## Heraeus

## **Platinum Resistance Temperature Detector**

M 1020

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	<b>Tolerance</b> 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	32 208 180	32 208 4 28 32 208 4 29 32 208 2 80
500 Ohm at 0°C	Class B	F 0.3	32 208 201	32 208 285
1000 Ohm at 0°C	Class 1/3 B Class A Class B	F 0.1 F 0.15 F 0.3	32 208 482 32 208 438 32 208 191	32 208 4 83 32 208 4 39 32 208 2 86

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 Temperature coefficient Leads	Tolerance Class A: -50°C	e) to +500°C to +300°C to +150°C	1,9*0,2	- 0,9:8:2 s:8:2 o	
Lead lengths (L)	10mm ±1 mm				
Long-term stability	max. R <sub>0</sub> -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 MΩ at 20°C; > 2 MΩ at 500				
Self heating	0.2 K/mW at 0°C		Ø0,2±0,02	<u>т ү</u>	
Response time	water current (v= 0.4m/s):	t <sub>0.5</sub> = 0.10s t <sub>0.9</sub> = 0.30s			
	air stream (v= 2m/s):	$t_{0.9} = 0.30s$ $t_{0.5} = 4.0s$ $t_{0.9} = 12.0s$			
Measuring current	100Ω: 0.3 to 1.0mA 500Ω: 0.1 to 0.7mA 1000Ω: 0.1 to 0.3mA (self heating has to be considered	ł)	Rol		
Note	Other tolerances, values of resista available on request.	ance and wire length	ns are		

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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