
MICROCAN[®]. Miniature high-pressure cylinder with 200 bar filling pressure.



Introduction Many sectors and applications are experiencing a strong trend towards miniaturisation. Fuel cells and analysers, such as the Micro-GC, are also being developed in increasingly smaller sizes, making it necessary for the gas supply to be just as compact.

Requirements Many users require maximum gas quantity with minimum space requirement to supply small, portable analysers (particularly when used in the field), or for small energy consumers via fuel cells. Moreover, the gas supply needs to be integrated into as many devices and systems as possible, while taking up little space.

Solution MICROCAN[®] from Linde is a high-pressure cylinder with a maximum of 200 bar filling pressure. It is therefore a miniature version of approximately one 250th scale in comparison to the 50-l high-pressure cylinders that are common in the market. Due to its high filling pressure, MICROCAN[®] has more gas content than conventional small compressed gas cylinders with 12 bar or 34 bar, while also being much smaller. Gas users value the compact design of MICROCAN[®] and its superiority really comes particularly into play when there is limited space. Gas is withdrawn using a piston pressure regulator C 210 Micro and a diaphragm pressure regulator C 260 Micro, both with a very compact design.

Further information MICROCAN[®] is part of our "Gases in Small cylinders" range. Thanks to this range, Linde provides universal gas application possibilities wherever it is critical that light containers are used in a mobile way.

→ MICROCAN®. Miniature high-pressure cylinder with 200 bar filling pressure.

Technical data

Pressure vessel, using the 0.2-l cylinder as example

Length (with valve)	approx. 230 mm
External diameter	approx. 50 mm
Filling volume	0.2 litres
Empty weight (with valve)	approx. 0.49 kg
Filling pressure (maximum)	200 bar
Filling quantity (maximum)	approx. 40 litres (depends on gas type)

Additional cylinder sizes on request

Piston pressure regulator C 210 Micro*

Design	single-stage, with inlet and outlet pressure gauge (outlet pressure range 0–6 bar)
Material	surface-coated brass
Gas purity	up to 5.0, no corrosive pure gases and mixtures
Output connection	hose nozzle for 4 mm internal diameter hose

Diaphragm pressure regulator C 260 Micro*

Design	single-stage, with inlet and outlet pressure gauge (outlet pressure range 0–6 bar)
Material	chrome-plated brass
Gas purity	up to 6.0 as well as gas mixtures with max. 0,1 % corrosive components
Output connection	compression fitting 6 mm

* Can be connected to the gas cylinder without tools, by screwing it into the cylinder valve.
Other connections for the process gas outlet on request.

Current product range

- Nitrogen 5.0
- Helium 5.0
- Hydrogen 5.0

Other pure gases and individual gas mixtures are available on request (subject to technical feasibility).



Piston pressure regulator C 210 Micro



Diaphragm pressure regulator C 260 Micro



Linde AG

Linde Gases Division, Seitnerstrasse 70, 82049 Pullach, Germany
Phone +49.89.74 46-16 61, Fax +49.89.74 46-20 71,
email: hiq@linde-gas.com, <http://hiq.linde-gas.com>