

MOTOR TEMPERATURE SENSOR

Product Description

Thermometers are mainly used for temperature measurement in electronic engine or motor. The function is to transfer the temperature of the objects into a resistance output.

Features

- Temperature range: $<200^{\circ}\text{C}$;
- Insulation resistance: $>100\text{Mohm}$;
- High-pot: 2300VAC;
- NTC/PT thermistor

Applications

- Electronic engine.
- Air conditioning systems
- White Goods
- Industrial system

Absolute Maximum Ratings

Parameter	Symbol	Condition	Min	Typical	Max	Unit
Storage Temperature	T_{Store}	permanent	-20	+25	+85	°C

Sensing Properties

NTC Parameter	Symbol	Condition	Min	Typical	Max	Unit
Insulation resistance	R	At 1000VDC, at room temperature	500			MΩ
Dissipation constant	δ	in still air	2.0		2.5	Mw/°C
Operating temperature	T		-40	25	200	°C
Maximum power rating		At +25 °C		100		mW
Dielectric strength		2300VAC, 1 minute, at room temperature			1	mA

PT Parameter	Symbol	Condition	Min	Typical	Max	Unit
Insulation resistance	R	At 500VDC, at room temperature	100			MΩ
Operating temperature	T		-30	25	155	°C
Measuring Current R0: 100 Ω		-			1.4	mA
Measuring Current R0: 1000 Ω		-			0.4	mA
Dielectric strength		2500VAC, 1 minute, at room temperature			1	mA

NTC Mechanical Dimensions

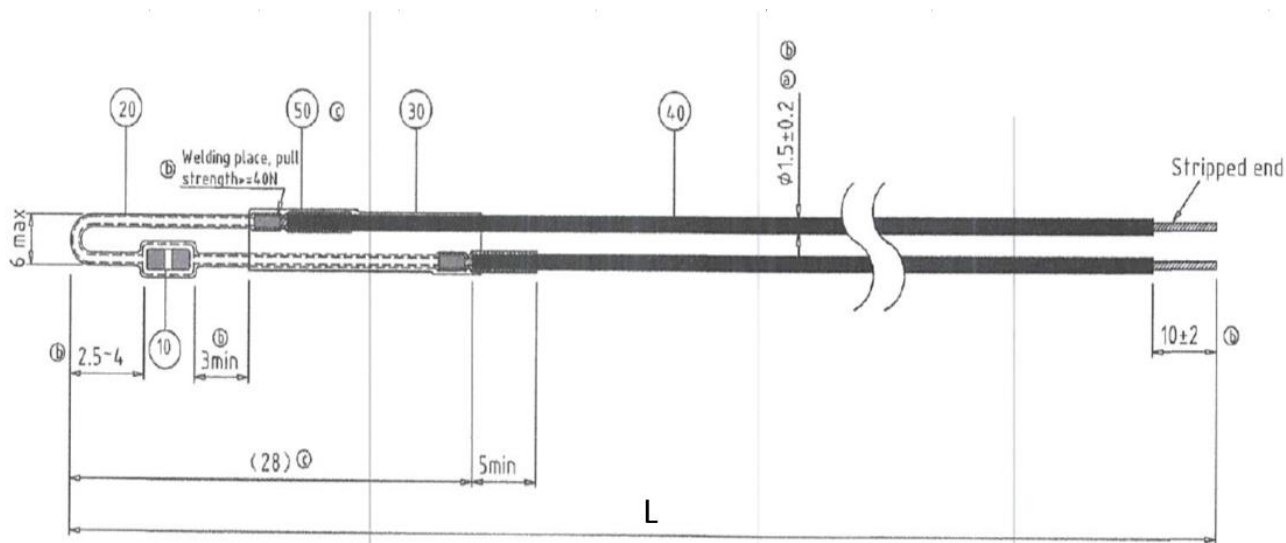


Figure 2: Mechanical dimensions of thermopile

Customize parameter

Model Sensor	Resistance [Ω] @ +25°C	Tolerance @ +25°C	Beta Value 25/85	Beta Tolerance	Operating Temperature
1	5,000	± 1%	3550	± 2%	-40° to +200°C
2	10,000	± 1%	3270	± 2%	-40° to +250°C
3	10,000	± 1%	3435	± 2%	-40° to +200°C
4	10,000	± 1%	3550	± 2%	-40° to +250°C
5	10,000	± 1%	3700	± 2%	-40° to +250°C
6	10,000	± 1%	3950	± 2%	-40° to +250°C
7	10,000	± 1%	3960	± 2%	-40° to +250°C
8	10,000	± 1%	3975	± 2%	-40° to +200°C
9	20,000	± 1%	3960	± 2%	-40° to +250°C
10	50,000	± 1%	3950	± 2%	-40° to +250°C
11	50,000	± 1%	3960	± 2%	-40° to +250°C
12	100,000	± 1%	3975	± 2%	-40° to +250°C
13	100,000	± 1%	4300	± 2%	-40° to +250°C
14	200,000	± 1%	4000	± 2%	-40° to +250°C

Model 'L' Body Length

---- Define 'L' Length in mm

Example: 100.0 = 100.0mm; 62.5 = 62.5mm

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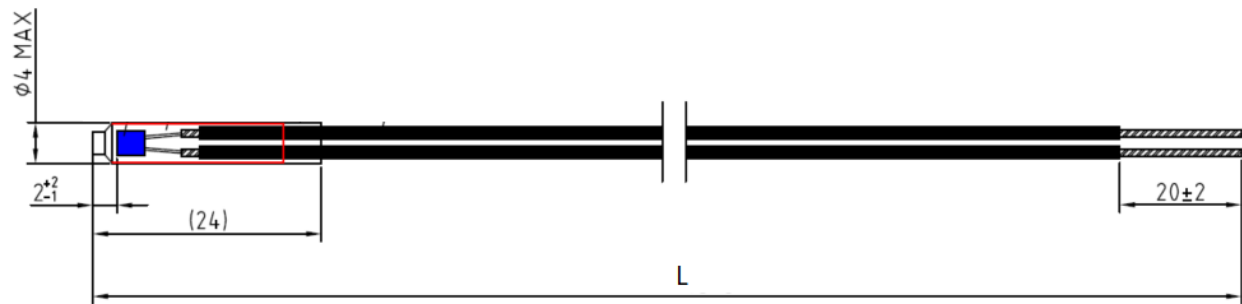
Model Lead wires, Element Configuration Color Code	
1	Black / Black
2	Red / Red
3	Black / Red

Ordering Information

Description	Stocked Part Number
L = 900mm / R25 = 30K Ω / Black Cable	20007268-00

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PT Mechanical Dimensions



Customize parameter

Model Sensor	Resistance [Ω] @ +0°C	Tolerance	Operating Temperature
1	100	class F0.15 (A)	-30° to +150°C
2	100	class F0.3 (B)	-30° to +150°C
3	100	class F0.6 (C=2B)	-30° to +150°C
4	1,000	class F0.15 (A)	-30° to +150°C
5	1,000	class F0.3 (B)	-30° to +150°C
6	1,000	class F0.6 (C=2B)	-30° to +150°C

Model 'L' Body Length
---- Define 'L' Length in mm
Example: 100.0 = 100.0mm; 62.5 = 62.5mm

Ordering Information

Description	Stocked Part Number
L = 100±5 mm	20007310-00