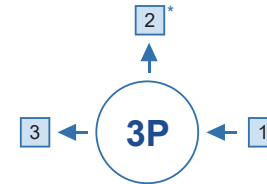
Technical Data

Type:	single-stage
Inlet pressure P1:	300 psig (20bar)
Outlet pressure P2:	Vac to 30/60/100/150 psig (2/4/7/10bar)
Surface finish:	15µin. Ra max / 10µin. Ra avg (10µin. Ra max optional)
Materials	
Body:	see ordering info
Valve seat:	PFA (Vespel® optional)
Diaphragm:	Hastelloy® C276
Inlets and Outlets:	3/4" / 1" VFS fitting or tube weld
Bonnet port:	1/8" FNPT(option)
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=1.6
Weight:	approx. 2.7kg (depending on connections or options)
Supply pressure effect:	7 psig rise in delivery pressure per 100 psig source pressure drop

Flowchart



Ordering Information



* port for gauge

Inlet/Outlet Connection

FV12: 3/4" VFS female

MV12: 3/4" VFS male

FV16: 1" VFS female

MV16: 1" VFS male

FV4: 1/4" VFS female

MV4: 1/4" VFS male

IFV4: 1/4" (gauge female threaded connection
machined on the body)

TW12: 3/4" tube weld

TW16: 1" tube weld

P: gauge (1/4" VFS fitting)

IP: gauge (IFV4 fitting)

* Other connection standard, consult factory

Port Selection

VSR - 920UCPS - 20 - V4 - 3P - 1 - 2 - 3 - VS

Installation

None: bottom mount

P: panel mount*

BP: bonnet port (1/8" FNPT)

* Panel hole Φ39.6mm

Materials

S: 316L

Inlet Pressure

20: 300 psig

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

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

Valve Seat Option

None: PFA (standard)

VS: Vespel®

Port Config

2P: 2 ports

3P: 3 ports

Ordering Example

VSR - 920UCS - 20 - 10 - 2P - MV12 - FV12

1 - 2

