RESISTANCE THERMOMETER
Measuring insert: Interchangeable

Type: BP2

5452-E030624V3.2

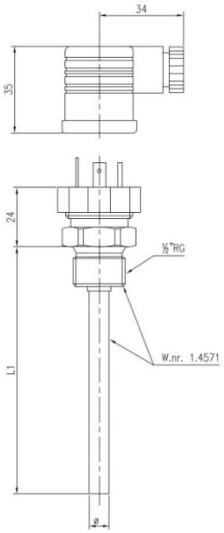
Application:

- For measuring temperatures of liquid and gaseous media
- The measuring inset can be replaced or calibrated without shutting down the system
- For operations that require the sensor to couple quickly and uncouple electrically, and where a secure fixing of the cable is needed
- Usually applied in: Processing plants, the shipping industry, the refrigeration industry, the engineering industry, the energy industry

Properties:

- Sensor: Pt100, 2xPt100 and Pt1000 in acc. with IEC 60751
- Mechanical and thermal stress in accordance with DIN 43772
- Measuring insert: Interchangeable
- Electrical connection: Valve plug (degree of protection IP65)
- Process attachment: Thread
- Outer protective sheath and nipple: Stainless acid-proof steel
- Stands media temperatures of up to max. 250°C
- Ambient temperature min./max.: -25/+120°C
- Withstands vibrations, Quick reaction time
- Marine approved by: DNV, LR, NK, RINA, ABS and BV





MECHANICAL SPECIFICATIONS:

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

Sensor diameter [mm]: ----------
Ø8
Ø6 (only with fixed measuring insert)
Special

Immersion length L1 [mm]: ----------
50 / 80 / 100 / 150 / 200 / 250
Special

Process attachment: ----------
½" BSP welded coupling
¼" BSP welded coupling

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:
Valve plug PG9
Valve plug PG11
None

--Cable (pre-mounted in valve plug):
SS (Silicone-Silicone) max. 180°C
SBS (Silicone-Inner Braided-Silicone)
TBT (Teflon-Inner Braided-Teflon)
None

---Cable length L2 [m]:
2 / 4 / 6 / 10
Special

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

This is provided to you as a service and for information purpose only. While we have attempted to maintain the information as accurately as possible, the page may contain errors or omissions for which we disclaim any and all liability.

RESISTANCE THERMOMETER
Measuring insert: Interchangeable

Type: BP2

5452-E030624V3.2

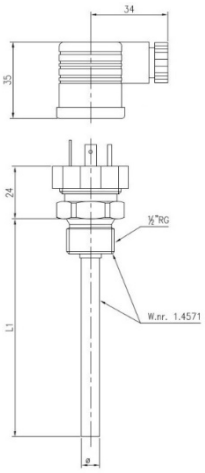
Calibration:
Temperature calibration are used to verify and certify the sensor to have the correct accuracy. We can do either: “In house” or “Accredited” calibration. Accredited is certified by 3.e part. Normally we do a calibration in 3 points.

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°

Programmable rail mounted transmitter

Link to further information: Transmitter Overview

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

---**Marine Certificate**
Certificate of DNV
Certificate of BV
Certificate of Rina
Certificate of ClassNK
Certificate of LR
Certificate of ABS

Other on request

Date:

Part No.:

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

This is provided to you as a service and for information purpose only. While we have attempted to maintain the information as accurately as possible, the page may contain errors or omissions for which we disclaim any and all liability.