

## SLV-24M MARINE PHOTOELECTRIC SMOKE SENSOR



Shown without base

### STANDARD FEATURES

- Low profile, 2.0" high (with base)
- Highly stable operation, RF/transient protection
- Low standby current, 45µA at 24VDC
- Two built-in power/alarm LEDs
- Non-directional smoke chamber
- Built-in magnetic go/no go detector test feature
- Removable smoke labyrinth for cleaning or replacement
- Highly resistant to false alarms caused by steam

### SPECIFICATIONS

<b>Light Source</b>	GaAlAs infrared light emitting diode
<b>Rated Voltage</b>	17.7 - 30.0 VDC
<b>Working Voltage</b>	15.0 - 33.0 VDC
<b>Maximum Voltage</b>	42 VDC
<b>Supervisory Current</b>	45µA @ 24 VDC
<b>Surge Current</b>	160µA max. @ 24 VDC
<b>Alarm Current</b>	150µA max. @ 24VDC
<b>Air Velocity Range</b>	0-4000 fpm
<b>Sensitivity Range</b>	0.5 - 2.68%/ft
<b>Ambient Temperature</b>	32°F to 120°F (0°C to 49°C)
<b>Maximum Humidity</b>	90% RH Non-condensing
<b>Color &amp; Case Material</b>	Bone PC/ABS Blend
<b>Dimensions</b>	1-1/2" high; 3-15/16" diameter
<b>Mounting</b>	Refer to NS Conventional Detector Base Data Sheet

### APPLICATIONS

The SLV-24M is for use in enclosed spaces, for ceiling-mount installations only and for use in enclosed dry cabin locations, where the unit is protected against blowing, spraying, and dripping water. The patented smoke chamber makes the SLV-24M well suited for fires ranging from smoldering to flaming fires.

NS4-220 (marine type) and NS6-220 (marine type) bases are used with the SLV-24M.

### OPERATION

The SLV-24M Marine Photoelectric Smoke Detector utilizes two bicolor LEDs for indication of status. In a normal standby condition the LEDs flash green every 3 seconds. When the detector senses smoke and goes into alarm, the status LEDs will latch on red.

The detector utilizes an infrared LED light source and silicon photo diode receiving element in the smoke chamber. In a normal standby condition, the receiving element receives no light from the pulsing LED light source. In the event of fire, smoke enters the detector smoke chamber and light is reflected from the smoke particles to the receiving element. The light received is converted into an electric signal.

Signals are processed and compared to a reference level, and when two consecutive signals exceeding the reference level are received within a specified period of time, the time delay circuit triggers the SCR switch to activate the alarm signal. The status LEDs light continuously during the alarm period.

### PRODUCT LISTINGS



California State  
Fire Marshal  
7272-0410:174

Specifications subject to change without notice.

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### ENGINEERING SPECIFICATIONS

The contractor shall furnish and install the Hochiki SLV-24M Marine Photoelectric Smoke Detector where indicated on the plans. The combination detector head and twist-lock base shall be UL Listed compatible with a UL Listed fire alarm control panel.

The base shall be appropriate twist-lock base NS4-220 (marine type) and NS6-220 (marine type).

The smoke detector has two flashing status LEDs for visual supervision. When the detector is in standby condition the LEDs will flash green. When the detector is actuated, the flashing LEDs will latch on red. The detector may be reset by actuating the control panel reset switch.

The sensitivity of the detector is capable of being measured.

To facilitate installation, the detector is non-polarized. Voltage and RF/transient suppression techniques are employed in the detector to minimize false alarm potential.

The vandal-resistant, security locking feature shall be used in those areas as indicated on the drawing. The locking feature shall be field removable when not required.

### WIRING DIAGRAMS

