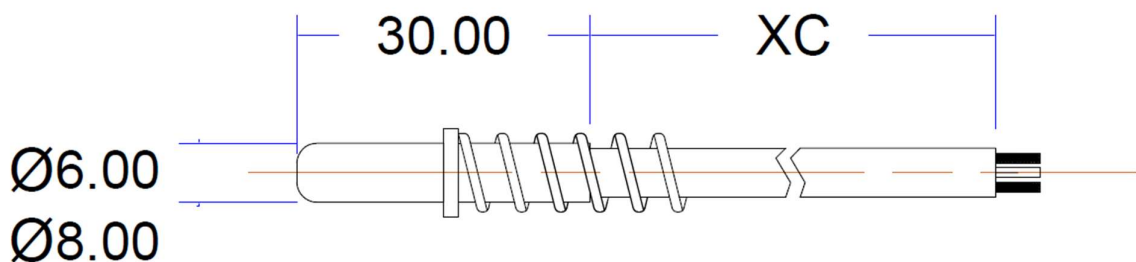


PT100 Temperature Sensor – Technical Datasheet

For Water Heating Systems – Ø6/Ø8 mm Probe



1. Product Description

This PT100 temperature sensor is designed for temperature measurement in water heating systems. It features a Ø6 - Ø8 mm stainless steel probe construction and is based on RTD (Resistance Temperature Detector) technology. The sensor provides reliable, accurate, and stable temperature measurement in industrial and commercial heating applications.

Typical applications:

- Electric water heaters
- Industrial water tanks
- Boiler systems
- Heating elements and immersion heaters
- Boilers and process equipment

2. Technical Specifications

Specification	Value
Sensor type	PT100 RTD
Nominal resistance	100 Ω at 0°C
Standard	IEC 60751
Accuracy class	Class B (optional Class A)
Connection type	3-wire (optional 2)
Operating temperature	-50°C / +250°C
Protection class	IP65

3. Mechanical Specifications

Specification	Value
Probe diameter	Ø6 – Ø8 mm
Probe length	15 – 300 mm (depending on application)
Probe material	AISI 316 Stainless Steel
Sensor tip	Closed tip
Mounting type	Threaded connection or non threaded connection

Standard Thread Connections:

- G1/2 BSP
- G1/4 (optional)
- M10x1 (optional)
- M12x1.5 (optional)

4. Electrical Connection

Specification	Value
Cable type	Silicone insulated cable or optionals
Cable length	1 m (other lengths optional)
Cable temperature rating	180°C
Cable outlet protection	IP65 sealed

Optional cable types:

- Fiberglass cable
- PTFE / Teflon cable
- Industrial connector termination

5. Response Time

Medium	Typical t50
Water	2 – 4 seconds

6. Applications

- Electric water heaters
- Boiler systems
- Industrial tanks
- Immersion heater systems
- Central heating systems
- Industrial process temperature control

7. Example Product Description

PT100 – Ø6x150 mm – AISI316 – 3 wire – Class B – silicone cable 1 m – G1/2

Description:

- PT100 temperature sensor
- 6 -8 mm diameter probe
- 15 mm sensor length
- AISI316 stainless steel sheath
- 3-wire connection
- Silicone cable
- G1/2 threaded connection