

Platinum Resistance Temperature Detector

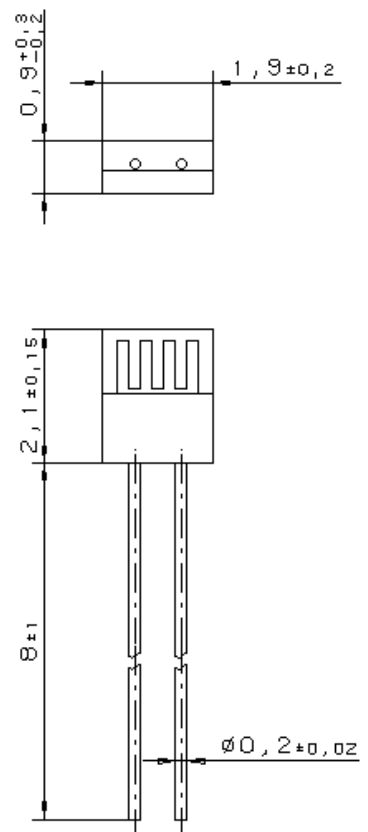
M 219 TC3750

M-series PRTDs are designed for large volume applications where long term stability, interchangeability and accuracy over a large temperature range are vital. Typical applications are Automotive, Appliances, HVAC, Energy Management, Life Science and the process industry.

Nominal Resistance R_0	Tolerance	Order No.
1000 Ohm at 0°C	DIN EN 60751, class B	32 208 739
1000 Ohm at 0°C	DIN EN 60751, class 2B	32 208 733

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 to + 500°C (continuous operation) (temporary use to 550 °C possible)
Tolerance class:	Class 2B, Spot-checking
Temperature coefficient:	TC = 3750 ppm/K
Leads:	Pt clad Ni wire
Long-term stability:	Max. R_0 -Drift 0.04% after 1000 h at 500°C
Vibration resistance:	at least 40 g acceleration at 10 to 2000 Hz, depending on installation
Shock resistance:	at least 100 g acceleration with 8ms half-sine-wave, depends on installation
Environmental conditions:	unhoused for dry environments only
Insulation resistance:	> 100 M Ω at 20°C; > 2 M Ω at 500°C
Self heating:	0.5 K/mW at 0°C
Measuring current:	1000 Ω : 0.1 to 0.3 mA (Self heating has to be considered)
Response time:	Water current ($v = 0.4$ m/s): $t_{0,5} = 0.05$ s; $t_{0,9} = 0.15$ s Air stream ($v = 2.0$ m/s): $t_{0,5} = 2.8$ s; $t_{0,9} = 9.0$ s



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.

Heraeus Sensor Technology USA

1901 Route 130
North Brunswick, NJ 08902
Phone 732-940-4400 Fax 732-940-4445
Email info.hst-us@heraeus.com
www.hst-us.com