

# Zero emission control valve

Low power integrated actuator, extremely accurate, zero fugitive emissions

## Type designation

Zero emission control valve

## Mokveld model

ZEV-R ....

## Size and pressure ratings

- Sizes 6" - 24"
- Rating ASME class 150 - 600
- Other sizes and ratings available upon request

## Typical applications

- M&R stations
- Mixing stations
- Any control valve application

**World  
First!**

Avoid leakage to atmosphere,  
comply with regulations, achieve  
net-zero Scope 1 GHG protocol  
with Mokveld's

**ZERO emission  
control valve.**



Check our website for  
videos and more about  
this Zero emission valve



## Mokveld Zero emission control valve main benefits:

### Zero fugitive emission

The inherent design eliminates fugitive emissions, leakage and unintentional losses over the lifetime of the valve. The internal actuator removes the need for dynamic packing seals thus eliminating the main leak path of more common valve designs, achieving zero external leakage. 'Wear and tear', causing increasing emissions to atmosphere are history. The single piece body casting without body/bonnet seal results in no leak paths.

### Lower weight, lower GHG

The streamlined flow path of the axial flow concept prevents erosion and vibration and allows smaller valve sizes as a result of the inherent high capacity. This results in lower weight and volume reducing both the actual and the environmental footprint. Process downtime and maintenance costs are reduced.

### Accurate control and high turndown

Extremely accurate control and a response without dead time makes this the ideal control valve for almost any application. The highly efficient and accurate integrated servo actuator outperforms any other actuator. Packing friction is eliminated, the design is fully pressure balanced, allowing perfect controllability.

### Lowest power consumption

Valve sizes up to 24 inch can be powered by 48V DC and require less than 400 watts (during stroking). During stand-still the power to the motor is cut reducing overall consumption. Minimal power requirement during movement and almost zero power when stationary makes it the optimum choice for remote locations, such as solar powered sites or those relying on uninterruptible power source (UPS) or a nobreak to assure availability.

### Reducing operational cost (OPEX)

The Leak Detection And Repair (LDAR) effort is limited to the flanges only. The maintenance free concept makes it possible to weld the valve in the line and apply it in buried applications. This further reduces LDAR cost as well.

### Diagnostics available

In order to further reduce the OPEX the electric servo actuator provides continuous diagnostic data which can be used to evaluate the status of the control valve.

### Special features

- Create a 'self-acting control valve' with the integrated PID controller and a pressure transmitter, additionally even with a remote set-point.
- Solar powered solution.
- 'Fail' action by power pack or your own UPS.
- Custom designed valve and trim for each unique control application.
- Cage designed for each specific application to reduce noise and/or cavitation to a minimum whilst obtaining maximum capacity where required.
- Reliable Class VI seat leakage.
- Suitable for bi-directional control.

**For more information, please contact Mokveld.**

