

Axial Check Valve

Fast acting non-slam protection for water applications

Type designation

Solid disc, non-slam check valve

Mokveld model

TKZ-Y

Size and pressure ratings

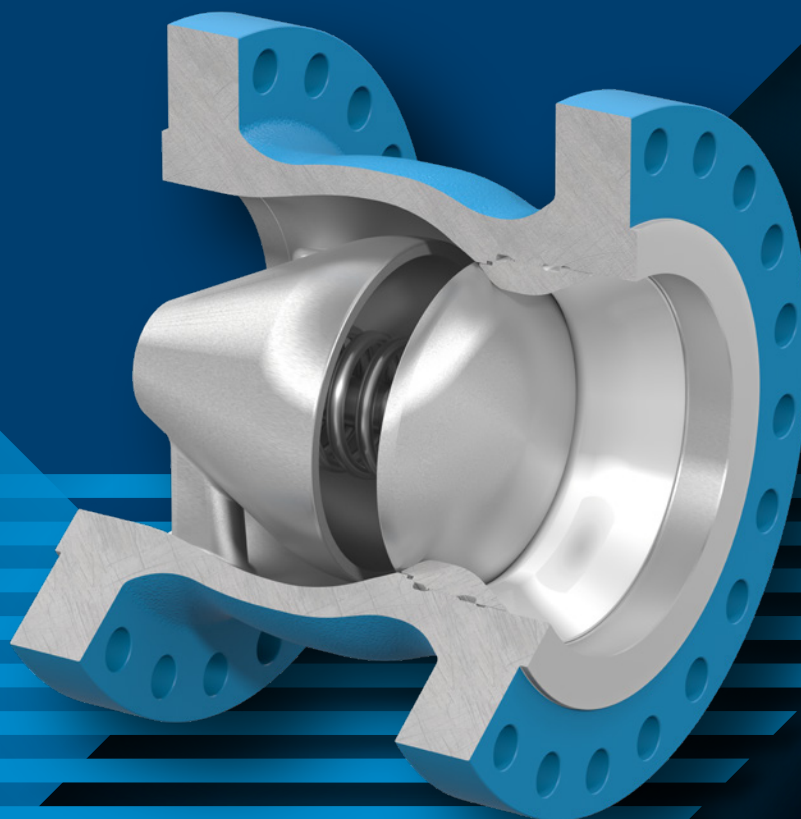
- Sizes 2" - 84" (DN 50 - DN 2100)
- Larger sizes upon request
- Rating ASME 125 - 2500 (PN 16 - PN 420)

In preference to

- Silent check valve
- Tilting or Pivoting disc check valve
- Ring disc check valve
- Swing check valve
- Dual-plate check valve
- Piston check valve

Typical applications

- Pump discharge
- Water hammer prevention
- Pipeline
- Cooling water system



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.

Engineered Check Valves

When selecting check valves it is crucial to correctly size the valve for the application instead of simply selecting a check valve based on the line size and pressure rating. Mokveld does not supply any check valves off-the-shelf.

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

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 developed in cooperation with a recognized fluid hydraulics laboratory.

Horizontal or vertical

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

For more information, please contact Mokveld.

