SYSTEM SENSOR FAAST™ 8100 ASPIRATION DETECTOR

DESCRIPTION
The FAAST 8100 aspirating smoke detector combines dual source (blue LED and infra-red laser) optical smoke detection with advanced algorithms to detect a wide range of fires while maintaining enhanced immunity to nuisance particulates. This enables FAAST to accurately detect incipient fire conditions as early as 30 to 60 minutes before a fire actually starts for Early Warning Fire Detection and Very Early Warning Fire Detection.

For initial system creation, the PipeIQ* software guides users through pipe layout. The software also provides intuitive control over system configuration and ongoing system monitoring. An installed device can be monitored through its integral display, from a computer connected to the device, or remotely through a computer browse or mobile device when the detector is connected to the Internet via its Ethernet port. When Internet-connected, FAAST can also e-mail status updates to appropriate personnel. The detector can communicate alarm levels, urgent and minor faults, and isolate inputs via eight form C relays.

To enable a full detection strategy, FAAST combines its advanced communications capabilities with an extensive range of customizable settings. The detector provides five alarm 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 enables technicians to preset alarm thresholds based on routine changes in the environment.

*PipeIQ is included on a CD shipped with the device or as a download from www.systemsensor.com.

FEATURES
• Detection as precise as 0.00046 %/ft obscuration
• Five alarm levels and two sensitivity modes provide application 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 remove contaminants from the system
• PipeIQ™ software provides intuitive system layout, configuration, and monitoring all in one package
• Onboard Ethernet interface enables remote monitoring and e-mail status updates
• Fault indicators 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

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: 32°F (0°C) to 100°F (38°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 l-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

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

Form No. P.1.151.01
## ORDERING INFORMATION

<table>
<thead>
<tr>
<th>Fike P/N</th>
<th>Mfg. P/N</th>
<th>Description</th>
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<tbody>
<tr>
<td>68-126</td>
<td>8100</td>
<td>FAAST Conventional Detector</td>
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<tr>
<td>68-127</td>
<td>F-A3384-000</td>
<td>Air Filter</td>
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<tr>
<td>68-128</td>
<td>F-LCARD-SP</td>
<td>Language Card - Spanish</td>
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<tr>
<td>68-129</td>
<td>P-PIPE-210</td>
<td>CPVC Pipe: 14 lengths of 15 foot pipe (210 ft)</td>
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<tr>
<td>68-130</td>
<td>P-COUPING</td>
<td>Coupling (15 per pkg)</td>
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<tr>
<td>68-131</td>
<td>P-ELB-45</td>
<td>45° Elbow (10 per pkg)</td>
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<tr>
<td>68-132</td>
<td>P-ELB-90</td>
<td>90° Elbow (20 per pkg)</td>
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<tr>
<td>68-133</td>
<td>P-ENDCAP</td>
<td>End Cap (25 per pkg)</td>
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<tr>
<td>68-134</td>
<td>P-TEE</td>
<td>Tee (15 per pkg)</td>
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<tr>
<td>68-135</td>
<td>P-UNION</td>
<td>Union (10 per pkg)</td>
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<tr>
<td>68-136</td>
<td>P-LABEL-T</td>
<td>Pipe Label (100 per roll)</td>
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<tr>
<td>68-137</td>
<td>P-LABEL-P</td>
<td>Sampling Point Labels (100 per roll)</td>
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<tr>
<td>68-138</td>
<td>P-SAMP-KT</td>
<td>Sampling Point Kit* (10 sets)</td>
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*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")
- Sample point fitting with 1/16" pre-drilled hole and label which states “Air Sampling Point”