

## 5600 Series Mechanical Heat Detectors

### GENERAL

System Sensor's 5600 Series mechanical heat detectors offer a low-cost option for property protection against fire and for non-life-safety installations, where smoke detectors are inappropriate.

**Multiple configurations.** The 5600 Series offers a full line of configurations to accommodate a broad range of applications. Both single- and dual-circuit models are offered, each available for low- and high-temperature ratings with either fixed-temperature or combination fixed-temperature/rate-of-rise (ROR) activation. The ROR element of the fixed/ROR models is restorable, to accommodate field-testing the unit.

**Installation flexibility.** To satisfy a variety of installations, the 5600 Series easily mounts to single-gang and octagonal backboxes. These models also accommodate 4" (101.6 mm) square backboxes when used with a plaster ring. The mounting bracket is reversible to allow for flush- and surface-mount backbox installations.

**Visual identification.** The 5600 Series provides clear markings on the exterior of the unit to ensure that the proper detector is being used. Alphanumeric characters identify the activation method, as well as the temperature rating, in degrees Fahrenheit and Celsius. Fixed temperature models are identified "FX", while combination fixed/rate-of-rise units are marked "FX/ROR". The 5600 Series also provides a collector as a post-activation indicator. Once the detector has been activated, the collector drops from the unit to allow easy identification of the specific unit in alarm.

### FEATURES

- Multiple configurations available:
  - Fixed-temperature (non-resettable) or combination fixed (non-resettable)/rate-of-rise (self-restoring).
  - Low-temperature and high-temperature ratings.
  - Single-circuit and dual-circuit.
- Easy-to-read alphanumeric identification of detector type and temperature rating.
- External collector provides visual indication of activation.
- Reversible mounting bracket for flush- and surface-mount installations.
- Flexible mounting capabilities: single-gang, 3.5" or 4" octagonal, 4" (101.6 mm) square with plaster ring.
- Easy-to-use terminal screws provide a more positive wiring connection.
- Low-profile design to coordinate with room aesthetics.

### SPECIFICATIONS

#### Physical Specifications:

#### Maximum installation temperature:

For models 5601, 5603, 5621, 5623: 100°F (38°C).  
For models 5602, 5604, 5622, 5624: 150°F (65.6°C).



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#### Alarm temperature:

For models 5601, 5603, 5621, 5623: 135°F (57°C).  
For models 5602, 5604, 5622, 5624: 194°F (90°C).

**Rate-of-rise threshold:** 15°F (8.3°C) per minute (*models 5601, 5602, 5621, 5622 only*).

**Operating humidity range:** 5% to 95% RH noncondensing.

**Input terminals:** non-polarized, accept 14 to 22 AWG (2.0 to 0.33 mm<sup>2</sup>).

**Dimensions:** diameter with mounting bracket: 4.57" (116 mm); height with mounting bracket: 1.69" (43 mm).

**Weight:** 6 oz. (170 grams).

**Mounting options:** 3.5" (88.9 mm) octagonal backbox; 4" (101.6 mm) octagonal backbox; single-gang backbox; 4" (101.6 mm) square backbox with a square-to-round plaster ring.

#### Electrical Specifications:

| Operating Voltage | Contact Ratings (Resistive) |
|-------------------|-----------------------------|
| 6 – 125 VAC       | 3.0 A                       |
| 6 – 28 VDC        | 1.0 A                       |
| 125 VDC           | 0.3 A                       |
| 250 VDC           | 0.1 A                       |

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Specifications and wiring information are provided for information only and are believed to be accurate. Gamewell assumes no responsibility for their use.

Data and design are subject to change without notice. Installation and wiring instructions shipped with the product shall always be used for actual installation.

**For more information, contact Gamewell, a Honeywell company.**

# ARCHITECTURAL AND ENGINEERING SPECIFICATIONS

Mechanical heat detector shall be a System Sensor 5600 Series model number \_\_\_\_\_, Listed to Underwriters Laboratories UL 521 for Heat Detectors for Fire Protective Signaling Systems. The detector shall be either a single-circuit or a dual-circuit type, normally open. The detector shall be rated for activation at either 135°F (57°C) or 194°F (90°C), and shall activate by means of a fixed-temperature thermal sensor, or a combination fixed-temperature/rate-of-rise thermal sensor. The rate-of-rise element shall be activated by a rapid rise in temperature, approximately 15°F (8.3°C) per minute. The detector shall include a reversible mounting bracket for

mounting to 3.5-inch (88.9 mm) octagonal, 4-inch (101.6 mm) octagonal, single gang, and 4-inch (101.6 mm) square backboxes with a square-to-round plaster ring. Wiring connections shall be made by means of SEMS screws that shall accommodate 14 – 22 AWG wire. The detector shall contain alphanumeric markings on the exterior of the housing to identify its temperature rating and activation method. The rate-of-rise element of combination fixed-temperature/rate-of-rise models shall be restorable, to allow for field-testing. The detectors shall include an external collector that shall drop upon activation to identify the unit in alarm.

## ORDERING INFORMATION

| Model | Circuit | Temperature Rating | Activation                     | UL Protected Spacing, 10' (3.048 m) Ceiling* |
|-------|---------|--------------------|--------------------------------|--|
| 5601  | Single  | 135°F (57°C)       | Fixed-Temperature/Rate-of-Rise | 50 ft. x 50 ft. (15.24 m x 15.24 m)          |
| 5602  | Single  | 194°F (90°C)       | Fixed-Temperature/Rate-of-Rise | 50 ft. x 50 ft. (15.24 m x 15.24 m)          |
| 5603  | Single  | 135°F (57°C)       | Fixed-Temperature              | 25 ft. x 25 ft. (7.62 m x 7.62 m)            |
| 5604  | Single  | 194°F (90°C)       | Fixed-Temperature              | 25 ft. x 25 ft. (7.62 m x 7.62 m)            |
| 5621  | Dual    | 135°F (57°C)       | Fixed-Temperature/Rate-of-Rise | 50 ft. x 50 ft. (15.24 m x 15.24 m)          |
| 5622  | Dual    | 194°F (90°C)       | Fixed-Temperature/Rate-of-Rise | 50 ft. x 50 ft. (15.24 m x 15.24 m)          |
| 5623  | Dual    | 135°F (57°C)       | Fixed-Temperature              | 25 ft. x 25 ft. (7.62 m x 7.62 m)            |
| 5624  | Dual    | 194°F (90°C)       | Fixed-Temperature              | 25 ft. x 25 ft. (7.62 m x 7.62 m)            |

\*NOTE: Refer to NFPA 72 guidelines for spacing reductions when ceiling heights exceed 10 feet (3.048 m).

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| Previous | ORDER | Previous | ORDER |
|----------|-------|----------|-------|
| HD-601   | 5601  | HD-621   | 5621  |
| HD-602   | 5602  | HD-622   | 5622  |
| HD-603   | 5603  | HD-623   | 5623  |
| HD-604   | 5604  | HD-624   | 5624  |

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## WIRING DIAGRAMS

