



MDS1 material pressure accumulator

The MDS1 maintenance-free material pressure accumulator is used as a compensation system between supply systems and dosing units for high-viscosity and pasty media. Up to a maximum input pressure of 200 bar, the MDS1 material pressure accumulator ensures that the output-side medium pressure set remains constant and available to the dosing or spray valves without pressure fluctuations.



Application possibilities

The material pressure accumulator can be used wherever high-viscosity fluids or pasty lubricants are used.

Conventional supply systems convey the medium with a relatively high, pulsating pressure. Pressures up to 100 bar are not unusual. That's in sharp contrast with lubricants that change their properties under high pressure and dosing valves that are usually designed for a pressure range of 1-6 bar.

The material pressure accumulator reduces the high, pulsating input pressure and keeps the output pressure in a fine-tuned range from 0.1 to 6 bar, precisely constant and free of pulsations.

Advantages

High input pressure

- Processes input pressures up to 200 bar

Precise output pressure

- Fluctuation-free, precision-regulated output pressure between 0.1 and 6 bar

Self-regulating

- Self-regulating controller
- Automatic filling process

Pneumatic signals

- Activation/deactivation of the supply system possible

Suitable for solid lubricants

- Avoids long-term conveyor pressure

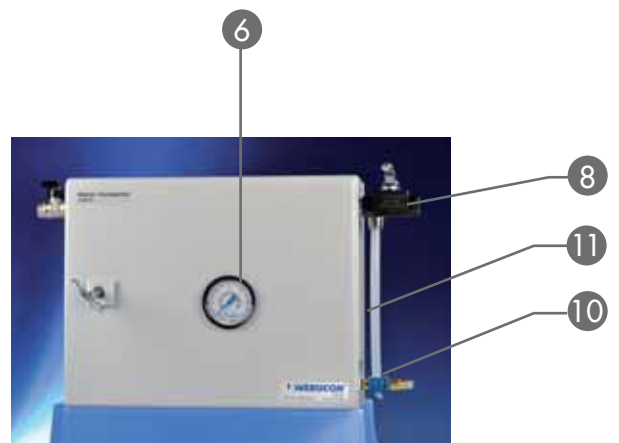
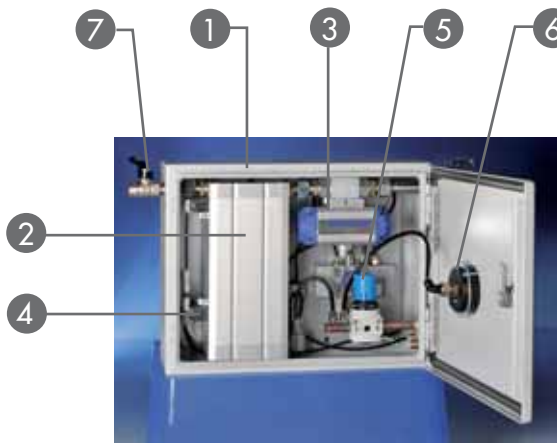
Maintenance-free

We have the technology for your lubricant

MDS1 material pressure accumulator

Functional principle

The medium is pumped into the pressure accumulator above the isolating piston, by an external supply system. The underside of the piston is provided with compressed air using a precision pressure regulator. During the filling process, the pressure regulator keeps the configured compressed air pressure and thus the material's output pressure constant. Once the pressure accumulator is completely filled, the pneumatic high-pressure ball valve automatically closes the material feed. A pneumatic signal is also raised that can be used to deactivate the external supply system. Once the pressure accumulator is nearly emptied, the filling process repeats: the pneumatic ball valve automatically opens the material feed, the pneumatic signal is applied, and the external supply pump starts. The output material flow is not interrupted by the filling process.



1. Housing
2. Pressure accumulator
3. Pneum. high-pressure ball valve
4. Pneum. fill level sensors
5. Precision pressure regulator
6. Precision manometer
7. Ball valve
8. High-pressure ball valve
9. Manual slider valve
10. Pneumatic output
11. Safety outlet



Technical data

Compressed air	max. 8 bar
Input pressure	max. 200 bar
Output pressure	adjustable between 0.1 and 6.0 bar
Accumulator volume	about 1.0 dm ³
Dimensions (H - W - D)	380 mm - 300 mm - 155 mm

As a leading provider of modern dosing technology, WERUCON® offers its customers an extensive portfolio of products in the areas of belt oiling, grease dosing, and Minimal Quantity Lubrication (MQL). Especially wherever flexibility and nearly environmentally independent, always reproducible oiling is a must, WERUCON® systems are in use.

WERUCON® dosing technology is in use around the world for process-reliable precision dosing in industrial settings. As a technology supplier, WERUCON® stands for flexibility, process reliability, and innovation.

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