FAAST FLEX™
ASPIRATING SMOKE DETECTION

◆ xtralis®

Description

FAAST FLEX offers a highly flexible and cost-effective ASD solution for a wide range of applications such as small to medium warehouses, cold storage, elevator shafts, ceiling and underfloor voids, transformer and electrical rooms, rest rooms and the like. FAAST FLEX provides consistent detection with minimum nuisance alarms to reduce operational costs enabled by improved detection chamber design.

FAAST FLEX allows a high degree of flexibility through pre-engineered pipe network designs, and true out-of-the-box operation with a built-in user-friendly configuration and control mechanism. It can be configured and commissioned using a 10-line dip-switch arrangement without the need for a special tool.

Through its Bluetooth interface and associated smartphone applications, FAAST FLEX offers extended configuration options and rapid diagnostics.

FAAST FLEX is easy to install with reduced effort and time; 1-man installation with an installation template, different orientations, direct wall-mounting and ample room for wiring. Through its modular design and field replaceable components, FAAST FLEX allows convenient in-field service and maintenance, thus minimizing downtime and reducing ongoing maintenance costs.

How It Works

Air is drawn into the FAAST FLEX through a network of air sampling pipes by speed adjustable aspirator. Each pipe inlet has an airflow sensor that monitors airflow changes in the pipe. Inside the FAAST FLEX, a sample of air is filtered and passed into the detection chamber and analysed for the presence of very small amounts of smoke. Air is exhausted from the FAAST FLEX and may be vented back into the protected zone.

FAAST FLEX Detection Technology

The FAAST FLEX detection technology a LED based light scattering technology. The technology offers high sensitivity IR LED and high gain IR receiver in addition to dual stage mesh filtration for removing dust particles and lint from air sample as well as preventing foreign objects from entering the exhaust.

Features

- Reliable smoke detection for consistent performance and minimum nuisance alarms
- Single & Dual channel variants with area coverage up to 1,600m² (17,200 sq.ft) for single channel and 2,000m² (21,527 sq.ft) for dual channel
- Double knock capability (Dual Channel) for coincident detection
- Pipe length up to 270m (886 ft) for single channel and 420m (1378 ft) for dual channel allowing extended coverage and convenient detector mounting
- Class A, B, C performance allowing:
    - 1 channel: 5, 15, 32 holes respectively
    - 2 channels: 8, 28, 56 holes respectively
- An ultrasonic flow sensing element per chamber for accurate and reliable flow detection
- A metallic mesh filter per chamber for optics protection and improved detector longevity
- Action, Alarm and Fault relays per channel for connection to FACP and BMS systems
- Simplified and intuitive LEDs user interface for immediate status indication
- Pre-engineered pipe networks for hassle-free and expedient design and installation
- Two configuration modes:
    - Out-of-box with built in user-friendly configuration and control mechanism for speedy commissioning
    - Extended for enhanced user experience
- Modular design with in-field replaceable chamber, filter and aspirator for ease of service and maintenance

- Installation template, different mounting orientations (upright, inverted) and ample wiring room to save time and effort
- Suitable for cold storage environments with -40 °C (-40°F) operating temperature
- Bluetooth interface with mobile device App for extended configuration options and rapid diagnostics
- General Purpose Input (GPI) for remote Reset, Disable, External Fault
- Password protected access for secured detector operation, diagnostics and maintenance
- IP40 rating for protection against ingress of foreign bodies
- Onboard event log up to 2,100 events for user actions and smoke trends

Listings / Approvals

- VdS
- EN 54-20, ISO 7240:20
- CE
- NF
- CCC
- ActivFire
- BOSEC
- IFT: HOXTFL23 – 13169
- ANATEL
- RAMATEL
- PBST
- FCC
- RED

FAAST FLEX™
TECHNICAL SPECIFICATIONS

xtralis®

Architect/Engineer Specifications

Electrical Specifications

Detector Dynamic Sensitivity	
Supply Voltage	24Vdc (18 - 30Vdc)
Maximum Power Consumption	**Single Channel Model:** 400mA @24Vdc **Dual Channel Model:** 450mA @24Vdc
Relays	3 per channel, Action, Alarm and Fault 2A @30V
Detector Sensitivity Range	0.05%obs/m to 6.56%obs/m (0.014%obs/ft – 2.00%obs/ft)

Environmental Specifications

Operating Conditions	
Operating Temperature	-40 °C to 55 °C
Sampled Air Temperature	-40 °C to 55 °C
Humidity	10-93% RH
Ingress Protection Rating	IP40

General Specifications

Flow Sensor Number	1 per channel		
Level of Alarm	Action and Alarm per channel		
Fan Setting	Adjustable		
Area Coverage	**Single Channel Model:** 1,600m² (17,200 sq.ft) **Dual Channel Model:** 2,000m² (21,527 sq.ft)		
Pipe Network Layout	**Single Channel Model:**	Linear pipe length:	1 x 105m (1 x 344 ft)
		Branch pipe length:	2 x 105m (2 x 344 ft)
			4 x 68m (4 x 223 ft)
	Dual Channel Model:	Linear pipe length:	2 x 105m (2 x 344 ft)
		Branch pipe length:	4 x 105m (4 x 344 ft)
			8 x 49m (8 x 161 ft)
Sampling Holes	**Single Channel Model:** A, B, C: 5, 15, 32 **Dual Channel Model:** A, B, C: 8, 28, 56		
General Purpose Input (GPI)	Reset, Disable, External Fault		
Out-of-Box Configuration	DIP Switches		
Field Replaceable Components	Sensing Module, Metal Filter, Front Cover, Aspirator, Internal Covers and Adaptor Set		
Data Logging	Device Info, Device Configuration, Device Status Logged Events and Data		
Communication	USB & Bluetooth		

Mechanical Specifications

Dimensions (WHD)	205mm X 280mm X 80.5mm
Weight	1.7Kg
Display Panel	LED

Ordering Information

Device Ordering Code	Description
FLX-010	FAAST FLEX 1-pipe Stand-alone
FLX-020	FAAST FLEX 2-pipe Stand-alone
FLX-010-NF	FAAST FLEX 1-pipe Stand-alone (NF)
FLX-020-NF	FAAST FLEX 2-pipe Stand-alone (NF)

Spare Parts

Spare Parts Ordering Code	Description
FLX-SP-01	FAAST FLEX Sensing Module
FLX-SP-02	FAAST FLEX Metal Filter (pack of 6)
FLX-SP-03-EN	FAAST FLEX Front Cover (EN)
FLX-SP-03-CH	FAAST FLEX Front Cover (CH)
FLX-SP-04	FAAST FLEX Aspirator
FLX-SP-05-EN	FAAST FLEX Internal Cover Set (EN)
FLX-SP-05-CH	FAAST FLEX Internal Cover Set (CH)
FLX-SP-06	FAAST FLEX Adaptor Set