VIEW High Sensitivity Smoke Sensor

NFXI-VIEW

High Sensitivity Smoke Sensor

General

The VIEW™ high sensitivity, high gain amplifier based intelligent smoke sensor is a unique offering from NOTIFIER that provides extremely high sensitivity to fire conditions, by detecting the earliest particles of combustion.

This is achieved by combining a patented optical chamber with advanced high power output IR LED diode and precision optics technology, which is matched with a unique superior high gain IR receiver amplifier, enhancing the sensitivity of the device. The chamber is supported by sophisticated processing circuitry and microprocessors that feature smoothing-filter algorithms to help eliminate transient environmental noise conditions, and reduce nuisance alarms.

The advanced detection capabilities are combined with enhanced AWACS™ algorithms in the NOTIFIER fire control panel. The result is a very sensitive but stable system that can achieve 0.06 to 6.41% / m obscuration sensitivity, providing up to 100 times more sensitivity than a standard photoelectric smoke sensor.

In addition, the light beam and algorithms, allow the system to differentiate between dust and smoke particles. Using these algorithms, the VIEW™ system provides drift compensation, three levels of maintenance alert, selection of nine alarm levels and nine pre-alarm levels. The system includes a self-learn sensitivity adjustment to set the pre-alarm level just above the peak levels sensed over extended periods for each sensor's actual environment. Multiple sensor algorithms permit the control equipment to consider readings from up to six sensors in an area to provide faster detection of incipient fires.

Using a point type intelligent sensor, the VIEW™ system inherently does not have transit times from sensing points to a detector, (a factor inherent in aspiration systems) delaying the sensing of a fire condition and since it does not rely on a single sensor for the room, no dilution can occur. A point sensor also enables the control panel to provide the operator with a pinpoint description of where the fire is located rather than a room alarm.

Features

› Extremely high sensitivity, high power output IR LED and high gain IR receiver amplifier based smoke sensor

› Improved signal stability using the latest LED technology for professional applications

› Redesigned smoke chamber to further reduce the risk of false alarms

› 3-colour LED's to locate alarms and speed up diagnostics and fault finding

› Integrated and controlled isolators

› Support for the latest OPAL protocol which offers superior performance and diagnostics capabilities

› Full backward compatibility with existing systems

› Rotary decade address switches
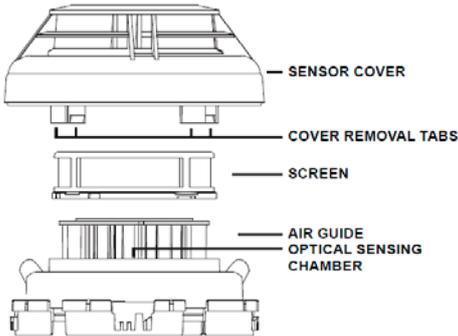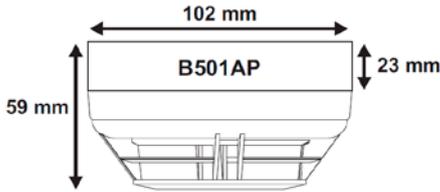
MECHANICAL SPECIFICATION	
HEIGHT	59mm installed in B501AP base
DIAMETER	102mm
WEIGHT	110g
MAX WIRE GAUGE FOR TERMINALS	2.5mm²
COLOUR	Pure White (RAL9010)
MATERIAL	PC/ABS FR
ELECTRICAL SPECIFICATION	
OPERATING VOLTAGE RANGE	15 to 32V DC
MAXIMUM STANDBY CURRENT	250µA at 24VDC (no communications) 300µA at 24VDC (Red blink enabled, once every 5s)
LED CURRENT	Red: 1.0mA at 24V DC Green: 3.0mA at 24V DC Yellow: 4.0mA at 24V DC
ISOLATION CURRENT	12mA at 24VDC
MAXIMUM CONTINUOUS CURRENT	1A (Switch Closed), Voltage at 24VDC
ADDITIONAL LOOP RESISTANCE	Typical 80 mohm @24V (max 170mohm @ 15V)
REMOTE OUTPUT VOLTAGE	22.5VDC
ENVIRONMENTAL SPECIFICATIONS	
APPLICATION TEMPERATURE RANGE	-10°C to +55°C
HUMIDITY	10 to 93% relative humidity (non-condensing)
AIR SPEED	0-20 m/s
SENSITIVITY SETTINGS	
ALARM LEVEL NO.1	0.06%/m smoke obs. (0.02%/ft)
ALARM LEVEL NO.2	0.10%/m smoke obs. (0.03%/ft)
ALARM LEVEL NO.3	0.16%/m smoke obs. (0.05%/ft)
ALARM LEVEL NO.4	0.33%/m smoke obs. (0.10%/ft)
ALARM LEVEL NO.5	0.66%/m smoke obs. (0.20%/ft)
ALARM LEVEL NO.6	1.65%/m smoke obs. (0.50%/ft)
ALARM LEVEL NO.7	3.24%/m smoke obs. (1.00%/ft)
ALARM LEVEL NO.8	4.85%/m smoke obs. (1.50%/ft)
ALARM LEVEL NO.9	6.41%/m smoke obs. (2.00%/ft)
ORDERING INFORMATION	
NFXI-VIEW	VIEW™ high sensitivity analogue addressable IR smoke detector, built-in isolator.
B501AP	Analogue Sensor Base

NOTIFIER by Honeywell

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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.

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