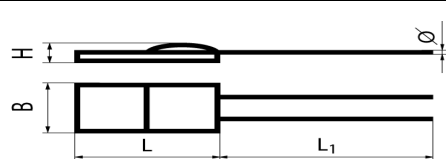


|                  |                       |               |
|------------------|-----------------------|---------------|
| <b>Datasheet</b> | <b>1,7x1,25Pt100A</b> | <b>112002</b> |
|------------------|-----------------------|---------------|

## Summary

This platinum temperature sensor element is characterized by the small size. Typically, it is used in the automotive industry and in air conditioning and heating.

## Dimensions in mm

|  | L          | B           | L <sub>1</sub> | H         | Ø           |
|-----------------------------------------------------------------------------------|------------|-------------|----------------|-----------|-------------|
|                                                                                   | 1,7 ± 0,25 | 1,25 ± 0,15 | 10 ± 1         | 0,8 ± 0,2 | 0,15 ± 0,02 |

## Technical specifications

| Nominal resistance<br>R <sub>0</sub> at 0 °C | Specification | Tolerance      | Order Number   | Item Number |
|----------------------------------------------|---------------|----------------|----------------|-------------|
| 100 $\Omega$                                 | DIN EN 60751  | F 0,15 (DIN A) | 1,7x1,25Pt100A | 112002      |

|                           |                                                                                                                                                                                   |                           |                           |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------------|
| Temperature range:        | -70 ° C to +500 ° C in continuous operation (briefly up to 550 ° C possible)                                                                                                      |                           |                           |
|                           | Validity of tolerance F 0.15: -70 ° C to +500 ° C                                                                                                                                 |                           |                           |
| Temperature coefficient:  | TK = 3850 ppm / K                                                                                                                                                                 |                           |                           |
| Connecting wires:         | NiPt coated wire, suitable for crimping, welding and brazing                                                                                                                      |                           |                           |
| Long-term stability:      | Max. R <sub>0</sub> -drift 0.04% after 1000 h at 500 ° C                                                                                                                          |                           |                           |
| Vibration resistance:     | At least 40 g acceleration at 10 to 2000 Hz, depends on installation                                                                                                              |                           |                           |
| Shock resistance:         | At least 100 g acceleration with 8ms half sine wave, depends on installation                                                                                                      |                           |                           |
| Environmental conditions: | unprotected only in dry environments                                                                                                                                              |                           |                           |
| Insulation resistance:    | > 100 M $\Omega$ at 20 ° C; > 2 M $\Omega$ at 500 ° C                                                                                                                             |                           |                           |
| Self-heating:             | 0.4 K / mW at 0 ° C                                                                                                                                                               |                           |                           |
| Response:                 | water current (v = 0.4 m / s):                                                                                                                                                    | t <sub>0,5</sub> = 0.04 s | t <sub>0,9</sub> = 0.12 s |
|                           | Air flow (v = 2 m / s):                                                                                                                                                           | t <sub>0,5</sub> = 2.2 s  | t <sub>0,9</sub> = 7.0 s  |
| Measurement current:      | Due to the self-heating error by the measurement conditions of the measurement current should be limited to a maximum value. We recommend:<br>0.3 to 1 mA (consider self-heating) |                           |                           |
| Measuring point:          | 8 mm from the end of the sensor element body                                                                                                                                      |                           |                           |
| Packaging:                | loose packed in bag / vacuum.                                                                                                                                                     |                           |                           |
| <b>Note:</b>              | <b>Please refer to our application and installation instructions.</b>                                                                                                             |                           |                           |
| RoHS compliant            |                                                                                                                                                                                   |                           |                           |

Technische Änderungen behalten wir uns vor. Alle technischen Angaben sind Beschaffenheitsangaben und sichern keine Eigenschaften zu.

Version 1.0 vom 06/2012

