

## Platinum Resistance Temperature Detector

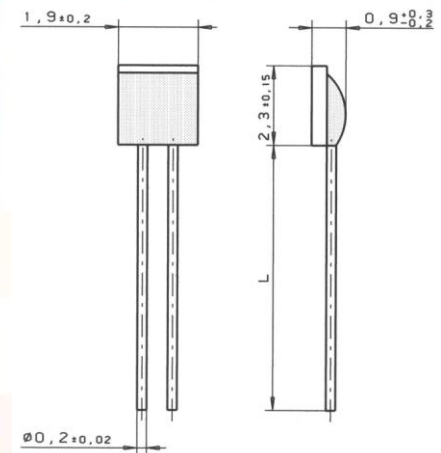
**M 220**

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, White goods, HVAC, Energy management, Medical and Industrial equipment.

Nominal Resistance R0	Tolerance DIN EN 60751 1996-07	Tolerance DIN EN 60751 2009-05	Order Number Plastic Bag	Order Number Blister reel
100 Ohm at 0°C	Class 1/3 B Class A Class B	F 0.1 F 0.15 F 0.3	32 208 715 32 208 714	32 208 466 32 208 465 32 208 440

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

<b>Specification</b>	DIN EN 60751 (according to IEC 751)
<b>Temperature range</b>	-70°C to +500°C (continuous operation) (temporary use to 550 °C possible) Tolerance Class B: -70°C to +500°C Tolerance Class A: -50°C to +300°C Tolerance Class 1/3 B: 0°C to +150°C
<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, depends 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>	0.4 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= 2m/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 (self heating has to be considered)
<b>Note</b>	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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