HD 421, Platinum Resistance Temperature Detector according to DIN EN 60751

Temperature range -70 °C to +850 °C

HD 421 Pt 100-type platinum temperature sensors are characterized by long-term stability, precision over a broad temperature range and compatibility. Main application area ist the process technology.

Nominal Resistance R0	Tolerance	Order Number
	DIN EN 60751 2009-05	Blister box
100 Ohm at 0 °C	F 0.3 (Class B) F 0.6 (Class 2B)	32 208 228 32 208 776

The measuring point for the nominal resistance is defined at 4 mm from the end of the sensor body.

Temperature and tolerance range

-70 °C up to +850 °C
Tolerance class F 0.6 (2B): -70 °C to +850 °C
Tolerance class F 0.3 (B): -70 °C to +650 °C

Temperature coefficient

TCR = 3850 ppm/K

Response time

Water current (v= 0.4m/s): t0.5 = 0.05 s
t0.9 = 0.17 s
Air stream (v= 2m/s): t0.5 = 3.3 s
t0.9 = 13.0 s

Measuring current

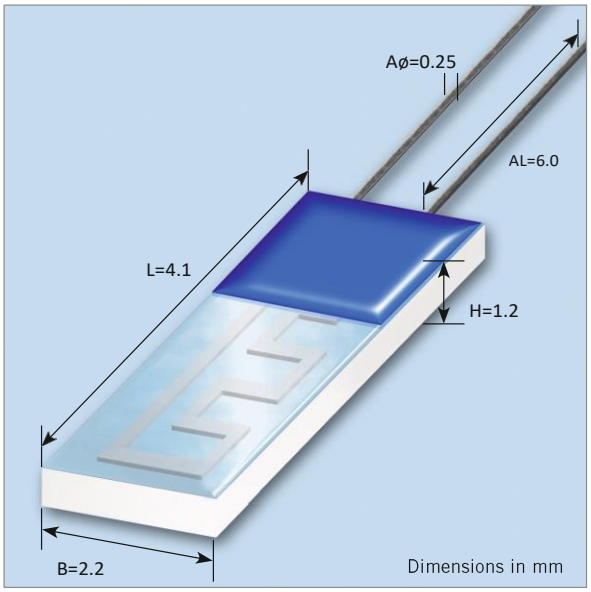
20 °C max. 5.0 mA
850 °C max. 2.8 mA
(self-heating has to be considered)

Long-term stability

R0-Drift < then the allowed deviation according to DIN B after 1000 hours at 850 °C (energized, open)
R0-Drift < then the allowed deviation according to DIN B after 1000 hours at 650 °C (under current as clean MI-type)

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

RoHS konform

Heraeus Nexensos GmbH, Reinhard-Heraeus-Ring 23, 63801 Kleinostheim, Germany
Web: www.heraeus-nexensos.com

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Temperature range -70 °C to +850 °C

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

Leads
Pt-wire

Lead lengths (L)
6 mm ± 1 mm

Connection technology
Suitable for welding and hard soldering

Tensile strength of leads
≥ 10 N

Packaging
Blister box

Storage life
Min. 12 months (in original packaging)

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

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