

Platinum temperature sensor in thin-film technology

L 416

L-series platinum temperature sensors are characterized by long-term stability, excellent precision over a wide temperature range and compatibility. They are used particularly for applications with high consumption volumes, typically in the automotive, white goods, HVAC and energy generation industries as well as in medical and industrial appliances and machinery.

Nominal Resistance R ₀	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	32 207 440 32 207 583 32 207 700

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

DIN EN 60751 Specification 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 ,5±0,15 TCR = 3850 ppm/KTemperature coefficient Leads AgPd Long-term stability Max. R₀ drift 0.04% after 1000 h at 400°C Vibration resistance at least 40 g acceleration at 10 to 2000 Hz, depends on installation Shock resistance at least 100 g acceleration with 8ms half sine wave, depends on installation **Ambient conditions** Use unprotected only in dry environments Insulation resistance > 100 M Ω at 20°C; > 2 M Ω at 500°C 4 Self heating 0.4 K/mW at 0°C Water current (v = 0.4 m/s): Response time $t_{0.5} = 0.07 \text{ s};$ $t_{0.9} = 0.25 \text{ s}$ Air flow (v = 2 m/s): $t_{0.5}$ = 3.2 s; $t_{0.9}$ = 14.0 s Ø0,25±0.02 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

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available

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