DATA SHEET

INTELLIGENT FAAST ASPIRATION DETECTOR

DESCRIPTION

The Fike intelligent Fire Alarm Aspiration Sensing Technology (FAAST) aspirating smoke detector (P/N 68-140) combines dual source blue LED and infrared laser optical smoke detection with advanced algorithms to detect a wide range of fires while maintaining enhanced immunity to nuisance particulates. The detector continuously draws air from the controlled environment through a series of sampling holes to monitor the environment for smoke particles. This technology is typically used in early warning and very early warning applications.

The FAAST detector is fully integrated into Fike's family of intelligent fire alarm and releasing control systems and reports just like other Fike devices.

Current status of the detector can be displayed in various ways:

- Displayed at Fike's alarm control systems
- Integral display at the detector
- Internet via ethernet port using various devices (computer, iPad, etc)
- Integration with Precise® Vision event management software

The FAAST detector is compatible with Fike's Cheetah® Xi 50, Cheetah Xi 1016, CyberCat® 50, CyberCat 254, and CyberCat 1016 control panels with firmware version 6.10 and higher. Its operating parameters and configuration are completed by the panels C-Linx® programming software. The on-board intelligence allows each FAAST detector to communicate its current status directly to other devices connected to the panel. The digital communication between the detector and host control panel provides fast reponse and reliable communication.

To enable a full detection strategy, FAAST combines its advanced communications capabilities with an extensive range of customizable settings. The detector provides 5 configurable set point levels that can be programmed for latching or non-latching relays. To accommodate specific codes or environments, alarm delays can be set anywhere between 0 to 60 seconds. FAAST also supports two sensitivity modes: In acclimate mode, the detector automatically adjusts itself to current environmental conditions to reduce nuisance alarms. Day/Night/Weekend mode enable technicians to preset alarm thresholds based on routine changes in the environment.

APPROVALS:

- UL - S911
- FM - 3045935
- CSFM - 7259-0900:0156

FM APPROVED

FEATURES

- Full integration into Fike's fire alarm and releasing control systems
- Wide sensitivity range: 0.00046 – 6.25 %/ft obscuration
- Five alarm levels and two sensitivity modes for flexibility
- Dual flow detection including both ultrasonic and electronic sensing for pipe and chamber air flow measurement
- A single device protects up to 8,000 square feet
- Advanced detection algorithms reject common nuisance conditions
- Patented particle separator and field-replaceable filter removes contaminants from the system
- Software support provides intuitive system layout, configuration and monitoring
- Standard onboard ethernet interface enables remote monitoring and e-mail status updates
- Fault indictors exhibit a broad spectrum of events
- Unique air flow pendulum graph verifies pipe network functionality
- Particulate graph displays subtle environmental changes for early problem indications

704 SW 10th Street • P.O. Box 610 • Blue Springs, Missouri 64013-0610 U.S.A.
Phone: 816•229•3405 • www.fike.com

SPECIFICATIONS

External Supply Voltage:	18-30 VDC
Remote Reset Time:	External monitor must be pulled low for a minimum of 100 ms
Power Reset:	1 sec.
Avg. Operating Current:	500 mA @ 24 VDC
Alarm:	650 mA – All relays active, all alarm levels displayed. Voltage @ 24 VDC
Relay:	Contact Ratings 3.0 A @ 30 VDC, 0.5 A @ 125 VAC
Operating Temperature:	14°F (-10°C) to 131°F (55°C)
Sampled Air Temperature:	-4°F (-20°C) to 140°F (60°C)
Humidity Range:	10 to 95% (non-condensing)
IP Rating:	IP30
Coverage Area:	8,000 sq. ft. (743 sq. m)
Air Movement:	0-4,000 ft./min. (0-1,219 m/min.)
Height:	13.25 inches (33.7 cm)
Width:	13.0 inches (33 cm)
Depth:	5.0 inches (12.7 cm)
Cable Access:	4 1-inch (2.54 cm) cable entry holes on top and bottom of unit
Wire Gauge:	12 AWG (2.05 mm) max. to 24 AWG (0.5 mm) min.
Maximum Single Pipe Length:	262 ft. (80 m)
Maximum Branched (2) Pipe Length:	165 ft. (50 m) each branch
Maximum Air Inlet Holes:	40 holes
Network Outside Pipe Diameter:	1.050 inches, IPS (25 mm)
Internal Pipe Diameter:	0.591 to 0.827 inches (15-21 mm)
Sensitivity Range:	0.00046 %/ft. obs – 6.25%/ft. obs
Relays:	8 form C, 3 AMP, programmable latching or non-latching
Event Log:	18,000 events stored
Communication Network:	Ethernet monitoring, 6 E-mail address alerts
Shipping Weight:	8.5 lbs. (3.8 kg), includes packing material

ORDERING INFORMATION

Fike P/N	Mfg. Model	Description
68-140		FAAST Intelligent Detector
68-127	F-A3384-000	Air Filter
68-129	P-PIPE-210	CPVC Pipe: 14 lengths of 15 foot pipe (210 ft)
68-130	P-COUPLING	Coupling (15 per pkg)
68-131	P-ELB-45	45° Elbow (10 per pkg)
68-132	P-ELB-90	90° Elbow (20 per pkg)
68-133	P-ENDCAP	End Cap (25 per pkg)
68-134	P-TEE	Tee (15 per pkg)
68-135	P-UNION	Union (10 per pkg)
68-136	P-LABEL-T	Pipe Label (100 per roll)
68-137	P-LABEL-P	Sampling Point Labels (100 per roll)
68-138	P-SAMP-KT	Sampling Point Kit* (10 sets)
40-002	AL300ULXJ	2.5 Amp Power Supply
40-001	AL300ULMR	2.5 Amp Multi-output Power Supply
10-2154-R		33 Amp AH Red Battery Enclosure
10-2190-2		Battery Assembly, 17AH with Wiring Assembly (2 Batteries)
10-2192		Wiring Assembly for 7.2AH and 18AH Batteries (Wire Only)
02-2820		Battery 12V, 18AH (Requires 2 each)
02-3468		Battery Enclosure, 33AH, Red, No Batteries

** Sampling Point Kit, P-SAMP-KT, includes 10 sets of the following components: 3/4" x 3/4" x 1/2" MNPT CPVC Tee fitting, 3/8" to 1/2" MNPT Fitting, 14 feet of flexible capillary tubing (3/8" x 1/4") and Sample point fitting with 1/16" pre-drilled hole and label which states "Air Sampling Point"*

Form No. P.1.166.01, June 2012. Specifications are subject to change without notice.