

## HM 220, Platinum Resistance Temperature Detector according to DIN EN 60751

Temperature range -70 °C to +600 °C

HM 220 type platinum sensors are characterized by long-term stability, precision over a broad temperature range and compatibility. The main feature is the small design. They are used in particular for applications with high consumption volumes, e.g. white goods and heating power.

Nominal Resistance R <sub>0</sub>	Tolerance	Order number
	DIN EN 60751 2009-05	Plastic box
100 Ohm at 0 °C	F 0.3 (Class B) F 0.15 (Class A)	32 208 787 32 208 788

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

### Temperature and tolerance range

-70 °C up to +600 °C

Tolerance class F 0.3 (B): -70 °C to +600 °C

Tolerance class F 0.15 (A): -50 °C to +300 °C

### Temperature coefficient

TCR = 3850 ppm/K

### Response time

Water current (v= 0.4m/s):  
t<sub>0.5</sub> = 0.05 s  
t<sub>0.9</sub> = 0.14 s

Air stream (v= 2m/s):  
t<sub>0.5</sub> = 3.0 s  
t<sub>0.9</sub> = 10.0 s

### Measuring current

0.3 to 1.0 mA

(self-heating has to be considered)

### Long-term stability

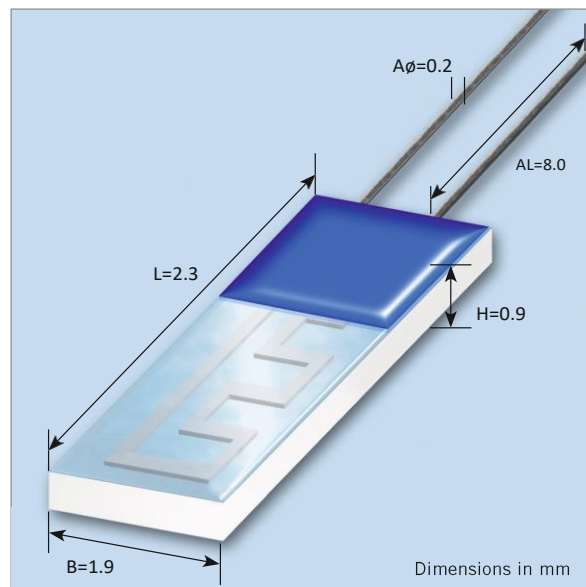
RO-Drift 0.24 %

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

> 1 MΩ at 600 °C

### Vibration resistance

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



The information provided in this data sheet regarding the technical characteristics of the product describe the quality of the product, but shall not be qualified or construed as quality guarantees (Beschaffenheitsgarantie) in the meaning of sections 443 and 444 German Civil Code.

The information provided in this data sheet regarding measurement values (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; measurements in productive use may vary significantly depending on the specific conditions of use.

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## HM 220, Platinum Resistance Temperature Detector according to DIN EN 60751 Temperature range -70 °C to +600 °C

### Shock resistance

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

### Leads

PdW3-Pt-jacket

### Lead lengths (L)

8 mm ± 1 mm

### Connection technology

Suitable for welding and hard soldering

### Tensile strength of leads

≥ 10 N

### Packaging

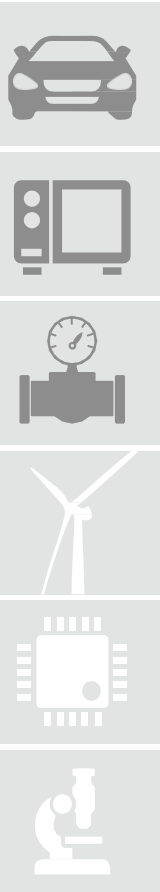
Vacuum plastic bag

### Storage life

Min. 12 months (in original packaging)

### Note

Other tolerances, values of resistance and wire lengths are available on request.



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