

# Pipeline temperature sensor RTS

RTS mit Stecker DIN 43650-A



RTS mit Rundsteckverbinder



RTS mit Aufsteckanzeige DA 06



## Application

Suitable for measuring temperature in pipelines in which a probe cannot reach into the medium. Specially suitable for hygienic applications in the food and pharmaceutical industries as well as for biotechnology and painting systems.

## Description

The RTS pipeline temperature sensor consists of a pipe piece with variable process connections and a sensor part contained in the centre. The sensor part contains a flush Pt 100 sensor. A number of thermal coupling and decoupling measures at the Pt 100 sensor minimise thermal errors. This allows for optimum detection of the temperature of the medium. The pipeline temperature sensor can be easily installed at any point of the pipeline. There is no probe reaching into the medium. This offers the following advantages:

- The pipeline can be cleaned with a scraper.
- There are no swirls in the pipeline.
- No danger of sensor damages in highly viscous media.
- Special internal coatings are available for corrosive media.
- Superior surface quality is possible by means of electro-polishing.

## Technical specifications Pipeline temperature sensor

**Measuring range**  
0/150 °C

**Sensor**  
1 x Pt 100  
2-, 3- or 4-wire  
Class B, IEC 751

**Basic values**  
According to EN 60751

**Measuring current**  
Approx. 1 mA  
(film measuring resistor)

**Process connection (both ends)**  
One of the following:  
Clamp DIN 32676  
Screwed pipe connection  
DIN 11851/SMS with union nut  
Male thread DIN 11887/SMS  
Flange according to DIN 2633  
Flange according to ANSI B 16.5

**Nominal widths**  
DN 25 to DN 100  
or 1" to 4"

**Pipe material**  
Stainless steel 1.4301

**Insulation resistance**  
≥ 100 MΩ at 20 °C (DC 500 V)

**Electrical connection**  
Plug DIN 43650-A

**Protection**  
IP 65 (EN 60529)

## Technical specifications Transmitter (option)

**Version**  
Ceramic hybrid transmitter,  
mounted directly in the neck

**Ambient temperature**  
Max. 100 °C

**Supply voltage**  
DC 12–28 V

**Output signal**  
4–20 mA, 2-wire

## Options

- Transmitter installation
- Other pipe materials
- Inner pipe electropolished
- Other process connections
- Other pipe dimensions
- Other measuring ranges
- Fixed cable connection
- Other plug-in connectors
- Sensor class A
- Digital plug-in display DA 06  
(for version with transmitter)

Price on request.