Heraeus

Platinum Resistance Temperature Detector

L 1020

L 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	F 0,1	32 207 585
	Class A	F 0,15	32 207 579
	Class B	F 0,3	32 207 708
1000 Ohm at 0°C	Class 1/3 B	F 0,1	32 207 586
	Class A	F 0,15	32 207 581
	Class B	F 0,3	32 207 710

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	-50°C to +400°C (continuous operation)						
	Tolerance Class B:	-50°C to +400°C					
	Tolerance Class A:	-50°C to +300°C		/ /			
	Tolerance Class 1/3B:	0°C to +150°C	1,9:0.2		1 +0.3		
Temperature coefficient	TC = 3850 ppm/K			0000	T 1		
Leads	AgPd- wire						
Lead lengths (L)	10mm ±1mm						
Long- term stability	max. R ₀ -drift 0.04% after 1000h at 400 °C						
Vibration resistance	at least 40g acceleration at 10 to 2000 Hz, depends on installation				σ [°]		
Shock resistance	at least 100g acceleration with 8m depends on installation	ns half sine wave,					
Environmental conditions	unhoused for dry environments only						
Insulation resistance	> 100 MΩ at 20°C; > 2 MΩ at 400°C						
Self heating	0.2 K/mW at 0°C				-		
Response time	water current (v = 0.4m/s):	t _{0.5} = 0.12s t _{0.9} = 0.30s					
	air stream (v = 2m/s):	$t_{0.5} = 6.0s$ $t_{0.9} = 20.0s$	Ø0,25±0.02	ųų Li	<u>i li</u>		
Measuring current	100 Ω : 0.3 to 1.0mA 1000 Ω : 0.1 to 0.3mA (self heating has to be considered)					
Note	Other tolerances, values of resista lengths are available on request.	ance and wire			\checkmark		

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.

