Heraeus

Platinum Resistance Temperature Detector

M 213

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 Box
100 Ohm at 0°C	Class 1/3 B Class A Class B	F 0.1 F 0.15 F 0.3	32 207 692 32 207 691 32 207 690
1000 Ohm at 0°C	Class B	F 0.3	32 207 695

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 (continu (temporary use to 550 °C Tolerance Class B: Tolerance Class A: Tolerance Class 1/3 B:		/	٥J	
Temperature coefficient	TC = 3850 ppm/K	++/	1,25±0,15	52,0±8,0	
Leads	Pt clad Ni- wire Recommended connection technology: Welding, Crimping and Brazing				
Lead lengths (L)	10mm ±1mm				
Long-term stability	max. R ₀ -drift 0.04% after	1000h at 500°C			
Vibration resistance	at least 40g acceleration depends on installation	at 10 to 2000 Hz,			
Shock resistance	at least 100g acceleratio wave, depends on install				
Environmental conditions	unhoused for dry enviror	ments only	ØD,15±0,02	- ' '	
Insulation resistance	> 100 M Ω at 20°C; > 2 M Ω at 500°C				
Self heating	0.6 K/mW at 0°C				
Response time	water current (v= 0.4m/s				
	air stream (v= 2m/s):	$\begin{array}{l} t_{0.9} = 0.12s \\ t_{0.5} = 2.2s \\ t_{0.9} = 7.0s \end{array}$			
Measuring current	100Ω: 0.3 to 1.0 mA 1000Ω: 0.1 to 0.3 mA (self heating has to be co	onsidered)			
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 Fax 732-940-4445 Email info.hst-us@heraeus.com http://heraeus-sensor-technology-us.com