

Dual Channel Aspiration Detector Model A320E

Overview

Features

- Dual channel aspiration smoke detection system
- Integrated into the main fire detection system
- Compatible with addressable or conventional detectors
- Upto 2000m² coverage through 2x100m pipes with 18 holes in each
- Integral display with local user programmable functions
- In-line air filter
- Local indication of airflow management status
- Adjustable airflow speed with visual monitor
- IP65 waterproof enclosure
- Design application for configuring the pipework



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Description

Aspiration systems are an effective way of providing very early warning protection for high value and enterprise critical areas; they are also an effective method of protecting large open areas or areas that are inaccessible or difficult to reach such as under-floor cable voids in computer rooms.

The A320E is designed for instances where the high sensitivity that is normally inherent in Aspiration detectors is an unnecessary expense or nuisance due to false alarms. The A320E dual channel aspiration detector becomes an integral part of the main fire detection system with direct communication from the panel to the installed detectors.

The units are supplied without bases or detectors, so they can be used in conjunction with any addressable or conventional System Sensor detector.

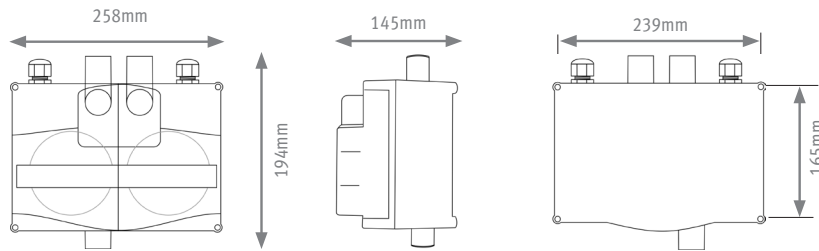
A single fan, mounted in the unit, is used to draw air through the input tubes, the fan is common across both tubes. High and low flow indicators are provided locally as a bar graph display in the unit. The pipework, typically 25mm in diameter, can be up to 100m in length per channel, giving a theoretical coverage of up to 2000m². Fault monitoring is through a common fault relay with visual indication

The A320E incorporates an in-line air filter housed in a removable cartridge to remove dust and particles from the air sample. It also provides closed loop sampling where the exhausted air can be completely returned to the sampled area if required.

The aspiration detector is powered from an external 24VDC supply.

Architect/Engineer Specifications

ASD Dual Channel Aspiration Detector



Installation Recommendations

Installation should be undertaken in accordance with recognised national or international standards and codes of practice.

We would also recommend that simulated fire tests are conducted to ensure that the desired response time for a given installation are met.

Electrical Specifications

Operating Voltage Range	18 to 30Vdc
Maximum Standby Current	100µA (with LED blink enabled)
Current Draw	80 to 500mA depending on pipe length and fan speed

Environmental Specifications

Application Temperature Range	-10°C to +55°C
Humidity	Humidity 10 to 93% (non condensing)
IP Rating	IP65

Fan Speed	Current /mA
10	330
9	260
8	200
7	160
6	125
5	100
4	75
3	60
2	50
1	50

Test performed with:
20m Pipe length
6mm End Hole

Mechanical Information

Maximum Pipe Length	100m per channel
Pipe Diameter	Typical 20mm to 26.7mm (3/4" BSP)
Pipe Hole Diameter	3mm & 6mm at end of pipe
Pipe Hole Spacing	15m
Max Wire Gauge for Terminals	0.4mm ² to 2.0mm ²
Weight	1750g

LED's

Per Channel	Power ON and Power Fault , General & Fan Fault, Mains Failure & Battery Low
Relay Output	Hi, Low and OK flow indication 10 LED bar graph of air speed 1 Fault Relay per channel

Product Range

A310E	Single Channel Aspiration Detector
A320E	Dual Channel Aspiration Detector
A211E-LSR	Single Channel Laser Aspiration Detector
A222E-LSR	Dual Channel Laser Aspiration Detector

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Installation information: in order to ensure full functionality, refer to the installation instructions as supplied.