

RESISTANCE THERMOMETER
Measuring insert: Fixed

**Type: RT
RST-TS**

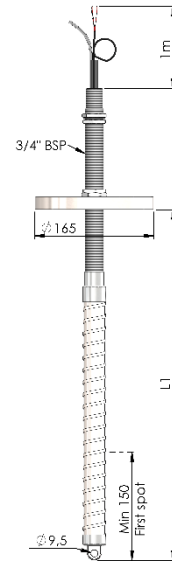
Sheet No.
1-06 V3.0
5753-E011220V3.1



Application:

The RT-RST-TS is a multi-spot temperature sensor used for measuring the average temperatures, primarily in stationary tank systems, with requirements to the tolerance and the response time of the temperature measurement. The RT-RST-TS is often used in connection with measuring of volume in e.g. oil or bitumen or for estimating the accumulated energy in bulk storing tanks.

- The measuring elements are in accordance with IEC 60751.
- Min. 150 mm from bottom of the sensor to the first spot.
- Flexible stainless-steel tube with diameter 1".
- Accessories: Flanges, weights, terminal boxes and transmitters.



MECHANICAL SPECIFICATIONS

Protective tube: -----
Stainless steel EN 1.4404 (AISI 316L),
max. 850°C

Total length L1 [mm]: -----
Min. 1000 mm, max. 70000 mm

Process attachment: -----
3/4" BSP
Flange DN50 PN16 EN 1092-1 TP05, Ø165mm
Special

Number of elements: -----
Max. 22 elements

Element placements: use page 3

Accessories: -----
Bottom Weight 5 kg

ELECTRICAL SPECIFICATIONS

-----**Sensor element:**
1xPt100
1xPt1000 (only cl. B 1/1 and cl. A)

-----**Number of conductors:**
3-wire
Special

-----**Media temperature max.:**
-50/+250°C
Special

-----**Electrical connection:**
Free Leads
With SS connection box
With connection box and protected cable

-----**Cable length L2: 1m (std.)**
Anaconda protection

-----**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)

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.

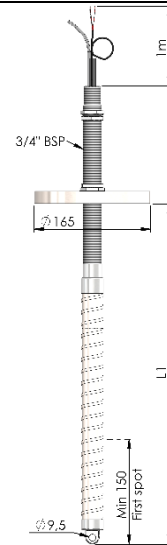
CRYO treatment is needed to ensure a correct and working sensor down to -196°C.

A sensor will always drift over time, especially when there is 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 SS Box -----

ABS Box -----

NONE -----

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](#)

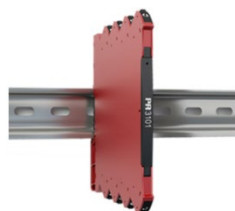


Transmitter Type:			
4 mA =	C°	20 mA =	C°

Link to further information:

[Transmitter Overview](#)

[DIN rail mounted transmitter](#)



CALIBRATION

---Calibration:

In house (Span)
Accredited – in laboratory

1.	Point	°C
2.	Point	°C
3.	Point	°C

Enhanced performance services

-----Cryo treatment:

Recommended for temperature applications below -50°C

-----Ageing:

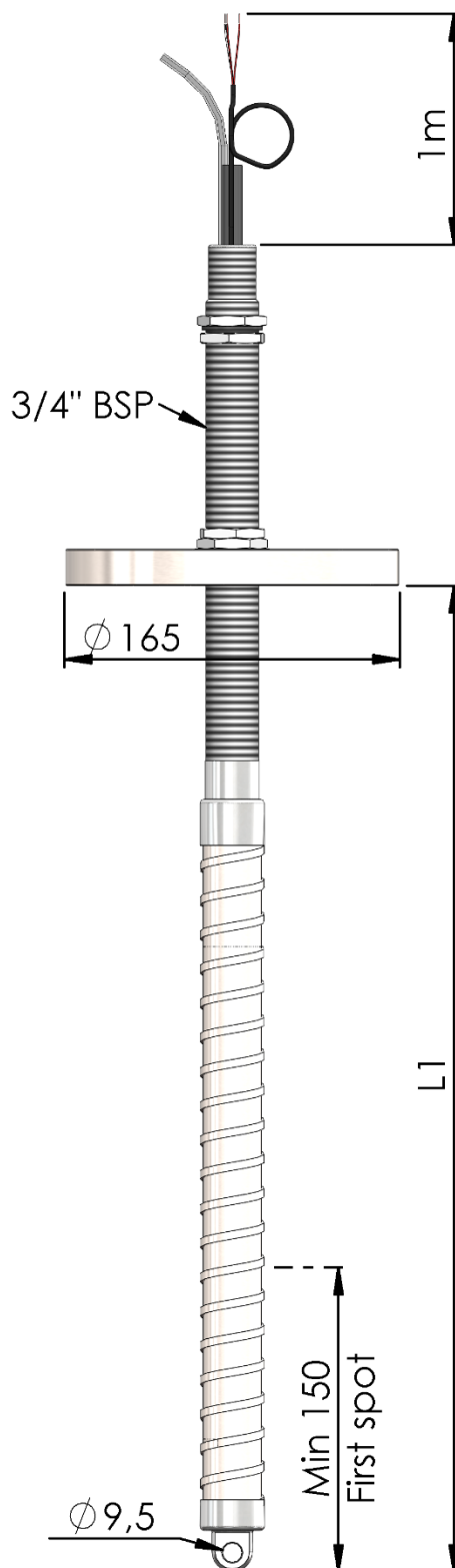
For long term stability

-----Documentation

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



22. Element	
21. Element	
20. Element	
19. Element	
18. Element	
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Date:	KP item No.:	Customer item No.:
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