



Certificate of Conformity

Certificate num.	Registration date	Version	Valid until	Page 1 of 2
afp - 1810	30-Jan-2006	Number 5	Issue date 1-Apr-2011	31-Dec-2011

Product designation

System Sensor, EPS120 Series, supervisory pressure switches

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

Agent/distributor

Firequip Pty Ltd
39 Brodie Street, RYDALMERE, NSW, AUSTRALIA, 2116

Registrant

Firequip Pty Ltd
39 Brodie Street, RYDALMERE, NSW, AUSTRALIA, 2116

Producer

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

Conformance criteria and evaluation

The System Sensor, EPS120 Series, supervisory pressure switches have been evaluated and verified as conforming with the relevant requirements of the following criteria.

1. Factory Mutual - Evaluation, surveillance and approval, 'FM approval'.
2. Approval Standard FM Class Number 3132:1970, 'Approval Standard for Pressure Actuated Waterflow Switches'.
3. NFPA Standard NFPA 72-1996, 'National Fire Alarm Code'.

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. These devices are unsuitable for potentially explosive atmospheres.

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.

Issued by

David Whittaker
Executive Officer – ActivFire Scheme



Schedule to Certificate of Conformity

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Producer's description

The System Sensor, EPS120 Series, supervisory pressure switches are designed to supervise air pressure in pipes or pressure tanks and water or air pressure supplies of automatic water control valves.

The System Sensor, EPS120 Series, supervisory pressure switches consist of a pressure chamber, actuating mechanisms and internal electrical switches housed in a cast aluminium base and thermoplastic cover. The switch diaphragm is ethylene-propylene dacron polyester fibre reinforced. The switch actuating mechanism consists of an electrical switch acted upon by a pivot plate on a spring loaded shaft. The shaft is displaced by a plunger which rests on a free end of a diaphragm. When sufficient pressure enters the chamber, the diaphragm is displaced which drives the plunger and shaft into the pivot plate which then actuates the electrical switch(s). Atmospheric and sprinkler system pressures in the switch piston chamber are separated by the diaphragm. Actuating pressures are varied by adjusting the spring compression on the piston.

The inlet flange connection of the switches is exposed to normal sprinkler system pressure. For switch actuation on decrease of pressure, the switch is normally actuated, when sprinkler system, pressure falls below the switch setting, the diaphragm relaxes enough to de-actuate the switch, thereby initiating a signal. When intended for operation on increasing pressure, the switch mechanism is normally relaxed.

The System Sensor EPS120 Series switches features adjustable pressure sensitivity to provide alarm response between 69 kPa (10 psi) and 1380 kPa (200 kPa). All models are factory set for use in a nominal 793 kPa (115 psi) system. The ESP120-1, Supervisory Pressure Switch is set to respond at 724 kPa (105 psi) at decreasing pressure while the ESP120-2, Supervisory Pressure Switch is factory set to respond at 862 kPa (125 psi) on rising pressure and at 724 kPa (105 psi) at decreasing pressure.

The EPS120-1 has a single SPDT switch while the EPS120-2 model contains two SPDT switches.

Technical specification

The following details are a representative extract of the technical specification for the System Sensor, EPS120 Series, supervisory pressure switches and may be subject to change. Complete and current details should be determined from the designated supplier's/manufacturer's technical manual/data sheets.

Switch contact ratings:	10.0 A, 1/2 HP at 125 / 250 Vac 2.5 A at 6 / 12 / 24 Vdc
Maximum operating pressure:	1414 kPa (205 psi)
Differential:	Approximately 21 kPa (3 psi) at 69 kPa (10 psi) Approximately 62 kPa (9 psi) at 1379 kPa (200 psi).
Maximum adjustment pressure range:	69 kPa to 1379 kPa
Pressure connection:	1/2" NPT Male
Operating temperature range:	-40° to 71°C
Dimensions:	130 mm H x 84 mm W x 108 mm L

Model	Function
EPS120-1	Low pressure supervisory switch
EPS120-2	High/Low pressure supervisory switch