

Platinum Resistance Temperature Detector

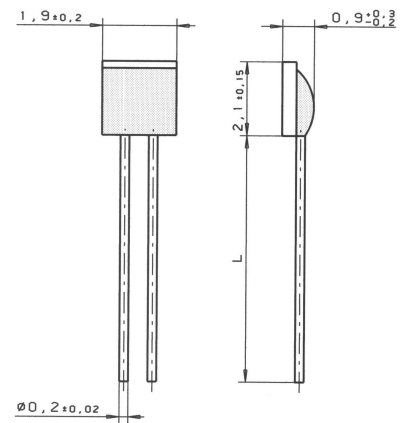
M 219

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.
100 Ohm at 0°C	DIN EN 60751, class B	32 208 744
1000 Ohm at 0°C	DIN EN 60751, class B	32 208 738
100 Ohm at 0°C	DIN EN 60751, class 2B	32 208 729

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 B and 2B	
Temperature coefficient:	TC = 3850 ppm/K	
Leads:	Pt clad Ni wire Recommend connection technology: Welding, Crimping and Brazing	
Lead lengths (L)	10 mm +- 1 mm	
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:	100 Ω : 0.3 to 1.0 mA 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):	$t_{0,5} = 3.0$ s $t_{0,9} = 10.0$ 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.

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