

Axial Check Valve

Fast acting non-slam protection for water applications

Type designation

Solid disc, non-slam nozzle check valve

Mokveld model

TKZ-Y

Size and pressure ratings

- Sizes 2" - 84" (DN 50 - DN 2100)
Larger sizes upon request
- Rating ASME 125 - 2500 (PN 16 - PN 420)

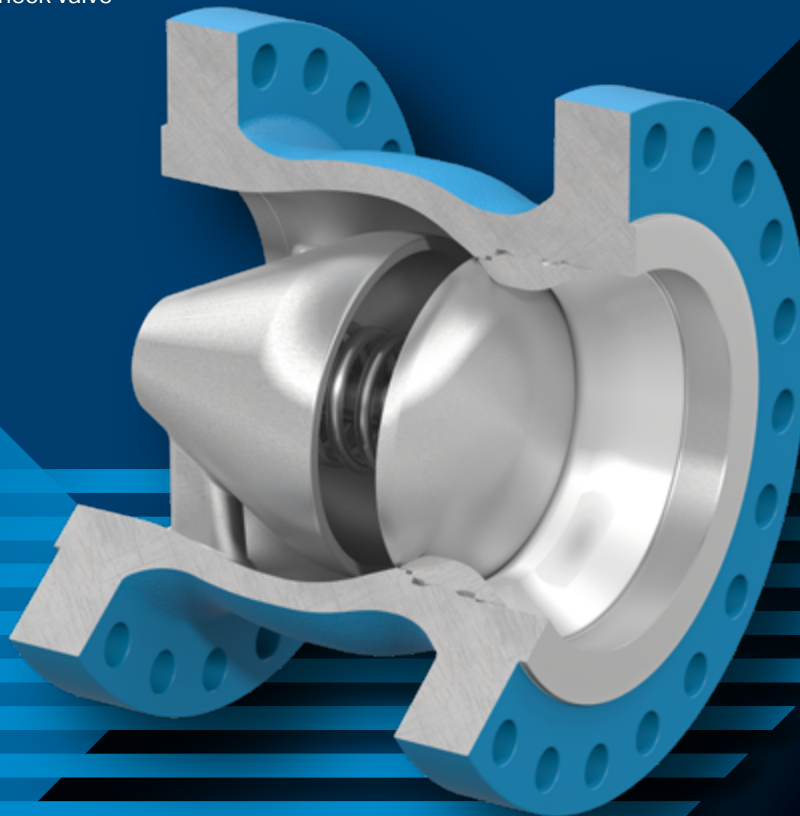
In preference to

- Swing check valve
- Dual-plate check valve
- Ring disc check valve

- Piston check valve
- Silent check valve
- Tilting or Pivoting disc check valve

Typical applications

- Waterworks and transmission systems, mains, loops, crossovers and tunnels
- Pump discharge
- Water hammer prevention
- Potable and raw water
- Cooling water systems



Mokveld axial check valves offer the following main features:

Axial flow

Streamlined flow path through expanded body avoids turbulence and prevents erosion and vibration. Process downtime and maintenance costs are eliminated. For most applications 2x DN straight length upstream and downstream is sufficient. Shorter lengths can be discussed.

Engineered Check Valves

When selecting check valves it is crucial to correctly size the valve for the application. Mokveld does not supply any check valves off-the-shelf. Each Mokveld check valve is customized for the specific application, including NSF-61 compliance.

Ultra-low pressure loss

The full opening flow passage and high-pressure recovery of the Venturi-shaped body result in very low pressure losses which yield significant long-term savings due to reduced operating cost of pumps.

Tight shut-off

Tight shut-off is obtained by means of metal-to-metal sealing between the disc and the seat. This sealing is not affected by erosion and deformation of material (like with a soft seal).

Low cracking pressure

The stability of a pump during start-up benefits from a low cracking pressure. This is achieved with a large disc that has identical effective pressure areas on both sides (line contact sealing).

Easy opening and stable operation

With start of flow the low static pressure in the Venturi-shaped throat area creates a pressure differential over the disc, resulting in easy opening. The axial check valve responds smoothly to changes in flow and remains stable when it is supposed to be.

Non-slam operation

The spring-assisted design ensures ultra-fast closing with virtually no backflow and pressure surges in critical applications such as multi-pump systems.

Maintenance free

Internal construction is based on the application of sound basic mechanical engineering principles. Consequently, Mokveld axial check valves do not require any maintenance.

Reliable performance prediction

Both the pressure drop and the dynamic behaviour can be predicted with great accuracy, based on full-scale laboratory flow tests and a mathematical model.

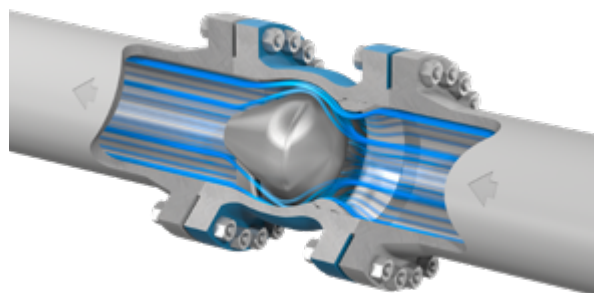
Horizontal or vertical

Whether installed horizontal or vertical, flow up or down, this will have no influence on the performance of our check valves.

Other unique features

NSF-61 compliant version available.

For more information, please contact Mokveld.



Mokveld Valves BV, experts in axial valve systems.

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