

## **Platinum Resistance Temperature Detector**

L 220

L 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 <sub>0</sub>	Tolerance	Order No. Plastic bag
100 Ohm at 0°C	DIN EN 60751, class B DIN EN 60751, class A DIN EN 60751, class 1/3 DIN	32 207 400 32 207 584 32 207 588

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

**Specification** DIN EN 60751 (according to IEC 751) Temperature range -50°C to +400°C (continuous operation) Tolerance class B: - 50 °C to + 400 °C Tolerance class A: - 50 °C to + 300 °C Tolerance class 1/3 DIN: 0 °C to + 150 °C 1,9±0,15 Temperature coefficient TCR = 3850 ppm/K Leads AgPd Long-term stability max. R<sub>0</sub>-drift 0.04% after 1000 h at 400°C Vibration resistance at least 40 g acceleration at 10 to 2000 Hz, depends on installation 9,0 **Shock resistance** at least 100 g acceleration with 8ms half sine wave, depends on installation **Environmental conditions** unhoused for dry environments only Insulation resistance > 100 M $\Omega$  at 20°C; > 2 M $\Omega$  at 500°C 0 Self heating 0.4 K/mW at 0°C Ø0,25±0,02 Response time water current (v = 0.4 m/s):  $t_{0.5} = 0.06$  s;  $t_{0.9} = 0.20$  s air stream (v = 2 m/s):  $t_{0.5}$  = 3.0 s;  $t_{0.9}$  = 13.0 s Measuring current 0.3 to 1.0 mA (self heating has to be considered)

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.

Other tolerances, values of resistance and wire lengths are

Heraeus Sensor Technology GmbH, Reinhard-Heraeus-Ring 23, 63801 Kleinostheim, Germany Phone: +49 (0) 6181/35-8098, Fax: +49 (0)6181/35-8101, E-Mail: info.HSND@Heraeus.com, Web:www.heraeus-sensor-technology.com

available on request.

Note

Status: 04/2004

Heraeus Sensor Technology