

## C 220, Platinum Temperature Sensor according to DIN EN 60751

Temperature range -196 °C to +150 °C

The C series thin-film PRTDs combine the ideal curve characteristics of ceramic wire-wound RTDs with the vibration resistance of glass wire-wound RTDs and represent an excellent alternative to wire-wound RTDs. They are characterized by high long-term stability, excellent temperature shock resistance and a wide temperature range of -196 °C to +150 °C, they show no hysteresis. These features make them best suited for applications in aerospace, chemical and power generation plants and analytical equipment.

Nominal Resistance $R_0$	Tolerance	Order Number	Packaging
100 Ohm at 0 °C	F 0.3 (Class B)	32 207 399	VCI-plastic bag

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

### Temperature and tolerance range

Tolerance class F 0.3 (B): -196 °C to +150 °C

### Temperature coefficient

TCR = 3850 ppm/K

### Response time

Water current ( $v = 0.4 \text{ m/s}$ ):  
 $t_{0.5} = 0.06 \text{ s}$   
 $t_{0.9} = 0.20 \text{ s}$

Air stream ( $v = 2 \text{ m/s}$ ):  
 $t_{0.5} = 3.0 \text{ s}$   
 $t_{0.9} = 13.0 \text{ s}$

### Measuring current

100  $\Omega$ : 0.3 to 1.0 mA  
 (self-heating has to be considered)

### Long-term stability

$R_0$ -Drift 0.03 % after 1000 hours at 150 °C

### Self-heating

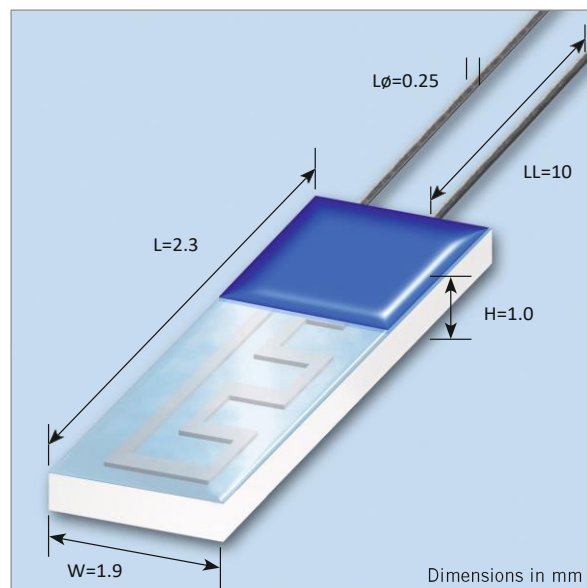
0.4 K/mW at 0 °C

### Insulation resistance

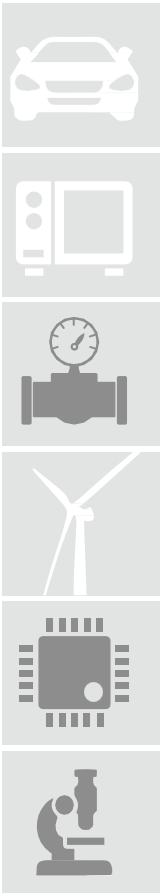
> 100 M $\Omega$  at 150 °C

### Vibration resistance

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



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## C 220, Platinum Temperature Sensor according to DIN EN 60751

Temperature range -196 °C to +150 °C

### Shock resistance

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

### Leads

AgPd-wire

### Lead lengths (LL)

10 mm  $\pm$  1 mm

### Connection technology

Suitable for soft soldering (note, application temperature of the solder)

### Tensile Strength of leads

$\geq$  8 N

### Packaging

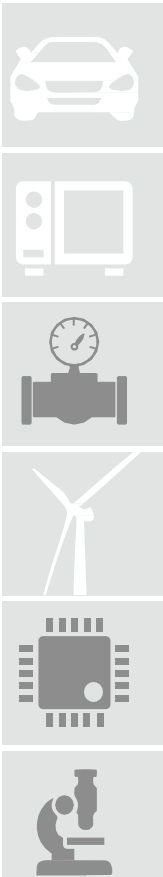
Alternative packaging forms on request.

### Storage life

Min. 12 month (in original packaging)

### Note

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



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