

FLO VANE TYPE WATER FLOW ALARM SWITCH

FEATURES

- Vane Type Water Flow
- Service Pressure: Up to 450 psi
- Flow Sensitivity Range For Signal: 4~10 GPM
- UL Listed
- FM Approved

TECHNICAL

- Code: FFS-VSR-F(size DN)
- Size Range: DN50 – 200
- Maximum Surge: 18 FPS (5.5 m/s)
- Contact Ratings: Two sets of SPDT (Form C)
10.1 Amps at 125/250 VAC
2.0 Amps at 24 VDC
- Operating Temperature Range: 4.5 °C to 49 °C
- Enclosure Rating: NEMA 4- suitable for indoor/outdoor use
- Conduit Entrances: Two openings for 1/2" conduit. One open, one knock-out type
- Compatible Pipe: Steel water pipe, schedule 10 through 40
- Service Use: Automatic Sprinkler AS 2118



**Flowcom
Model # CFS01**

INSTALLATION

The CFS01 Vane Type Water flow switch may be mounted on horizontal or vertical pipe. On horizontal pipe they should be installed on the top side of the pipe where they will be accessible. It is recommended that the device be installed within 150 mm of a fitting which changes the direction of the waterflow or within 600mm of a valve or drain.

Drain the system and drill a hole in the pipe using a circular saw in a slow speed drill. The 2" (50 mm) and 2-1/2" (65 mm) devices require a hole with a diameter of 1-1/4" \pm 0.08" (31.8 mm \pm 2 mm). All other sizes require a hole with a diameter of 2" \pm 0.08" (50.8 mm \pm 2 mm).

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 so that the arrow on the saddle points in the direction of the waterflow.

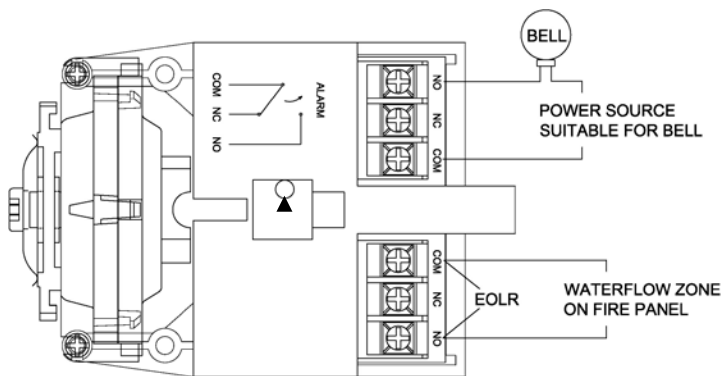
NOTE: Do not leave cover off for an extended period of time.

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.

ENGINEERING SPECIFICATIONS

The CFS01 Vane Type Water flow switch shall be installed on system piping as designated on the drawing and/or as specified herein. Water flow indicators shall mount on any clear pipe span of the appropriate nominal size, either a horizontal or vertical pipe. The indicators shall have sensitivity in the range of 4 - 10 gallons per minute and a static pressure rating up to 450 psi for 50mm thru 200mm pipes. The indicator shall respond to water flow in the specified direction after a preset time delay that is field adjustable. The retard structure shall be a sealed mechanical pneumatic unit with visual time delay adjustment.

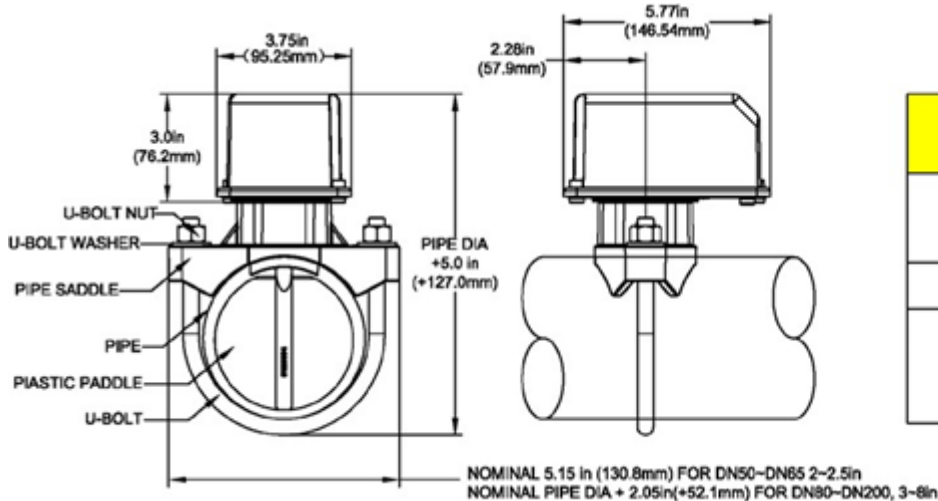
FIELD TYPICAL ELECTRICAL CONNECTIONS



CFS01 Vane Type Water flow switch 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.

This additional pin hole allows the wrench (coming with the device) to be inserted into it and temporarily stop the device from functioning causing false alarm during the maintenance. When the wrench is in place, it also prevents the red device cover to be re- installed.

MOUNTING DIMENSIONS



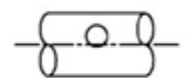
CAUTION

Hole must be drilled perpendicular to the pipe and vertically centered.

Correct



Incorrect



TESTING

The frequency of inspection and testing for the CFS01 Vane Type Water flow switch and its associated protective monitoring system shall be in accordance with applicable NFPA Codes and Australian Standards and/or the authority having jurisdiction (manufacturer recommends quarterly or more frequently).

If provided, the inspector's test valve shall always be used for test purposes. If there are no provisions for testing the operation of the flow detection device in the system, application of the CFS01 is not recommended or advisable.