

Thank you for the purchase of our Temperature sensor. Before using our Temperature sensor, make sure you have understood this instruction manual in order to use the sensor correctly.

To prevent accidents arising from the misuse of this sensor, please ensure the operator using it receives this manual.



Make sure to read this instruction manual before using our Temperature sensor.

1. Check the temperature sensor immediately after unpacking

- The name plate showing temperature sensor type is attached to the product.
Check if it is the same product as ordered and if there is any quantity shortage, damage or defects.

2. When installing the temperature sensor

2.1 Take care when handling the sensor.

- Weight of the sensors may vary greatly depending on the type. If they are dropped in error, therefore, it can be very dangerous.
Since temperature sensors are high precision equipment, a shock which would result from dropping can cause malfunction.
- As products having a ceramic tube cannot withstand thermal or mechanical shock, further attention is required such as preheating.

2.2 Do not forcibly pull the lead wire if the sensor has a lead wire.

- If the lead wire is forcibly pulled, the connection may be broken.
- When the lead wire is protected by a flexible tube, the compressed area of the tube may be peeled off.
- Do not forcibly bend at the connection area (sleeve) where resin is applied.

2.3 Confirm the polarity before connecting the lead wire to the terminal

- Incorrect connection will result in a large error in temperature, which makes correct measurement impossible. (Especially note that the color code of the compensating lead wire is different depending on the standards)

2.4 Close the terminal box cover securely after connecting the lead wire

- After connecting the lead wire and confirming that the packing is surely set, close the terminal box cover tightly to avoid intrusion of rainwater or foreign substances.

2.5 Connect the screws or flanges securely.

- When connecting the screw, tighten it with a spanner, using sealing tape or sealing compound for the taper thread and a gasket for the parallel thread. When connecting the flange, tighten the bolts to the same degree, using a specified gasket.

2.6 Be careful of the bending point and the radius of the bending part of the sheathed temperature sensor.

- The sheathed temperature sensor can be bent so that the radius inside the bend (if one were to imagine a circle on the inside of the bend) is 2 times the sheath outside diameter, however, is

sometimes damaged if this is reversed.

- When bending the sheath at the job site, bend it on a radius 5 times or greater the sheath outside diameter for safety. Since the resistance element is located inside the end of the sheathed RTD, never bend the sheath at a position within a length of 100mm from the end.

2.7 Do not expose the connection area of the terminal with the lead wire to a higher temperature than 80°C.

- If the connection area of the terminal with the lead wire is exposed to such high temperature, insulation resistance will sometimes fall, which will cause temperature error. Keep the temperature around the terminal and its connection area with the lead wire at a temperature lower than 80°C, if not specified for high temperature application.

3. Maintenance and checking

3.1 Do not dismantle or repair the temperature sensor at job site.

- As the temperature sensor is manufactured with the specification for each operating requirement, never dismantle, repair or modify it at the job site.
- Do not divert the temperature sensor for any other purposes than the application specified on your purchase order.

3.2 Do not use the temperature sensor as scaffolding

- Do not use the temperature sensor installed on your equipment as a scaffolding or a supporting tool. If it is used in such a way, it will be damaged or broken.

3.3 Confirm operation stop, ambient temperature and atmospheric pressure.

Since, in many cases, the temperature sensor is installed at a place with high temperature and high atmospheric pressure, check or replace it after confirming the operation has stopped and also after the ambient temperature and the pressure become identical to room temperature and ordinary atmospheric pressure.

4. Storage

- Be sure to store the temperature sensor in a dry, clean indoor place. If the temperature sensor is stored in a humid area or outdoors, insulation resistance will possibly drop.

5. Scrapping

- Dispose of unnecessary temperature sensors as industrial scrap.

SHINKO TECHNOS CO.,LTD.
OVERSEAS DIVISION

Reg. Office: 2-5-1, Senbahigashi, Minoo, Osaka, Japan

URL : <http://www.shinko-technos.co.jp>

E-mail : overseas@shinko-technos.co.jp

Tel : 81-72-727-6100

Fax : 81-72-727-7006