



REDLINE® C 200hv/2

Two-stage cylinder pressure regulator

Description C 200hv/2 is a two-stage diaphragm pressure regulator, especially suitable for non-corrosive gases up to 6.0 purity (99.9999%) as well as gas mixtures with a low concentration of corrosive components.

The regulator is designed to reduce the inlet pressure to very low outlet pressures and can regulate low pressures very precisely. The regulator also has a vacuum dosing capability down to 0.1 bar abs. C 200hv/2 can be plain or equipped with a shut-off valve (type A) or a metering valve (type B).

| Product name | Material | bar | psi | Art. Nr |
|--------------|---------------------|---------|--------|---------|
| C 200hv/2 | Chrome-plated brass | 0.2 – 2 | 3 – 29 | 5441 |
| C 200hv/2 | Chrome-plated brass | 0.2 – 3 | 3 – 44 | 5442 |
| C 200hv/2 | Stainless steel | 0.2 – 2 | 3 – 29 | 5447 |
| C 200hv/2 | Stainless steel | 0.2 – 3 | 3 – 44 | 5448 |
| C 200hv/2 A | Chrome-plated brass | 0.2 – 2 | 3 – 29 | 5443 |
| C 200hv/2 A | Chrome-plated brass | 0.2 – 3 | 3 – 44 | 5444 |
| C 200hv/2 A | Stainless steel | 0.2 – 2 | 3 – 29 | 5449 |
| C 200hv/2 A | Stainless steel | 0.2 – 2 | 3 – 29 | 5450 |
| C 200hv/2 B | Chrome-plated brass | 0.2 – 2 | 3 – 29 | 5445 |
| C 200hv/2 B | Chrome-plated brass | 0.2 – 3 | 3 – 44 | 5446 |
| C 200hv/2 B | Stainless steel | 0.2 – 2 | 3 – 29 | 5451 |
| C 200hv/2 B | Stainless steel | 0.2 – 3 | 3 – 44 | 5452 |

Delivery and ordering information

Cylinder pressure regulator with cylinder connection (manual connection) according to DIN 477 on the high-pressure side and compression fitting 6 mm on the service gas outlet. In addition to the article number, please specify the type of gas. Other configurations on request.

Application

Suitable for all applications requiring non-corrosive high-purity gases and gas mixtures at pressures below 1 bar (abs) or in a pressure range from 0 to 3 bar (abs.) with high control accuracy. For all applications in analysis, as well as research and development, where high demands in gas purity, accuracy, reliability are required. The pressure regulator must not be used as a shut-off device. The version with a shut-off valve allows the gas flow to be shut off / opened while maintaining the pressure setting. The design with a needle valve allows additional metering of the gas flow.

Technical Data

| | bar | psi |
|-------------------------------|---|--------------------------------|
| Maximum primary pressure | 230 | 3336 |
| Outlet pressure range | 0.2 – 2 (abs.) 0.2 – 3 (abs.) | 3 – 29 (abs.) 3 – 44 (abs.) |
| Outlet gauge range | -1 – 1.5 -1 – 5 | -15 – 22 -15 – 73 |
| Gas purity | ≤ 6.0 (99.9999%) | |
| Leak rate | ≤10 ⁻⁹ mbar l/s He to the outside ≤5x10 ⁻⁶ mbar l/s He in the seat | |
| Connections | 6 x NPT 1/4" f | |
| - Pressure reducer body | | |
| - cylinder pressure regulator | | |
| - Service gas outlet | Compression fitting 6 mm | |
| - High pressure inlet bottle | Connection according to DIN 477 | |
| - Relief valve outlet | NPT 1/4" f | |
| Stability | Constant outlet pressure when the inlet pressure drops from 200 bar to 0 bar | |
| Flow coefficient | Cv = 0.06 | |



| | | |
|-----------------------|---|-------------------------|
| Materials | | |
| - Casing | Cr-plated brass | SS 316L |
| - Housing seal | PVDF | PCTFE |
| - Membrane | Hastelloy® | |
| - Seat seal | PCTFE | |
| - Seal relief valve | FKM / EPDM | (according to gas type) |
| Operating temperature | -20°C ... +60°C | -4°F ... +140°F |
| Particle filter | Inlet 10 µm | Outlet 100 µm |
| Valves | Diaphragm shut-off valve V 200 (Type A) Diaphragm control valve V50 (Type B) | |
| Cylinder connection | DIN 477 (other connections on request) | |
| Weight | 3.33 kg max. | 7.34 lb max. |

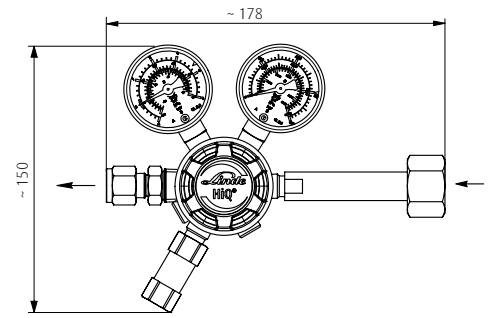
Other accessories

Gas type-specific manual connection, brass or stainless-steel compression fittings from 3 to 12 mm or 1/8" to 1/2" for service gas and relief valve outlet, contact pressure gauge.

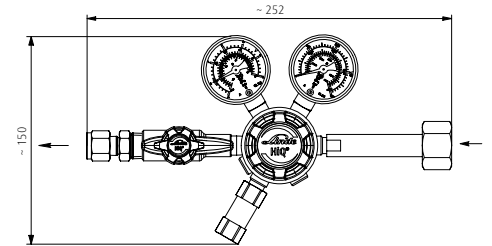
Quality Assurance

The cylinder pressure regulator C 200hv/2 is manufactured in accordance with the following international standards: ISO 9001, ISO 2503, EN ISO 5171, EN ISO 7291 (including oxygen burnout test for brass-chrome-plated fittings). Every step, from design to final test, is subject to one Quality Management System.

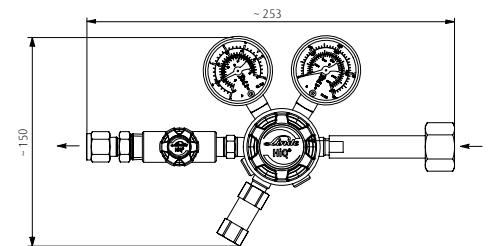
C 200hv/2



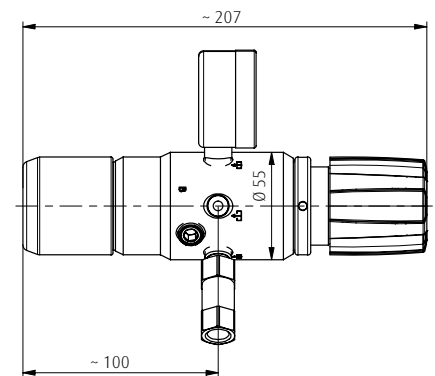
C 200hv/2 A



C 200hv/2 B

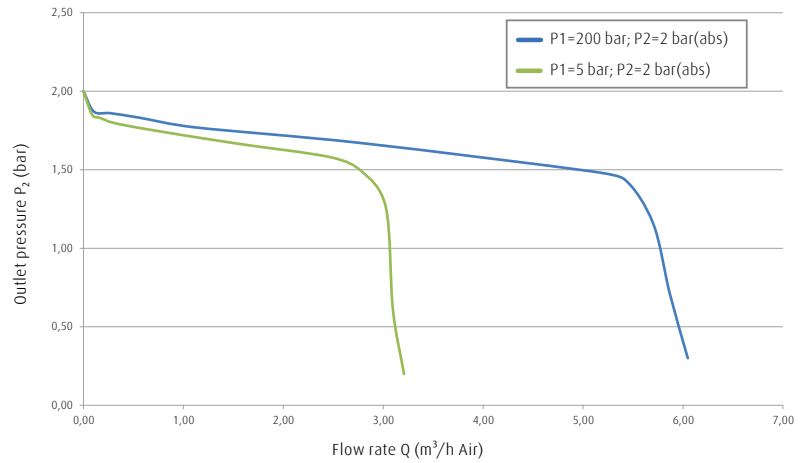


C 200hv/2
Side view

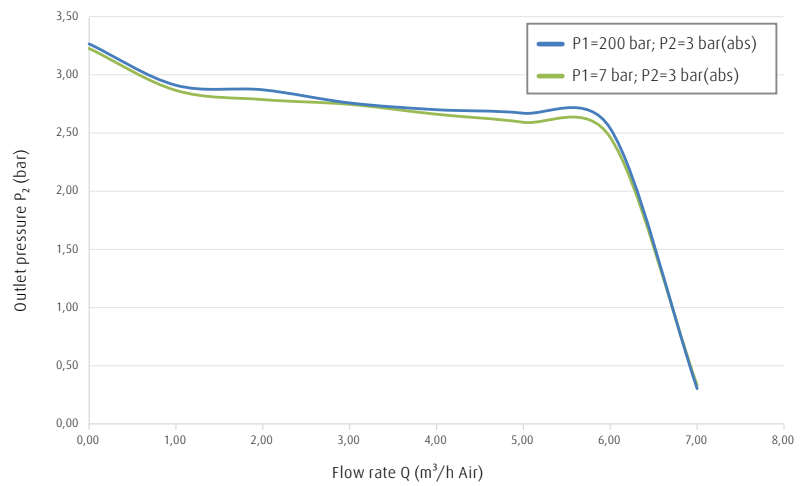


All dimensions in millimeters

200hv/2 – 2 bar (abs.)



200hv/2 – 3 bar (abs.)



Linde GmbH
 Dr.-Carl-von-Linde-Strasse 6-14, 82049 Pullach, Germany
 Phone +49 89 7446-0, Fax +49 89 7446-1230, <http://hiq.linde-gas.com>