Pressure regulator
series M51 / M52\textsuperscript{exact}

Cylinder regulator FM 52\textsuperscript{exact}  Line pressure regulator LM 51  Panel regulator PM 52\textsuperscript{exact}
Pressure regulators series 51 and M2\textsuperscript{exact} are designed to reduce high pressures from gas cylinders and pipe lines to a constant and stable outlet pressure, which is essential for specialty gas applications throughout laboratory, R&D and analytical facilities as well as industries.

To meet all requirements the 51 & M2\textsuperscript{exact} series are available as a
- Cylinder pressure regulator
- Line pressure regulator
- Panel mounted pressure regulator

Brass and stainless steel
\textit{Spectrolab} series pressure regulators are brass chrome plated with a Hastelloy diaphragm and are therefore the best overall solution for non corrosive high purity gases up to quality 6.0. For corrosive and toxic gases stainless steel pressure regulators should be used, for which we refer to our \textit{Spectrocem} program.

Flexible product range
The series 51 and M2\textsuperscript{exact} pressure regulators offer many different configurations and variations for all modern requirements. The regulator is available in 2-, 4- and 6-port versions. Furthermore, this pressure regulator can be supplied with a wide range of inlet and outlet connections. Pressure gauges are with a bar/psi double scale.

Single stage: M51
The M51 is a single stage pressure regulator. This model is generally used for applications where small variations in outlet pressure can be tolerated.

\textbf{Extremely Accurate Technology: M52\textsuperscript{exact}}
Exact - this unique technology advancement is incorporated into a pressure regulator with the same dimensions of a single-stage regulator. Exact enables the same performance of a double stage pressure regulator!

For information about line pressure regulators please see data sheets of panel mounted pressure regulators.
Dynamic expansion curves series 51 / 52\textsuperscript{exact}

Flow curves series 51 / 52\textsuperscript{exact}

- **Inlet pressure** $P_1 = 4$ bar
- **Outlet pressure** $P_2$
- **Flow** $Q$ [m$^3$/h air]

- **Inlet pressure** $P_1 = 9$ bar
- **Outlet pressure** $P_2$
- **Flow** $Q$ [m$^3$/h air]

- **Inlet pressure** $P_1 = 21$ bar
- **Outlet pressure** $P_2$
- **Flow** $Q$ [m$^3$/h air]

- **Inlet pressure** $P_1 = 41$ bar
- **Outlet pressure** $P_2$
- **Flow** $Q$ [m$^3$/h air]