

# VANE TYPE WATER FLOW DETECTOR WITH RETARD

Fig No.: WFD-V

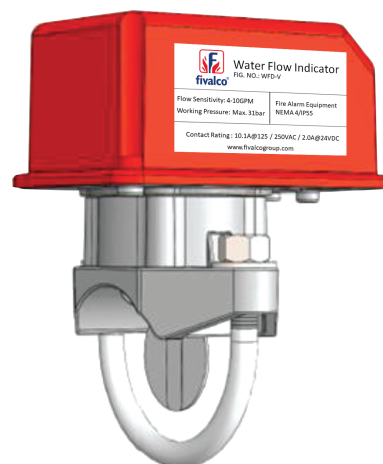
## DESCRIPTION

The WFD-V is a vane type water flow detector for use on fire protection and wet sprinkler system. It is suitable for use with Schedule 10 through 40 steel pipe of 2" to 8", and can be installed in vertical or horizontal pipe. The detectors shall have a sensitivity in the range of 4 to 10 gallons per minute, and a service pressure up to 450psi. WFD-V will respond to water flow in the specified direction after preset time delay that is adjustable on site.



## FEATURES AND SPECIFICATIONS

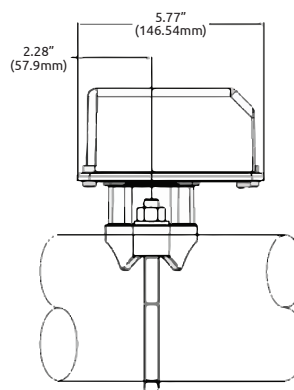
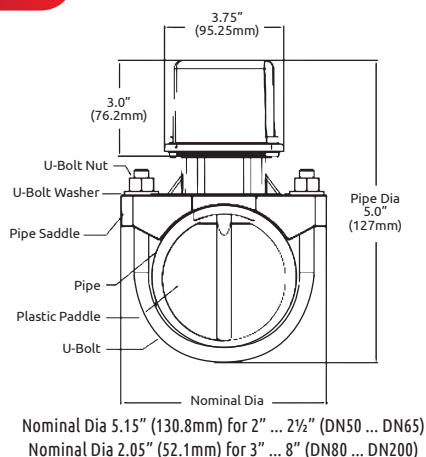
- Conforms to FM1042-2016 & UL346
- Two conduit opening of 1/2". One open; one knock-out type
- Sensitivity Range : 4 ... 10 usgpm
- Contact Rating : Two sets of SPDT (Form C) 10Amps (125 / 250 VAC) / 2Amps (24 VDC)
- Enclosure Rating : NEMA 4- suitable for indoor / outdoor
- Compatible Pipe : Steel pipe, Schedule 10 through 40
- Special tamper screws to prevent disassembly
- Maximum Surge : 5.5m/s
- Time delay adjustment via rotating dial
- Two sets Micro-switch, 100% synchronization
- Working pressure : Max. 31bar / 450psi
- Working temperature : 4.5°C ... 49°C
- Available in aluminium or ABS casing



## ORDERING MODEL AND SIZE

MODEL	DESCRIPTION	PIPE SIZE	HOLE SIZE
WFD-V-050	Vane Type Water Flow Detector	50mm (2")	31.8mm (1¼")
WFD-V-065	Vane Type Water Flow Detector	65mm (2.5")	31.8mm (1¼")
WFD-V-080	Vane Type Water Flow Detector	80mm (3")	50.8mm (2")
WFD-V-100	Vane Type Water Flow Detector	100mm (4")	50.8mm (2")
WFD-V-150	Vane Type Water Flow Detector	150mm (6")	50.8mm (2")
WFD-V-200	Vane Type Water Flow Detector	200mm (8")	50.8mm (2")

## DIMENSION



WATER FLOW INDICATOR

**VANE TYPE WATER FLOW DETECTOR WITH RETARD**

Fig No.: WFD-V

**INSTALLATION GUIDE**

The WFD-V water flow detector may be mounted on a horizontal or vertical pipe. On horizontal pipe, it should be installed on the top side of the pipe where they will be accessible. The detector should not be installed within 6" (150mm) of a fitting which changes the direction of the waterflow or within 24" (600mm) of a valve or drain.

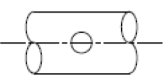
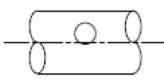
Drain the system and drill a hole on the pipe. The 2" (50mm) and 2½" (65mm) detectors require a hole with a diameter of 1¼" +/- 0.08" (31.8mm +/- 2mm). All other sizes require a hole with a diameter of 2" +/- 0.08" (50.8mm +/- 2mm).

Clean the inside pipe of all growth or other material for a distance equal to the pipe diameter on either side of the hole.

Roll the vane so that it may be inserted into the hole; do not bend or crease it. Insert the vane with the arrow on the saddle points in the direction of the waterflow.

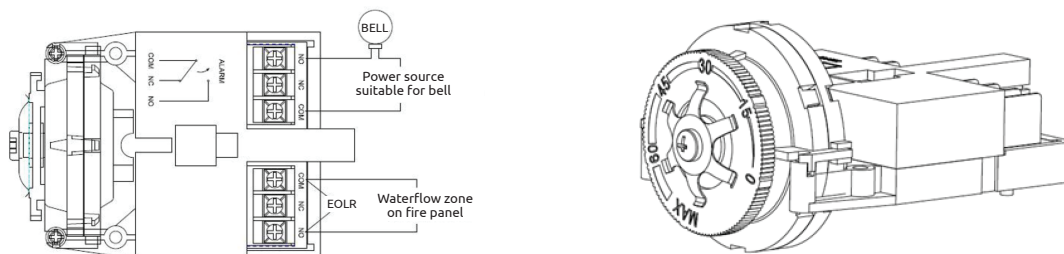
Do not leave cover off for an extended period of time.

Retard Adjustment : The delay can be adjusted by rotating the retard adjustment knob from 0~Max position (0~90 secs). Factory setting is position 2 (Delay time is approximate 30 seconds). The time delay should be set at the minimum required to prevent false alarms.

<b>CAUTION</b>	
Hole must be drilled perpendicular to the pipe and vertically centered.	
<b>CORRECT</b>	<b>INCORRECT</b>
	

**ELECTRICAL CONNECTIONS AND TIME DELAY ADJUSTMENT**

The WFD-V water flow detector have two switches, one can be used to operate a central station, proprietary or remote signaling unit, while the other contact is used to operate a local device or visual annunciator.



Note : Retard Structure can be set from "0" to "MAX" position, delay time can be set from 0~90 secs.