

Datasheet

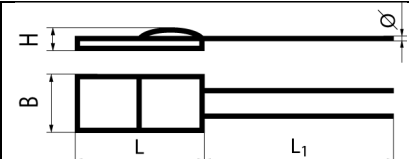
3x1Pt100A-G

112029

Summary

This platinum temperature sensor element is characterized by its long-term stability over a wide temperature range. They are used particularly in the automotive, air conditioning and heating technology branch and in devices for medicine and industry.

Size in mm

	L	W	L ₁	H	Ø
	3 ± 0,15	1 ± 0,15	10 ± 1	0,8 +0,3 -0,2	0,15 ± 0,02

Technical specifications

Nominal resistance R ₀ at 0 °C	Specification	Tolerance	Order Number	Item Number
100 Ω	DIN EN 60751	F 0,15 (DIN A)	3x1Pt100A-G	112029

Temperature range:	-70 °C to +500 °C in continuous operation (briefly up to 550 °C possible)		
	Validity of tolerance F 0.15: -50 °C to +300 °C		
Temperature coefficient:	TK = 3850 ppm/K		
Connecting wires:	NiPt coated wire, suitable for crimping, welding and brazing		
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, depends on installation		
Shock resistance:	at least 100 g acceleration with 8 ms half sine wave, depends on installation		
Environmental conditions:	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:	water current (v = 0.4 m/s):	t _{0,5} = 0.04 s	t _{0,9} = 0.12 s
	Air flow (v = 2 m/s):	t _{0,5} = 2.5 s	t _{0,9} = 8.0 s
Measuring current:	0.3 to 0.1 mA (consider self-heating)		
Measuring point:	8 mm from the end of the sensor element body		
Packaging:	Taped		
Note:	Please refer to our application and installation instructions.		
RoHS compliant			

We reserve the right to make technical changes. All technical data serves as information and does not guarantee properties.

Version 1.0 10/2011

