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.