

**RESISTANCE THERMOMETER**  
Measuring insert: Fixed

**Type:**  
**RT-RC1**

Sheet No.  
1-60 V2  
5751-E010721V3.1



**Application:**

- All-purpose sensor/ insert
- For measuring temperatures in air-conditioning and cold storage plants
- For tasks that require interchangeable inserts

**Properties:**

- Resistance thermometer Pt100 or Pt1000 in acc. with IEC 60751
- Process attachment: Thermowell or adjustable coupling
- Outer protective sheath: Stainless acid-proof steel
- Withstands vibrations
- Measuring insert: Fixed
- Approved by: GOST and TRCU (on request)



**MECHANICAL SPECIFICATIONS**

**Protective sheath:** -----  
EN 1.4571 (AISI 316Ti, max. 850°C)  
Special

**Sensor diameter Ø [mm]:** -----  
Ø6  
Special

**Nominal length L1 [mm]:** -----  
60  
Special

**Process attachment:** -----  
None  
1/4" BSP adjustable coupling  
1/2" BSP adjustable coupling  
Adjustable flange  
Special

**Olive (for adjustable coupling):** -----  
With Teflon  
With Steel

**ELECTRICAL SPECIFICATIONS**

**----Sensor element:**

1xPt100  
2xPt100  
1xPt1000 (only cl. B 1/1 and cl. A)  
2xPt1000 (only cl. B 1/1 and cl. A)

**----Number of conductors:**

2-wire (recommended only for Pt1000)  
3-wire  
4-wire

**----Temperature range min/max:**

-50/+180°C  
-50/+250°C  
Special

**----Tolerance in acc. with IEC 60751:**

Type A DIN (i.e.±(0,15+0,002xTactual)°C)  
Type B 1/1 DIN (i.e.±(0,3+0,005xTactual)°C)  
Type B 1/3 DIN (i.e.±(0,1+0,0017xTactual)°C)  
Type B 1/6 DIN (i.e.±(0,06+0,00083xTactual)°C)  
Type B 1/10 DIN (i.e.±(0,03+0,0005xTactual)°C)  
Special

**----Electrical connection:**

Cable type SS (Silicone-Silicone)  
Cable type SBS (Silicone-Braided-Silicone)  
Cable type TBT (Teflon-Braided-Teflon)  
Special

**----Cable length L2 [m]:**

2 / 4 / 6 / 10  
Special

**----Degree of protection:**

IP54  
IP67

Link for further information: [Pt100 Tolerance](#)

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**Calibration:**

Temperature calibration are used to verify and certify the sensor to have the correct accuracy. We can do either: "In house" or "Accredited" calibration. Accredited is certified by 3.e part. Normally we do a calibration in 3 points.

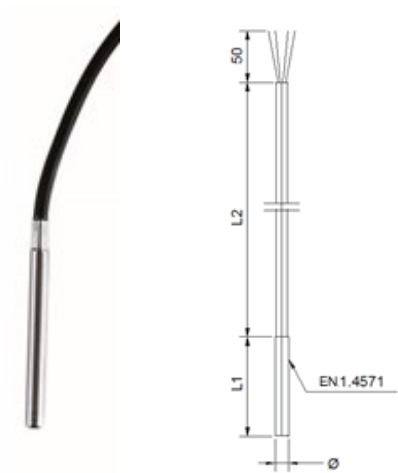
**Enhanced performance services:**

Cold applications (below -50°C) will influence the material and the measurement. CRYO treatment is needed to ensure a correct and working sensor down to -196°C.

A sensor will always drift over time, especially when there are high temperature fluctuations. With "Ageing treatment" we stabilize the sensor to ensure a minimum drift over time. The benefits are long term stability, more correct measurement and easier planning of calibration periods.

**Documentation:**

Please order the correct documentation when ordering the sensor.



**SIGNAL PROCESSING**

**Enclosure**

**Marine Box** (112x82x42mm) -----

**ABS Box** (82x80x56mm) -----

**NONE** -----

**Programmable mounted transmitter:**

Measuring range min/max: -200/+850°C  
Output: 2-wire, 4-20 mA  
Min. span: 25°C  
Ambient temperature min/max: -40/+85°C



- [5333A Uninsulated for RTD](#)
- [5333D EEX Uninsulated for RTD](#)
- [5332A Uninsulated for RTD](#)
- [5332D EEX Uninsulated for RTD](#)
- [5331A Galvanic Isolated RTD / TC](#)
- [5331D EEX Galvanic Isolated RTD / TC](#)
- [5335A Hart 5 Protocol Standard](#)
- [5335D Hart 5 Protocol CSA, FM, ATEX, IECEx](#)
- [5337A Hart 5 & 7 Protocol](#)
- [5337D Hart 5 & 7 Protocol CSA, FM, ATEX, IECEx](#)



Transmitter Type:			
4 mA =	C°	20 mA =	C°

Link to further information:

[Transmitter Overview](#)

[Programmable rail mounted transmitter](#)

**CALIBRATION**

**---Calibration:**

In house (Span -33°C - +700°C)

Accredited – in laboratory (-196°C - +1200°C)

1.	Point	°C
2.	Point	°C
3.	Point	°C

**More point on request**

**Enhanced performance services**

**-----Cryo treatment.**

For temperature sensor under -50°C

**-----Ageing:**

For long term stability.  
Secure minimum drift of sensor accuracy

**-----Documentation**

Certificate: 3.1 Material  
Certificate of origin  
Certificate of conformity  
Certificate of GOST

Other on request

**THERMOCOUPLE THERMOMETER**  
Measuring insert: Fixed

**Type:**  
**TC-TC1**

Sheet No.  
3-55 V2  
5750-E010721V3.1

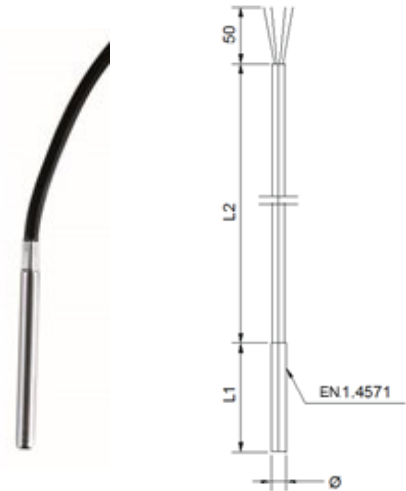


**Application:**

- All-purpose sensor/ insert
- For measuring temperatures in air-conditioning and cold storage plants
- For tasks that require interchangeable inserts

**Properties:**

- Thermocouple type J or K in acc. with IEC 60584-1
- Process attachment: Thermowell or adjustable coupling
- Outer protective sheath: Stainless acid-proof steel
- Withstands vibrations
- Measuring insert: Fixed
- Approved by: GOST/TRCU



**MECHANICAL SPECIFICATIONS**

**Protective sheath:** -----  
EN 1.4571 (AISI 316Ti, max. 850°C)  
Special

**Sensor diameter Ø [mm]:** -----  
Ø6  
Special

**Nominal length L1 [mm]:** -----  
60  
Special

**Process attachment:** -----  
None  
¼" BSP Adjustable coupling  
½" BSP Adjustable coupling  
Ø6 mm Adjustable flange  
Special

**Olive (for adjustable coupling):** -----  
With Teflon  
With Steel

**ELECTRICAL SPECIFICATIONS:**

**----Sensor element:**  
Type J (Fe-CuNi) max. +800°C  
Type K (NiCr-Ni) max. +1200°C  
Special

**----Number of thermocouples:**  
1xTC  
2xTC  
Special

**----Media temperature max.:**  
800°C  
1150°C (type K)

**----Tolerance in acc. with DIN 43732:**  
Class 1 for K, J ( $\pm 1,5^{\circ}\text{C}$  eller  $\pm(0,0040 \times T)^{\circ}\text{C}$ )  
Class 2 for K, J ( $\pm 2,5^{\circ}\text{C}$  eller  $\pm(0,0075 \times T)^{\circ}\text{C}$ )

**----Electrical connection:**  
Cable type PVC (Plastic-Plastic)  
Cable type TT (Teflon-Teflon)  
Cable type TGSB (Teflon-Glass-Braid)  
Special

**----Cable length L2 [m]:**  
1 / 3 / 5  
Special

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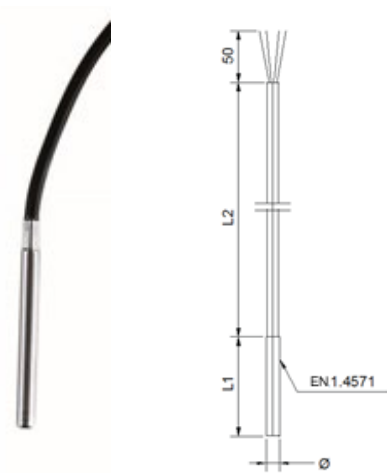
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