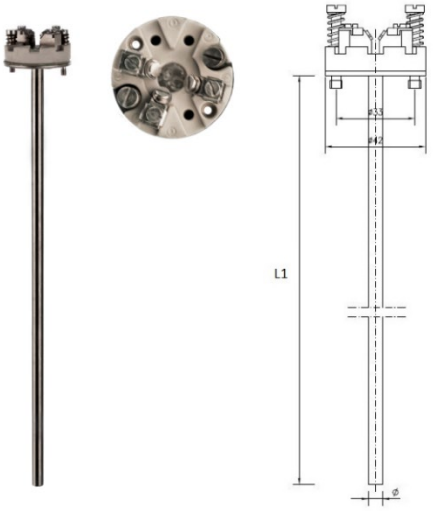
RESISTANCE THERMOMETER **Measuring insert: Fixed**	**Type: IN** **R20/R25/R40/R60**	Sheet No. 4-10V2.1 **5152-E010321V3.1**

Application:

- For type A and B resistance thermometers
- Electrical connection: Standard heads

Properties:

- Sensor 1xPt100, 2xPt100, Pt1000 or 2xPt1000 in acc. with IEC 60751
- Process attachment: Free leads, ceramic block, temperature transmitter
- Marine approved by: DNV, LR, GL, NK, RINA, ABS and BV
- Approved by: GOST and GOST Metrology



MECHANICAL SPECIFICATIONS:

Protective sheath: ----------
EN 1.4571 (AISI 316Ti) max. 850°C
Other on request

Protective sheath diameter Ø [mm]: --------
Ø6
Ø8
Special

Insert length L1 [mm]: ----------
125
175
225
275
325
525
735
1025
1425
Special

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

---Media temperature max:
+180°C
+250°C
+400°C
+600°C (only cl. B 1/1 Pt100 and Pt1000)

---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)

Link for further information: Pt100 Tolerance

Date:

Part No.

Kjaerulf Pedersen a/s, Taastrupgaardsvej 8-10, DK-2630 Taastrup, Tel.: +45 39760203, Fax: +45 39760501, sensor@kp-as.com, www.kp-as.com

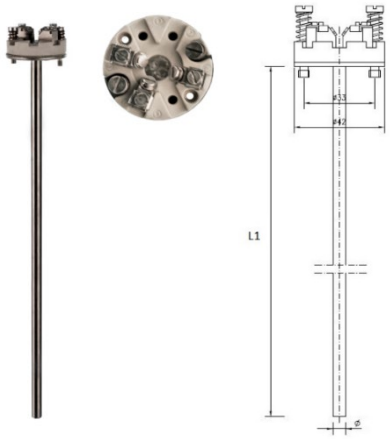
RESISTANCE THERMOMETER **Measuring insert: Fixed**	**Type: IN** R20/R25/R40/R60	Sheet No. 4-10 V2.1 **5152- E010321V3.1**

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 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

Ceramic socket mounted in terminal head. ---------- ●

Prepared for transmitter w/o ceramic socket. w/long leads ---------- ○

Programmable head 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

None ----**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

☐ ----**Marine Certificate**
Certificate of DNV.GL
Certificate of BV
Certificate of Rina
Certificate of ClassNK
Certificate of LR
Certificate of ABS

Other on request

Save Print Submit

Date:

Part No.

Kjaerulf Pedersen a/s, Taastrupgaardsvej 8-10, DK-2630 Taastrup, Tel.: +45 39760203, Fax: +45 39760501, sensor@kp-as.com, www.kp-as.com

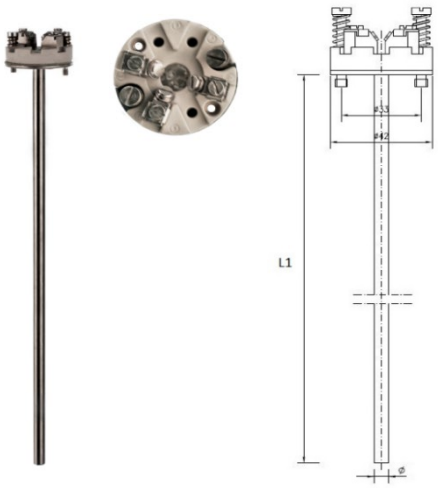
THERMOCOUPLE **Measuring insert: Fixed** Sensor element: Thermocouple	**Type: IN** **T40/T60/T85**	Sheet No. 4-15 V2.1 **10130-E010321V3.1**

Application:

- For type A and B sensors with standard heads
- Electrical connection: Standard heads

Properties:

- Thermocouple type K, J, E, N or T in acc. with IEC 60584-1
- Thermocouple weld: Insulated
- Constructed in accordance with DIN 43733
- Process attachment: Loose wires, ceramic block with terminals, temperature transmitter or special process attachment
- Marine approved by: DNV, LR, GL, NK, RINA, ABS and BV
- Approved by: GOST and GOST Metrology



MECHANICAL SPECIFICATIONS:

Protective sheath: ----------
EN 1.4571 (AISI 316Ti) max. 850°C
Other on request

Protective sheath diameter Ø [mm]: ---------
Ø6
Ø8
Special

Insert length L1 [mm]: ----------
125
175
225
275
325
525
735
1025
1425
Special

ELECTRICAL SPECIFICATIONS:

------**Sensor type:**
Type K (Fe-CuNi) max. +1150°C
Type J (NiCr-Ni) max. +700°C
Type E (NiCr-CuNi) max. +800°C
Type N (NiCrSi-Ni) max. +1250°C
Type T (Cu-CuNi) max. +300°C
Special

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

------**Media temperatures max.:**
+400°C (T40)
+600°C (T60)
+850°C (T85)
Special

------**Electrical connection:**
Free Leads (L=50mm)
Ceramic block with terminals
Temperature transmitter
Special

------**Tolerance in acc. with DIN 43732:**
Class 1
Class 2

Date:

Part No.

Kjaerulf Pedersen a/s, Taastrupgaardsvej 8-10, DK-2630 Taastrup, Tel.: +45 39760203, Fax: +45 39760501, sensor@kp-as.com, www.kp-as.com

THERMOCOUPLE **Measuring insert: Fixed** **Sensor element: Thermocouple**	**Type: IN** **T40/T60/T85**	Sheet No. 4-15 V2.1 **10130- E010321V3.1**

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 are high temperature fluctuations.
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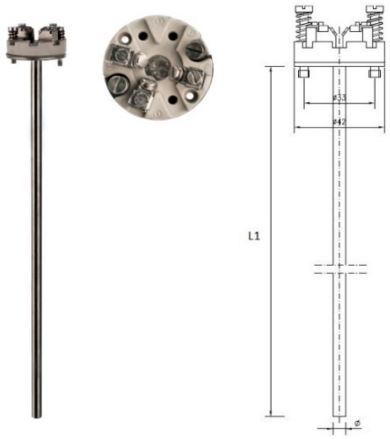

SIGNAL PROCESSING

Ceramic socket mounted in terminal head. ---------- ○

Prepared for transmitter w/o ceramic socket. --------- w/long leads ○

Programmable head mounted transmitter---------- ○

Measuring range min/max: -200/+850°C
Output: 2-wire, 4-20 mA
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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

None ----**Calibration:**
In house (Span -33°C - +700°C)
Accredited – in laboratory (-196°C - +1200°C)

4.	Point	°C
5.	Point	°C
6.	Point	°C

More point on request

Enhanced performance services

☐ ----**Cryo treatment.**
For temperature sensor under -50°C

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For long term stability.
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Date:

Part No.

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