

# Back Pressure Regulators

## VSR-51 Series

### Product Features

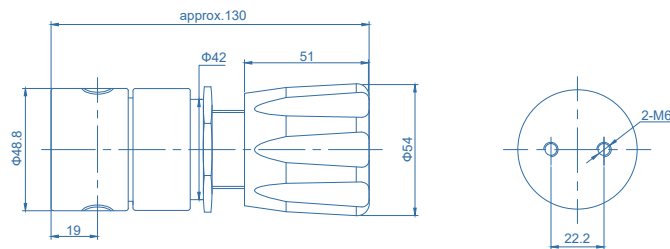
- Reduces contamination and provides accurate regulation of corrosive or non-corrosive gases
- Close pressure differential between crack and reseal
- Compact and economical
- panel mounting is available
- Tested for use with oxygen



### Typical Applications

- Analytical systems
- Gas sampling
- pilot plants
- OEM packages
- R & D laboratories

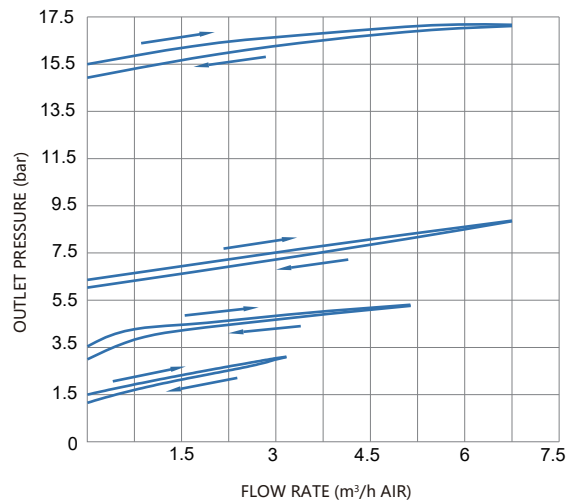
### Dimensions (mm)



### Technical Data

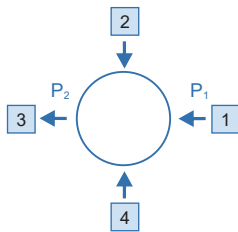
Inlet pressure P1:	max. 17 bar
Controlled pressure:	see ordering info
<b>Materials</b>	
Body regulator, Relief valve:	see ordering info
Valve seat:	PCTFE
Diaphragm:	Hastelloy®
Filter:	SS 316L
Inlets and Outlets:	1/4"NPT(F)
Temperature range:	-30°C to +74°C
Leak rate:	Bubble tight
Flow capacity:	Cv=0.08
Weight:	1kg

### Flow Chart

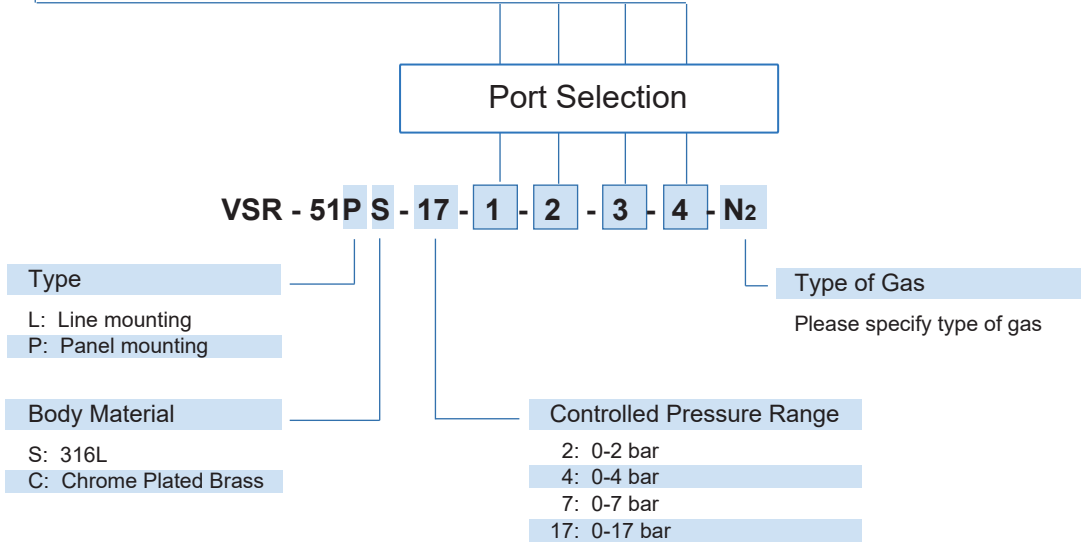


# Back Pressure Regulators VSR-51 Series

## Ordering Information



**Inlets / Outlets**  
 F4: 1/4" NPT(F) | P: Gauge (Psig/bar) | B: Plug  
 \* Other connection standard, consult factory.



## Ordering Example

**Example: VSR - 51LS - 17 - F4 - P - F4 - B - O<sub>2</sub>**

1
2
3
4



\* For mixed gases, please specify cylinder connection standard and thread when ordering.

# Back Pressure Regulators

## VSR-52 Series

### Product Features

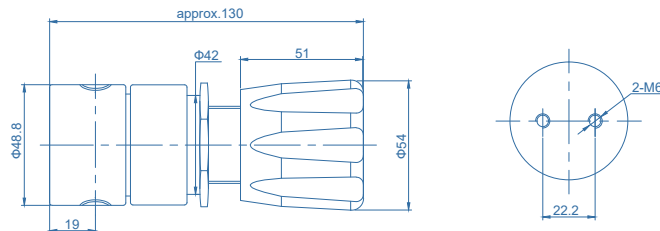
- Economical, compact design
- Piston sensed design is safe and reliable
- Available in a Stainless Steel or Brass design
- Optional gauge ports and panel mounting
- Low handknob torque for easy operation
- Bubble-tight shutoff at all reseating pressures
- Tested for use with oxygen



### Typical Applications

- Industrial equipment for hydraulic or pneumatic service
- calibration system
- Laboratory pressure control
- High pressure sampling system
- Maintain and test equipment

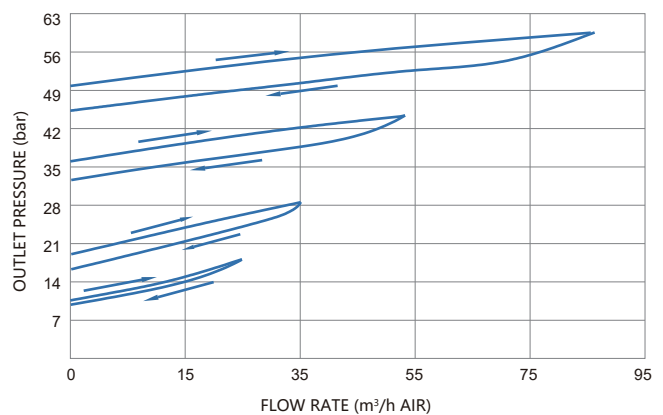
### Dimensions (mm)



### Technical Data

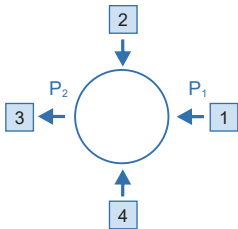
Inlet pressure P <sub>1</sub> :	max. 50 bar
Controlled pressure:	see ordering info
<b>Materials</b>	
Body regulator, relief valve:	see ordering info
Valve seat:	PCTFE
Piston:	SS 316L
O-ring:	Viton® (FKM)
(option)	Kalrez® (FFKM)
Filter:	SS 316L
Inlets and Outlets:	1/4"NPT(F)
Temperature range:	-30°C to +74°C
Leak rate:	Bubble-tight
Flow capacity:	Cv=0.1
Weight:	1kg

### Flow Chart



# Back Pressure Regulators VSR-52 Series

## Ordering Information



### Inlets / Outlets

F4: 1/4"NPT(F) | P: Gauge (Psig/bar) | B: Plug

\* Other connection standard, consult factory.

### Port Selection

VSR - 52 - L S - 10 - 1 - 2 - 3 - 4 - N<sub>2</sub>

#### Type

L: Line mounting  
P: Panel mounting

#### Body Material

S: 316L  
C: Chrome Plated Brass

#### Type of Gas

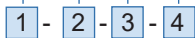
Please specify type of gas

#### Controlled Pressure Range

10: 3-10 bar  
20: 3-20 bar  
50: 7-50 bar

## Ordering Example

Example: VSR - 52LS - 10 - F4 - P - F4 - B - N<sub>2</sub>



\* For mixed gases, please specify cylinder connection standard and thread when ordering.

# Back Pressure Regulators

## VSR-53 Series

### Product Features

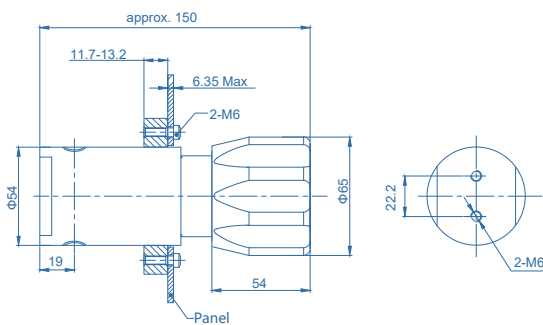
- Function similar to relief valve, ease of adjustment
- Panel and line mounting
- Accuracy:  $\pm 1\%$  of central pressure range
- Bubble-tight shut-off at all reseal pressures
- Tested for use with oxygen

### Typical Applications

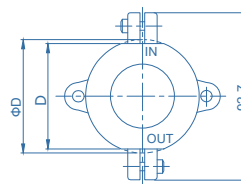
- Pump discharge pressure control
- Reactor pressure control
- Over-pressurization relief



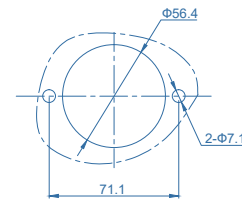
### Dimensions (mm)



Inlets and Outlets	D
1/4 NPT(F)	58.4
1/4, 3/8 NPT(F)	$\Phi 63$
3/8 NPT(F) HU	78.2
1/2 NPT(F)	84.6



Stent models: LV-53

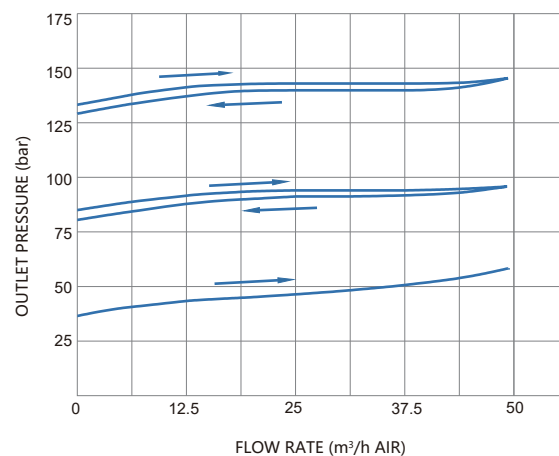


Panel Cut-Out

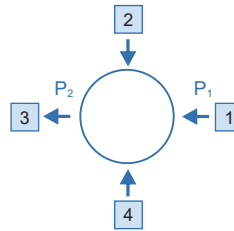
### Technical Data

Type:	single-stage
Inlet pressure P1:	max. 300 bar
Controlled pressure:	see ordering info
Materials	
Body regulator:	316L
Valve seat:	PCTFE
O-ring:	Viton® (FKM)
(option)	Kalrez® (FFKM)
Filter:	SS 316L
Piston:	SS 316L
Inlets and Outlets:	see ordering info
Temperature range:	-30°C to +74°C
Leak rate:	Bubble-tight
Flow capacity	CV=0.14 (<100bar) CV=0.1(100~300bar)
Weight:	2.2 kg

### Flow Chart



## Ordering Information



### Inlets / Outlets

F4: 1/4"NPT(F)      P: Gauge (Psig/bar)  
 F6: 3/8"NPT(F)      B: Plug  
 F8: 1/2"NPT(F)

\* Other connection standard, consult factory.

### Port Selection

VSR - 53L S - 50 - 1 - 2 - 3 - 4 - N<sub>2</sub>

### Type

L: Line mounting  
 P: Panel mounting

### Body Material

S: 316L

### Type of Gas

Please specify type of gas

### Controlled Pressure Range

35: 0.35-35 bar  
 50: 0.35-50 bar  
 100: 0.7-100 bar  
 200: 1.72-200 bar  
 300: 3.45-300 bar

## Ordering Example

Example: VSR - 53LS - 50 - F4 - F4 - F4 - B - N<sub>2</sub>

1 - 2 - 3 - 4

