

Platinum temperature sensor in thin-film technology

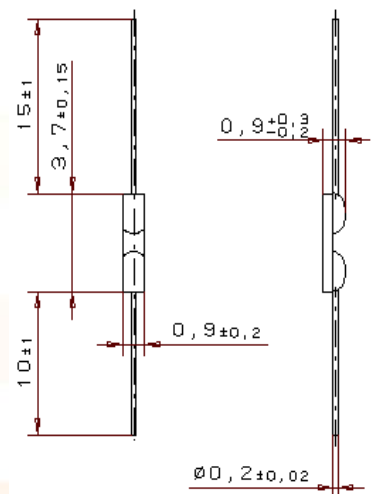
M 410 ax

M 410 ax platinum temperature sensors have axial leads. They are characterized by their small design, short contact times, long-term stability, excellent precision over a wide temperature range and compatibility. They are typically used 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. Blister reel
100 Ohm at 0°C	DIN EN 60751, class B	32 208 209

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

Specification	DIN EN 60751
Temperature range	-70°C to +500°C (continuous operation) (temporary use to 550 °C possible) Tolerance class B: - 70 °C to + 500 °C
Temperature coefficient	TCR = 3850 ppm/K
Leads	Pt clad Ni-wire
Vibration resistance	At least 40 g acceleration at 10 to 2000 Hz, depends on installation
Shock resistance	At least 100 g acceleration with 8 ms half sine wave, depends on installation
Impact resistance	At least 100 g acceleration with 8 ms half sine wave
Ambient conditions	Use unprotected only in dry environments
Insulation resistance	> 100 MΩ at 20°C; > 2 MΩ at 500°C
Self heating	0.4 K/mW at 0°C
Contact time	Water current ($v = 0.4$ m/s): $t_{0.5} = 0.06$ s; $t_{0.9} = 0.17$ s Air flow ($v = 2$ m/s): $t_{0.5} = 3.0$ s; $t_{0.9} = 10.0$ s
Measuring current	0.3 to 1.0 mA (self heating has to be considered)
Note	Other tolerances, values of resistance and wire lengths are available on request.



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.

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