

# Sanitary Temperature Transmitter

## RT2004RTD



Output: 4~20mA, HART



Accuracy:  $\pm 0.2^{\circ}\text{C}$



Working Temperature:  $(-50 \sim 200^{\circ}\text{C})$



Sensor Material: SS316L/ Titanium alloy

**Product  
Datasheet**

# ROCKSENSOR AT A GLANCE (ABOUT US)

Rocksensor is one of the global leaders specializing in process Instrumentation, Research and Development and Designing of Industrial Automation Equipment. We provide highly precise pressure sensors and transmitters, flow metres, level transmitters & temperature transmitters with a prime focus to help our clients efficiently, safely and economically run complex industrial processes.

Rocksensor headquartered in Germany (originated in Switzerland), has its footprint in various geographical regions such as the US, Russia, South Korea, Italy, Germany, Singapore, Malaysia, China, Taiwan, Australia, UAE, Brazil, and India. Our clients come from some of the major industries such as Oil and Gas, Petrochemicals, Pharmaceuticals, FMCG, Automobiles, Water, Cement, Metal & Mining and mainly from the Power Industry like Nuclear, Thermal, Hydro and Solar.

Rocksensor deals in a wide range of highly accurate industrial automation instruments ensuring that even the complex industrial processes happen efficiently.

To fulfill the needs of our clients we make sure that our instruments work in even the harsh environmental conditions offering accurate recordings and communication.

We, at Rocksensor, believe in creating bonds that last a lifetime and create a success story for each and every client. Rocksensor aims to achieve a perfect fit in global market landscape and establish our footprints across the globe.



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## 1. Introduction

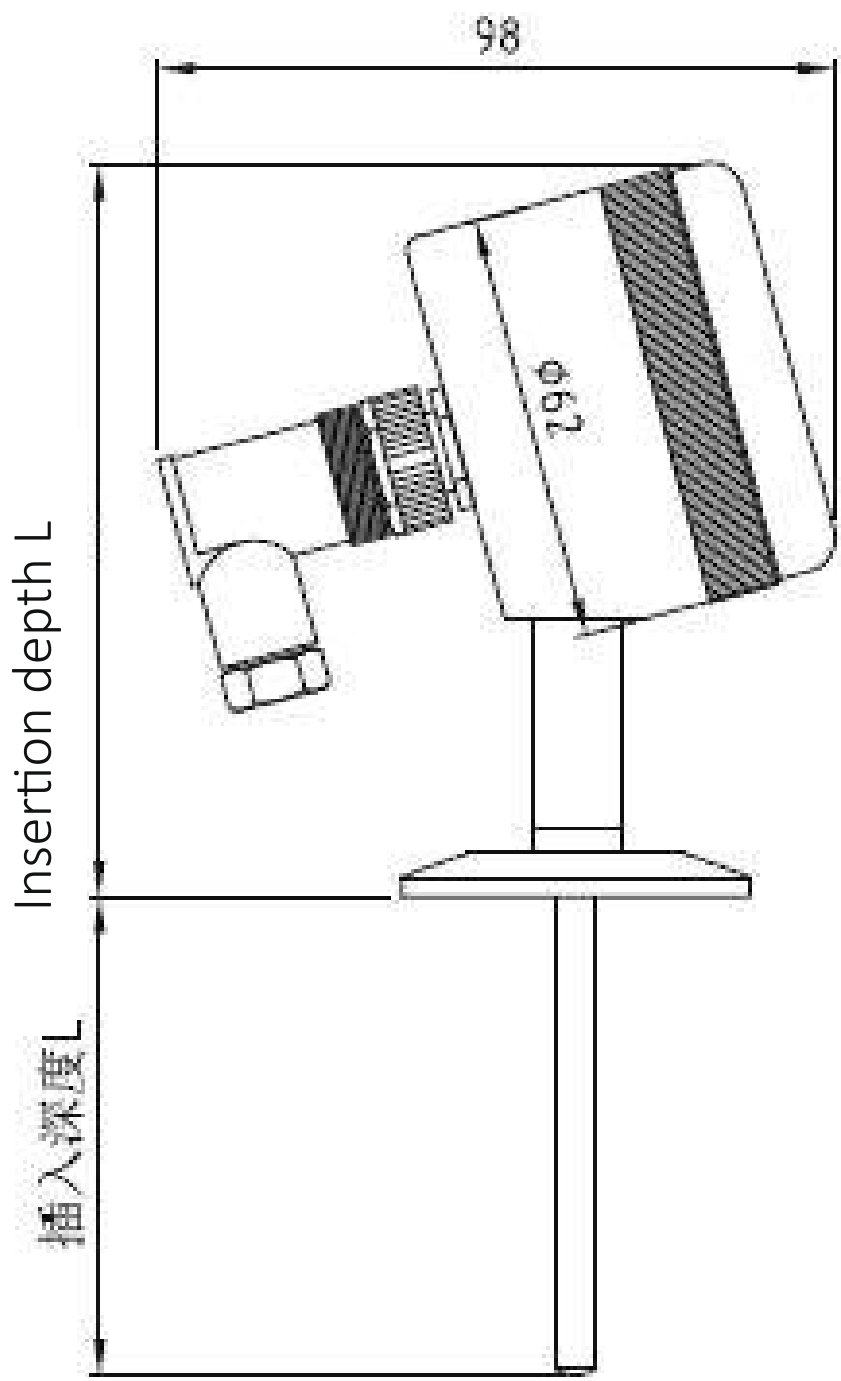
The RT2004 RTD temperature transmitter measures the temperature of liquids, gases or vapors in the food & pharmaceutical industries and converts them into a 4 to 20 mA DC current signal output.



## 2. Technical Specifications

Characteristics	Parameters
Temperature range	-50°C ~ +200°C
protection tube	Stainless steel
communication	HART communication output optional
Temperature sensor	Pt100 Class A high precision temperature sensor
Junction Box	Stainless steel housing
	15° radial liquid crystal display
	corrosion resistant air socket
Protection class	IP65
Ambient temperature	-20°C ~ +55°C
Process interface standards	ASME, BPE
	ISO 2852
	DIN 32676
Process interface size	Tri-clamp DN15 ~ DN100
Protective casing	6mm outer diameter
	length 30 ~ 150mm
	Thermal resistor ferrule
	Pt100 temperature sensor
	EN60751
	Class A
Response time	<1s
Output	voltage 7.5 - 45V
	maximum load (V power-7.5V) / 0.022A
	Electrical isolation U=2000VAC
Circuit limit	<22mA
Saturation current	Low 3.8mA
	High 20.5mA

3. Dimension



## 11. Model Selection Table

RT2004 RTD Temperature Transmitter						
Code	1	2	3	4	5	6
<b>Basic options</b>	10	K	L	20	30	40
Stainless steel housing, 15° tilt LCD display, output 4 to 20mADC						
Stainless steel housing, 15° tilt LCD display, output 4 to 20mADC with HART protocol						
<b>Probe length</b>	20	1	2	3	4	5
50mm						
100mm						
150mm						
30mm						
<b>Wet surface material</b>	30	S	R	40	A	B
SS316L						
Titanium alloy						
<b>Additional options</b>	60	1	2	50	0	1
Test Report						
Material Report	50	0	1	2	3	4
Process connection size						
Tri-clamp DN 15						
Tri-clamp DN 25						
Tri-clamp DN 40						
Tri-clamp DN 50						
Tri-clamp DN 65						
Tri-clamp DN 80						
Tri-clamp DN 100						
<b>Process connection standard</b>	40	A	B	C	ASME BPE	ISO2852
ASME BPE						
ISO2852						
DIN32676						

### Example: RT2004 RTD - K1SA62

RT2004 RTD - Temperature Transmitter

K - Basic Options: Stainless steel housing, 15° tilt LCD display, output 4 to 20mADC

1 - Probe Length: 50mm

S - Wet surface material: SS316L

A - Process connection standard: ASME BPE

6 - Process connection size: Tri-clamp DN 100

2 - Additional options: Material Report

Note 1: The temperature measurement range is set to -10-150 °C by default, and other measurement range settings are required on the order

## Field Instrumentation Range



### Pressure Measurement

- Smart Differential Pressure Transmitter
- Smart Gauge Pressure Transmitter
- Smart Absolute Pressure Transmitter
- Miniature Pressure Transducer without display
- Sanitary Gauge/ Absolute Pressure Transmitter

- Submersible Pressure Transmitter
- Remote Seal Differential P.T. with capillary
- Remote Seal Differential P.T. Direct Mount
- Remote Seal Gauge/Absolute P.T. with capillary
- Remote Seal Gauge/Absolute P.T. Direct Mount



### Flow Measurement

- Coriolis Mass Flowmeter
- Thermal Gas Mass Flowmeter
- Positive Displacement Flowmeter
- Electromagnetic Flowmeter
- Vortex Flowmeter

- Turbine Flowmeter
- Variable Area Flowmeter
- Clamp On Ultrasonic Flowmeter
- Inline Ultrasonic Flowmeter
- Portable Ultrasonic Flowmeter



### Level Measurement

- RADAR Level Transmitter Horn Antenna
- Compact RADAR Level Transmitter
- RADAR Level Transmitter Sanitary
- RADAR Level Transmitter
- Guided Wave RADAR Level Transmitter
- Guided Wave RADAR Level Transmitter
- RADAR Level Transmitter Lens Antenna

- RADAR Level Transmitter Rod Antenna
- Ultrasonic Level Transmitter
- Microwave Barrier Level Switch
- Admittance Level Switch Series
- Vibrating Rod Level Switch Series
- Tuning Fork Level Switch Series



### Temperature Measurement

- Head Mount Temperature Transmitter
- Temperature Transmitter for Sanitary Applications

- DIN Rail Temperature Transmitter
- Field Mount Temperature Transmitter

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