## Heraeus

## Platinum Temperature Sensor in Thin-film Technology

MR 518 G

MR 518 G platinum temperature sensors are characterized by their small, drop-form design. They are also characterized by high long-term stability, excellent precision over a wide temperature range and compatibility. They are used in the white goods, HVAC and energy generation industries as well as in medical and industrial appliances and machinery.

Nominal Resistance R0	<b>Tolerance</b> DIN EN 60751 1996-07	<b>Tolerance</b> DIN EN 60751 2009-05	Order Number Plastic Bag
100 Ohm at 0°C	Class B	F 0.3	32209 504
100 Ohm at 0°C	Class A	F 0.15	32209505

The measuring point for the nominal resistance is 8mm from the end of the sensor body

Specification	DIN EN 60751	1/-	1	1 1 1
Temperature range	-70°C to +500°C (continuous ope Tolerance Class B: -70°C to +500 Tolerance Class A: -50°C to +300	°C		
Temperature coefficient	TCR = 3850 ppm/K	111	_	Ø1,8+0,1
Leads	Pt clad Ni wire			
Lead lengths (L)	10mm +1mm / -2mm	LO LO		
Long- term stability	Max. $R_0$ drift 0.04% after 1000h a	5±0,		
Vibration resistance	At least 40g acceleration at 10 to			
Shock resistance	At least 100g acceleration with 8 ms half sine wave		Î	
Ambient conditions	Use unprotected only in dry environments			
Insulation resistance	> 100 MΩ at 20°C; > 2 MΩ at 500°C			
Self-heating	0.4 K/mW at 0°C			
Response time	Water current (v= 0.4m/s):	t <sub>0.5</sub> = 0.2s t <sub>0.9</sub> = 0.4s		
	Air flow (v= 2m/s):	$t_{0.9} = 0.48$ $t_{0.5} = 3.08$ $t_{0.9} = 9.08$		Ø0,2±0,02
Measuring current	100Ω: 0.3 to 1.0mA			



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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