Efficient control of compressed air technology with reliable

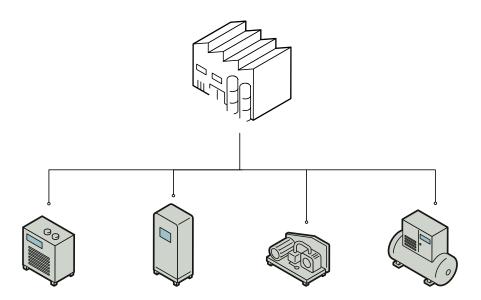






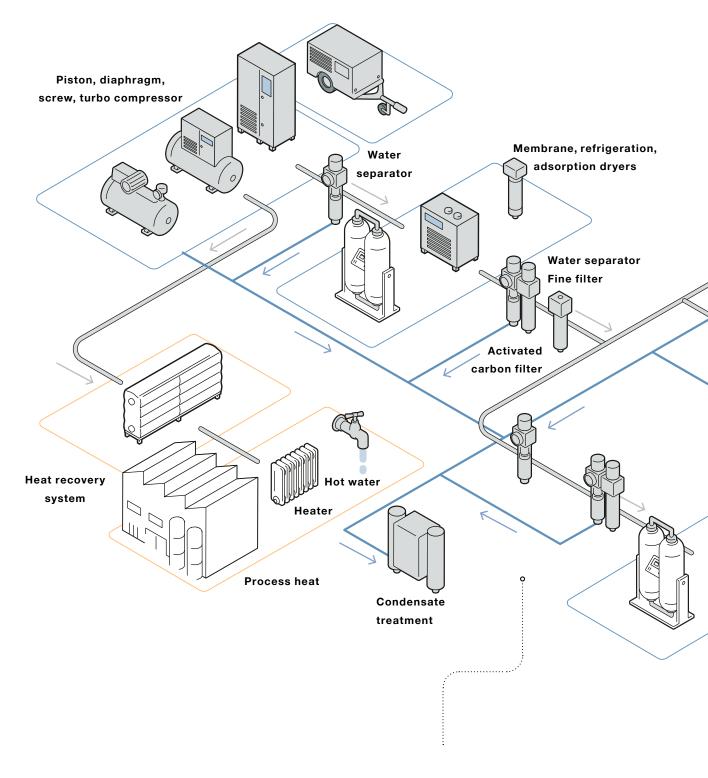
/ Valve technology and consulting for reliable and durable compressed air systems / For you as a manufacturer of compressors or compressed air systems, the flawless end product comes first. Whether in the construction & building, pharmaceutical, food or beverage industries: The compressed air supply must comply with the applicable quality criteria. To ensure this, not only generation but also treatment and the complete infrastructure for compressed air are crucial.

At Bürkert you will find the right valve solution for every step in the process - thanks to a broad portfolio, custom-fit solutions and personal consulting.



Challenges 4

/ It's all about the compressor / Safe and always available compressed air is crucial in addition to the individually required air quality. The variety of compressors requires precisely matching valves and tailored to the compressed air systems.



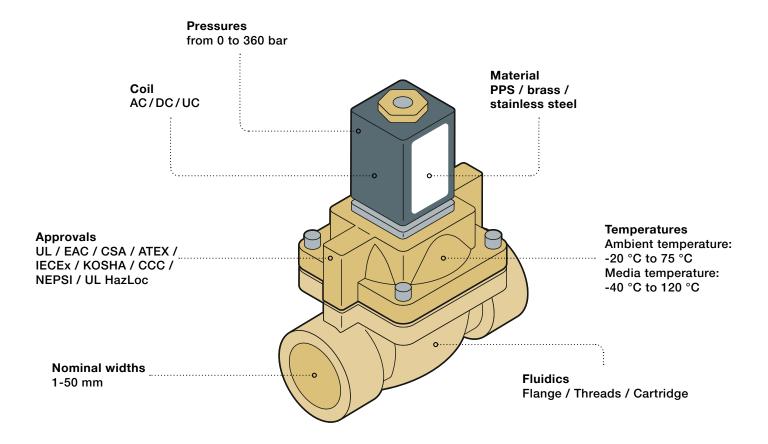
Comply with local regulations and directives

Improve energy consumption and environmental protection Throughout the life cycle, the aim is to keep operating costs low and produce more compressed air with less energy. Other important factors are minimal noise emission and compliance with environmental regulations. Simplify maintenance and service Thinking about maintenance during the design phase saves time. Free access to wearing parts contributes to this, as does a service concept adapted to the system. In addition, spare parts should be available in the long term. Compressed air system with booster compressor Compressed air for downstream processes (O2) oxygen / (N₂) nitrogen generators Compressed air for downstream processes Oxygen Nitrogen

The long service life of the components contributes to a long service life of the compressed air systems. In addition, maximum operational reliability is ensured through worldwide availability and modern logistics.

Extend service life

/ The valve partner for your compressors / To be able to produce and operate compressed air systems safely, flexibly and economically, you need the ideal valve for every process step. Bürkert meets your requirements: with a unique range of standard valves, components manufactured for your needs and a service all around. We accompany you with fluidic solutions from the idea through design and production to the application.



Competent partner for customised solutions



Either we have the perfect solution for you or we develop it together with you. To achieve this, we combine application know-how with professional consulting and customer-oriented service.

Fast projects thanks to complete valve range



Whether coils, fluidics, seal materials, approvals, nominal diameters, pressures or temperatures: The high variance within our standard valves accelerates your project progress.

Environmentally friendly with a positive energy balance



Thanks to a wide range of valve controls, Bürkert solutions help to reduce your energy consumption - even with modern voltage supplies.

Less maintenance reduces operating costs



High-quality materials and an immense vertical range of manufacture ensure the high quality of the Bürkert solution and extend your maintenance intervals. For you, this means less effort and operating costs.

Long-term operational reliability thanks to high delivery reliability



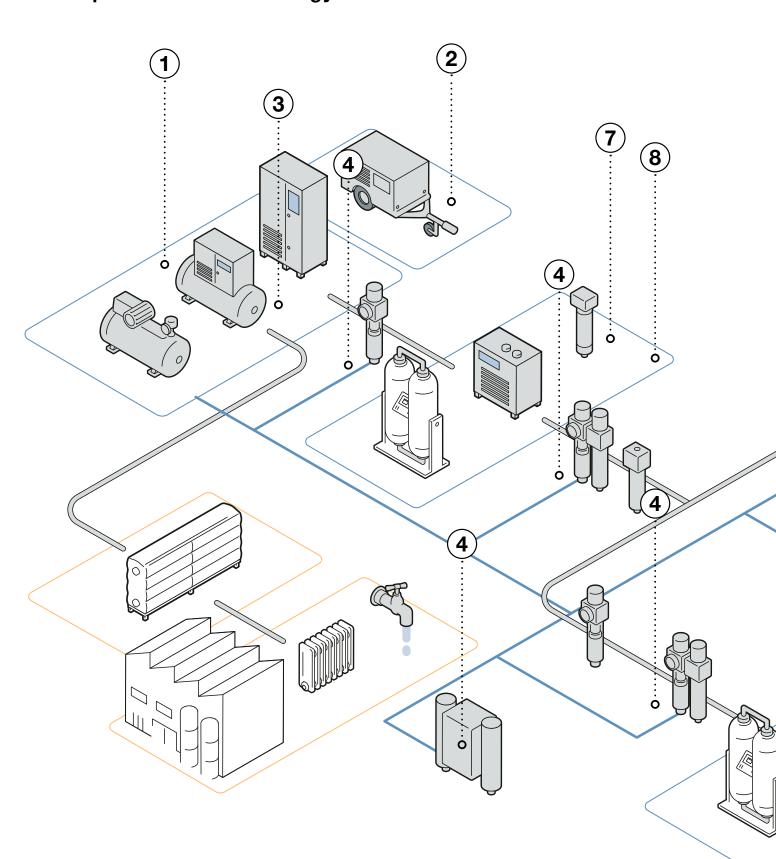
With global availability and short supply chains and times, we support the long-term reliable operation of your compressors and compressed air systems.

Long life cycles create stability

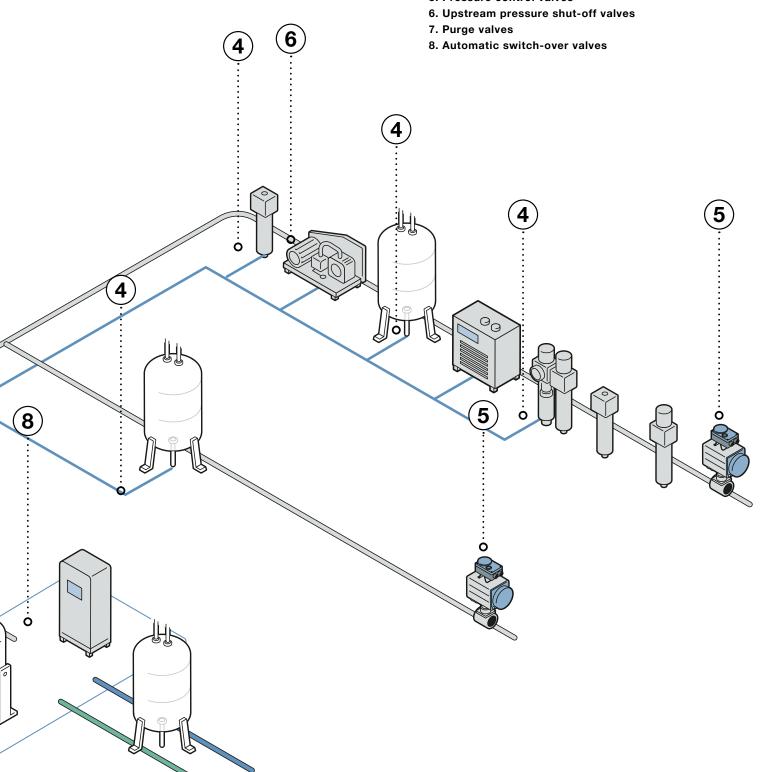


Thanks to stable product life cycles and long-term availability of spare parts, time-consuming planning changes for your compressed air systems are a thing of the past.

/ Switch quickly and accurately / How do you ensure smooth processes such as the demand-oriented and energy-saving supply of compressed air? With a wide range of valve solutions and partnership-based consulting, we support you in every stage of compressed air technology and infrastructure.



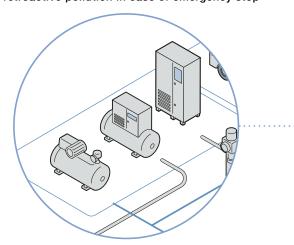
- 1. Valves for intake (suction) control
- 2. Valves for intake (suction) control with mobile compressors
- 3. Blow-off valve
- 4. Drain valves
- 5. Pressure control valves



1. Valves for intake (suction) control

Solenoid valves mainly load or unload the intake control or the inlet valve in screw compressors. The valves are available in various designs, such as de-energised opening and de-energised closing. These offer the following advantages in application:

- higher energy efficiency
- increased compressor service life
- · gentle start-up
- optimised compressor characteristic curve
- low fluctuation of the compressed air generated
- demand-oriented pressure generation
- · no retroactive pollution in case of emergency stop







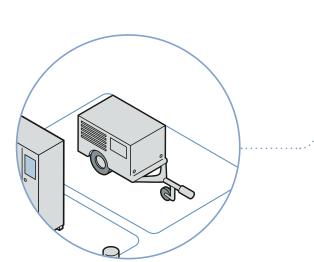
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This is where proportional valves on the intake control impress: Load and energy consumption are based on the compressed air requirement. The exact matching of the engine power to the compressed air requirement saves fuel and emissions.









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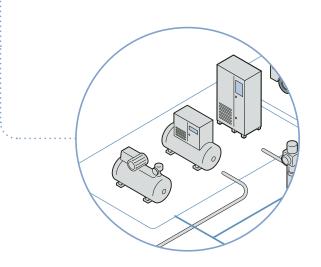
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3. Blow-off valves

To prevent compressors from starting against pressure, a) the blow-off valve (NC) can relieve pressure at stop or b) the blow-off valve (NO) can relieve the engine at start.

Main advantages of both variants:

- contribute to energy savings in compressor operation
- increase the service life of the motor drive of the compressor









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4. Drain valves

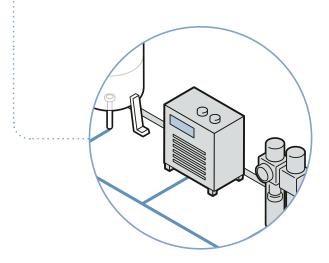
When air is compressed, contaminated condensate is produced. To avoid damage to the entire compressed air system, this fluid must be drained and then disposed of properly.

Advantages:

- prevents damage to the compressed air system
- extends the service life of the compressor and the system components
- less effort for maintenance and servicing
- saves energy and resources



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5. Pressure control valves

They represent the interface between the compressed air system and the compressed air grid. The valves keep the pressure level stable and enable a safe start-up. With low demand, this protects the compressors as well as the treatment components.

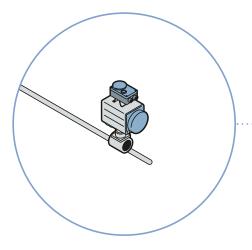
Associated advantages:

- Optimises the use of energy
- Smooth start-up relieves the motor
- Increases the life cycle of your plant
- Permanently consistent compressed air quality













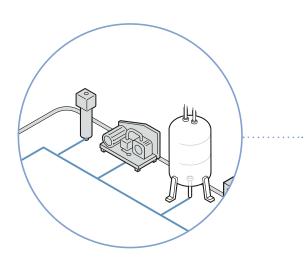
The inlet valves placed in front of a booster compressor control the air supply during operation and close automatically when the inlet pressure is too low.

The booster compressor sucks in treated compressed air from an existing grid or a low-pressure compressor and increases the pressure to a higher pressure level.





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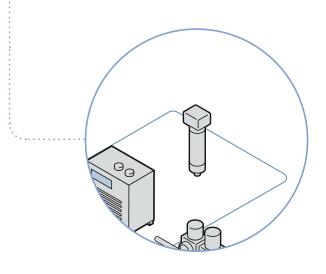
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7. Purge valves

In the membrane dryer, moisture is removed from the generated compressed air with the help of the purge air. The valves purge air as required and thus ensure energy-efficient operation of the membrane dryer.







8. Automatic switch-over valves

Overlap and pressure surge-free switching in adsorption dryers and nitrogen and oxygen generators. In both cases, Bürkert solenoid or process valves specifically switch operation between adsorption and regeneration.



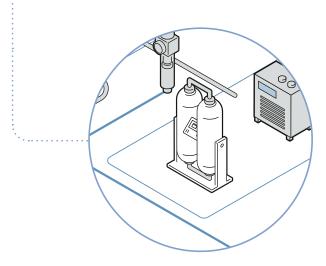




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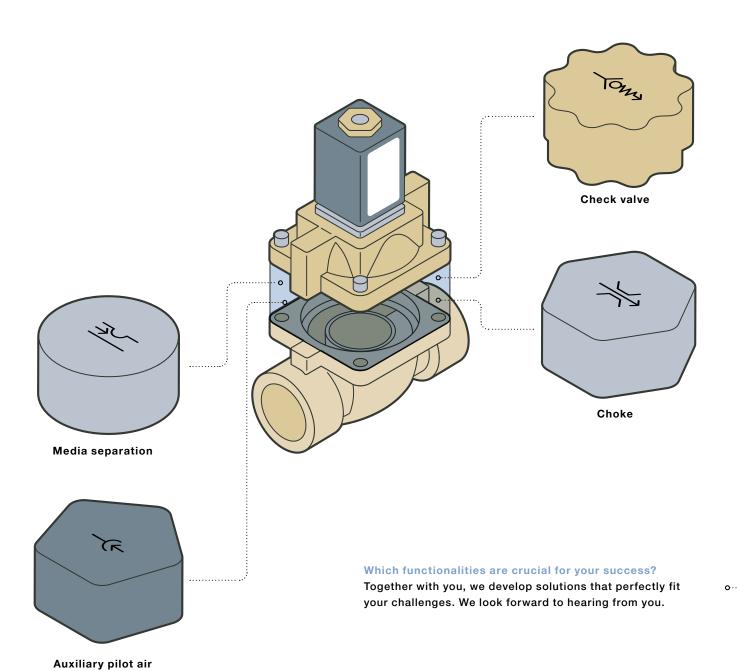


Excerpt from the portfolio

Added value

/ Your requirements are our starting point / Bürkert not only offers you what is probably the most comprehensive valve portfolio in the world - we also have the ability to customize valves in order to meet the requirements of the application. For you, this means: functionally sophisticated, energy-saving compressors and compressed air technology as well as safety and flexibility in production.

Air volume, installation situation, degree of contamination or mode of operation: Your requirements are the starting point to which we adapt valve characteristics and functionalities.





A perfect overall package: From the selection of suitable components to service and spare parts delivery: Your process depends on many points. So that you can focus on your tasks, we support you with individually adapted solutions and a service tailored to your needs. This saves you time and optimises

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Bürkert Fluid Control Systems

Christian-Bürkert-Strasse 13–17 74653 Ingelfingen Germany

Phone: +49 7940 100 Fax: +49 7940 1091204 info@buerkert.de www.buerkert.de