

# Single Stage Pressure Regulators

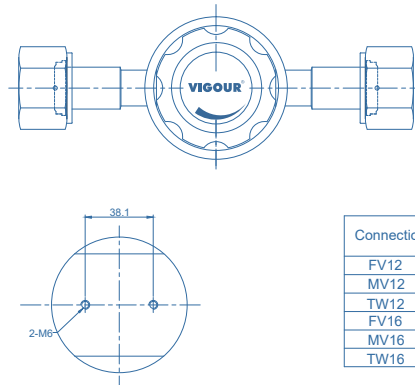
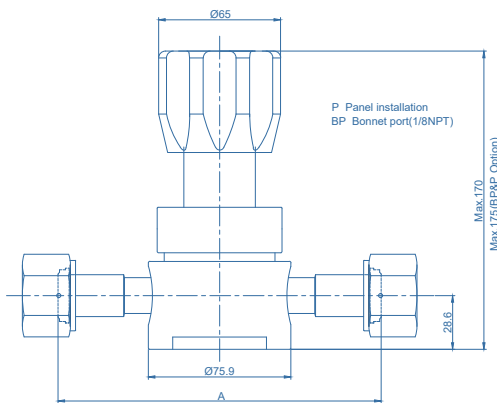
## VSR-920UC Series

### Product Feature

- Single-stage pressure regulator
- 10µin. Ra surface finish
- 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
- 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
- Cleaned for O<sub>2</sub> service
- Tied-diaphragm design



### Dimensions(mm)

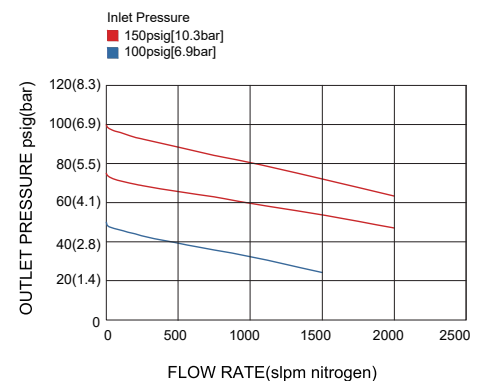


Connections	A	
	inch	(mm)
FV12	6.78	(172.2)
MV12	6.00	(152.4)
TW12	6.00	(152.4)
FV16	7.34	(186.4)
MV16	6.00	(152.4)
TW16	6.00	(152.4)

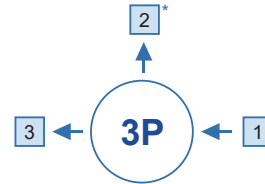
### Technical Data

Type	single-stage
Inlet pressure P1	max. 300 psig
Outlet pressure P2	30/60/100/150 psig
Surface finish	15µin. Ra max / 10µin. Ra avg (10µin. Ra max optional)
Materials	
Body	see ordering info
Valve seat	PFA
Diaphragm	Hastelloy <sup>®</sup> C276
Inlets and Outlets	3/4" / 1" face seal 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 <sup>-9</sup> mbar l/s He
Leak rate (via seat)	1x10 <sup>-8</sup> mbar l/s He
Flow capacity	Cv=1.6
Weight	approx. 2.72kg (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" face seal female

MV12: 3/4" face seal male

FV16: 1" face seal female

MV16: 1" face seal male

FV4: 1/4" face seal female  
(for gauge port)

MV4: 1/4" face seal male  
(for gauge port)

TW12: 3/4" tube weld

TW16: 1" tube weld

P: gauge

\* Other connection standard, consult factory

#### Port Selection

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

#### Installation

P: panel mount\*

BP: bonnet port(1/8"FNPT)

None: bottom mount

\* 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

#### Port Config

2P: 2 ports

3P: 3 ports

### Ordering Example

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

1 - 2

