

Description

The **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 can 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 15 – 20 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 sensor tests without drain of the system.*



The Model WAC Alarm Check Valves can be supplied in several varied 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 **FIRE KILL™** FM approved system for FM HC1 occupancies.

Technical data

Specification	
Materials	Bronze and brass
Model WAC Valve Variations	DN40 – 1 ½" DN50 – 2"
Max Working Pressure	16 bar
Min Working Pressure	0,5 bar
Minimum detection flow rate	Type A – 15 l/min Type B – 35 l/min
Working temperatures	5°C to 55°C
Weight Kg	DN 40 – 4,70 Kg DN 50 – 6,35 Kg
Related products	
Name	Model
Automatic nozzle	FIRE KILL™ OH Series
Gasket kit	N/A
Filter	Model F

Dimension	Flow l/min	Pressure drop	
DN 40	376,00 l/min	0,22 bar	
	426,00 l/min	0,28 bar	
	470,00 l/min	0,34 bar	
	517,00 l/min	0,40 bar	
	565,00 l/min	0,50 bar	
DN 50	638,00 l/min	0,08 bar	
	715,00 l/min	0,10 bar	
	794,00 l/min	0,12 bar	
	873,00 l/min	0,14 bar	
	950,00 l/min	0,18 bar	
Sales and order number	Type A	Type B	
	Alarm flow rate: 15-20 l/min	Alarm flow rate: 35 ± 3 l/min	
Model WAC	DN40	WAC-10408	WAC-10439*
	DN50	WAC-10407	WAC-10438*

* *FM Approved version*

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.

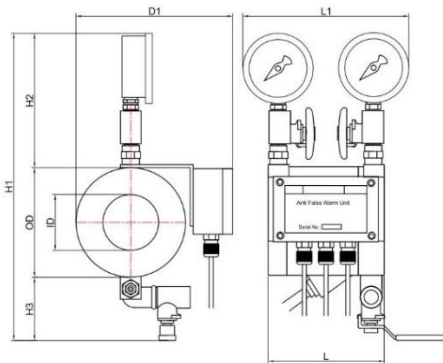
The valve should be positioned in accordance with the directions arrows on the body of the valve.

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 system is completely filled.

Dimension



	WAC 40	WAC 50
L	150 mm	112 mm
L1	153 mm	160 mm
H1	288 mm	300 mm
H2	130 mm	130 mm
H3	64 mm	64 mm
OD	94 mm	106 mm
ID	42 mm	54 mm
D1	146 mm	160 mm

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.

Contact

For further information on FIREKILL™ products, please contact our sales department at Sales@vidaps.dk