

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

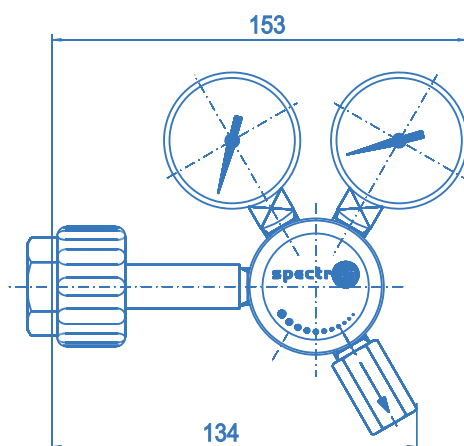
Type	single-stage
Inlet pressure P_1	max. 300 bar
Outlet pressure P_2	1,5 / 4 bar ($P_1 \leq 50$ bar) 10 / 20 / 50 / 100 / 200 bar ($P_1 > 50$ bar)

Materials

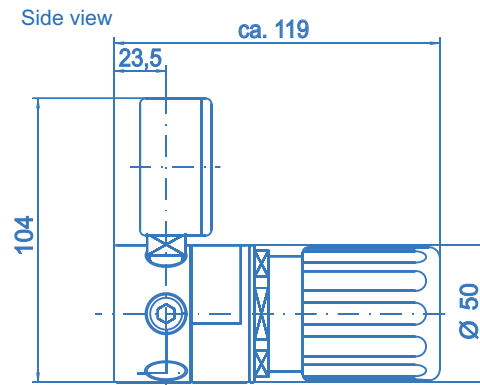
Body regulator, relief valve: chrome plated brass
 Valve seat: Hytrel ($P_1 > 50$ bar: PA)
 Diaphragm: Hastelloy C276
 Filter: Sintered bronze

In- and outlets	1/4" NPT-F
Temperature range	-30°C to +60°C
Leak rate (to atmosphere) (via seat)	1×10^{-8} mbar l/s He 1×10^{-6} mbar l/s He
Pressure gauge	Safety pressure gauges ISO5171/K11.6/NG50
Flow capacity	$C_v=0.15$
Weight	1.2 kg

Dimensions
FM51



Side view



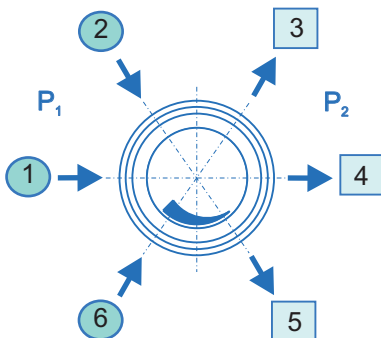
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Ordering information:
Cylinder regulator FM51

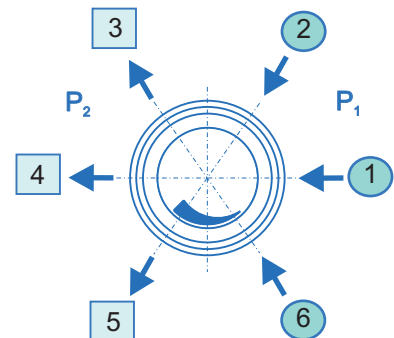
In- / outlets

- 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

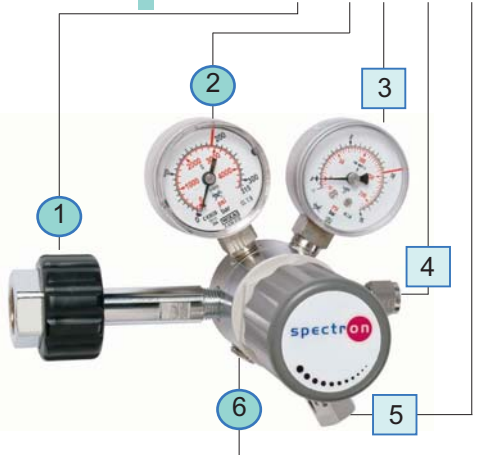
- 1,5 - to 1,5 bar ($P_1 \leq 50$ bar)
- 4 - to 4 bar ($P_1 \leq 50$ bar)
- 10 - to 10 bar
- 20 - to 20 bar
- 50 - to 50 bar
- 100 - to 100 bar
- 200 - to 200 bar

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

