

## **Platinum Resistance Temperature Detector**

L 220 P

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 R0	<b>Tolerance</b> DIN EN 60751 1996-07	<b>Tolerance</b> DIN EN 60751 2009-05	Order Number Plastic Box	Order Number Vacuum bag
100 Ohm at 0°C	Class B	F 0.3	32 207 302	32 207 608

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 -50°C to +400°C (continuous operation)

Tolerance class B: -50°C to +400°C

Temperature coefficient TCR = 3850 ppm/K

Leads AgPd- wire

Lead lengths (L) 10mm ±1mm

Long-term stability max. R<sub>0</sub>-drift 0.04% after 1000h at 400°C

Vibration resistance at least 40g acceleration at 10 to 2000 Hz,

depends on installation

Shock resistance at least 100g 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 400°C

Self heating 0.4 K/mW at 0°C

**Response time** water current (v= 0.4m/s):  $t_{0.5} = 0.20$ s

 $\begin{array}{c} t_{0.9} = 0.30s \\ \text{air stream (v= 2m/s):} \\ \end{array}$ 

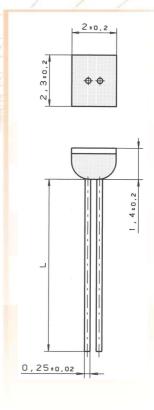
 $t_{0.9} = 9.0s$ 

Measuring current  $100\Omega$ : 0.3 to 1.0mA

(self heating has to be considered)

Note Other tolerances, values of resistance and

wire lengths 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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