

# SLV-24M MARINE PHOTOELECTRIC SMOKE DETECTOR



*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

Light Source	GaAIAs Infrared Light Emitting Diode
Rated Voltage	17.7 - 30.0 VDC
Working Voltage	15.0 - 33.0 VDC
Maximum Voltage	42 VDC
Supervisory Current	45µA @ 24 VDC
Surge Current	160µA max. @ 24VDC
Alarm Current	150mA max. @ 24 VDC
Air Velocity Range	0-4000 fpm
Ambient Temperature	32°F to 120°F (0°C to 49°C)
Color & Case Material	Bone PC/ABS Blend
Sensitivity Range	0.5 - 2.68%/ft
Mounting	Refer to NS Conventional Detector Base Data Sheet

## APPLICATION

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 photoelectric smoke detector utilizes two bicolored 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 a 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 electronic 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

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## ENGINEERING SPECIFICATIONS

The contractor shall furnish and install where indicated on the plans, Hochiki America Model SLV-24M marine photo-electric smoke detectors. The combination detector head and twist-lock base shall be UL listed compatible with a UL listed fire alarm panel.

The base shall be appropriate twist-lock base NS4-220 (Marine Type) and NS6-220 (Marine Type).

The smoke detector shall have 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 shall be capable of being measured.

To facilitate installation, the detector shall be non-polarized. Voltage and RF/transient suppression techniques shall be 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 DIAGRAM

