

# Cylinder pressure regulator FE51-SP



Cylinder regulator FE51-SP2

## Specifications

- SPECTROCEM-components guarantee maximum quality by using high grade materials and a quality assurance program acc. to ISO 9001.
- All parts in the gas wetted surface area are cleaned in an ultrasonic cleaning system (CFC-free) with the special Cleaning process SPECTRO-CLEAN® and then baked out.
- SPECTROCEM-components undergo a 100% function- and Helium-leak-test.

## Product features

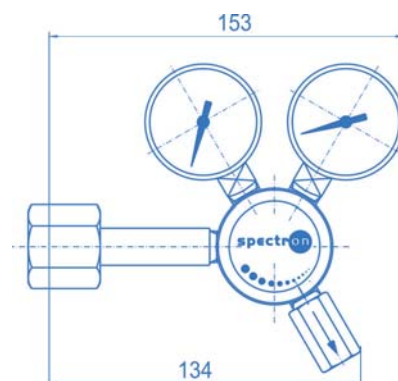
- Stainless steel cylinder pressure regulator with purge valves for process gas or purge gas purging
- Pressure regulator with very stable outlet pressure and anti-vibration device
- For corrosive, toxic gases and gas mixtures with corrosive components up to quality 6.0
- Purge valves in 3 different configurations available
- Suitable for inlet pressures up to 200 bar
- Max. outlet pressures 1.5 up to 200 bar \*
- Integrated relief valve up to 100 bar
- Metal-to-metal seal to atmosphere
- Suitable for ECD-applications
- Pressure regulator can be evacuated
- Inlet filter
- Approved for use with oxygen
- Simple outlet pressure limitation by handwheel
- Easy to install
- New laboratory-style design

\* 1.5 / 4 bar only for inlet pressure  $\leq$  50 bar

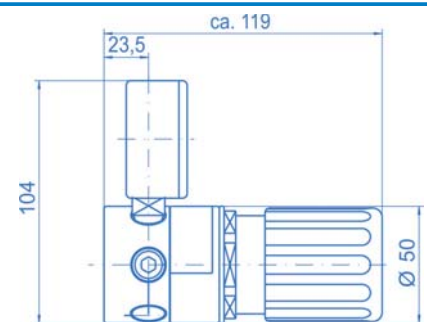
## Technical data

<b>Type</b>	single-stage
<b>Inlet pressure <math>P_1</math></b>	max. 200 bar
<b>Outlet pressure <math>P_2</math></b>	1,5 / 4 bar ( $P_1 \leq$ 50 bar) 10 / 20 / 50 / 100 / 200 bar ( $P_1 >$ 50 bar)
<b>Materials</b>	
Body regulator,	
relief valve:	SS 316L (SS 1.4404)
Valve seat:	PVDF
Diaphragm:	Hastelloy C276
Filter:	Stainless steel 1.4404
<b>In- and outlets</b>	1/4" NPT-F
<b>Temperature range</b>	-30°C to +60°C
<b>Leak rate (to atmosphere)</b> (via seat)	10 <sup>-8</sup> mbar l/s He 10 <sup>-6</sup> mbar l/s He
<b>Pressure gauge</b>	Safety pressure gauges ISO5171/K11.6/NG50
<b>Flow capacity</b>	0,15
<b>Weight</b>	FE51-SP2A ca. 2,0 kg FE51-SP2 ca. 1,9 kg FE51-SP3 ca. 2,2 kg

Dimensions FE51



Side view



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## Ordering information:

Cylinder pressure regulator FE51-SP

**FE51 - SP3 - 200 - 10 - DIN 7 - SO2**

### Configuration

- SP2A** 2 purge valves in the outlet:  
waste gas + process gas
- SP2** 2 purge valves:  
purge gas in the inlet  
process gas in the outlet
- SP3** 3 purge valves:  
purge gas in the inlet  
waste gas in the outlet  
process gas in the outlet

### Type of gas

Please specify type of gas (for selection of valve seat materials)

### Cylinder connection

Detailed specification of cylinder connection including the relevant standard and number (e.g. BS no.3)

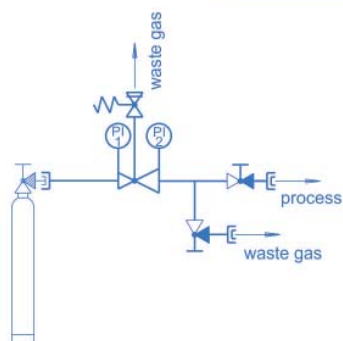
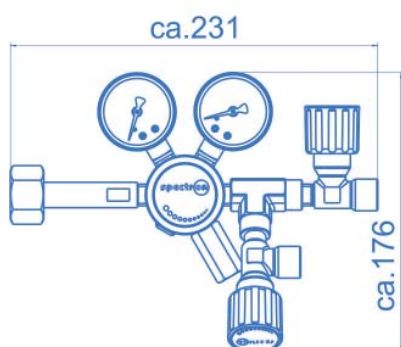
### Inlet pressure $P_1$

- 10** - max. 10 bar
- 20** - max. 20 bar
- 50** - max. 50 bar
- 100** - max. 100 bar
- 200** - max. 200 bar

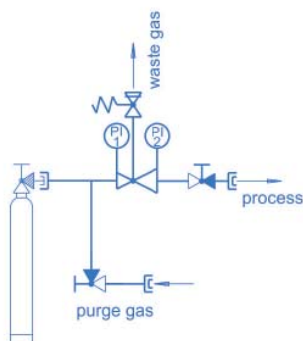
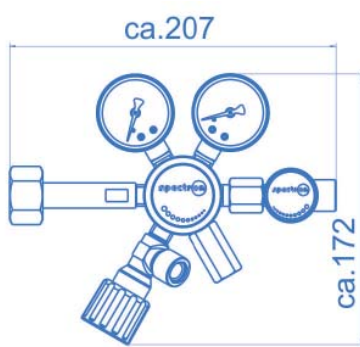
### Outlet pressure $P_2$

- 1,5** - up to 1,5 bar ( $P_1 \leq 50$  bar)
- 4** - up to 4 bar ( $P_1 \leq 50$  bar)
- 10** - up to 10 bar
- 20** - up to 20 bar
- 50** - up to 50 bar
- 100** - up to 100 bar
- 200** - up to 200 bar

**FE51-SP2A**  
Process gas purging



**FE51-SP2**  
Purge gas purging  
without waste gas valve



**FE51-SP3**  
Inert gas purging  
with waste gas valve

