



REDLINE® R 500/1

In-line pressure regulator

Description R 500/1 is an in-line single 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.

| Product name | Material | bar | psi | Art. Nr |
|--------------|---------------------|---------|----------|---------|
| R 500/1 | Chrome-plated brass | 0.2 – 3 | 3 – 44 | 7437 |
| R 500/1 | Chrome-plated brass | 0.5 – 6 | 7 – 87 | 7438 |
| R 500/1 | Chrome-plated brass | 1 – 14 | 15 – 203 | 7439 |
| R 500/1 | Stainless steel | 0.2 – 3 | 3 – 44 | 7441 |
| R 500/1 | Stainless steel | 0.5 – 6 | 7 – 87 | 7442 |
| R 500/1 | Stainless steel | 1 – 14 | 15 – 203 | 7443 |

Delivery and ordering information In-line pressure reducer with upstream and downstream pressure gauge and relief valve. In addition to the article number, please specify the type of gas. Other configurations on request.

Application Suitable for all applications in analysis, as well as research and development, where high demands in gas purity, accuracy, reliability are required. Used as a second pressure reducer stage in a central gas supply system.

Technical Data

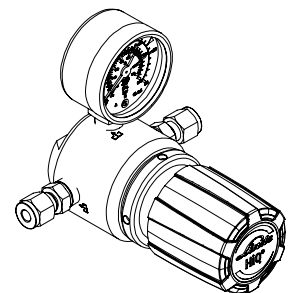
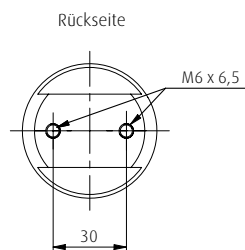
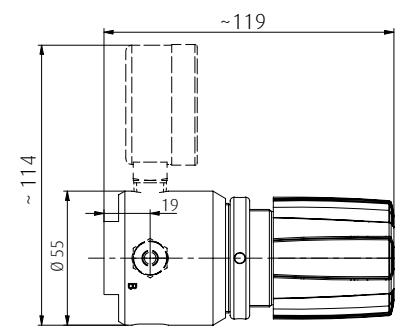
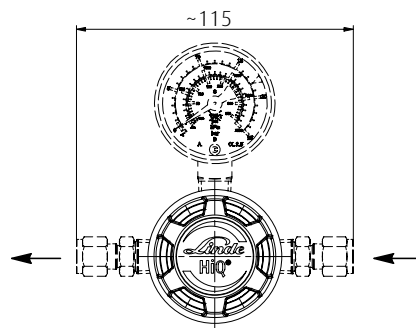
| | bar | psi |
|-------------------------------|---|-----------------|
| Maximum primary pressure | 40 | 580 |
| Outlet pressure range | 0.2 – 3 | 3 – 44 |
| | 0.5 – 6 | 7 – 87 |
| | 1 – 14 | 15 – 203 |
| Outlet gauge range | -1 – 5 | -15 – 73 |
| | -1 – 10 | -15 – 145 |
| | -1 – 25 | -15 – 363 |
| 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 | | |
| - Pressure reducer body | 4 x NPT 1/4" f | |
| - cylinder pressure regulator | | |
| - Service gas outlet | NPT 1/4" f | |
| - High pressure inlet bottle | NPT 1/4" f | |
| - Relief valve outlet | NPT 1/4" f | |
| Flow coefficient | Cv = 0.09 | |
| Materials | | |
| - Casing | Cr-plated brass | Stainless steel |
| - Housing seal | PVDF | |
| - Membrane | Hastelloy® | |
| - Seat seal | PTFE | |
| 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 | |
| | Diaphragm control valve V 50 | |
| Weight | 1.3 kg max. | 2.9 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.

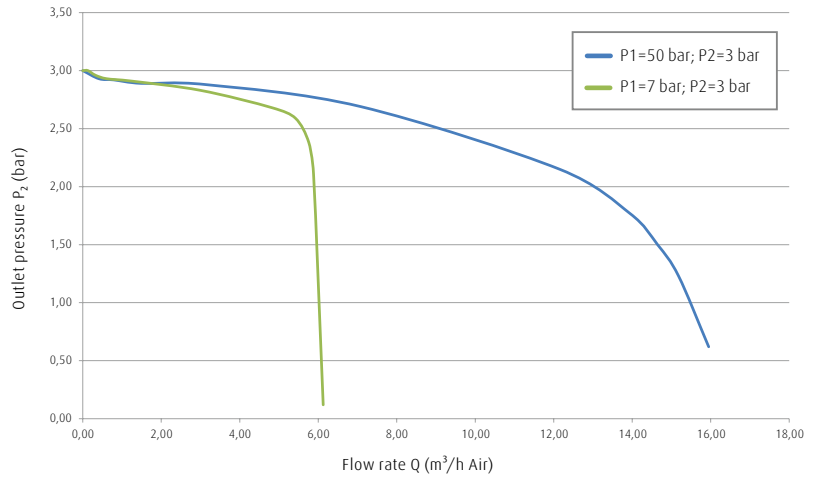
Quality Assurance The in-line pressure regulator R 500/1 is manufactured in accordance with the following international standards: ISO 9001, EN ISO 5171, EN ISO 7291 (including oxygen burnout test for brass-chrome-plated fittings). Every step, from design to final test, is subject to one Quality Management System.

R 500/1

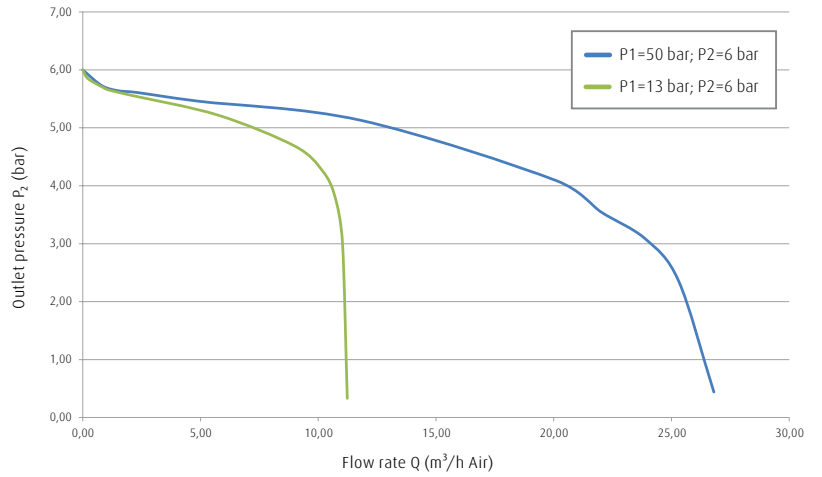


All dimensions in millimeters

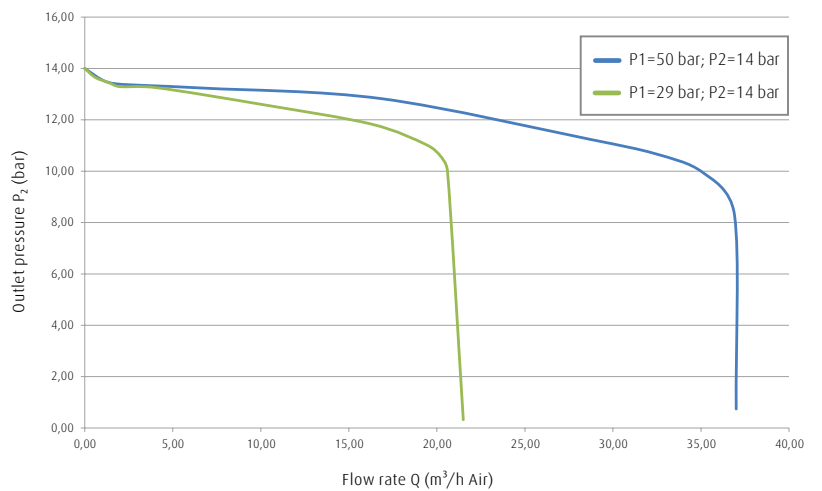
R 500/1 – 3 bar



R 500/1 – 6 bar



R 500/1 – 14 bar



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