

## Platinum Resistance Temperature Detector

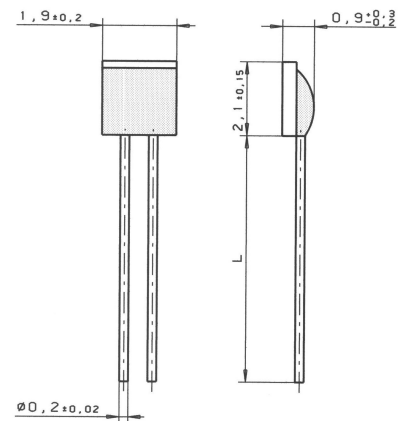
M 219

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 R0	Tolerance DIN EN 60751 1996-07	Tolerance DIN EN 60751 2009-05	Order Number Plastic Box
100 Ohm at 0°C	Class B	F 0.3	32 208 744
	Class 2B	F 0.6	32 208 729
1000 Ohm at 0°C	Class B	F 0.3	32 208 738

The measuring point for the nominal resistance is defined at 6mm from the end of the sensor body.

<b>Specification</b>	DIN EN 60751	
<b>Temperature range</b>	-70°C to +500°C (continuous operation) (temporary use to 550°C possible) Tolerance Class B and 2B: -70°C +500°C	
<b>Tolerance class:</b>	Class B and 2B	
<b>Temperature coefficient</b>	TC = 3850 ppm/K	
<b>Leads</b>	Pt clad Ni- wire Recommend connection technology: Welding, Crimping and Brazing	
<b>Lead lengths (L)</b>	10mm ±1mm	
<b>Long-term stability</b>	Max. R <sub>0</sub> -Drift 0.04% after 1000h at 500°C	
<b>Vibration resistance</b>	at least 40g acceleration at 10 to 2000 Hz, depending on installation	
<b>Shock resistance</b>	at least 100g acceleration with 8ms half-sine-wave, depends on installation	
<b>Environmental conditions</b>	unhoused for dry environments only	
<b>Insulation resistance</b>	> 100 MΩ at 20°C; > 2 MΩ at 500°C	
<b>Self heating</b>	0.5 K/mW at 0°C	
<b>Response time</b>	Water current (v= 0.4m/s):	t <sub>0,5</sub> = 0.05s t <sub>0,9</sub> = 0.15s
	Air stream (v= 2.0m/s):	t <sub>0,5</sub> = 3.0s t <sub>0,9</sub> = 10.0s
<b>Measuring current</b>	100Ω: 0.3 to 1.0mA 1000Ω: 0.1 to 0.3mA (Self heating has to be considered)	



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

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