**Feature**

- High-temperature resistance and fast response
- THINKING Pt sensor is the first UL 60730-1 certified product in industry.
- Various electrical characteristics are available for your choice.
- Screw-on type, metal case type, and plastic case type sensors are available, and the sensors are customizable.

**Function**

- Sensor can be installed next to heater or directly contacts heating plate for temperature detection.
- Sensors can be installed in various spots of home appliance, including bottom, top, broadside, etc to detect temperature at the same time for more complicate cooking methods.
- Sensor detects temperature of food ingredients in food stirrer to adjust stirring speed.

**Application**

Electric pressure cooker, precision cooker, food stirrer, food processor, waffle iron, bread machine, slow cooker, air fryer, food warmer, etc.

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**Thinking Electronic Industrial Co., Ltd.**

**Your Best Choice**
### Feature: Screw-on design is for easy installation and installed on metallic surface for temperature detection.

### Application: The sensor does not contact liquid and steam directly, and it is recommended for dry environment.

**Component** | Sensing top (terminal+NTC chip+aluminum cap)+lead wire +terminal+housing
---|---
**Moisture Resistance** | 40°C 95% RH X 1000 hours
**Operation Temperature** | -30~+105°C
**Insulation Test** | DC 500V 100MΩ (Min)
**R Value** | R25°C=10KΩ±5%  B Value | B25/50=3435K±1%
**Thermal Time Constant** | Around 30 seconds (in air)
**Hi-Pot Test** | AC 1500V 10mA(Max)

**Component** | Sensing top (NTC chip+aluminum cap)+lead wire +terminal+housing
---|---
**Moisture Resistance** | 40°C 95% RH X 1000 hours
**Operation Temperature** | -20~+105°C
**Insulation Test** | DC 500V 100MΩ (Min)
**R Value** | R100°C=3.3KΩ±2.5%  B Value | B25/50=4085K±1%
**Thermal Time Constant** | Around 20 seconds (heating board)
**Hi-Pot Test** | AC 1500V 10mA(Max)

### Feature: The sensor is with fast temperature transmission and high stability. For meeting customer’s needs, the sensor can combine temperature detection with ON/OFF function to increase product safety.

### Application: Electric pressure cooker, precision cooker, food stirrer, waffle iron, air fryer, etc.

**Component** | Sensing top (NTC chip+aluminum cap)+lead wire +terminal+housing
---|---
**Moisture Resistance** | 40°C 95% RH X 1000 hours
**Operation Temperature** | -20~+150°C
**Insulation Test** | DC 500V 100MΩ (Min)
**R Value** | R114°C=3.4513KΩ±1.5%  B Value | B25/50=4060K±1%
**Thermal Time Constant** | Around 4 seconds (in water)
**Hi-Pot Test** | AC 1500V 10mA(Max)

**Component** | Sensing top (NTC chip+stainless steel cap)+tube +lead wire+terminal+housing
---|---
**Moisture Resistance** | 40°C 95% RH X 1000 hours
**Operation Temperature** | -30~+105°C
**Insulation Test** | DC 500V 100MΩ (Min)
**R Value** | R25°C=100KΩ±1%  B Value | B25/100=4060K±1%
**Thermal Time Constant** | Around 3 seconds (in water)
**Hi-Pot Test** | AC 1500V 10mA (Max)

**Component** | Sensing top (NTC chip+aluminum cap)+tube +lead wire+terminal+housing
---|---
**Moisture Resistance** | 40°C 95% RH X 1000 hours
**Operation Temperature** | -40~+180°C
**Insulation Test** | DC 500V 100MΩ (Min)
**R Value** | R100°C=7KΩ±2.9%  B Value | B25/100=4400K±2%
**Thermal Time Constant** | Around 2-5 seconds (in water)
**Hi-Pot Test** | AC 1500V 10mA (Max)

**Component** | Sensing top (NTC chip+aluminum cap)+tube +lead wire+housing
---|---
**Moisture Resistance** | 40°C 95% RH X 1000 hours
**Operation Temperature** | -40~+200°C
**Insulation Test** | DC 500V 100MΩ (Min)
**R Value** | R100°C=7KΩ±2.9%  B Value | B25/100=4400K±2%
**Thermal Time Constant** | Around 12 seconds (in water)
**Hi-Pot Test** | AC 1500V 10mA (Max)
1. Temperature sensor is customizable in accordance with customer’s needs, and THINKING provides consulting services for sensor design.

2. All specifications are subject to change.

3. Please contact your sales representative if you have any questions.

Platinum Sensor (Pt sensor)

Feature: Pt sensor is similar to PTC thermistor, but is more accurate and stable. THINKING Pt sensor is the first UL 60730-1 certified product in industry.

Application: The sensor is mostly used in commercial food cooking or warming applications.
### Feature:
For sensing top, structures of epoxy coating type and tubing type are simple and can be installed easily. In addition, plastic case type offers better water resistance, and its standard products and customizable products can be mass produced.

### Application:
Epoxy coating type and tubing type sensing tops do not contact liquid and steam directly, and are recommended for dryer application environment. Plastic case type sensing top is recommended for food warmer.

#### Component
- Sensing top (NTC chip+terminal+tube)+lead wire
- Sensing top (NTC chip+terminal+housing)
- Sensing top (NTC chip+plastic cap)+lead wire+tube

#### Moisture Resistance
- 40 °C 95% RH X 1000 hours
- DC 500V 100MΩ (Min)

#### Operation Temperature
- -40 °C to 150 °C
- -20 °C to 180 °C
- -55 °C to 105 °C

#### Insulation Test
- DC 500V 100MΩ (Min)

#### R Value
- R25°C=10KΩ±1%
- R100°C=3.3KΩ±2.5%
- R25°C=5KΩ±1%
- R100°C=3.3KΩ±2.5%

#### B Value
- B25/100=3998K±1%
- B25/85=3974K±5%

#### Thermal Time Constant
- Around 3 seconds (in water)
- Around 15 seconds (in air)
- Around 60 seconds (in air)
- Around 25 seconds (in water)

#### Hi-Pot Test
- AC 1000V 10mA (Max)
- AC 3750V 10mA (Max)

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**Product Application**

- Temperature detection of plate
- Temperature detection of broadside
- Temperature detection of body
- Temperature detection of lid
- Temperature detection of bottom and switch