



Certificate of Conformity

Certificate num.	Registration date	Version	Valid until	
afp - 2427	30-Jun-2010	Number 8	Issue date 28-Apr-2017	30-Apr-2018

Page 1 of 3

Product designation

FireSense, FSH-OH Series, flexible sprinkler hoses

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

Agent/distributor

FireSense Pty Ltd
18-20 Brookhollow Avenue, BAULKHAM HILLS, NSW, AUSTRALIA, 2153

Registrant

FireSense Pty Ltd
18-20 Brookhollow Avenue, BAULKHAM HILLS, NSW, AUSTRALIA, 2153

Producer

FireSense Pty Ltd
18-20 Brookhollow Avenue, BAULKHAM HILLS, NSW, AUSTRALIA, 2153

Conformance criteria and evaluation

The FireSense, FSH-OH Series, flexible sprinkler hoses have been evaluated and verified as conforming with the relevant requirements of the following criteria.

1. Approval Standard FM Class Number 1637:February 2010, 'Approval Standard for Flexible Sprinkler Hose With Threaded End Fittings'.
2. Factory Mutual - Evaluation and approval, 'FM approval'.
3. Australian Standard AS 2118.1-2006, Clause 7.6, 'Automatic fire sprinkler systems - General systems'.

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. Specific or special requirements in relation to this product must be considered and included in the system design and installation.
- ii. For use on commercial T-bar grid suspended ceilings.
- iii. The maximum working pressure is 1380 kPa (200 psi).

Issued by

David Whittaker
Executive Officer – ActivFire Scheme



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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 3
afp - 2427	30-Jun-2010	Number 8	Issue date 28-Apr-2017	30-Apr-2018	

Producer's description

The FireSense, FSH-OH Series, flexible sprinkler hoses have been designed to reduce onsite installation time by allowing flexible positioning of the sprinkler heads relative to the branch lines.

The large internal diameter hose provides lower frictional losses, higher flow rates and consequently contributes to lowering sprinkler pipe and pump sizing.

Flat O-Ring seals make connection and/or re-connections simple and efficient. Anti-Slip grooves on straight reducers provide additional grip to eliminate any possible movement during sprinkler activation.

Hose assemblies are available in various lengths. Each assembly includes a 1" BSP branch nipple and a straight reducer with either a ½" or ¾" NPT female thread for connection to sprinkler head. 90° elbows are also available for maneuvering below duct work etc.

The mounting bracket assembly includes 2 x end bracket assemblies (available with fixed or "Wing Nut" screws), a Centre Bracket for positioning the reducer and a square caring bar to allow complete lateral alignment of sprinklers during installation. The caring bar includes center and outer marking for ease of positioning on a standard 1200 tile grid without the need for measuring.

Technical specification

The following details are a representative extract of the technical specification for the FireSense, FSH-OH Series, flexible sprinkler hoses and may be subject to change. Complete and current details should be determined from the designated producer's technical manual/data sheets.

Maximum working pressure:	1380 kPa (200 psi)
Connections:	
To branch line (inlet)	1" BSP male thread
To sprinkler head (outlet)	½" or ¾" NPT female thread
Minimum bend radius:	180 mm
Hose size:	DN25 equivalent as per AS2118:2006

Hose assembly - frictional loss table

Part num .	Hose assembly overall length		Outlet size NPT	Maximum num. of bends	Equiv length of 1" Sched 40 pipe m
	inches	mm			
FSH-OH-0610-1/2NPT	24	610	½"	1	1.5
FSH-OH-0790-1/2NPT	31	790	½"	2	2.7
FSH-OH-0915-1/2NPT	36	915	½"	3	3.5
FSH-OH-1220-1/2NPT	48	1220	½"	4	4.8
FSH-OH-1525-1/2NPT	60	1525	½"	4	6.4
FSH-OH-1830-1/2NPT	72	1830	½"	4	7.7
FSH-OH-0610-3/4NPT	24	610	¾"	1	2
FSH-OH-0790-3/4NPT	31	790	¾"	2	3
FSH-OH-0915-3/4NPT	36	915	¾"	3	3.8
FSH-OH-1220-3/4NPT	48	1220	¾"	4	5.1
FSH-OH-1525-3/4NPT	60	1525	¾"	4	6.6
FSH-OH-1830-3/4NPT	72	1830	¾"	4	8.2

Mounting bracket

Part num.	Bar length mm	End bracket	
		Screw	Height
FSH-BT2-FS *	1200	Fixed	Short (35mm)
FSH-BT2-FT	1200	Fixed	Tall (60mm)
FSH-BT2-WS *	1300	Wing	Short (35mm)
FSH-BT2-WT	1300	Wing	Tall (60mm)

* Use with FSH-ER-S short elbow reducer.

Schedule to Certificate of Conformity

Certificate num.	Registration date	Version		Valid until	Page 3 of 3
afp - 2427	30-Jun-2010	Number 8	Issue date 28-Apr-2017	30-Apr-2018	

Elbow reducers

Part num.	Type	Outlet NPT
FSH-ER-S-1/2NPT #	Short (100mm)	½"
FSH-ER-S-3/4NPT #	Short (100mm)	¾"
FSH-ER-L-1/2NPT	Long (160mm)	½"
FSH-ER-L-3/4NPT	Long (160mm)	¾"

Requires FSH-BT2-FS or FSH-BT2-WS mounting brackets.