

SensyTemp TSH200 Series High-Temperature Sensors

High accuracy up to 1800 °C (3272 °F)



- Low investment costs due to standardized modules
- Wide range of possible combinations due to flexible building-block principle
- Simplified ordering process due to clear product structures
- Amazing variety of thermowell materials
- Suitable for different process requirements
- Extremely short delivery times for standard models

ABB Instrumentation

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The thermowell is the essential element



High-temperature combustion, annealing and melting processes are usually executed without pressure. As a result, the selection of the appropriate thermowell is the greatest challenge for temperature measurement. Both the thermowell materials' temperature resistance and their resistance to aggressive media are decisive. In conjunction with the appropriate thermocouple, the thermowell has a considerable effect on the temperature sensor's measuring accuracy and service life. You can benefit from optimal plant productivity and efficiency by selecting the appropriate and correctly dimensioned temperature sensor.



Specially-designed for 600 °C (1112 °F) to 1800 °C (3272 °F)

The temperature sensors of the SensyTemp TSH200 family have been specially designed for 600 °C (1112 °F) to 1800 °C (3272 °F) applications. They comply with the European standard for straight thermocouples, EN50446. The engineering process of this product series took advantage of more than 125 years of experience in the field of temperature measurement.

Tailored to high temperature

The flexible building-block principle offers a choice of thermowell materials, with or without ceramic protection tube, combined with all

common thermocouple types. The plant designer can select the appropriate temperature sensor for his application from a wide range of low-cost standard modules.

The well-structured modular documentation and ordering information provide precise and reliable product specifications. This reduces the need for detailed explanations and saves time and costs.

Applications

- Annealing and hardening furnaces
- Cement production
- Brick production
- Porcelain and ceramics industries
- Molten baths
- Blast furnaces
- Hot blast stoves
- Garbage incineration
- Glass industry

Three temperature sensors meeting the highest requirements

For all requirements up to 1300 °C (2372 °F) – TSH210

The TSH210 temperature sensor is designed for temperatures up to 1300 °C (2372 °F). It is made up of a metal thermowell, a thermocouple and a connection head. If required, a ceramic protection tube can be added to protect the thermocouple against contamination and for stabilizing the thermowell at high temperatures. An optional head-mounted transmitter and the appropriate process connection complete the TSH210 temperature sensor.

When it becomes really hot – TSH220

The TSH220 temperature sensor allows for temperature measurement up to 1800 °C (3272 °F). A ceramic thermowell provides for the required high temperature resistance. The thermowell is held by a stainless steel stay tube. The thermocouple is also made of stainless steel. A connection head, a protection tube, a head-mounted transmitter and a process connection are available as additional parts for the TSH220.

Specially designed for use in molten glass – TSH250

A platinum-coated ceramic thermowell qualifies this temperature sensor for measurement in molten glass at a temperature of up to 1650 °C (3002 °F). Due to the high temperature this application requires stainless steel thermocouples. The TSH250 is also available with a triple stage element to allow for temperature distribution measurement of the molten bath. A connection head, a stay tube, a head-mounted transmitter and a process connection optimally complete the TSH250.

Consistent quality due to measurable standard

All temperature sensors of the TSH200 series can be calibrated in our DKD calibration lab on request. The traceability to a national standard value ensures a consistently high quality of the temperature measurement point. This means cost savings due to high process reliability.

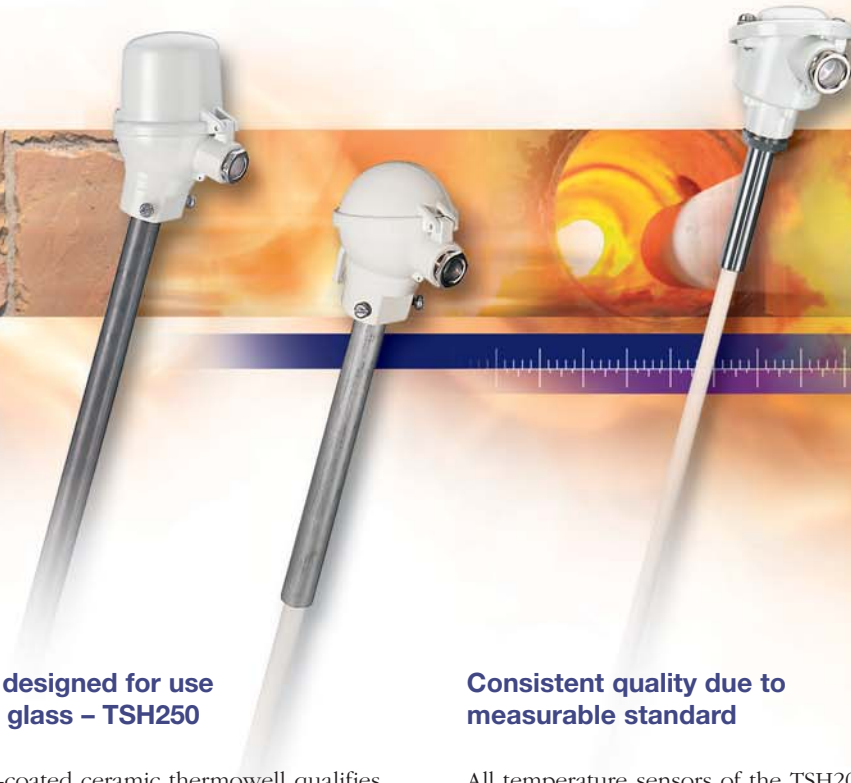


ABB is a leader in power and automation technologies that enable utility and industry customers to improve performance while lowering environmental impact. The ABB Group of companies operates in around 100 countries and employs about 111,000 people.

www.abb.com/temperature

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