

Fast-response Temperature Sensor Type 5207-0060



with Pt 1000 resistor

Application

Fast-responding temperature sensors for measuring rapid temperature changes in heat exchangers. Pt 1000 resistors. Basic values according to Class B of DIN EN 60751.



Fast-responding temperature sensors are used in compact heat exchangers which only have a fairly small mass with a low heat storage capacity. As a result, the temperature can change rapidly.

The Type 5207-0060 Temperature Sensor has been especially designed for domestic hot water heating in instantaneous heating systems. The sensor is primarily used in conjunction with Series 57xx Controllers with Electric Actuators.

Special features

- Optimal step response featuring a half-value time $t_{0,5} \leq 1$ second and a 90 % time $t_{0,9} \leq 3$ seconds measured in flowing water (0.4 m/s)
- Minimum thermal resistance and low heat capacity
- Immersion depth 52 mm
- Easy to install
- The use of a special sensor pocket provides optimal positioning of the temperature sensor at the heat exchanger

Three times characterize the step response:

- **Half-value time $t_{0,5}$** indicates the time taken for the measurement to reach 50 % of the final value
- **90 % time $t_{0,9}$** indicates the time taken to reach 90 % of the final value
- **Time τ** , indicates the time taken to reach 63.2 % of the final value



Fig. 1: Type 5207-0060 Temperature Sensor

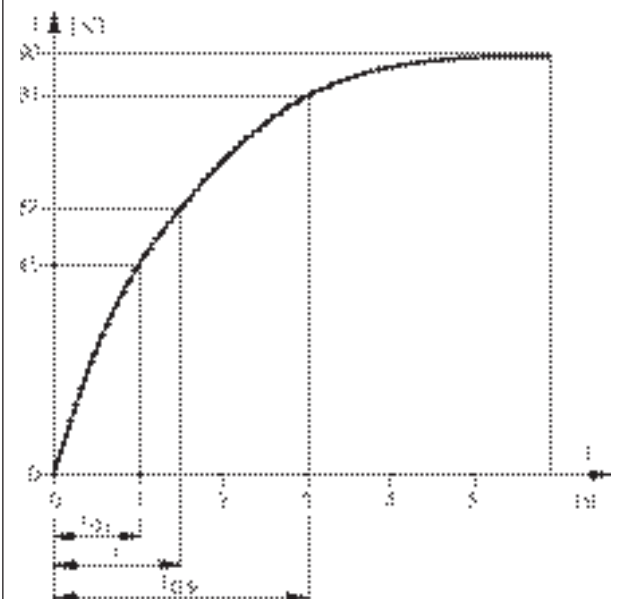


Fig. 2: Step response

