

ZEV
R

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**

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. Zero external leakage throughout the lifetime of the valve, 'wear and tear' resulting in increasing emissions to atmosphere are history.

Axial flow

Reduced number of leak paths as a result of the single piece body casting, without body / bonnet seal. The low weight and reduced volume reduces the actual and the environmental footprint. The streamlined flow path through the full-port expanded body prevents erosion and vibration and allows smaller valve sizes as a result of the inherent high capacity. Process downtime and maintenance costs are reduced.

Accurate control and high turndown

Extremely accurate control and a response without dead time makes this an ideal control valve for almost any application. The highly efficient and accurate technology of the servo actuator allows positioning with unmatched precision. The valve starts moving as soon as a position change is received making the dead time close to zero.

Lowest power consumption

Extremely low power consumption achieved by integrating the electric actuator inside the fully pressure balanced valve. Valve sizes up to 24 inch can be powered by 48V DC and require less than 400 watts (during stroking). Minimal power requirement during movement and almost zero power when stationary means the valve is the optimum choice for remote locations, such as solar powered sites or those which rely on uninterruptible power source (UPS) or no-break to assure availability.

Reducing operational cost (OPEX)

Compared to any other valve, the Leak Detection And Repair (LDAR) effort is vastly reduced. The maintenance free concept makes it possible to weld the valve in the line and even apply it in buried applications.

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

- Integrated PID controller creates a 'self-acting control valve' loop with pressure transmitter (if required 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.

