## Heraeus

## **Platinum Resistance Temperature Detector**

HA 2421 Pt 200-type platinum temperature sensors are characterized by long-term stability, precision over a broad temperature range and compatibility. Main application area is the automotive industry. With this thermometer you are able to use the high temperature range above the standard 500°C.

Nominal Resistance R <sub>0</sub>	Tolerance	Order No. Blister box
200 Ohm at 0°C	HST - Tolerance 0°C: +- 4.5 K; 500°C: +- 7.5 K; 1000°C: +- 15 K	32 208 760

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

Specification	HST (Heraeus Sensor Technology)
Temperature Range	- 70°C up to + 1000°C
Temperature coefficient	TCR = 3770 ppm/K
Leads	Pt
Lead length (L)	8 mm +- 1mm
Long-term stability	tbd
Environmental conditions	Unhoused for dry environment only, Up to 650°C in housings also as clean MI-typ possible, above 650°C no reducing atmosphere, free air admission necessary
Insulation resistance	>100 MOhm at 20°C
Self heating	0.2 K/mW at 0 °C
Response time	Water current (v = 0.4 m/s): $t_{0.5} = 0.10 \text{ s};$ $t_{0.9} = 0.30 \text{ s}$ Air stream (v = 2 m/s): $t_{0.5} = 4.6 \text{ s}; t_{0.9} = 15.0 \text{ s}$
Measuring current	20°C 5 mA ; 1000°C max. 2.7 mA (self heating has to be considered)
Note	Other tolerances, values of resistance and wire lengths are available on request. When connecting the sensor, please consider polarisation!!!
Status	preliminary

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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