

## ATJ-EA FIXED TEMP/RATE OF RISE HEAT SENSOR



### STANDARD FEATURES

- Low profile - Only 2.00" high, including base
- Simple and reliable device addressing method
- Uses the noise immune Digital Communication Protocol (DCP), which utilizes interrupts for fast response to fires
- Rate of Rise temperature threshold = 15°F/Min (determined by panel)
- Adjustable threshold temperature = 135°F - 190°F (determined by panel)

SPECIFICATIONS	
Operating Voltage	17 - 41 VDC
Standby Current	350µA
Alarm Current	500µA
Transmission Method	DCP - Digital Communication Protocol
Rate of Rise	15°F/Min. (8.3° C/Min.)
UL Temperature Range	135°F to 190°F (57.2°C to 87.8°C)
Operating Temperature Range	32°F to 190° F (0° C to 87.8° C)
Maximum Humidity	95% RH Non-Condensing
Color & Case Material	Bone / White - ABS blend
Weight	3.2 oz (4.9 oz. with 4" base)
Bases	YBN-NSA-4, HSB-NSA-6, ASB, SCI-B4 and SCI-B6

Specifications subject to change without notice.

### APPLICATION

The Hochiki America ATJ-EA Fixed Temperature / Rate of Rise sensors provide accurate temperature measurement data to the fire alarm control panel. These sensors are well-suited for environments where dust, cooking fumes or other factors make the use of smoke sensors impractical.




### OPERATION

The ATJ-EA incorporates a highly linear thermistor circuit. The specially designed cover protects the thermistor while allowing maximum air flow. The thermistor circuit produces a voltage proportional to the temperature; this information is transmitted to the control panel as a digital value. When the ambient temperature exceeds a pre-programmed threshold (fixed temp or rate of rise), the sensor transmits an interrupt to the control panel indicating a fire alarm. The fire alarm control panel can adjust the sensor's fixed temperature threshold for different installation requirements.

Up to 127 devices may be installed on each SLC loop. The sensor address may be set by a hand-held programming unit. The sensor mounts to an electronics-free base and incorporates a locking mechanism for security. The base provides mounting slots, terminals for field wiring and a third terminal for a remote indicator/LED. The sensor has dual LEDs for easy viewing of the sensor status.

### ENGINEERING SPECIFICATIONS

Heat sensors are installed in accordance with NFPA (National Fire Protection Association) 72, the UL Listed Spacing Requirements and the rules and regulations set forth by the local authorities having jurisdiction. The contractor shall furnish and install, where indicated on the plans, Fixed Temp / Rate of Rise Automatic heat sensors.

PRODUCT LISTINGS		
		 California State Fire Marshal
		7270-0410:0203

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## ENGINEERING SPECIFICATIONS, *continued*

The Sensor and Base shall be UL listed as compatible with the fire alarm control panel (FACP).

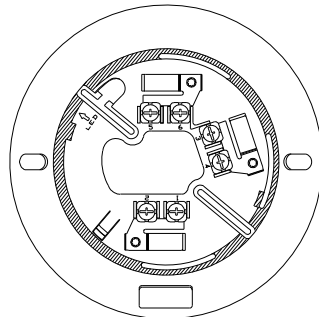
The base shall permit direct interchange with the Hochiki America ALG-V photoelectric smoke sensor, ALK-V/ALK-V2 Photoelectric type sensor AIE-EA ionization type smoke sensor, ATG-EA heat sensor, and the ACA-V Multi-Criteria sensor.

The vandal-resistant, security locking feature shall be used in those areas as indicated on the drawing. The locking feature shall be optional and can be implemented when required.

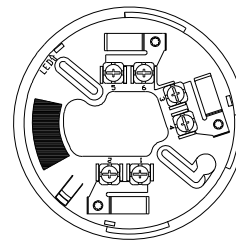
It shall be possible for the control panel to perform a functional test of the sensor without heat. The test method shall simulate the effects of heat on the device to insure testing of internal circuitry.

## BASES

The HOCHIKI America HSB-NSA-6 and the YBN-NSA-4 mounting bases are electronic free and are a simple, rugged design with screw terminals for wiring connections. A common mounting base allows sensor interchange and maintains loop continuity when sensors are removed. A simple anti-tamper head locking system is provided which is enabled by removing a small plastic tab on the back of the sensor. Once locked, the head can be removed using a small diameter screwdriver.

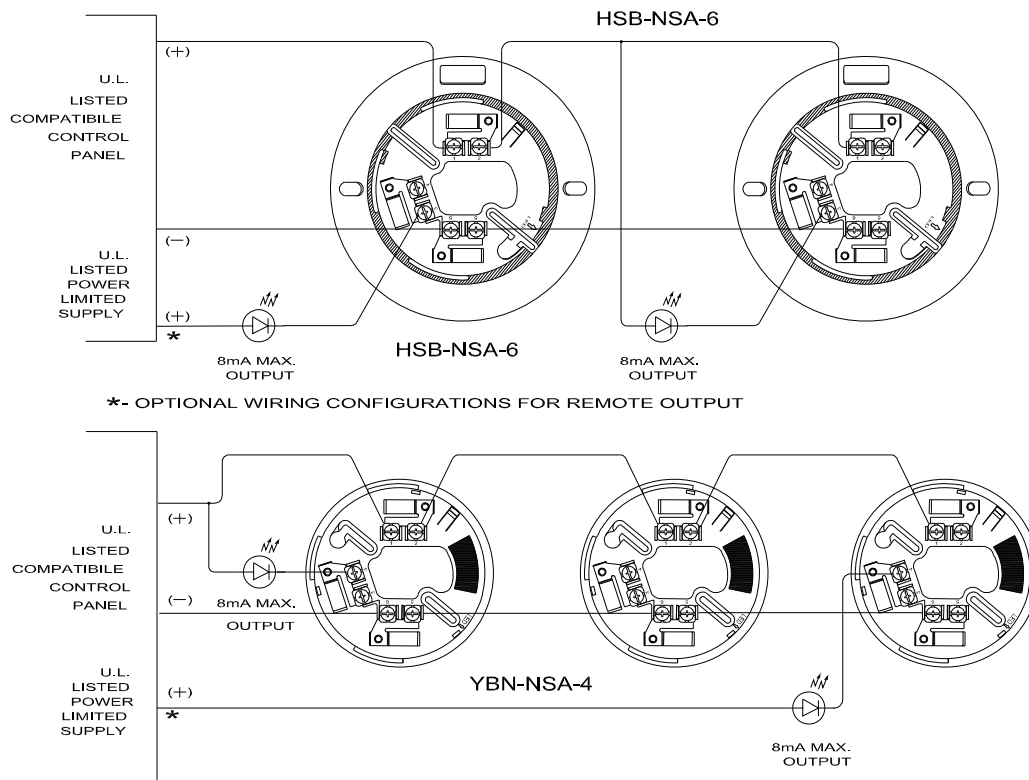


**HSB-NSA-6 Base**



**YBN-NSA-4 Base**

## TYPICAL WIRING DIAGRAMS



**NOTE:** Fire alarm control panel compatibility is required for DCP products.

DCP communications protocol allows system components (DCP sensors AIE-EA, ALG-V, ACA-V, ACC-V, ALK-V, ALN-V, ATJ-EA and ATG-EA, bases and modules) to be used concurrently on a system's SLC (Signaling Line Circuit).