

# FLAME SENSOR

**FS-5000E** (DC12V)

HIGH SENSITIVITY FOR OUTDOOR USE



## FLAMES DO NOT WAIT !

**FS-5000E DETECTS "FLAME" BEFORE IT GROWS INTO "FIRE".  
IT DETECTS SMALL FLAMES IMMEDIATELY ! AN EPOCHAL ULTRAVIOLET RAY  
DETECTION FLAME SENSOR THAT CAN BE USED OUTDOORS.**

### GENERAL DESCRIPTION

Flame sensor FS-5000E immediately detects ultraviolet rays contained in flames and activates an external output. Weather proof construction of the housing enables application outdoors. It can be widely used for fire prevention of areas where fire is prohibited.

### 8 SELECTABLE SENSITIVITY LEVELS

\* 2 sensitivity settings High & Low  
\* 4 detection timer settings : 1 sec., 6 sec., 15 sec., 30 sec.  
Possibility of false alarms can be reduced.

The set up can be selected from the 8 levels according to the environment of installation.

Area masking enables elimination of unnecessary detection areas.

### WHITE BODY MATCHES EVERY LOCATION

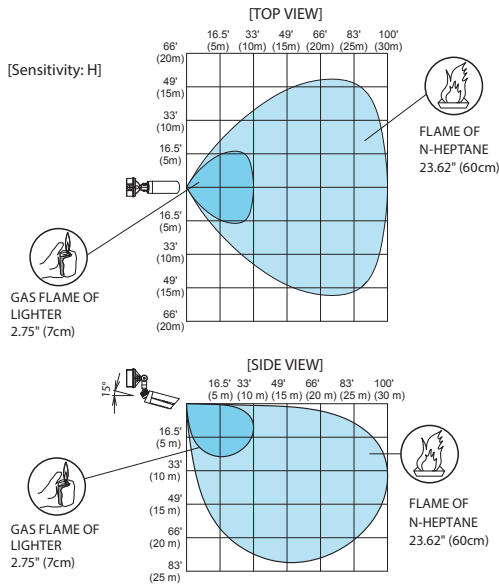
Aesthetically pleasing white housing blends well with most surroundings. The unique ball lock mechanism allows for adjustment of the detection area after installation.

### CONVENIENT FUNCTIONS

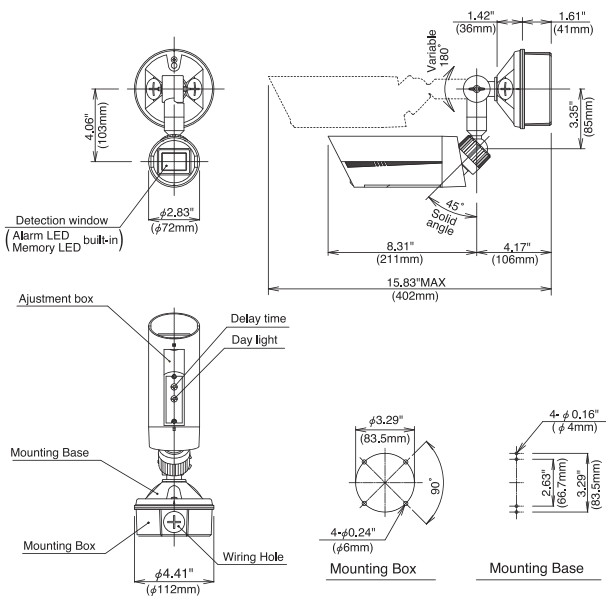
- Alarm memory function  
Memory indication function enables identification of individual sensors in multiple sensor on configuration.  
After raising an alarm, the memory indication LED blinks for 3 minutes and then lights for 47 minutes.
- Day/night time discernment function  
By adjusting operation mode control switch, output operation can be controlled according to ambient light level.  
Selectable for night time only. (5 lux - ∞ lux)
- Output time set up  
Time of detection output operation can be adjusted by a switch [off delay selectable approx. 2 sec. - 1 min. or approx. 5 sec. - 10 min.]

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## DETECTION AREA



## EXTERNAL DIMENSIONS (Unit : inch (mm))



## SPECIFICATIONS

Product name	Flame sensor	
Model no.	FS-5000E	
Detection system	Ultraviolet rays detection (Detected wave length <185 to 260nm>)	
Detection area	Distance	33ft. (10m) Gas Flame of Lighter in front of sensor : approx. 2.75"(7cm) 100ft. (30m) Flame of N-heptane on fire plate 15cm×15cm : approx. 23.62"(60cm) *The flame size is rough.
	Angle	Vertical : approx.75° (upward : 15°) Horizontal : approx.100° (downward : 60°)
	Adjustment range	Vertical : downward 90° (horizontal - vertical) Horizontal : 180°
Sensitivity	Sensitivity	H(100%), L(50%) [selectable by switch]
	Detection timer	1sec., 6sec., 15sec., 30sec. [selectable by switch]
Power supply	10V to 30VDC (non-polarity)	
Power consumption	35mA or less	
Alarm output	Dry contact relay Form C (alarm : open/close) Contact capacity : 30V (AC/DC) 0.5A or less (resistance load)	
	Operation time : The following are selectable * Detection time + off delay operation approx. 2sec. - 1min. * Detection time + off delay operation approx. 5sec. - 10min.	
	Output operation : The following are selectable * Same time as above continuous output * Same time as above intermittent output (Flashing)	
	Operation mode (day/night time discernment function) : 5lux (night time operation) - ∞ lux (day time operation) adjustment volume	
Alarm memory	LED(yellow) blinking and lights on /or LED disable. [selectable by switch]	
LED	Operation LED (red) : synchronous dry contact relay Memory indication LED (yellow) : After blinking for 3 minutes and auto reset after 47 minutes or reset by manual	
Wiring	Lead wiring Power supply : 2 / dry contact : 3	
Ambient temp. range	- 4° F to +122° F (-20° C to + 50° C )	
Installation	Indoor, Outdoor	
Weight	approx. 19.3 oz (550g)	
Appearance	Sensor part : PC resin (white) Adjustment, mounting part : AES resin (white)	
Accessories	* Tapping screw φ6×30 (SUS) : 4 pcs * Tapping screw φ4× 8 (SUS) : 1 pc * Band : 1 pc * Area mask seal : 1 pc	
Optional	Pole attachment (for the end) : BP-01 Pole attachment (for the middle) : BP-02 Vise :BV-03	

\* Specifications and design are subject to change without prior notice.

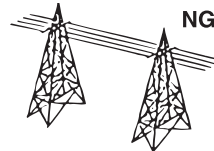
### WARNING !

This product may detect ultraviolet rays other than flames due to the high sensitivity of ultraviolet ray detection. Read the instruction manual before installation and follow the proper usage.

● Do not install near railways. The sparks from the pantograph may cause false detection.



● Do not install near high voltage power lines. The sparks from the pylon may cause false detection.



● Do not install near weld construction sites. The sparks may cause false detection.



Please note : This sensor is designed to detect ultraviolet rays and to initiate an alarm; it is not a crime preventing device. TAKEX is not responsible for damage, injury or losses caused by accident, theft, Acts of God (including inductive surge by lightning), abuse, misuse, abnormal usage, faulty installation or improper maintenance.

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