

Platinum Resistance Temperature Detector

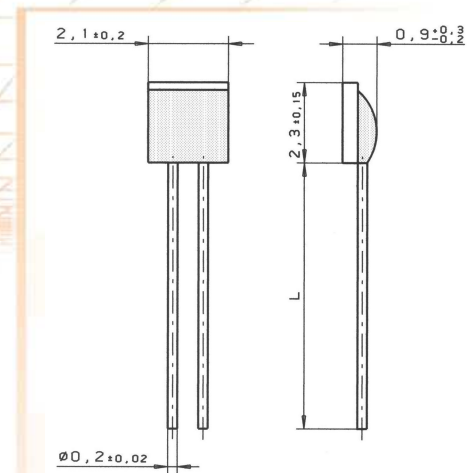
MN 222

MN- series PRTDs are designed for large volume applications where long term stability, interchangeability and accuracy over a large temperature range are vital. Typical applications are Automotive, White Goods, HVAC, Energy management, Medical and Industrial equipment.

| Nominal Resistance R_0 | Tolerance | Order No. Plastic bag |
|--------------------------|------------------------|-----------------------|
| 100 Ohm at 0°C | DIN EN 60751, class 2B | 32 207 757 |
| | DIN EN 60751, class B | 32 207 758 |
| | DIN EN 60751, class A | 32 207 759 |
| 500 Ohm at 0°C | DIN EN 60751, class 2B | 32 207 755 |
| | DIN EN 60751, class B | 32 207 756 |
| 1000 Ohm at 0°C | DIN EN 60751, class 2B | 32 207 751 |
| | DIN EN 60751, class B | 32 207 753 |
| | DIN EN 60751, class A | 32 207 754 |

The measuring point for the nominal resistance is defined at 8 mm from the end of the sensor body.

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|--------------------------------|---|
| Specification | DIN EN 60751 (according to IEC 751) |
| Temperature range | -70°C to +500°C (continuous operation) (temporary use to 550 °C possible) Tolerance class B: - 70 °C to + 500 °C Tolerance class A: - 50 °C to + 300 °C |
| Temperature coefficient | TCR = 3850 ppm/K |
| Leads | Ni wire Recommend connection technology: Welding and Brazing |
| Lead lengths (L) | 10 mm ± 1mm |
| Ambient conditions | Unhoused for dry environments only |
| Insulation resistance | > 100 MΩ at 20°C; > 2 MΩ at 500°C |
| Self heating | 0.4 K/mW at 0°C |
| Response time | water current (v = 0.4 m/s): $t_{0.5} = 0.05$ s $t_{0.9} = 0.15$ s air stream (v = 2 m/s): $t_{0.5} = 3.0$ s $t_{0.9} = 10.0$ s |
| Measuring current | 100 Ω: 0.3 to 1.0 mA 500 Ω: 0.1 to 0.7 mA 1000 Ω: 0.1 bis 0.3 mA (self heating has to be considered) |
| Application advice | 1. To avoid shear forces on the connection area, the connection wires may be neither split or bent. The bending may only take place 3 mm after the element, using a bending or splitting tool. 2. Other nominal values, lengths and temperature coefficients on request. 3. Due to a production-caused oxide layer coating the leads, soft-soldering is restricted. |
| Note | Other tolerances, values of resistance are available on request. |



We reserve the right to make alterations and technical data printed. All technical data serves as a guideline and does not guarantee particular properties to any products.

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