

SENSOR_CNSF Series

Metal tube (shell) structure



◆ Product Introduction

The thermistor sensor with a metal tube (shell) structure at the head is a temperature measurement component based on thermistor technology, which plays a crucial role in numerous fields such as industry, electronics, and healthcare. The core component of this sensor is the thermistor chip, which is extremely sensitive to temperature changes and can accurately convert the changes in temperature into changes in resistance values. The metal tube (shell), serving as the encapsulation structure of the sensor head, is usually made of metal materials with good thermal conductivity and mechanical strength, such as stainless steel and copper alloys. This metal encapsulation not only provides reliable physical protection for the moisture resistance of the thermistor chip, shielding it from external mechanical impacts, vibrations, and abrasions, but also efficiently conducts external heat, quickly and accurately transmitting the changes in ambient temperature to the thermistor chip, greatly improving the response speed and measurement accuracy of the sensor.

◆ Features

- 1.The temperature measurement accuracy can reach $\pm 0.1^{\circ}\text{C}$, meeting the requirements of high-precision applications.
- 2.It supports a temperature measurement range from -40°C to $+180^{\circ}\text{C}$.
- 3.It has strong moisture-proof and humidity-resistant performance.
- 4.The thermistor has the characteristic of rapid response and can reflect temperature changes in real time.

◆ Applications

- 1.New energy vehicles.
- 2.AI servers, server power supplies, and robots.
- 3.Smart toilets, water treatment equipment.
- 4.Water heaters/Temperature-controlled faucets.
- 5.Temperature measurement of radiators, liquid or oil temperature sensing.
- 6.Industrial/commercial temperature control systems.

◆ Coding Principle

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Product Type			Series		Resistance Value			Resistance Value Precision	B-Value		Product Drawing Number				Category		Wire Length Recognition