

Platinum Resistance Temperature Detector

HL 220 Pt 100

HL 220 type platinum sensors are characterised 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, heating power and process technology.

Nominal Resistance R	Tolerance up to 650°C	Tolerance up to 750°C	Order No.
100 Ohm at 0°C	DIN EN 60751, Class B	DIN EN 60751, Class 2B	32 208 398

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

Specification DIN EN 60751

Temperature range - 70°C up to + 750°C

Temperature coefficient TCR = 3850 ppm/K

Leads

Lead lengths (L) 8 mm +-1mm

Long-term stability 1000h at 750°C (energized) smaller then the

allowed deviation according to DIN B.

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

Environmental conditions Unhoused for dry environmental only,

up to 600°C in housings also as clean MI-type possible, above 600°C no reducing atmosphere,

free air admission necessary.

Insulation resistance > 100 MOhm at 20 °C; > 2 MOhm at 650 °C

Self heating 0.3 K/mW at 0 °C

Response time Water current (v = 0.4 m/s): $t_{0.5} = 0.05 \text{ s}$; $t_{0.9} = 0.14 \text{ s}$

Air stream (v = 2 m/s): $t_{0.5} = 3.0 \text{ s}$; $t_{0.9} = 10 \text{ s}$

Measuring current 0.3 to 1.0 mA

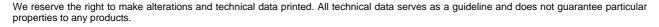
(self heating has to be considered)

Packaging Plastic bag

Note Other tolerances, values of resistance and wire lengths are

available on request.

Status preliminary



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