

Product features/USPs

Valves by KTW Systems are extremely flexible and replaces a large number of individual solutions. Our valves don't have the disadvantages of needle or spring systems and convince through an extreme long life time – tested are more than 3bn switching cycles due to low friction and a minimal mechanical load.

In addition no hydraulic system is required.

Only these facts lead to high cost savings in the production process. Our valves are extremely flexible and replace a large number of individual solutions.



All in one

Suitable for all gases and liquids, heat and cold resistant (plus/minus 200 degrees Celsius), usable for pressure control



Large dynamic range

100 nL/min to 5.000 l/min: dose range is 1.000 times higher as conventional valves



Fast switches allows high flexibility

extremely fast (1 ms), direct and stochastic switching, which allows real time applications



We love pressure

Pressure range from 0.5 bar to 1.000 bar



Compact design

Easy to clean, corrosion-resistant and requires no lubrication; regulating and self-locking in one (permanently technically dense)



Frequencies up to 1000 Hz

By pulse width modulation the flow can be controlled linearly



We don't like failures

No resonance frequencies

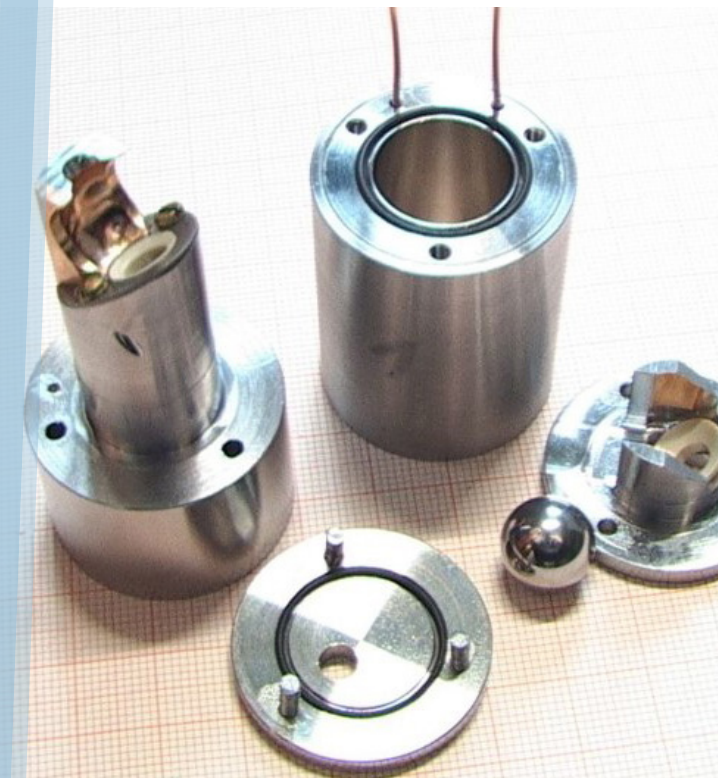
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Realtime Valves by KTW Systems

Air Compression Industry



Pressed air equals expensive energy

What may cost compressed air? Of course, the air itself costs nothing—but the required electrical energy is even more expensive. So it is always true that the more often a compressor has to start in order to maintain even pressure in the air system, the more expensive compressed air will ultimately be.

Not seldom the energy cost for air compression is more than 30% of the total energy balance of a manufacturing company.

Market Need and Opportunity

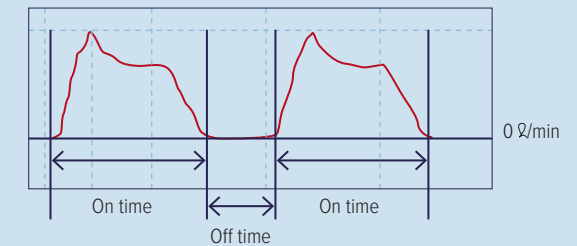
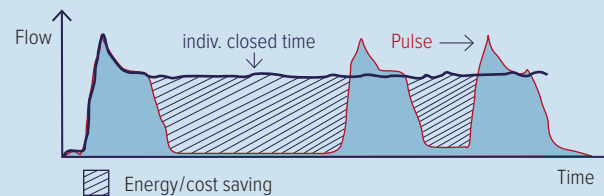
- Global Environmental Issues
- Global warming
- Air & Water pollution

Trend on reduction of CO2 emission

- Political driven
- Market is struggling to achieve reduction
- Energy saving

How does it work?

- Converts continuous air flow into pulse blow
- Reduces consumption of compressed air
- Reduces CO2 emission associated with production of compressed air
- Improved the impulse of air blow resulting in higher efficiency
- By pulse width modulation the flow can be controlled linearly up to 1000 Hz
- Extremely fast (1 ms), direct and stochastic switching, which allows realtime
- Big effect due to very fast short strong impacts and an individual controllable on/off timing



Value Proposition

- Reduces consumption of compressed air resulting in energy saving
- Improves impulse of air blow resulting in higher efficiency
- Reduces CO2 emission associated with production of compressed air
- Easy installation in existing pneumatic systems
- Short payback time
- Will contribute to companies environmental objectives
- Does not have the technical limitations of the competitors

Target Markets with high consumption of air compression

Forming

- Rubber/plastic Molding
- Die-casting
- Injection molding

Cutting

- Machine tool cutting
- Production machinery tool

Converting

- Paper applied
- Non-Food packaging
- Converting

Packaging and Conveying

- Cleaning and Distribution

Printing Industry

- Paper feeding/handling machinery

Filling

- Beverages and Food

Metall processing

- Milling/turning/shaving