

## Hydraulic Actuator by VAG - The efficient and safe way of moving water

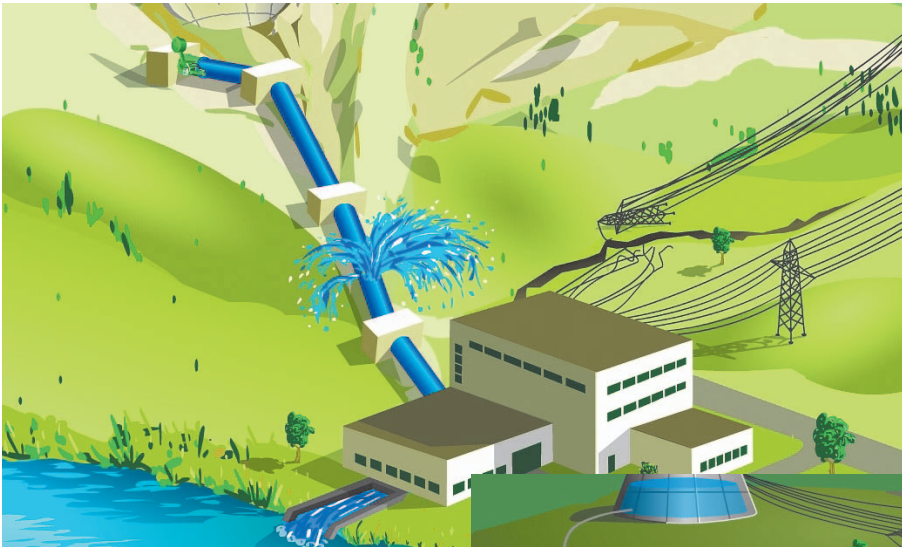


## Hydraulic Actuator by VAG - When performance and safety matter

When the performance and safety of supplying water matter, you can be sure that VAG Hydraulic Actuated Valves (VAG Brake-and-Lift Cylinders) are used. For example, as a check valve with lever and weight that is controlled through a brake-and-lift unit. VAG Brake-and-Lift Cylinders are equipped with an electrohydraulic actuator that moves the valves efficiently and safely.

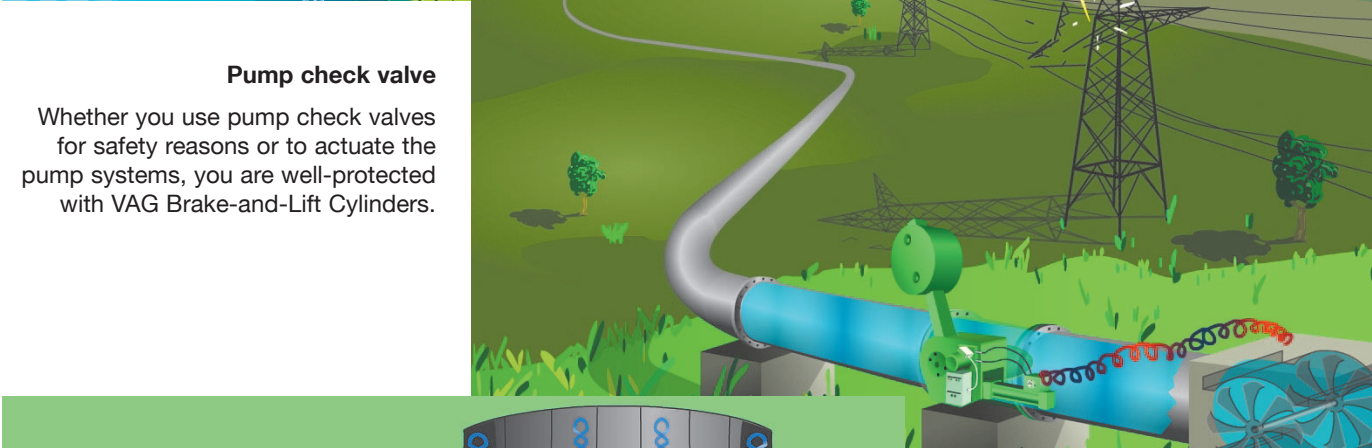
Their modular construction enables VAG Brake-and-Lift Cylinders to be used in a variety of areas. Extra functions are easily and quickly added by attaching a new module. For example, shut-off valves that have to be actuated as quick-opening valves without auxiliary power. Or as shut-down/control valve. Combined with a switch/signalling unit, VAG Brake-and-Lift Cylinders are perfect for this kind of application.

The highest safety is guaranteed wherever VAG Brake-and-Lift Cylinders are used:



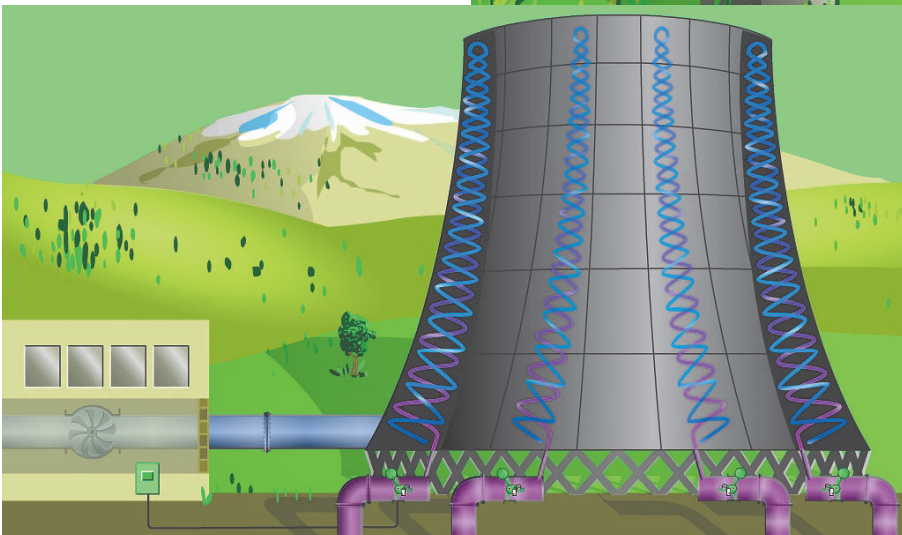
### Pipe burst safety device

With VAG Brake-and-Lift Cylinders we are able to close the pipeline immediately. So we can protect the pipeline from a waterhammer. This keeps damage and repairs to a minimum.



### Pump check valve

Whether you use pump check valves for safety reasons or to actuate the pump systems, you are well-protected with VAG Brake-and-Lift Cylinders.



### Quick opening/quick closing valve

As quick opening/quick closing valves, VAG Brake-and-Lift Cylinders react as fast as lightning. During the shut-off from turbine supply lines VAG Brake-and-Lift Cylinders are used as emergency supply for fire extinguishers or cooling circuits in power stations a safe matter.

# Hydraulic Actuators by VAG -

## Perfect handling, maximum functionality

VAG Brake-and-Lift Cylinders integrate all drive, actuator, and control devices into a compact unit. The ready-for-use assembly can be delivered optionally with a built-in terminal or control box. All you have to do to put the assembly into operation is plug it into the power supply. VAG Brake-and-Lift Cylinders are quick to install and put into operation.

VAG Brake-and-Lift Cylinders are also optimally prepared for specific applications. Each of the operation times are easily set on site using the adjustable flow regulator that is installed on all VAG Brake-and-Lift Cylinders. And we can easily and quickly prepare your VAG Brake-and-Lift Cylinders for new applications by extending their functionality with optional modules.

## Advantages that increase your benefits ...

VAG Brake-and-Lift Cylinders are particularly user friendly. Their compact design, easy handling and extensive functionality guarantee high customer satisfaction with maximum benefit and maximum safety. For example, the space-saving design enables VAG Brake-and-Lift Cylinders to work safely and reliably in even the smallest of spaces. This is only one of the many advantages. Find out more about our product and let the following advantages speak for themselves:

### Compact actuator unit with closed oil tank

In contrast to units with an open oil tank that usually have to be put into operation on site by service technicians, VAG delivers actuator units that fulfil your requirements perfectly. The pre-assembly and the required configuration activities are carried out at our manufacturing plant. You benefit from the unit's operational readiness and reduced service costs.

#### Advantages:

- Ready-to-use VAG drive
- Immediately ready for operation

### Submerged motor with protection class IP 68

Valves with hydraulic actuators often have to be installed under adverse environmental and space conditions. VAG Brake-and-Lift Cylinders with submerged motor and protection class IP 68 make things a lot easier. Their compact, space-saving and corrosion resistant design means they are optimally prepared for every application and are quickly installed.

#### Advantages:

- Space-saving
- High corrosion resistance
- Floodable

### Hydraulic piston pump with redundant pump components

VAG Brake-and-Lift Cylinders with piston pump and redundant pump components provide double safety:

- Redundant pump components guarantee operational reliability even if one of the components fails
- Integrated pressure-limiting valve protects the actuator unit from damage caused by overpressure in the oil circuit

#### Advantages:

- Double safety
- Integrated pressure-limiting valve

### Stainless steel valve manifold with corrosion-resistant flow regulators

VAG Brake-and-Lift Cylinders are always equipped with a stainless steel valve manifold and corrosion-resistant flow regulators. Service costs are kept to a minimum while ensuring maximum service life.

#### Advantages:

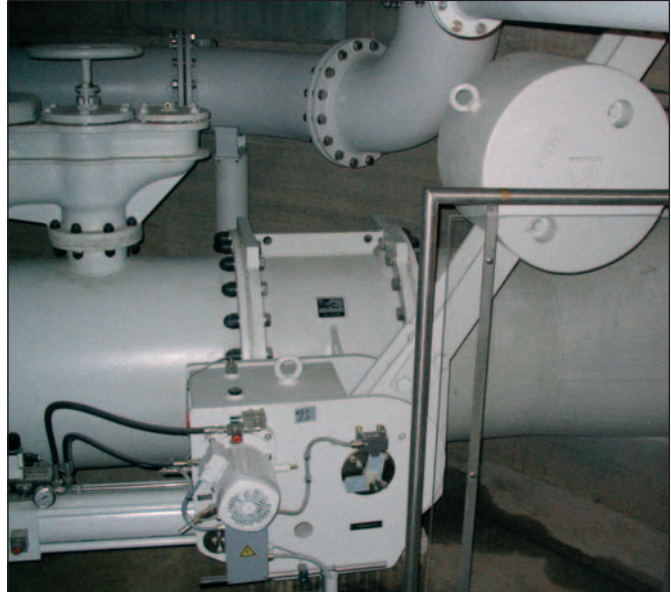
- Long-lasting and maintenance-free
- Can be extended at a later stage

# Hydraulic Actuators by VAG - The possibilities are yours!

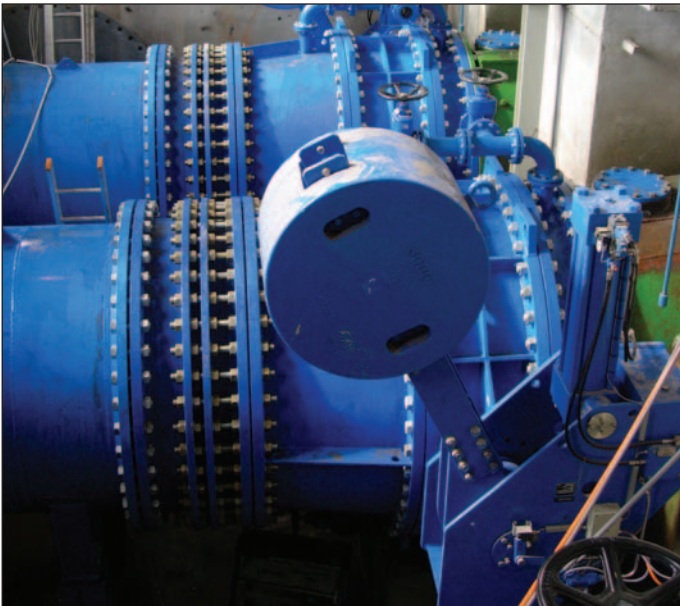
## Application examples:



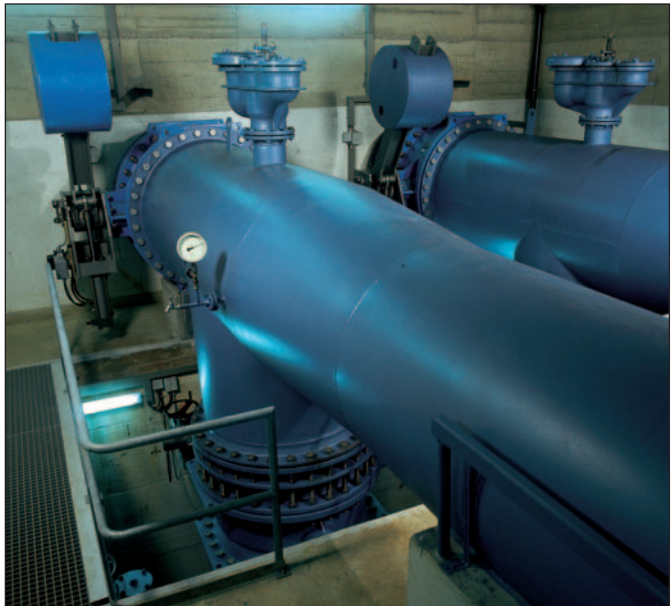
**Horizontal cylinder, anti clockwise closing**  
VAG RIKO® Plunger Valve DN 150 with Brake-and-Lift Cylinder, installed in the pumping station in Neuenkleussheim in Germany.



**Horizontal cylinder, clockwise closing**  
VAG EKN® Butterfly Valves DN 800 with Brake-and-Lift Cylinders, installed in the Lichtenberg dam in Germany.



**Vertical cylinder upward, anti clockwise closing**  
VAG EKN® Butterfly Valves DN 2000 with Brake-and-Lift Cylinders, installed in the Rurdam Schwammenauel in Germany.



**Vertical cylinder downward, clockwise closing**  
VAG EKN® Butterfly Valves DN 1200 with Brake-and-Lift Cylinders, installed in the Eibenstock dam in Germany.



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