



**SILENT
KNIGHT**

by Honeywell

HFS-D Intelligent Air Duct Smoke Detector

Detect smoke in air handling systems and air handling equipment with Silent Knight's addressable duct smoke detector

The HFS-D Intelligent air duct smoke detector comes with the sensor head factory installed. HFS-D is used for detecting smoke and products of combustion present in air moving through an HVAC air handling system. When smoke is detected in a duct, the unit communicates the condition to the IntelliKnight 5600 control panel. The panel, in turn, depending on programming and wiring, turns off fans, blowers, and other devices.

For more information about the IntelliKnight 5600 system, or to locate your nearest source, please call 800-328-0103.

Description

The Model HFS-D Air Duct Smoke Detector with extended air speed range utilizes photoelectric technology for the detection of smoke. It provides early detection of smoke and products of combustion present in air moving through HVAC ducts in Commercial and Industrial applications.

The HFS-D is in a heavy duty gray housing with a clear cover. It features a pivoting housing that fits both square and rectangular footprints capable of mounting to a round or rectangular duct. It installs quickly and easily.

The HFS-D detectors are designed to be used in air handling systems having air velocities of 100 to 4000 feet per minute, temperatures of -4°F to 158°F, and a humidity range of 0 to 93 percent (non-condensing).

If relay functions are required, a HFS-MR can be added to the housing.

Features

- Versatile mounting options: square or rectangular configuration
- Sensor head factory installed
- LED alarm indication and communication on sensor head
- Detects and limits the spread of smoke
- Easy to clean
- Large terminal connection screws
- Transparent cover for convenient visual inspection
- Patented sampling tube installs from front or back of the detector with no tools required
- Available space within housing to accommodate mounting of HFS-MR relay module
- ETL and UL listed



HFS-D

Specifications

Physical

(Rectangular): 14.38 in (37 cm) Length;
5 in (12.7 cm) Width; 2.5 in (6.36 cm) Depth
(Square): 7.75 in (19.7cm) Length;
9 in (22.9cm) Width ; 2.5 in (6.35cm) Depth
Weight: 1.8lb (0.82kg)

Environmental

Operating Temperature: -4°F – 158°F
(-20°C – 70°C)

Humidity: 0% – 93% (non-condensing)

Air Velocity

100 to 4000 ft/min (0.5 – 20.3 m/sec.)

Electrical

Operating Voltage: 15 to 32 VDC

Standby Current: 300µA @ 24 VDC (LED enabled)

Max Alarm Current: 6.5mA @ 24 VDC

Compatibility

The HFS-MM, Honeywell Fire Systems sensor, is compatible with the model 5600 Addressable fire control panel.

You cannot use Hochiki or SK device type protocols on the 5600 SLC loop.

Mode HFS-D

Duct Smoke Detector

Engineering Specifications

The air duct smoke detector shall be a HFS-D photoelectric duct smoke detector. The detector housing shall be UL listed per UL 268A specifically for use in air handling systems. The flexible housing of the duct smoke detector fits both square and rectangular footprints. The detector shall operate at air velocities of 100 ft/min to 4000 ft/min (0.5 m/sec to 20.32 m/sec).

The unit shall be capable of providing a trouble signal in the event that the sensor cover is removed or improperly installed. It shall be capable of local testing via magnetic switch or remote testing using the RTS151/RTS151KEY remote test station. Terminal connections shall be of the strip and clamp method suitable for 12–18AWG wiring.

Ordering Information

HFS-D	Intelligent non-relay duct smoke detector
HFS-P	Addressable Photo detector (Included with HFS-D)
HFS-MR	Addressable Relay module, must be added if relay function is required (fits in housing)

Accessories

DST1	Metal Sampling Tube Duct Width up to 1'
DST1.5	Metal Sampling Tube Duct Widths 1' - 2'
DST3	Metal Sampling Tube Duct Widths 2' – 4'
DST5	Metal Sampling Tube Duct Widths 4' – 8'
DST10	Metal Sampling Tube Duct Widths 8' – 12'
HFS-DPR	Replacement Photoelectric Head for Duct Detector
DH400OE-1	Weatherproof Enclosure
ETX	Metal Exhaust Tube Duct width 1'
RA100Z	Remote LED Annunciator
RTS151	Magnetic Remote Test station
RTS151KEY	Key-Activated Remote Test station
M02-04-00	Test Magnet
P48-21-00	Replacement End Cap for Metal Sampling Tube
APA151	Remote annunciator with piezo alarm



**SILENT
KNIGHT**

by Honeywell

This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice. For more information, contact Silent Knight 12 Clintonville Road, Northford, CT 06472-1610
Phone: (800) 328-0103, Fax: (203)484-7118. www.silentknight.com

FORM# 350142 Rev A
© 2010 Honeywell International Inc.