Piston type anti-siphon valve

benefits

- Piston instead of diaphragm - for maximum safety even in case of pollution, ice or system overpressure
- Adjustment value corresponds to the safe height (reduced line resistance)
- also for outdoor use (manhole)
- sealed system for error-free operation
- pressure relief mechanism in both directions
- Proofed Barrier (odour-tight)
- materials resistant to biofuel and biodiesel with max. 100 % FAME
- green fuels ready: suitable for use at tank facilities filed with the new paraffinic fuels HVO or GTL
- watertight up to 10 m water column - ideal for use in flood hazard areas

Application

For oil carrying suction lines in fuel oil consuming systems where a pipe section is below the maximum tank level. KAV keeps fuel oil from being siphoned out of the tank in the case of leaks.
Suitable for fuel oil EL (DIN 51603-1), diesel fuel (EN 590), liquid fuels as per DIN SPEC 51603-6 and DIN/TS 51603-8 as well as biofuel and biodiesel with up to 100 % FAME (EN 14214). This product is therefore ideal for all ecologically upgraded fuel oil consuming systems that use the new paraffinic fuels HVO or GTL as an admixture or 100 %. Also for use in flood hazard areas and flood risk areas.

Description

Vacuum-controlled shut-off system with a completely new function principle. KAV is closed when the burner pump is not in operation. When the burner pump starts, a vacuum is generated in the suction line. This opens the KAV and fuel oil is pumped from the tank. If the suction line has a leak or if the burner pump stops, KAV closes and the suction line between the tank and the burner pump is closed. KAV features a pressure relief mechanism, i.e. if the fuel oil contained in the suction pipe heats up and therefore expands, KAV opens. The fuel oil can flow back into the tank, provided that a tank withdrawal fitting without backflow preventer is installed. The pressure relief is independent of the adjusted safe height and operates reliably at a response pressure as low as 300 mbar. KAV is continuously adjustable from 1–4 m. The adjusted value corresponds to the actual safe height and not the installation height (as, for example, in the case of diaphragm type anti-siphon valves). This results in reduced line resistance, which has a positive effect on the service life of the burner and the pump. KAV is designed as a sealed system. Therefore, no vent is required and water or dirt cannot get into the system. Since the sensitive diaphragm as the main actuating element has been replaced by a piston, malfunctions caused by pollution, ice or system overpressure (rupture of the diaphragm) are practically impossible. Watertight up to 10 m water column.

Technical Specifications

Adjustment of safe height
corresponds to actual safe height
1 – 4 m, fully adjustable

connection thread
both ends G⅜ female

Mounting position
any

Oil flow rate
max. 220 l/h

Operating temperature range
Medium: -25/+40 °C
Ambient: -25/+40 °C

Vacuum-tight
bis -1 bar

Test pressure
max. 10 bar

Response pressure
pressure relief: 300 mbar

Material
Housing: Brass

approval
Z-65.50-415

Scope of delivery
- Piston type anti-siphon valve
- screw connector kit for pipes ⌀ 6, 8 and 10 mm
- Lead sealing kit

Versions

		Part no.
Piston type anti-siphon valve KAV	●	20240

● in-stock items

○ Non-stock items