



# Certificate of Conformity

Certificate num.	Registration date	Version	Valid until	
<b>afp - 1474</b>	12-Oct-2001	Number 16	Issue date 1-May-2019	30-Apr-2020

Page 1 of 2

## Product designation

**System Sensor, Accuflow™ AFD Series, Solid State Time Retard, Vane Type, Water Flow Detectors**

(Refer to the Schedule/enclosures for further specified details)

## Agent/distributor

Honeywell Security and Fire  
9 Columbia Way, BAULKHAM HILLS, NSW, AUSTRALIA, 2153

## Registrant

Honeywell Security and Fire  
9 Columbia Way, BAULKHAM HILLS, NSW, AUSTRALIA, 2153

### Producer

System Sensor, Ltd  
3825 Ohio Avenue, ST CHARLES, IL, UNITED STATES, 60174

## Conformance criteria and evaluation

The System Sensor, Accuflow™ AFD Series, Solid State Time Retard, Vane Type, Water Flow Detectors have been evaluated and verified as conforming with the relevant requirements of the following criteria.

1. Underwriters Laboratories - Evaluation and listing, 'UL listing'.

## Limitations/conditions of conformance

Limitations/conditions of conformance, where identified on this certificate, are derived from qualifications from evaluation(s) for conformity and/or other related technical documentation. All details with respect to design, assembly and installation instructions and restrictions should be checked against the producer's current technical manual/data sheets and the requirements of the Authority having Jurisdiction.

Specified limitations/conditions, determined from the evaluation for conformity, include the following.

- i. Use in wet-pipe systems only. Do not use them in dry-pipe, deluge, or pre-action systems. The sudden inrush of water in such systems may break or damage the vane or damage the mechanism. Do not use in potentially explosive atmospheres.
- ii. Do not use on copper pipe. The clamping forces of the mounting bolts may collapse the pipe sufficiently to prevent the detector from functioning correctly. Do not install steel or iron pipe sections in copper piping for mounting a waterflow detector. Incompatibility between the dissimilar metals causes bimetallic corrosion.
- iii. For two wire conventional control and indicating equipment, not more than 5 waterflow detectors may be connected across a single initiating zone.

Issued by

David Whittaker  
Executive Officer – ActivFire Scheme



© CSIRO Australia, 2019

This certificate remains the property of CSIRO and may be subject to amendment, suspension or withdrawal at any time.  
The validity and authenticity of this certificate can be verified by the certification register located at <http://www.activfire.gov.au>



This certification is issued within the scope of CSIRO Verification Services – Rules governing ActivFire Scheme and is valid only for the product(s) as submitted for evaluation and verification of conformity, subject to the following conditions.

- Reference to details, limitations and requirements, where documented as a schedule/enclosure with this certificate.
- The Registrant is responsible for their attestation of conformity and ensuring that on-going production complies with the conformance criteria defined in this certificate.
- This certificate will not be valid if any changes or modifications are made to the product which have not been notified and validated by CSIRO Verification Services.
- This certificate is subject to periodical re-validation upon verification that all requirements, as determined by the conformity assessment body, continue to be satisfactorily met by the Registrant.
- This certificate may only be reproduced in its published form, without modification and inclusive of all schedules/enclosures.
- Any changes, errors or omissions, must be submitted in writing and if necessary or requested, substantiated with relevant evidence.
- Any representations, such as advertising or other marketing related activities or articles shall reflect the correct contents of this certificate and conform with all relevant trade practices and consumer protection legislation and regulations.
- Any terms or conditions of use as applicable to content and documentation as published or accessed through web sites administered by the CSIRO Verification Services.

# Schedule to

## Certificate of Conformity

Certificate num.	Registration date	Version		Valid until	Page 2 of 2
<b>afp - 1474</b>	12-Oct-2001	Number 16	Issue date 1-May-2019	30-Apr-2020	

### Producer's description

The System Sensor, Accuflow™ AFD Series, Solid State Time Retard, Vane Type, Water Flow Detectors mount to water filled pipes in sprinkler systems in the horizontal or vertical position. The water flow in the pipe deflects a vane which produces a switched output, usually after a specified delay. All water flow detectors have a controlled delay mechanism. The delays do not accumulate. They are reset if the water flow stops before the entire delay has elapsed. All switches actuate when the water flow is 45.5 l/min or greater but will not actuate if the flow rate is less than 18.2 l/min.

The AFD series incorporates a solid state retard feature to ensure consistently accurate timing and minimising the risk of false alarms created by pressure surges or trapped in the sprinkler system. The solid state retard's sealed design is immune to dust and other contaminants.

### Technical specification

The following details are a representative extract of the technical specification for the System Sensor, Accuflow™ AFD Series, Solid State Time Retard, Vane Type, Water Flow Detectors and may be subject to change. Complete and current details should be determined from the designated producer's technical manual/data sheets.

<b>Switch contact ratings:</b>	0.6 A at 125 Vac 2 A at 30 Vdc
<b>Trigger threshold flow rate:</b>	18.2 to 45.5 litres/min
<b>Static pressure rating:</b>	3102 kPa
<b>Dimensions installed:</b>	88.9 mm H x 76.2 mm W x 170.2 mm D
<b>Operating temperature range:</b>	0°C to 49°C
<b>Voltage range:</b>	8.4 to 33 Vdc 108 to 132 Vac
<b>Power requirements:</b>	250 µA at 12 / 24 Vdc 400 µA at 120 Vac
<b>Enclosure rating:</b>	NEMA Type 4 (as tested by Underwriters Laboratory, Inc.)
<b>Shipping weight:</b>	1.82 to 3.18 kg - according to size

Model	Nominal pipe size (mm)
AFD20	50
AFD25	65
ADF30-2	80
AFD35	90
AFD40	100
AFD50	125
AFD60	150
AFD80	200