

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.

Specification DIN EN 60751 (according to IEC 751)

Temperature range -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

Temperature coefficient TC = 3850 ppm/K

Leads Pt clad Ni- wire

Recommend connection technology: Welding, Crimping and Brazing

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Lead lengths (L) 10mm ±1mm

Long-term stability max. R₀-drift 0.04% after 1000h at 500°C

Vibration resistance at least 40g acceleration at 10 to 2000 Hz,

depends on installation

Shock resistance at least 100g 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 0.4 K/mW at 0°C

Response time water current (v= 0.4m/s): $t_{0.5} = 0.05$ s

 $t_{0.9} = 0.053$ $t_{0.9} = 0.15s$ $t_{0.5} = 3.0s$

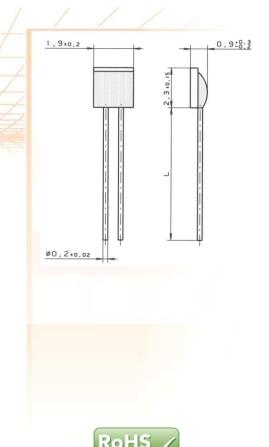
air stream (v= 2m/s): $t_{0.5} = 3.0s \\ t_{0.9} = 10.0s$

Measuring current 100Ω : 0.3 to 1.0mA

(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.

Heraeus Sensor Technology USA

1901 Route 130

North Brunswick, NJ 08902

Phone 732-940-4400 Fa_X 732-940-4445

Email info.hst-us@heraeus.com

http://heraeus-sensor-technology-us.com

Name of document: 30910014 Index B

Status: 106/2010