

## Temperature Sensors

resistance thermometer



The temperature sensors can be individually adjusted to the specific task and conditions by a wide-ranged modular configuration system including various types of available shaft materials and variable installation length. Thus, in all fields of industrial process technology, monitoring and laboratory applications universal and accurate temperature measurements are available.

### Features

- temperature measurements by means of platinum chip resistance PT100 and PT1000 or NTC resistance
- 2-wire or 4-wire system
- high accuracy and long-term stability
- low maintenance required in combination with long service life
- robust, shock-protected design
- dimension comparable to glass electrodes
- installation length variable
- various shaft materials available
- universally applicable at temperatures up to +150 °C (depending on shaft material)
- electrical connection by threaded plug head connector PG 13.5, plug head connector S+ or fixed connection
- appropriate for installation in armatures

### Application fields

- universal temperature measurements for industrial applications and laboratories
- application for temperature compensation at pH and redox measurements

## Technical data

| Parameter                          |                      | Description                                |
|------------------------------------|----------------------|--|
| resistance / insulation resistance | PT100                | 100 Ω / > 10 MΩ                            |
|                                    | PT1000               | 1000 Ω / > 10 MΩ                           |
|                                    | NTC                  | 1000 Ω / > 100 MΩ                          |
| shaft material                     |                      | normal-purpose glass                       |
|                                    |                      | PVC  |
|                                    |                      | PVDF                                       |
| shaft diameter                     |                      | 12 mm                                      |
| installation length                |                      | fabrication according to customers request |
| electrical connection              |                      | threaded plug head connector PG 13.5       |
|                                    |                      | plug head connector S+                     |
|                                    |                      | fixed connection                           |
| permitted temperature range        | normal-purpose glass | -10 to +150 °C                             |
|                                    | PVC                  | -20 to +50 °C                              |
|                                    | PVDF                 | -20 to +115 °C                             |
| max. permitted pressure            |                      | 6 bar                                      |

## Order options

| measuring parameter |    | design measuring system |   | electrical connection |   |                                      | shaft properties |                      | installation length        |    | number conductors |   |
|---------------------|----|-------------------------|---|-----------------------|---|--------------------------------------|------------------|----------------------|----------------------------|----|-------------------|---|
| TE                  |    | P                       |   | PA                    |   |                                      | D                |                      | 12                         |    | 2                 |   |
| temperature         | TE | PT100                   | P | no thread             | plug head connector S+  | S+                                   | PVC              | K1                   | variable, indication in cm | XX | 2-wire system     | 2 |
|                     |    | PT1000                  | L |                       | no connector  | FX                                   | PVDF             | K2                   |                            |    | 4-wire system     | 4 |
| NTC                 |    | N                       |   |                       | fixed connection, X=cable length in m, measuring transducer with... | BNC connector straight               | FXG              | normal-purpose glass | D                          |    |                   |   |
|                     |    |                         |   |                       |   | BNC connector angled                 | FXB              |                      |                            |    |                   |   |
|                     |    |                         |   |                       |   | DIN connector                        | FXD              |                      |                            |    |                   |   |
|                     |    |                         |   |                       |   | threaded plug head connector PG 13.5 | PA               |                      |                            |    |                   |   |
|                     |    |                         |   |                       | thread PG 13.5  | no connector                         | EX               |                      |                            |    |                   |   |
|                     |    |                         |   |                       |   | BNC connector straight               | EXG              |                      |                            |    |                   |   |
|                     |    |                         |   |                       |   | BNC connector angled                 | EXB              |                      |                            |    |                   |   |
|                     |    |                         |   |                       |   | DIN connector                        | EXD              |                      |                            |    |                   |   |

We will be happy to assist you by selecting the suitable options that meet your requirements. In addition to the displayed order options special customized designs are certainly possible. Please contact us!

The necessary accessories such as connecting cables and armatures can be found in the respective technical data sheets. Specifications are subject to modifications.