Datasheet
Wet Alarm Check Valve
Model: WAC

Description

The VID Fire-Kill Model WAC Wet Alarm Check Valves are a series of robust and reliable clapper and wafer style alarm check valves. The WAC Wet Alarm Check Valve is able to detect low values of flow, commonly found in fine water spray systems and utilizes a Model AFA Anti False Alarm Unit to reduce the risk of false alarms as a product of pressure shocks.

The Model WAC Valves are divided into two specific product versions:

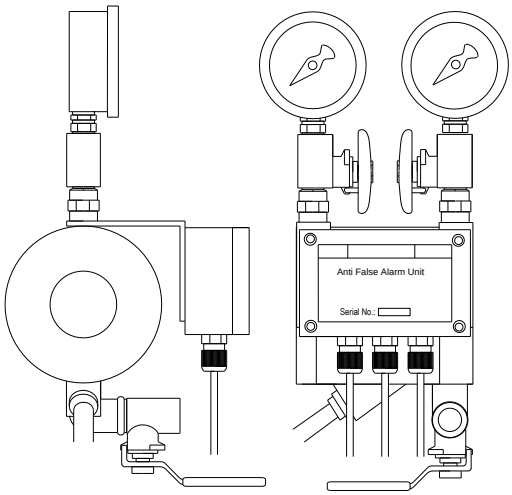
- **Type A:** The Model WAC designed for detection of flow rates above 5 ± 2 l/min.
- **Type B:** The Model WAC designed for detection of flow rates above 35 ± 3 l/min. *Note: This version does not enable the user to do manual senor tests without drain of the system*.

The Model WAC Alarm Check Valves can be supplied in several different sizes and variations as listed in Section 2.1 of this manual. Additional project specific variations to flow rates, size etc. can be acquired upon request.

Certain model WAC valves are FM Approved as a part of the FIREKILL FM approved system for FM HC1 occupancies. See below:

Sales and order number		Type A	Type B
		Flow rate: 5 ± 2 l/min	Flow rate: 35 ± 3 l/min
Model WAC	DN 40	WAC-10408	WAC-10439*
	DN50	WAC-10407	WAC-10438*

**FM Approved version*



General Description	
Dimensions	See fig. above
Materials	Bronze & Brass
Model WAC Valve Variations	DN 40 (1½")
	DN 50 (2")
Maximum Working Pressure	16 bar
Minimum Working Pressure	0.5 bar
Minimum detection flow rate	Type A: 5 ± 2 l/min
	Type B: 48 ± 3 l/min
Working temperatures	5°C – 55°C
Weight	6.5 kg

Related Products	
Name	Model
Automatic nozzle	Type FIREKILL OH- series
Gasket kit	NA.

Installation

The Model WAC valves are installed in wet pipe systems, down-stream from the system water supply and system pumps, where the valve is fitted between two flanges.

The valve should be positioned in accordance with the directions arrows on the body of the valve.

Once the valve is in place, the plate on the False Alarm Box should be unscrewed and the power supply and/or external panels should be connected to the valve and the plates should be fitted to the False Alarm Box in its original position.

It is recommended that the Model WAC valve is installed downstream from a monitored stop valve, both for maintenance purposes and for turning off the system after an actuation.

After the installation of the Model WAC valve the system should be checked for any leaks and that the valve emits an alarm signal when the pipes fill with water and that the alarm silences once the completely filled.

Service and Maintenance

The Model WAC valve should undergo maintenance when:

- The valve fails to sound alarms,
- The valves leaks externally
- The valve back-flow leaks internally.

Clapper Gaskets and O-rings

The O-rings & Gasket Spare Kit should be used when changing the valve gaskets.

Valve Alarm System

The Inductive Alarm sensor is factory set to sound alarm when water flows through the valve (Factory set delay time: 8 - 10 seconds).

The Inductive Alarm sensor should only be maintained if the sensor fails to operate, or if water leaks from the sensor.

Check of False Alarm Unit

Before checking the False Alarm Unit, it should be made sure that the system is switched on, that the system is connected to a 12 Vdc – 24 Vdc and that the system is connected correctly to any external alarm circuits and panels, and that the panels/circuits are performing as intended.

Inductive Alarm System

When maintaining or adjusting the Inductive Alarm System, it is recommended to have the Service Pack, including the “Inductive sensor including sensor house and installation tools” available.

Caution

The Model WAC valve contains sensitive components and should therefore be handled with care.

Contact

For further information on the Model WAC valve or related products, please contact our sales department at Sales@vidaps.dk