

RESISTANCE THERMOMETER

Measuring insert: Fixed.

Type:
RT-RC1-C

Sheet No.
2-2 V2.1
5751-E010818V2.1

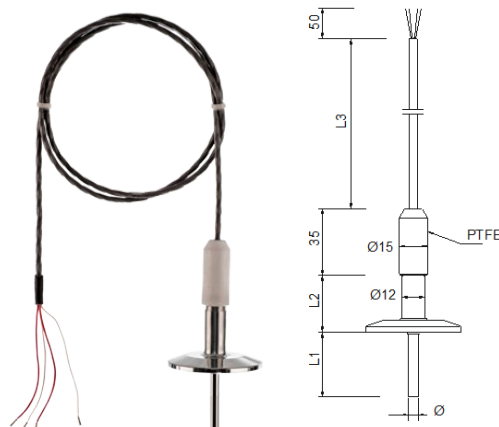


Application:

- For measuring temperatures in the food industry and the pharmaceutical, cosmetic and chemical/ technical industries

Properties:

- Sensor: Pt100, 2xPt100, Pt1000 in acc. with IEC 60751
- Measuring insert: Interchangeable
- Mechanical and thermal stress in accordance with DIN 43772
- Process attachment: Flange
- Outer protective sheath and flange: Stainless acid-proof steel
- Stands media temperatures of up to max. 250°C
- Stands ambient temperatures of up to max. 250°C
- Stands vibrations
- Quick reaction time
- IP67
- Approved by: GOST/TRCU



MECHANICAL SPECIFICATIONS

Protective sheath: -----
EN 1.4404 (AISI 316L)

Immersion tube diameter [mm]: -----
Ø5
Special

Extension length L2 [mm]: -----
30
Special

Immersion tube length L1 [mm]: -----
20 / 35 / 50
Special

Process attachment: -----
Clamp: 3/4" APC
1 1/2" DN38, ISO2852
2" DN51, ISO2852
Special

Surface area of parts with media contact: -----
Mechanically polished <0,8 µm
Electro-polished <0,5 µm

ELECTRICAL SPECIFICATIONS:

Sensor type:
1xPt100
2xPt100
1xPt1000

Number of conductors:
2-wire
3-wire
4-wire

Temperature range min/max:
-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.±(0,05+0,00083xTactual)°C)
Type B 1/10 DIN (i.e.±(0,03+0,0005xTactual)°C)

Cable type:
Cable type SS (Silicone-Silicone) max. 180°C
Cable type SBS (Silicone-Braid-Silicone) max. 180°C
Cable type TBT (Teflon-Braid-Teflon) max. 250°C
Special

Cable length L3 [mm]
2 / 4 / 6 / 10 m
Special

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:

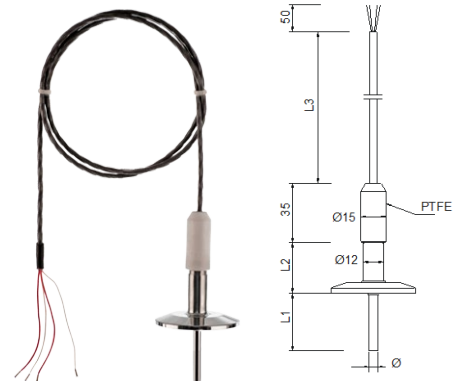
Cold applications (below -50°C) will influence the material and the measurement. CRYO treatment is needed to ensure a correct and working sensor down to -196°C.

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:

[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°

[5350A Profibus standard](#)

[5350B Profibus ATEX, FM and CSA](#)

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