Axial On-Off Valve
Balanced piston valve for special applications

Type designation
On-off or isolating valve

Mokveld model
RZD - X...

Sizes and pressure ratings
• Sizes 2" - 72"
• Rating ASME Class 150 - 2500
  or API 3000 - 10 000
• Higher pressure ratings upon request

In preference to
• Ball valve
• Plug valve
• Gate valve

Typical applications
• Quick-acting on-off (HIPPS, ESD)
• Severe-duty on-off (upstream)
• Flow line and header on-off
• Critical isolation, start-up and blow-down
Mokveld axial on-off valves main features:

**Axial flow**  
Streamlined flow path through full-port expanded body avoids turbulence and prevents erosion and vibration. Process downtime and maintenance costs are reduced.

**Low pressure loss**  
The capacity of the axial on-off valve is extremely high, as a result of which the pressure loss is negligible. Operating costs of pumps and compressors are reduced.

**Pressure-balanced**  
Operating forces are independent of pressure. Valve can be opened against full differential pressure without damage to sealing. Equalisation with bypass valve is not required.

**Easy actuation**  
Actuation force is low and constant because of pressure-balanced trim. Small, spring-opposed actuators can be selected and gearboxes are not required.

**Excellent sealing**  
In the open position the main seal is protected against erosive flow. The self-energising sealing system offers reliable bi-directional and bubble-tight shut-off (class VI).

**Compact**  
The one-piece valve body provides 15% - 60% weight reduction compared to ball or gate valves. This feature is even more attractive combined with spring-opposed actuators.

**Fire-safe**  
The seals that prevent internal and external leakage are secured inside the valve body and therefore less susceptible to external heat sources. All axial on-off valves are certified fire-safe.

**Special features**  
- Custom-designed.
- Safety: secured process isolation by means of reliable on-off technology (HIPPS).
- Very fast stroke times: 20" Class 1500 in less than 2 seconds.
- Suitable for infrequent use: operating forces do not increase over time. No sticking.
- Low fugitive emission: Tightness class B certified conform ISO 15848-1 (optional).
- Full range of matching Mokveld pneumatic and hydraulic actuators with tailored control arrangements is available. Electric and electro-hydraulic actuation is also available.

For more information, please contact Mokveld.