HM220, Pt Temperature Sensor according to DIN EN IEC 60751

Temperature range -70 °C to +600 °C

- Large operation window up to 600 °C
- High accuracy over a wide temperature range
- High vibration and shock resistance
- Optimized for welding and brazing
- Small footprint

HM 220 Pt-RTDs are characterized by long-term stability, and precision over a broad temperature range. HM elements are used in industrial processes where operation temperatures above 500 °C are used. In principle, the products can also be used in automotive applications, in this case Heraeus will check upon the request of the customer, whether additional requirements can be met (e.g. IMDS,PPAP).

Nominal Resistance R_0 [Ω]	Tolerance Class	Order Number	Packaging

The measuring point for the nominal resistance is 6 mm from the end of the sensor body.

Temperature Range of Tolerance Class

Temperature Coefficient

TCR = 3850 ppm/K

Measuring Current

(self-heating has to be considered)

Dimensions and Tolerances in mm

L: 2.3 ±0.15
W1: 1.9 ±0.15
H: 0.9 ±0.3
LL: 8 ±1
Lø: 0.2 ±0.02
W2: 0.8 ±0.1

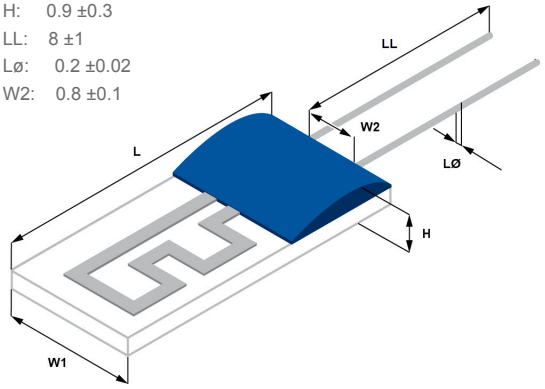

Image for illustration purposes only
Color, shape and forming of fixing drop may vary

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Temperature range -70 °C to +600 °C

Long-Term Stability
R_0- Drift 0.24 % after 1000 hours at 600 °C (energized)
(unhoused chip in standard atmosphere)

Self-Heating
0.2 K/mW at 0 °C

Insulation Resistance
> 100 MΩ at 20 °C
> 2 MΩ at 600 °C

Vibration Resistance
At least 40 g acceleration at 10 to 2000 Hz, depends on installation

Shock Resistance
At least 100 g acceleration with 8 ms half sine wave, depends on installation

Connection Technology
Welding, Brazing

Lead Type
Pt coated Pd alloy

Tensile Strength of Leads
≥ 10 N

Packaging
Plastic bag
Alternative packaging forms on request.

Storage Life
Min. 12 months (in original packaging)

Note
Other tolerances, values of resistance and wire lengths are available on request.
Due to random sample measurements, a bending of connection wires may occur (called V-shape). This bending is batch-dependent and has no influence on the functionality of the platinum measuring resistor.

The information provided in this data sheet describes certain technical characteristics of the product, but shall not be qualified or construed as quality guarantee (Beschaffenheitsgarantie) in the meaning of sections 443 and 444 German Civil Code. The information provided in this data sheet regarding measurement values (including, but not limited to, response time, long-term stability, vibration and shock resistance, insulation resistance and self-heating) are average values that have been obtained under laboratory conditions in tests of large numbers of the product. Product results or measurements achieved by customer or any other person in any production, test, or other environment may vary depending on the specific conditions of use. YAGEO Nexensos does not recommend the use of standard catalogue products or automotive grades for aerospace applications or manned space flight. The customer is solely responsible to determine whether the product is suited for the customer's intended use; in this respect YAGEO Nexensos cannot assume any liability. The sale of any products by YAGEO Nexensos is exclusively subject to the General Terms of Sale and Delivery of YAGEO Nexensos in their current version at the time of purchase, which is available under www.yageo-nexensos.com/tc or may be furnished upon request. This data sheet is subject to changes without prior notice.

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