TR05
RTD Temperature Probe

Platinum RTD sensors offer high accuracy, sensitivity, and superior linear temperature resistance compared to other sensors. Our products, including sensors for small motors, large motors, high voltage motors, and bearings, ensure stability and high reliability. Easy installation and compatibility with intelligent temperature controllers allow direct display of motor coil and bearing temperatures.

Features

- For temperatures from -50 to 500 °C
- Two-wire and three-wire circuit available

Advantages

- Fast measurement
- Packed in stainless steel sheel
- Compact size

Applications

- Water temperature
- Air temperature
- Refrigeration

Standards

- DIN EN IEC 60751
- DIN EN 60529
- DIN EN 60068-2-6
- DIN EN 60068-2-27

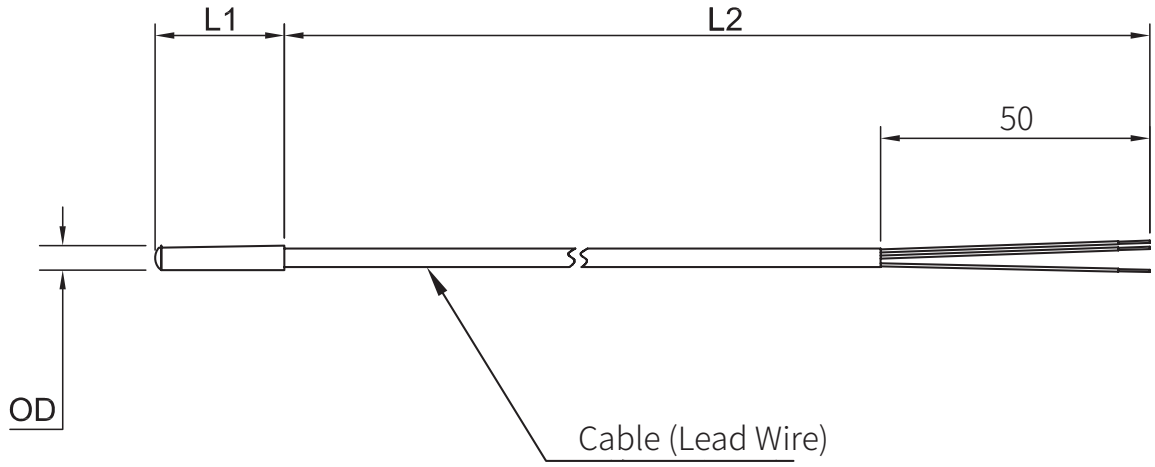
Specifications

Parameter	Value		Comment
RTD resistance options	PT100		
	PT500		
	PT1000		
Tolerance options	Class A	-50...150 °C	
	Class B		
	Class A	-50...250 °C	
	Class B		
	Class A	-50...300 °C	
	Class B		
	Class B	-50...500 °C	
Temperature coefficient	TC = 3850 ppm/K		
Measuring current	PT100: 0.3 to 1 mA		(Self heating has to be considered, overcurrent situations may cause sensor damage)
	PT500: 0.1 to 0.7 mA		
	PT1000: 0.1 to 0.3 mA		
Housing material	AISI 304		
Response time	Water current (V= 0.4m/s): t0.5 = 1s t0.9 = 1.5s		
	Air stream (V= 2m/s): t0.5 = 5.0s t0.9 = 12.0s		
Self heating	0.4 K/mW at 0°C		

Environmental test conditions

Test condition	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 since wave, depends on installation

Structure and dimensions (mm)



Name Guide Description

Notes

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