100KF3950 Household Durable Heat Probe Sensor, Fast Response, Easy To Install, Suitable For Induction Cookers And Commer

Our Product Introduction

Basic Information

- Place of Origin: Dongguan China
- Brand Name: linkun
- Certification: CE / ROHS / UL / TUV / SGS
- Model Number: Household Temperature Sensor
- Minimum Order Quantity: Negotiation
- Price: Negotiation
- Packaging Details: Export Package / Negotiation
- Delivery Time: Negotiation
- Payment Terms: T/T, L/C, Western Union
- Supply Ability: 24 million per year

Product Specification

- Resistance Value: 1K, 5K, 10K, 50K, 100K, 15K 150K
- Accracy: ±1%
- Application: Water Dispenser
- Temperature Range: -40~120
- Theory: Resistance Sensor
- Resistance Tolerance: F±1%,G:±2%, H:±3%,J:±5%,K:±10%
- Highlight: **Household Thermal Probe Sensor**, **Durable Thermal Probe Sensor**, **Multipurpose Temperature NTC Sensor**

More Images

Product Description

High Sensitivity And Rapid Response Household Temperature Sensor For Drinking Fountains

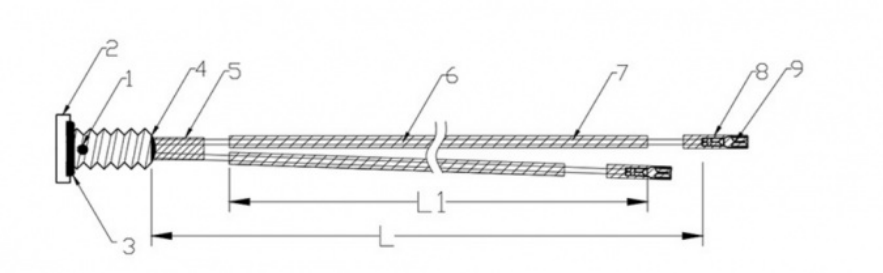
NTC temperature sensor (temsensor) is the most common sensor in industrial production. It converts the temperature of the object into an electrical signal output. The NTC temperature sensor has the advantages of simple structure, wide measurement range, good stability and high precision. Different NTC temperature sensors are manufactured in different ways, and the common ones are thermistors, thermocouples and integrated products. Its development has generally gone through the stage from split type, analog integration to intelligent type.

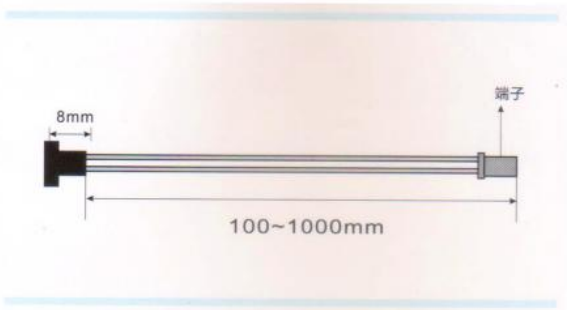
NTC temperature sensor not only outputs temperature signal, but also integrates humidity measurement, and the signal output is also changed from the original single signal to a variety of output forms, which can carry out long-distance communication, data can be recorded according to needs, upper limit alarm and automatic control, etc. function.

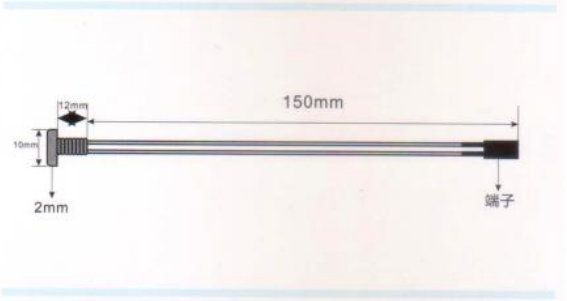
NTC Temperature Sensors offers wide range of standard and customized temperature sensors designed according to individual customer's requirements covering applications in temperature range between -80°C and +600°C. Our product contains temperature sensors build using NTC/PTC thermistors, RTDs ,DS18B20 and other sensing elementsmounted into wide range of metal/plastic housings.

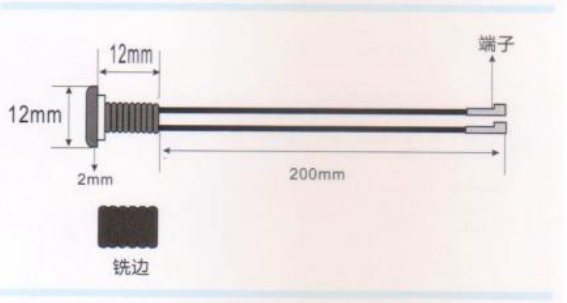
NTC temperature sensor product features

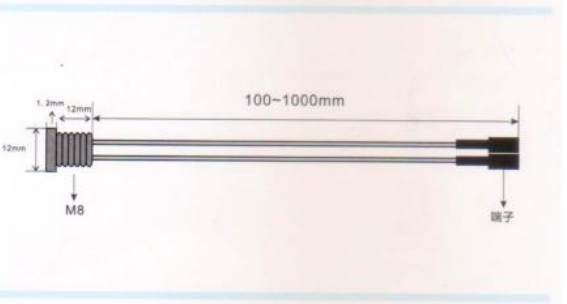
- Using a new technology, the product performance is stable, and it can work stably for a long time (annual resistance value drift rate ≤ 3‰)
- Resistance value and B value have high precision, good consistency, and are interchangeable (resistance value and B value accuracy can reach ±1% respectively)
- High sensitivity and rapid response
- Using double-layer sealing technology, it has good insulation sealing and anti-mechanical collision and anti-bending capabilities
- It can be packaged according to the installation conditions used, which is convenient for users to install; it can be made into high-dissipation products, and the test current can be much higher than that of sensors with traditional structures, which simplifies the application circuit

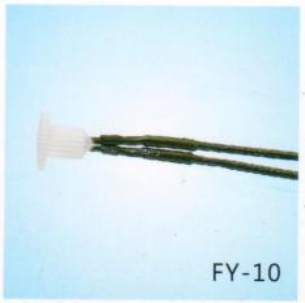


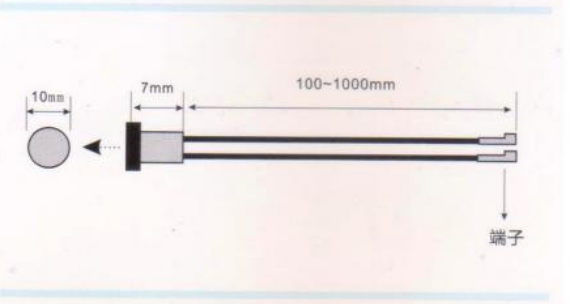












Product Description

Certificates for Raw Material	All parts and processing is compliant with ROHS, CCC
Certificates for Wire Harness Material	UL/CSA,CE, VDE,SAA,CB,ISO9001 etc are avalable; PA66 for connectors; copper or stainless steel for terminals
Length	As per customer’s request
Connector Type	Tyco, Delphi, Bosch, Deutsch, Yazaki, Sumitomo, FCI replacements
Service	Different series of customized CAD wire harness are available

NTC temperature sensor application range

◆Heating and heating air conditioners and related equipment
◆Household appliances of various sizes: air conditioners, refrigerators, battery stoves, bread ovens, baking ovens, electric ovens, microwave ovens, electric fans, soybean milk machines, electric water heaters, electric rice cookers, disinfection cabinets, water dispensers, heaters, electric irons, disinfection Cabinets, drinking fountains, lighting appliances, etc.
◆Temperature measurement and control circuits for agricultural, medical, environmental protection, meteorological, food processing and other equipment
◆Instrument coils, automotive circuits, integrated circuit modules, transistor amplifier circuits, temperature compensation circuits such as quartz crystal oscillators and thermocouples

Conventional product electrical performance parameters

Part No.	R25 (KΩ)	B(K) 25/50	Rated Power @25 (mW)	Dissipation Factor(δ) (mW/)	Thermal time Constant (S)
TS502□3274A	5.0	3274	10-20	2-4	5-20
TS502□3435B	5.0	3435	10-20	2-4	5-20
TS502□3470A	5.0	3470	10-20	2-4	5-20
TS502□3950A	5.0	3950	10-20	2-4	5-20
TS103□3274A	10.0	3274	10-20	2-4	5-20
TS103□3435B	10.0	3435	10-20	2-4	5-20
TS103□3470A	10.0	3470	10-20	2-4	5-20
TS103□3950A	10.0	3950	10-20	2-4	5-20
TS103□4100A	10.0	4100	10-20	2-4	5-20
TS153□3950A	15.0	3950	10-20	2-4	5-20
TS153□4100A	15.0	4100	10-20	2-4	5-20
TS203□3950A	20.0	3950	10-20	2-4	5-20
TS203□4100A	20.0	4100	10-20	2-4	5-20
TS223□4200A	22.0	4200	10-20	2-4	5-20
TS403□3928A	40.0	3928	10-20	2-4	5-20
TS503□3950A	50.0	3950	10-20	2-4	5-20
TS503□4100A	50.0	4100	10-20	2-4	5-20
TS104□3950A	100.0	3950	10-20	2-4	5-20
TS104□4100A	100.0	4100	10-20	2-4	5-20
TS104□4400A	100.0	4400	10-20	2-4	5-20

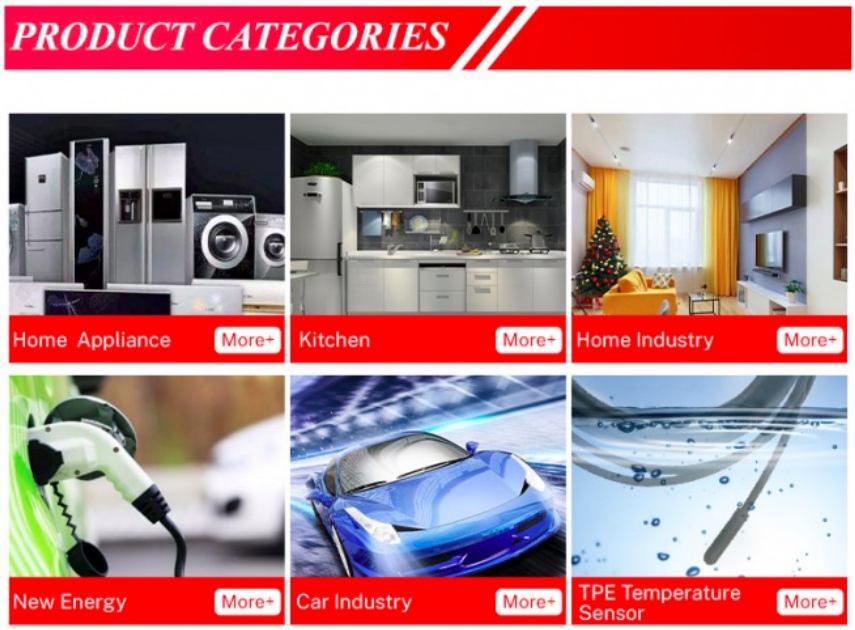
Reliability Test

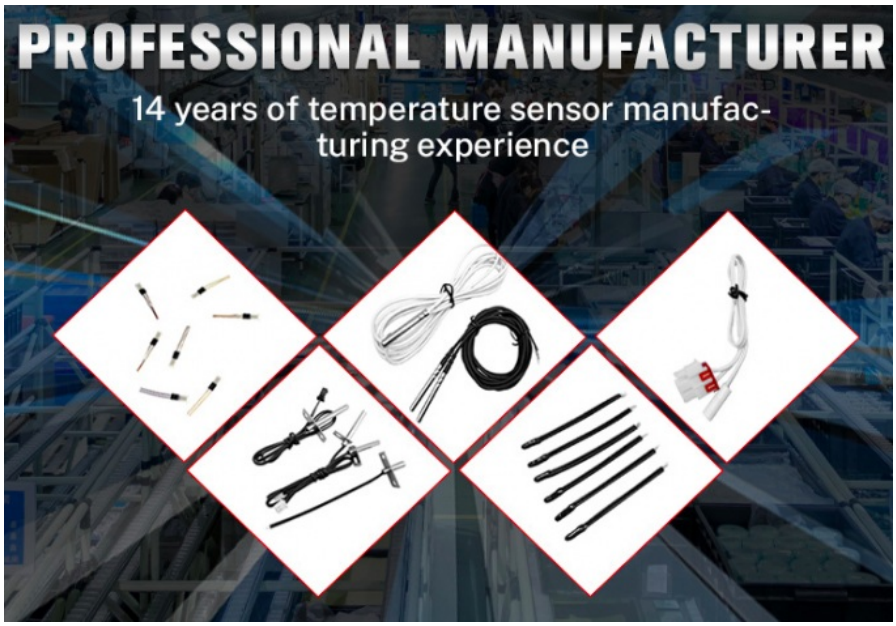
Test Item	Test Standard	Test method	Performance requirements

Zero Power Resistance	IEC 60539-1	Immerse samples in the constant temperature bath at 25 ±0.005 ,test steady resistance	Resistance tol ±1%
B value	IEC60 539-1	Immerse samples in the constant temperature bath at 25 ,50 (or 85), test steady resistance,and calculate B value	Resistance tol ±1%
Free fall	IEC60 068-2-32	Fall height: 1.5±0.1m,Surface: Cement , 1 time	No obvious damage, R25 △R/R≤±1%
Insulation	IEC60 539-1	500V pressure on insulation shell test insulation resistance	>500MOhm
Withstand voltage	IEC60 539-1	Withstand voltage: 1500V/AC ,Leakage current:2mA Lasting: 60sec	No obvious damage
Tension	IEC60 068-2-21	Pull uniform speed at the end, F>4.0KG(requested by customer)	No obvious damage, R25 △R/R≤±1%
Vibration	Q/HB m 108-94	Test frequency: 10~500Hz,swing: 1.2mm acceleration: 30m/s2 Direction X,Y,Z Time:8Hour/direction	No obvious damage, R25 △R/R≤±1%
Steady humidity and heat	IEC60 068-2-78	Temp:40±2 Humidity:92-95%RH Time:1000±24Hour	No obvious damage, R25 △R/R≤±1%
Thermal time constant	EC605 39-1	Immerse in 25 water,after thermal balance,immerse in 85 ,resistance arrives 63.2%,calculate total time	<10 sec
High temperature storage	IEC60 068-2-2	Temp:125 ±5 Time: 1000±24Hour	No obvious damage, R25 △R/R≤±1%
Cold and thermal shock	IEC60 068-2-14	-40 ~+125 T1:30min Cycle time:1000	No obvious damage, R25 △R/R≤±1%
Knock experiment	IEC60 068-2-77	Acceleration:250m/s2 Pulse lasting: 6ms Knock times: 1000 Recovery time: 2 Hour	No obvious damage, R25 △R/R≤±1%
Low temperature storage	IEC60 068-2-1	Temp: 40±2 Time: 1000±24Hour	No obvious damage, R25 △R/R≤±1%
Salt spray	IEC60 068-2-11	Temp: 35±2 Collection hour : 1.0mL~2.0mL Time: determine per as actual demand	No obvious damage, R25 △R/R≤±1%

Working principle of temperature sensor

Using the NTC thermistor under a certain measurement power, the resistance value drops rapidly as the temperature rises. Utilizing this feature, the NTC thermistor can be used to determine the corresponding temperature by measuring its resistance value, so as to achieve the purpose of detecting and controlling the temperature.





How to order ?

1. Operating temperature range : ?
2. Application: ?
3. Material and dimension of Housing: ?
4. Specification of sensing element : ?
(For example: If sensing element is NTC Thermistor, then Resistance at 25degree is 10KOHM,Resistance tolerance is ±1% ; Beta value is 3950,Beta tolerance is ±1%)
5.Cable gauge and length
6. How to deal with tail of cable ? Attach connector or stripped & tinned ? If attach connector,pls let us know part number of connector and we will recommend suitable one.
7. Any special requirements ? For example; Tolerance for sevaral temperature point etc.
8. Estimated quantity required

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