MODEL R000

These small and light weight sensors are designed to measure temperature of gas/air, suitable for temperature measurement in thermostatic bath, drying chambers, artificial environment and climate chambers.

**GENERAL SPECIFICATIONS**

**NET-TUBE TYPE (R000-31, R000-31W)**

Resistance element: Pt100, (3-wire type)

*Please contact us for JPt100

Class: JIS B, A

Rated current: 2mA (Specify if 1mA)

Temperature range: -30 to 130°C (heat-conductive part is up to 60°C)

Material of protective tube:

- Nickel-plated brass (Removable)
- SUS304

Dimension of protective tube: 12mm x 100mm

Lead wire:

- Single element type:
  - Vinyl coated 3-core copper lead wire, type WV38, outer diameter φ8mm, 3 meter length
  - (When specified heat-coated copper lead wire, silicon coated 3-core copper lead wire (180°C heat-resistant), type WS36, outer diameter φ6mm is used instead.)

- Double element type:
  - Vinyl coated 6-core copper lead wire, type WV61, outer diameter φ10mm, 3 meter length
  - (When specified heat-coated copper lead wire, silicon coated 6-core copper lead wire (180°C heat-resistant), type WS68, outer diameter φ8mm is used instead.)

Mounting: Wall mount

**CLOSED-TUBE TYPE (R000-32, R000-32W)**

Resistance element: Pt100, (3-wire type)

*Please contact us for JP100

Class: JIS B, A

Rated current: 2mA...2mA (Specify if 1mA)

Temperature range: -50 to 150°C (heat-conductive part is up to 60°C)

Material of protective tube:

- SUS304

Dimension of protective tube: φ6mm x 100mm

Lead wire:

- Single element type:
  - Vinyl coated 3-core copper lead wire, type WV38, outer diameter φ8mm, 3 meter length
  - (When specified heat-coated copper lead wire, silicon coated 3-core copper lead wire (180°C heat-resistant), type WS36, outer diameter φ6mm is used instead.)

- Double element type:
  - Vinyl coated 6-core copper lead wire, type WV61, outer diameter φ10mm, 3 meter length
  - (When specified heat-coated copper lead wire, silicon coated 6-core copper lead wire (180°C heat-resistant), type WS68, outer diameter φ8mm is used instead.)

Mounting: Wall mount

**RESPONSE TIME**

In the air (50°C→20°C):

- Net-tube type: Approx. 70 seconds
- Closed-tube: Approx. 3 minutes

(Note: This response time means the time to reach 63.2% of the equilibrium value.)

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**MODEL R000-31**

**MODEL R000-32, R000-32W**

**EXTERNAL DIMENSIONS**

**NET-TUBE TYPE (R000-31, R000-31W)**

- 3 : Pt100

**TYPE OF PROTECTIVE TUBE**

1 : Net-tube

2 : Closed-tube

**NUMBER OF ELEMENT**

- Blank : Single element type
- W : Double element type

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**NET-TUBE TYPE (R000-31, R000-31W)**

- Holder
- Storage tube
- Conductor connection part
- L-shaped bracket

**CLOSED-TUBE TYPE (R000-32, R000-32W)**

- Holder
- Storage tube
- Conductor connection part
- L-shaped bracket

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*Conductor allowable temperature -20 to 60°C
MODEL R011
These sensors are suitable for temperature management of industrial use at general production work room and warehouse.

GENERAL SPECIFICATIONS
Resistance element: Pt100 (3-wire type)
Class: JIS B, A
Rated current: 2mA (Specify if 1mA)
Temperature range: -20 to 60°C
Material of protective tube: SUS304
Dimension of protective tube: \( \phi 6 \text{mm} \times 100\text{mm} \)
Lead wire: Single element type...
- Vinyl coated 3-core copper lead wire, type WV38, outer diameter \( \phi 8\text{mm} \), 3 meter length
- Double element type...
  - Vinyl coated 6-core copper lead wire, type WV61, outer diameter \( \phi 10\text{mm} \), 3 meter length
Mounting: Wall mount

RESPONSE TIME
In the air (50°C→20°C): Approx. 50 seconds
(This response time means the time to reach 63.2% of the equilibrium value.)

EXTERNAL DIMENSIONS

MODEL R011-1

- MODEL
  - R011
  - ELEMENT
    - 3 : Pt100
  - NUMBER OF ELEMENT
    - Blank : Single element type
    - W : Double element type

- RESISTANCE ELEMENT
  - Type: Pt100 (3-wire type)
  - Class: JIS B, A
  - Rated current: 2mA (Specify if 1mA)
  - Temperature range: -20 to 60°C
  - Material of protective tube: SUS304
  - Dimension of protective tube: \( \phi 6 \text{mm} \times 100\text{mm} \)
  - Lead wire: Single element type...
    - Vinyl coated 3-core copper lead wire, type WV38, outer diameter \( \phi 8\text{mm} \), 3 meter length
    - Double element type...
      - Vinyl coated 6-core copper lead wire, type WV61, outer diameter \( \phi 10\text{mm} \), 3 meter length
  - Mounting: Wall mount

- TERMINAL BOX
  - Aluminum die-casting
  - 2-\( \phi 8.5\text{mm} \) hole
  - Y-type terminal for M4

- CHAINS
  - SUS304

- PROTECTIVE TUBE
  - Vinyl coated 3-core copper lead wire, type WV38, 3 meter length

Unit: mm
**MODEL R030**

These small, lightweight and high responses are designed to measure temperature of gas/air, suitable for temperature management at high humidity place or freezer compartment because of the waterproof structure.

**GENERAL SPECIFICATIONS**

- **Resistance element:** Pt100 (3-wire type)
- **Class:** JIS B, A
- **Rated current:** 2mA (Specify if 1mA)
- **Temperature range:** -30 to 100°C
- **Material of protective tube:** SUS304
- **Dimension of protective tube:** 2.5mm (0.2mm wall thickness)
- **Lead wire:** Single element type
  - Vinyl coated 3-core copper lead wire, type WV35, outer diameter 5mm, 3 meter length
  - Double element type
  - Use 2 pcs. same wire of the above.
- **Mounting:** Wall mount
- **Casing:** Structure.....Drip-proof type
  - Material........Heat-resistant ABS resin
  - Color........Cream

**RESPONSE TIME**

- In the air (50°C→20°C): Approx. 25 seconds
  (This response time means the time to reach 63.2% of the equilibrium value.)

**EXTERNAL DIMENSIONS**

**MOUNTING FIGURE**

*Please contact us for JPt100*

Class: JIS B, A
Rated current: 2mA (Specify if 1mA)
Temperature range: -30 to 100°C
Material of protective tube: SUS304
Dimension of protective tube: 2.5mm (0.2mm wall thickness)
Lead wire: Single element type
  - Vinyl coated 3-core copper lead wire, type WV35, outer diameter 5mm, 3 meter length
  - Double element type
  - Use 2 pcs. same wire of the above.
Mounting: Wall mount
Casing: Structure.....Drip-proof type
  - Material........Heat-resistant ABS resin
  - Color........Cream

**RESPONSE TIME**

- In the air (50°C→20°C): Approx. 25 seconds
  (This response time means the time to reach 63.2% of the equilibrium value.)

**NUMBER OF ELEMENT**

- Blank: Single element type
- W: Double element type

**RESPONSE TIME**

In the air (50°C→20°C): Approx. 25 seconds
(This response time means the time to reach 63.2% of the equilibrium value.)

**UNIT : mm**
MODEL R031

This is for general indoor use, suitable for room temperature measurement in relatively severe air conditioning management as pharmaceutical plant or blood storage center.
Since it has good response, the mounting has become easier to set up on the wall according to JIS standards. Thermo-plate type is available for to lessen the effect of wall surface temperature.

**GENERAL SPECIFICATIONS**
- Resistance element: Pt100 (3-wire type)
- Rated current: 1mA
- Temperature range: -20 to 80°C
- Casing: Natural draft type-heat-resistant ABS resin material (Color: Munsell N9)
- Lead wire connection: Terminal connection (Please prepare the lead wire separately)
- Mounting: Wall mount, mounting hole pitch 66.7mm (Correspond to JIS C 8340 standard product)

**RESPONSE TIME**
In the air (50°C→20°C): Approx. 50 seconds
(This response time means the time to reach 63.2% of the equilibrium value.)

**EXTERNAL DIMENSIONS**

**MODEL R031-3**

**TERMINAL ARRANGEMENT**

**MODEL R031-3T**