

## **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 R0	<b>Toler ance</b> DIN EN 60751 1996-07	<b>Tolerance</b> DIN EN 60751 2009-05	Or der Number Plastic Bag
100 Ohm at 0℃	Class A	F 0.15	32 207 759
	Class B	F 0.3	32 207 758
	Class 2B	F 0.6	32 207 757
500 Ohm at 0℃	Class A	F 0.15	32 207 761
	Class B	F 0.3	32 207 756
	Class 2B	F 0.6	32 207 755
1000 Ohm at 0℃	Class A	F 0.15	32 207 754
	Class B	F 0.3	32 207 753
	Class 2B	F 0.6	32 207 751

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

Specification DIN EN 60751 (according to IEC 751)

Temperature range

Tolerance Class A:

-50℃ to +300℃

Tolerance Class B:

-70℃ to +500℃

Tolerance Class 2B:

-70℃ to +500℃

(temporary use at Cl. B and 2B to 550℃ possible)

Temperature coefficient TCR = 3850 ppm/K

Leads Ni- wir

Recommend connection technology:

Welding and Brazing

Lead lengths (L) 10mm ±1mm

Ambient conditions Unhoused for dry environments only

**Insulation resistance** > 100 M $\Omega$  at 20°C; > 2 M $\Omega$  at 500°C

Self heating 0.4 K/mW at 0℃

**Response time** water current (v= 0.4m/s):  $t_{0.5} = 0.05s$   $t_{0.9} = 0.15s$ 

air stream (v= 2m/s):  $t_{0.5} = 3.0s$  $t_{0.9} = 10.0s$ 

Measuring current100Ω:0.3 to 1.0mA500Ω:0.1 to 0.7mA

1000Ω:0.1 bis 0.3mA

(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.

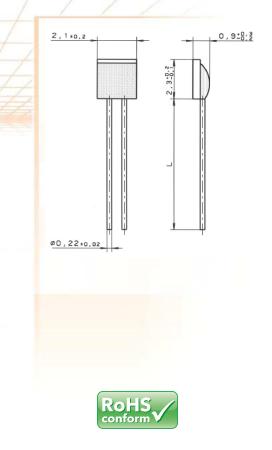
2. Other nominal values, lengths and temperature coefficients on request.

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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