

## Resistance temperature probe with cable

### Features

- Available with different thermocouples
- Wide application
- low-cost and high precision

### Descriptions

The temperature sensor are mainly used for measuring temperatures in liquids and gases. An important factor for selection this installation type is its ability to form reliable seals for vacuum and high pressure applications. Versions with Pt100 or Pt1000 are also available. The connection can also be supplied in a 2-wire, 3-wire, 4-wire circuit as an option.

### Applications

The application areas are among others, in air conditioning, and refrigeration technology as well as heating and apparatus engineering. The thermocouples are suitable for temperatures from -50 to +350.



图 1

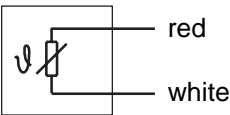
### RTD temperature probe accuracy DIN EN 60751

Accuracy	Allowable deviation	Temperature range
Class B	$\Delta t = \pm (0,3 \text{ }^{\circ}\text{C} + 0,005x t )$	-50...+400 °C
Class A	$\Delta t = \pm (0,15 \text{ }^{\circ}\text{C} + 0,002x t )$	-50...+300 °C
Class 1/3B	$\Delta t = \pm (0,1 \text{ }^{\circ}\text{C} + 0,0017x t )$	0...+150 °C
Class 1/10B	$\Delta t = \pm (0,03 \text{ }^{\circ}\text{C} + 0,0005x t )$	0...+150 °C

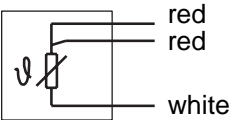
### Temperature measuring end

Material	304/316L (stainless steel)
Diameter	3mm , 4mm , 5mm , 6mm, 7mm, 8mm (can be made in customers requirements)
Length	(can be made in customers requirements)

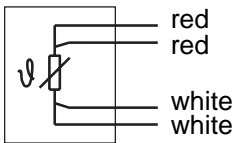
### Electrical connection



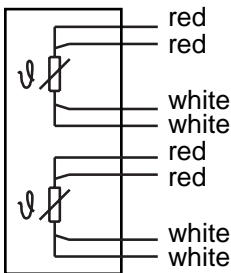
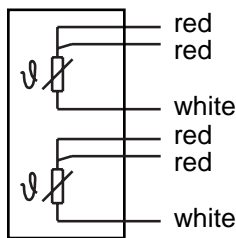
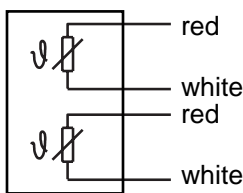
2-wire



3-wire



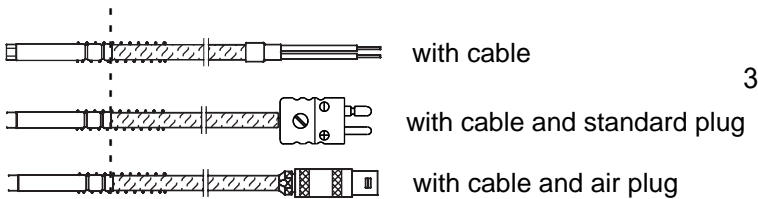
4-wire



2

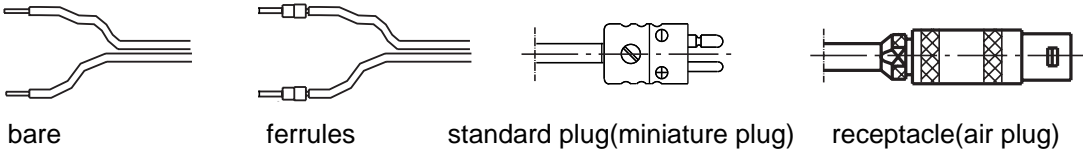
double temperature sensor in two-wire    double temperature sensor in three-wire    double temperature sensor in four-wire

Electrical connection



3

Electrical connection termination



4

Connect cable

Cable	Copper wire or thermocouple compensation wire
Sectional area	0.22 mm (Standard model)
Sensor quantity	depend on thermocouples sensors
Cable material	PVC,Silicone,FEP,PTFE or fiberglass
Note:the cable material on request.	
The choice of the appropriate protection tube material depends on the medium which has to be measured and the conditions reigning in the site of measurement.	
PVC	-20...+100 °C
Silicone	-50...+180 °C
PTFE	-200...+260 °C
Mental braiding	-50... +400 °C
Fiberglass	-50... +400 °C