Piston type anti-siphon valve KAV

A sealed system for safe fuel oil pipes.

Option:
Pressure gauge for indicating the KAV opening pressure

Your benefits

- Piston instead of diaphragm – for maximum safety even in case of pollution, ice or system overpressure
- Height difference continuously adjustable from 1 m to 4 m
- Adjustment value corresponds to the safe height (reduced line resistance)
- Also for outdoor use (manhole)
- Sealed system for error-free operation
- Pressure gauge can be connected

Application

For oil carrying pipes in oil fired systems as per DIN 4755 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 in the suction line. Suitable for the following media: fuel oil (DIN 51603-1) and diesel fuel (EN 590) as well as biofuel (EN 14213) and biodiesel (EN 14214) with up to 100 % FAME.

PROOFED BARRIER

FOR BIO-OIL 100% FÜR BIO-ÖL

SUITABLE FOR FLOOD AREAS

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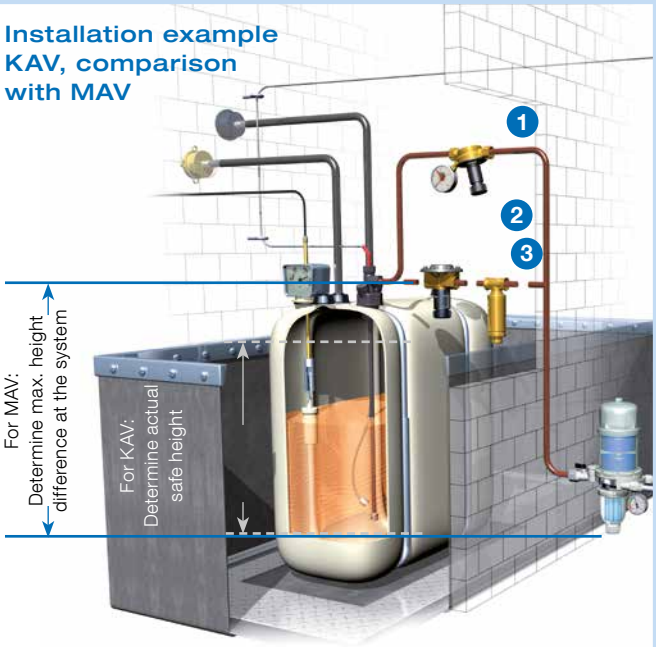
Description

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 shut off.
KAV features a pressure relief mechanism, i.e. if the fuel oil contained in the suction line 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 (= max. liquid level) and not the installation height (as 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 pressure relief port 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 or malfunctions caused by a diaphragm are practically excluded.

Installation example KAV, comparison with MAV



1. Piston type anti-siphon valve KAV*
2. Diaphragm type anti-siphon valve MAV*
3. Pressure compensation unit DAE

* Mounting position (example), arrangement is variable and must be adapted to suit local conditions.

Technical specifications

Adjustment of safe height	1–4 m, continuously adjustable ≙ actual safe height
Connection thread	⅜ female thread at both ends
Mounting position	Any
Oil flow rate	Max. 220 l/h
Operating temperature range	Medium: 6/40 °C Ambient: -25/+60 °C (function range)
Vacuum-tight	Up to -1 bar
Test pressure	Max. 10 bar
Response pressure	300 mbar
Housing material	Brass
Approval for construction products	Technical Approval of the German Institute for Civil Engineering (DIBt) Z-65.50-415
Scope of delivery	Piston type anti-siphon valve with screw connector kit for pipes Ø 6, 8 and 10 mm and lead sealing kit

Tester anti-siphon valve

- Reliable function test of all mechanical anti-siphon valves (manufacturer-independent)
- Simple and reliable check and assessment of the system safety

Your dealer

Version	Part no.
Piston type anti-siphon valve KAV	**20240**
Pressure gauge (-0.7/+0.9 bar) for indication of the opening pressure of KAV	**70030**
Tester anti-siphon valve	**20239**

Ident-Nr. 991517 06706 10/14

AFRISO-EURO-INDEX GmbH · Lindenstr. 20 · 74363 Güglingen · Germany · Phone +49 7135 102-0 · Fax +49 7135 102-147 · info@afriso.com · www.afriso.com