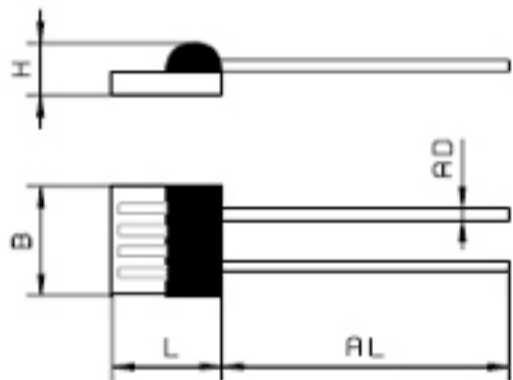


M-FK 422 platinum temperature sensor in thin-film technology

F series platinum temperature sensors are characterized by long-term stability, precision over a broad temperature range and compatibility. They are used in particular for applications with high consumption volumes, typically in the automotive, white goods, HVAC and energy generation sectors as well as in medical and industrial equipment.

Specification	DIN EN 60751
Temperature range	-70°C to +500°C (continuous operation) Tolerance Class B -70°C to +500°C Tolerance Class A -30°C to +350°C Tolerance Class 1/3 B 0°C to +100°C
Temperature coefficient	TCR = 3850 ppm/K; TCR = 3750 ppm/K on request
Leads	Nickel platinum-clad wire
Long-term stability	Max. R_0 drift 0.04% after 1000 h at 500°C
Vibration resistance	At least 40 g acceleration at 10 to 2000 Hz, depending on mounting method
Shock resistance	At least 100 g acceleration with 8 ms half sine wave, depending on mounting method
Ambient conditions	Use unprotected only in dry environments
Insulation resistance	> 10 MΩ at 20°C; > 1 MΩ at 500°C
Measuring current	100 Ω: 0.3 to 1.0 mA 500 Ω: 0.3 mA 1000 Ω: 0.1 to 0.3 mA



Order no. Vacuum packaging Blister reel	Nominal resistance Ω at 0 °C	Dimensions in mm					Self heating K/mW at 0 °C	Response time in seconds				
		L	B	H	AL	AD		Water v = 0.4 m/s		Air v = 1 m/s		
								t _{0.5}	t _{0.9}	t _{0.5}	t _{0.9}	
32 208 392 32 208 520	100	3.9	2.1	0.8	10	0.2	0.3	0.2	0.3	3.4	11	
32 208 414 32 208 523	500	3.9	2.1	0.8	10	0.2	0.3	0.2	0.3	3.4	11	
32 208 499 32 208 526	1000	3.9	2.1	0.8	10	0.2	0.3	0.2	0.3	3.4	11	
32 208 498 32 208 521	100	3.9	2.1	0.8	10	0.2	0.3	0.2	0.3	3.4	11	
32 208 501 32 208 524	500	3.9	2.1	0.8	10	0.2	0.3	0.2	0.3	3.4	11	
32 208 503 32 208 527	1000	3.9	2.1	0.8	10	0.2	0.3	0.2	0.3	3.4	11	
32 208 500 32 208 522	100	3.9	2.1	0.8	10	0.2	0.3	0.2	0.3	3.4	11	
32 208 537	1000	3.9	2.2	0.8	10	0.2	0.3	0.2	0.3	3.4	11	

Dimension tolerance: L = ±0.2, B = ±0.2, H = +0.2/-0.1, AL = ± 1.0, AD = ±0.01