Heraeus

Platinum temperature sensor in thin-film technology

M 416

M-series platinum temperature sensors are characterized by long-term stability, excellent precision over a wide temperature range and compatibility. They are used particularly for applications with high consumption volumes, typically in the automotive, white goods, HVAC and energy generation industries as well as in medical and industrial appliances and machinery.

Nominal Resistance R0	Tolerance DIN EN 60751 1996-07	Tolerance DIN EN 60751 2009-05	Order Number Plastic Bag	Order Nur Blister r				
100 Ohm at 0°C	Class 1/3 B Class A Class B	F 0.1 F 0.15 F 0.3	32208217 32208216 32208213	322087 322082 322082	279			
The measuring point for the nominal resistance is defined at 8mm from the end of the sensor body.								
Specification	DII	N EN 60751						
Temperature range	(te To To	0°C to +500°C (conti mporary use to 550° lerance Class B: lerance Class A: lerance Class 1/3 B:	°C possible) -70°C -50°C	to +500°C to +300°C to +150°C	1	1	/	
Temperature coefficient		R = 3850 ppm/K			1,5±0,2	-		0,9+0,3
Leads	Re	clad Ni- wire commend connection elding, Crimping and					3, 9±0,15	
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 at 10 to 2000 Hz, depends on installation						
Shock resistance		At least 100g acceleration with 8ms half sine wave, depends on installation						
Ambient conditions	Us	Use unprotected only in dry environments			Ø0,2±0,02	ΨΨ	1	—Ψ
Insulation resistanc	e > 1	> 100 MΩ at 20°C; > 2 MΩ at 500°C						
Self heating	0.4	K/mW at 0°C						
Response time	Wa	ater current (v= 0.4m	$t_{0.5} = 0$ $t_{0.9} = 0$					
	Air	flow (v= 2m/s):	$t_{0.5} = 3$ $t_{0.9} = 1$	5.1s				
Measuring current		0Ω : 0.3 to 1.0mA elf heating has to be	considered)			RoH		
Note		her tolerances, value ogths are available o		l wire				

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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