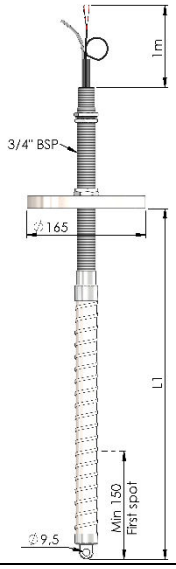
RESISTANCE THERMOMETER **Measuring insert: Fixed**	**Type: RT RST-TS**	**5753-E100724V3.2**

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

Date:

Part No.

Kjaerulf Pedersen a/s, Taastrupgaardsvej 8-10, DK-2630 Taastrup, Tel.: +45 39760203, sales@kp-as.com, www.kp-as.com

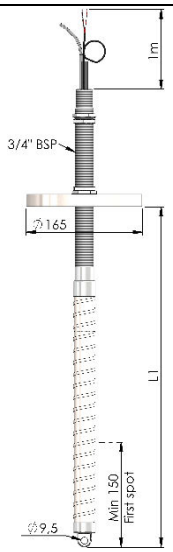
RESISTANCE THERMOMETER **Measuring insert: Fixed**	**Type: RT RST-TS**	5753-E100724V3.1

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°

CALIBRATION

In House ----**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

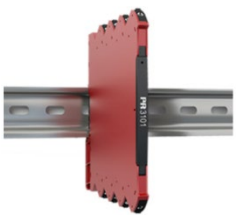
☐ ----**Ageing:**
For long term stability

☐ ----**Documentation**
Certificate: 3.1 Material certificate
Certificate of origin
Certificate of conformity

Link to further information:

Transmitter Overview

DIN rail mounted transmitter



Date:

Part No.

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Kjaerulf Pedersen a/s

Element placement
sheet No. 1-06

RESISTANCE TERMOMETER type: RT-RST-TS

Tank temperature sensor for measuring multiple spots

22. Element	
21. Element	
20. Element	
19. Element	
18. Element	
17. Element	
16. Element	
15. Element	
14. Element	
13. Element	
12. Element	
11. Element	
10. Element	
9. Element	
8. Element	
7. Element	
6. Element	
5. Element	
4. Element	
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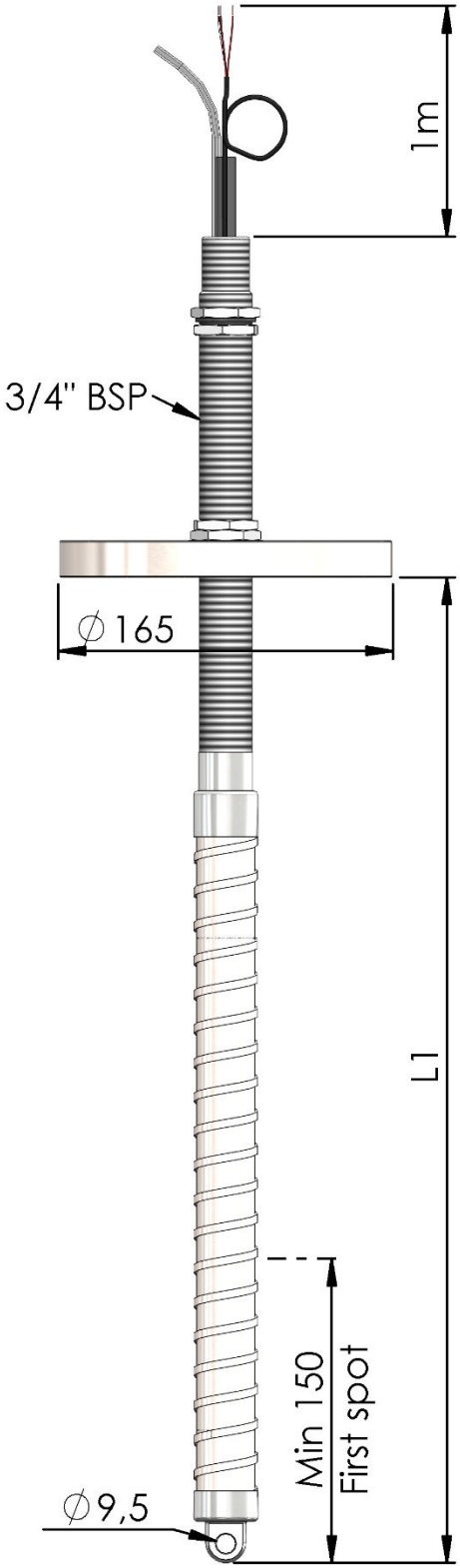
2. Element	
1. Element	



Date:	KP item No.:	Customer item No.:

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