

# Cylinder regulator FM51

spectro lab



Cylinder regulator FM51

## Specifications

- SPECTROLAB-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.
- SPECTROLAB-components undergo a 100% function- and Helium-leak-test.

## Product features

- Brass (chrome plated) cylinder pressure regulator
- For non-corrosive gases and gas mixtures up to quality 6.0
- 6 ports for flexible and individual configuration
- Very stable outlet pressure
- Suitable for inlet pressures up to 300 bar
- Max. outlet pressures 1,5 up to 200 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
- Ergonomically designed

\* 1,5 / 4 bar only for inlet pressure  $\leq$  50 bar

## Technical data

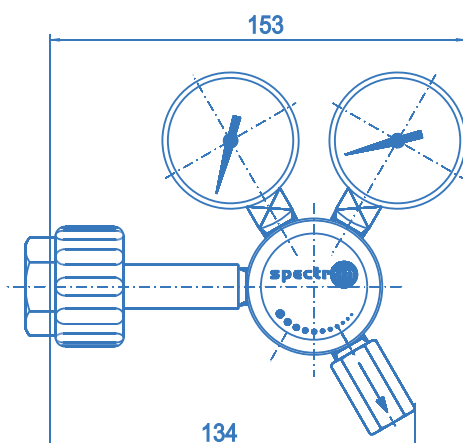
<b>Type</b>	single-stage
<b>Inlet pressure <math>P_1</math></b>	max. 300 bar
<b>Outlet pressure <math>P_2</math></b>	1,5 / 4 bar ( $P_1 \leq 50$ bar) 10 / 20 / 50 / 100 / 200 bar ( $P_1 > 50$ bar)

## Materials

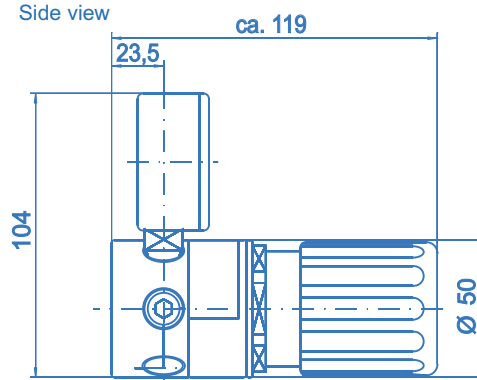
Body regulator, relief valve: chrome plated brass  
 Valve seat: PA  
 Diaphragm: Hastelloy C276  
 Filter: Sintered SS 316L

<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)	$1 \times 10^{-8}$ mbar l/s He $1 \times 10^{-6}$ mbar l/s He
<b>Pressure gauge</b>	Safety pressure gauges ISO5171/KI1.6/NG50
<b>Flow capacity</b>	$C_v=0.15$
<b>Weight</b>	1.2 kg

Dimensions  
FM51



Side view



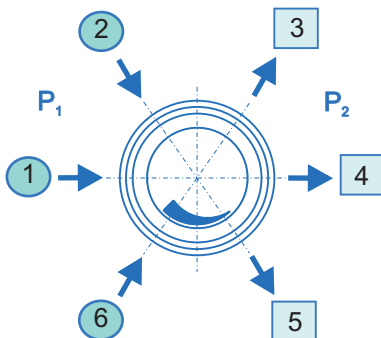
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Ordering information:  
Cylinder regulator FM51

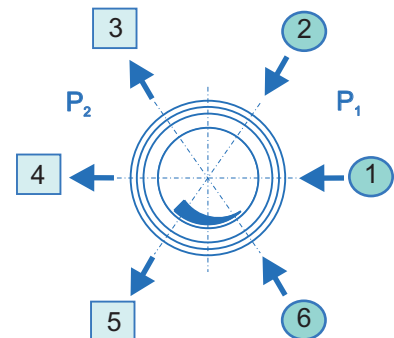
## In- / outlets

- CM 1/4 - 1/8" / 1/4" / 1/2" - OD compression fitting (brass)
- CM 6 - 3/6/8/10/12 mm compression fitting (brass)
- CE 1/4 - 1/8" / 1/4" / 1/2" - OD compression fitting (stainless steel)
- CE 6 - 3/6/8/10/12 mm compression fitting (stainless steel)
- B - plug
- A - relief valve - 1/4"-18 NPT-F ( $P_2 \leq 100$  bar)
- xxxx - detailed specification of cylinder connection including the relevant standard and number (e.g. BS no.3 for nitrogen up to 230 bar)
- K - contact gauge
- M - pressure gauge
- 0 - 1/4"-NPT-F (port only)



Inlet left: L

FM51 - L - 300 - 20 - 1 - 2 - 3 - 4 - 5 - 6 - N2



Inlet right: R

## Inlet

- L - left
- R - right

## Inlet pressure $P_1$

- |                  |                    |
|------------------|--------------------|
| 10 - max. 10 bar | 100 - max. 100 bar |
| 20 - max. 20 bar | 200 - max. 200 bar |
| 50 - max. 50 bar | 300 - max. 300 bar |

## Outlet pressure $P_2$

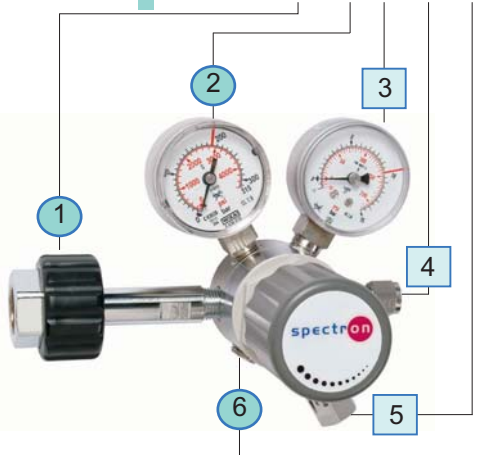
- 1,5 - to 1,5 bar ( $P_1 \leq 50$  bar)
- 4 - to 4 bar ( $P_1 \leq 50$  bar)
- 10 - to 10 bar
- 20 - to 20 bar
- 50 - to 50 bar
- 100 - to 100 bar
- 200 - to 200 bar

## Type of gas

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

## Ordering example:

FM51-L-200-10-DIN10-M-M-CE6-A-B-N2



## Ordering example:

FM51-R-200-10-CGA540-M-M-CE1/8-A-B-Ar

