

HL 220, Platinum Resistance Temperature Detector according to DIN EN 60751

Temperature range -70 °C to +750 °C

HL 220 type platinum sensors are characterized 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 and heating power.

Nominal resistance R0	Tolerance	Order number
	DIN EN 60751 2009-05	Plastic Box
1000 Ohm at 0 °C	F 0.6 (Class 2B)	32 208 779

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

Temperature and tolerance range

-70 °C up to +750 °C

Tolerance class F 0.6 (2B): -70 °C to +70 °C

Temperature coefficient

TCR = 3850 ppm/K

Response time

Water current (v= 0.4m/s):
 $t_{0.5} = 0.05$ s
 $t_{0.9} = 0.14$ s

Air stream (v= 2m/s):
 $t_{0.5} = 3.0$ s
 $t_{0.9} = 10.0$ s

Measuring current

0.1 to 0.3 mA

(self-heating has to be considered)

Long-term stability

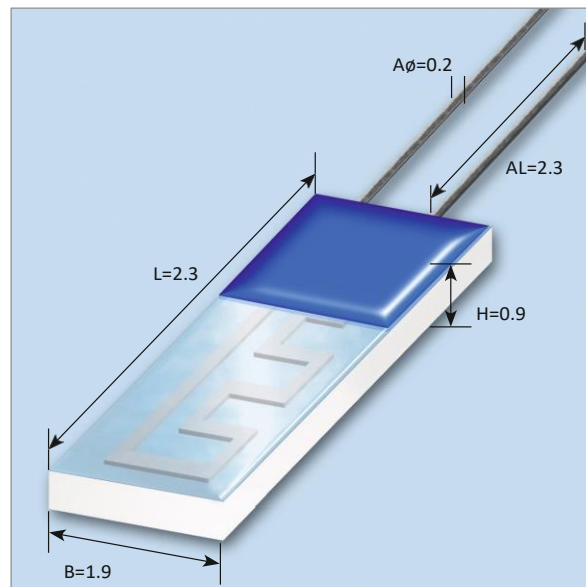
R0-Drift <0.24 %

after 1000 hours at 750 °C (energized)

(Unhoused chip in standard atmosphere)

Self-heating

0.2 K/mW at 0 °C



Insulation resistance

> 100 MΩ at 20 °C

> 2 MΩ at 650 °C

Vibration resistance

At least 40 g acceleration at 10 to 2000 Hz, depends on installation

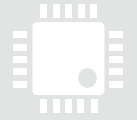


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HL 220, Platinum Resistance Temperature Detector according to DIN EN 60751

Temperature range $-70\text{ }^{\circ}\text{C}$ to $+750\text{ }^{\circ}\text{C}$

Shock resistance

At least 100 g acceleration with 8 ms half sine wave, depends on installation

Leads

NiCr-Pt-jacket

Lead lengths (L)

8 mm \pm 1 mm

Connection technology

Suitable for welding and hard soldering

Tensile strength of leads

$\geq 10\text{ N}$

Packaging

Vacuum bag > 500 pieces

Storage life

Min. 12 months (in original packaging)

Note

Other tolerances, values of resistance and wire lengths are available on request.

California Proposition 65



WARNING:

This product can expose you to chemicals including nickel and cobalt, which are known to the State of California to cause cancer. For more information go to www.p65warnings.ca.gov.



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