

# TC804E Photoelectric and TC805E Ionization Smoke Detectors

**SPECIFICATION DATA**



## FEATURES

- Low current draw
- Tamper-resistant wiring bases
- Integral insect resistant screen
- Heads seals against back-pressure, dust, dirt and insects
- Dual LEDs for 360° visibility
- Optional remote LED annunciation
- Shorting spring in base for wiring tests without head in place
- Compatible with FS90 Plus and XLS200/1000 systems

## DESCRIPTION

The TC804E Photoelectric and TC805E Ionization Smoke Detectors are solid-state, low voltage, two-wire area detectors used with Honeywell's DeltaNet FS90 Plus and XLS200/1000 Life Safety systems. The TC804E has an optical sensing chamber that operates on the light-scattering principle. It is also available with an integral heat detector that initiates an alarm signal when the temperature at the detector reaches 135° F (57° C). The TC805E has a unique uni-polar dual chamber. Both detectors provide exceptional stability and a fast response to a wide range of fire conditions.

The detectors are designed for surface mounting on square or octagonal electrical boxes. Heads plug into wiring bases for simplified installation, service and replacement. Several bases are available, allowing the same detector to be used in a number of applications, and to be wall, ceiling or duct mounted.

The TC804E and TC805E are also available as low profile options.



**Fig. 1: Low Profile Option.**

## SPECIFICATIONS

**Detector Models:**

- TC804E Photoelectric Smoke Sensor
- TC804E Photoelectric Smoke Sensor with Integral Heat Detector
- TC804E Low Profile Photoelectric Smoke Sensor
- TC805E Ionization Smoke Sensor
- TC805E Low Profile Ionization Smoke Sensor

**Nominal Sensitivity:**

- TC804E: 3.3%/ foot obscuration
- Low profile: 3% ± 0.7%/ foot
- TC805E: 1.5%/ foot obscuration
- Low Profile: 1.9% ± 0.62%/ foot

**Coverage:**

- Maximum recommended: 1000 sq. ft (100sq m)
- Physical characteristics of the area may reduce the effective coverage to less

**Alarm Indication:**

- two red LEDs
- LEDS turn on in alarm

**Environmental Operating Limits:**

- Temperature: 32° to 120°F (0° to 49°C)
- Humidity: 10 to 93% rh, non-condensing

**Velocity Rating:**

- TC804E: 2000 ft/ min (10 m/sec.)
- TC805E: 1500 ft/ min (7.5 m/sec)

**Detector Placement:**

Detectors must be installed in accordance with local codes

**Mounting:**

Surface mounted, ceiling or wall, or duct mounted

**Mounting Bases:**

14506587-001:

Two-wire base with current limiting resistor  
Mounts on 4 in (102 mm) square x 1.5 in (38 mm) deep electrical box, or 3 in (76 mm) or 4 in (102 mm) octagonal x 1.5 in (38 mm) deep electrical box

14506587-002:

Four-wire base with Form A and C relay output  
Mounts as 14506587-001  
Relay Rating (Resistive or Inductive load):  
Form A: 2.0A at 30 VAC/DC  
Form C: 0.6A at 110 VDC, 2.0A at 30 VDC  
1.0A at 125 VAC, 2.0A at 30 VAC

145065587-005:

Two-wire base with current limiting resistor  
Mounts on metric-sized electrical box

14506873-002:

Four-wire duct housing for duct applications

**Operating Voltage:**

14506587-001 and -005 Base: 10-32 VDC  
14506587-005 Base: 19-28.5 VDC

**Power Consumption:**

Standby current: (at 24Vdc nominal operating voltage)  
Standard Profile: 120 µA, Low Profile: 85 µA  
Alarm current:  
14506587-001 and -005 Base: 22-62 mA on alarm  
14506587-002 Base: 14-39 mA on alarm

**Testing:**

TC804E: Test Card or Test Magnet  
TC805E: Test Magnet

**Weight:**

TC804E/ TC805E: 8 oz (227 g)  
Low Profile: 3.6 oz (104 g)

**Insect Resistant Screen:**

0.025 in. (0.635 mm) openings

**Detector Accessories:**

SSDMOD400R	Field Sensitivity Test Module
SSDMOD45R	Replacement Cord for above
SSDRA400Z	Remote LED Annunciator
SSDRTS451	Remote Test Station
SSDXR2	Detector Removal Tool for Low Profile detectors
SSDXR5	Detector Removal Tool for Standard Profile detectors
SSDXP4	Set of three 1.5m Extension Poles for SSDXR2 and SSDXR5
SSDRMK400	Recess Mounting Kit for Standard Profile detectors
SSDSMK400	Surface Mounting Kit for Standard Profile detectors
SSDA7771602	End-of-Line Supervisory Relay
SSDCRT400	Cover Removal Tool
SSDMO2-04	Test Magnet
SSDR59-18-00	Detector Test Card
SSDAPA451	Remote Piezo Sounder/LED Annunciator
SSDWB1	Weatherproof mounting backbox

**Approvals:**

LPCB (EN-54)  
CE

**Dimensions in Inches (Millimeters):**

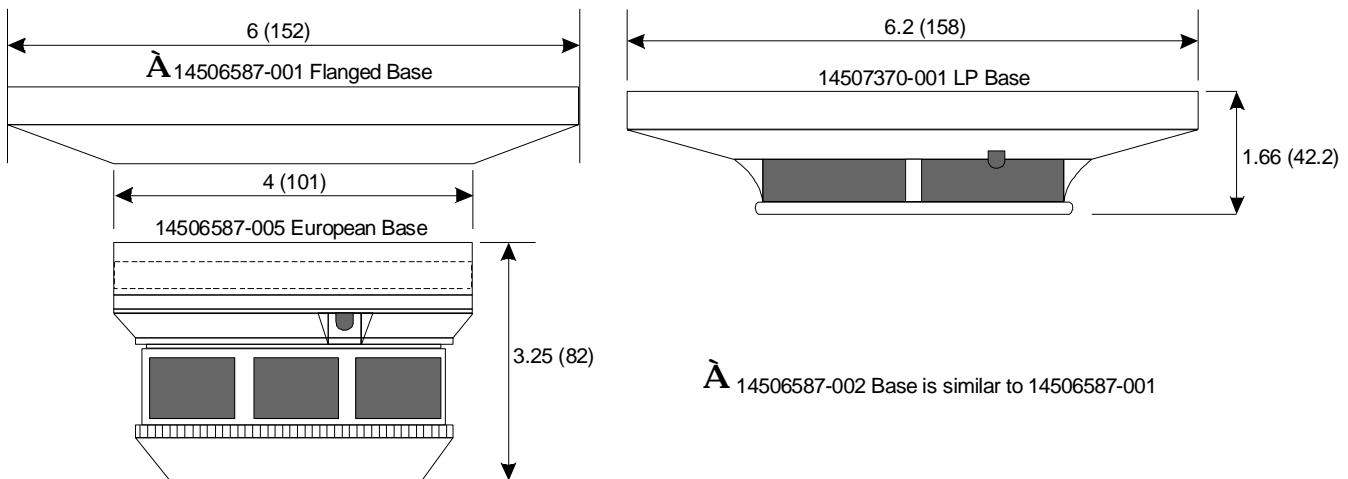


Fig. 2: TC804E Detector and Low Profile Option



Comfort from Experience

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