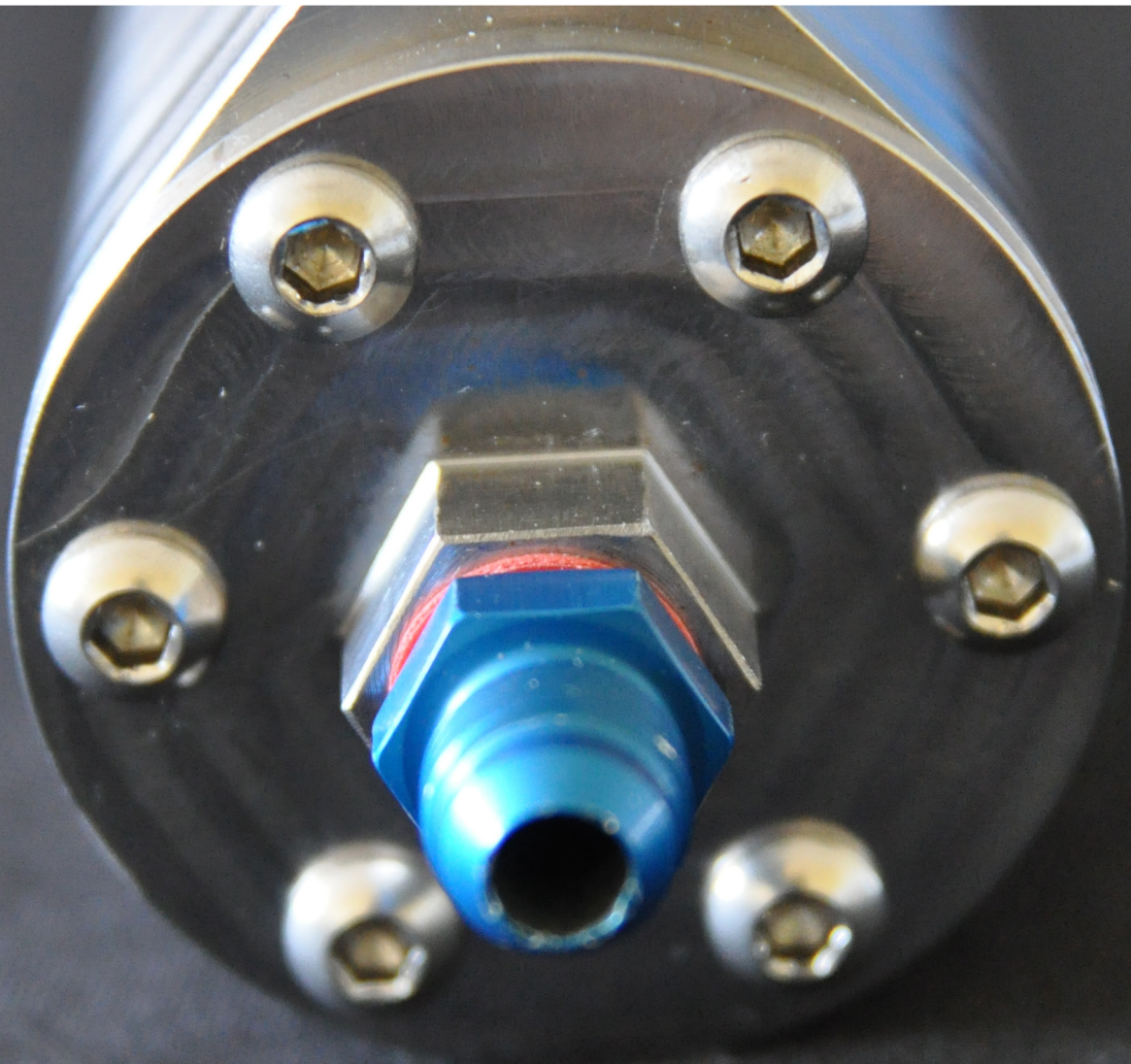




# Realtime Valves by KTW Systems

We redefine the terms »fast, flexible and reliable«  
for valves: smart valve technology



# With realtime into the future

Pneumatics, needle, spring or spindle are valve components from the past. The future belongs to the realtime capable, direct and stochastic switching magnetic valves with a calibre as locking element.

KTW Systems is proud to announce the future of the smart valve technology. The dosing range is up to 1.000 times larger than with conventional valves.

We have the solution for all existing problems in the application of valves. Our valves can be used anywhere where there is a flow, no matter if it is air, gases, water or viscous media. And this with a high pressure variance and flexible flow rates.

Less complexity, flexibility, cost efficiency, long service life, to name just a few advantages.

Our valves make new applications possible, increase efficiency and reduce costs in the production process.

## Our new innovations – Valve with ring technology

We've developed a solenoid valve that control flow through a ring instead of a ball.

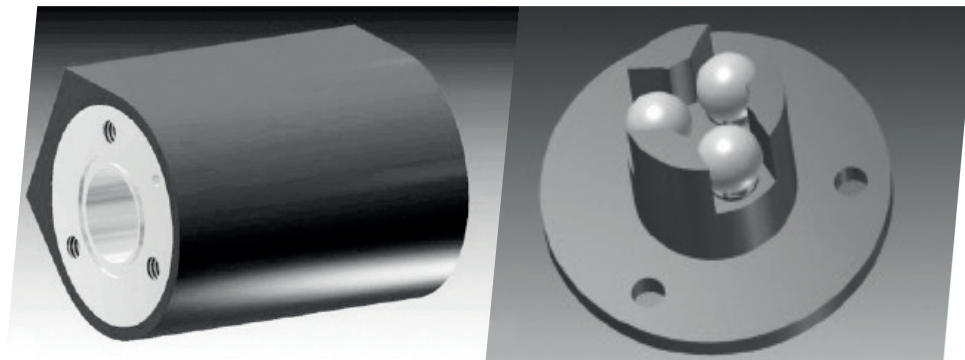
The effect is that the magnetic field needs less power to control the calibre.

This innovation in combination with the existing the characteristics of our high-speed switching valve opens up completely new possibilities for valves, for where a high Kv value is required.

## Valve with a multi-ball system

This innovation replaces the complex design of pilot-operated and readjusted valves. In this valve several valves are combined. In this valve several valves are combined.

But the smart valve is also a perfect solution when high pressure and high flow are required.



# Realtime Valves by KTW Systems avoid bottlenecks – for the highest quality standards

## Sample Applications

- Water supply
- Cooling, lubrication and dosing
- Control of cleaning processes
- Stream sterilization control
- Control of diesel and auxiliary materials
- Direct water injection
- Filling of infusions, eye ointment
- Dosage of the crop protection consumption
- Impulse valve for UAVs to open the parachute
- Pressure vessels in carrier rockets
- Spraying of chemicals and gases
- Filling of beverages
- Compressed air dosing
- Dosing in textile machines
- Dosage in spray robots

From welding robots to waterworks, from dedusting in open-cast mining to cabin pressure control in aircraft; from saving compressed air to bottling beverages – with our valves as a reliable solution. Component of the products they use. Everything is possible with these technology.

Our valves are extremely flexible and replace a large number of individual solutions.

## Industrial Applications

Aerospace	security industry	sanitation
farming	mechanical engineering	shipbuilding
compressed air	energy	semiconductor
analytics	food	textile
automotive	medical technology	water treatment
biotechnology	defence technology	genetic engineering
cosmetics	packaging	mechanial engineering
chemistry	pharmacy	beverage industry
electronics	rail	

# Product features / USPs

KTW Realtime Valves are extremely flexible and replace a large number of individual solutions. Our valves do not have the disadvantages of needle, spindle or spring systems and convince with an extremely long service life – tested in more than 5 billion switching cycles due to low friction and minimal mechanical stress.

In addition, no pneumatic system is required. This fact alone leads to high cost savings in the production process.



## 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 in one component; 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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