

RESISTANCE THERMOMETER

Measuring insert: Interchangeable

Type:
BP1-W

Sheet No.
1-29 V2.1
5452-E010721V3.1

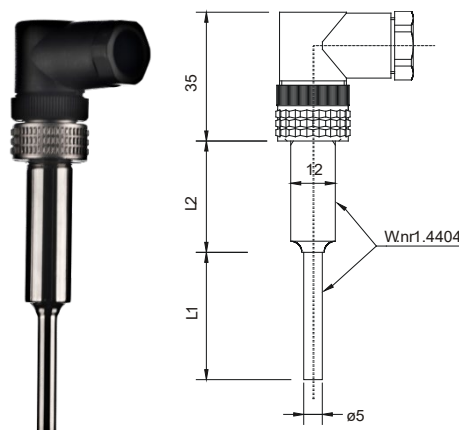


Application:

- 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
- Mechanical and thermal stress in acc. with DIN 43772
- Measuring insert: interchangeable
- Process attachment: weld-in thermowell
- Outer protective sheath: acid-proof steel
- Stands media temperatures of up to max 250°C
- Stands ambient temperatures of up to max 120°C
- Stands vibrations
- Quick reaction time
- Electrical connection: PG9 (Degree of protection IP 65)
- After the sensor has been fitted, the plug can be adjusted to point in the desired direction



MECHANICAL SPECIFICATIONS:

Protective sheath: -----
Stainless acid-proof steel, Wnr.1.4404
(AISI316L)

Immersion tube diameter Ø: -----
Ø5 mm / Ø6 mm / Ø8 mm
Special

Extension length L2: -----
30 mm
50 mm
Special

Immersion tube length L1: -----
20 mm
35 mm
50 mm
Special

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

ELECTRICAL SPECIFICATIONS

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

-----Cable length [m]:

-----Sensor element:
1xPt100
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)

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:

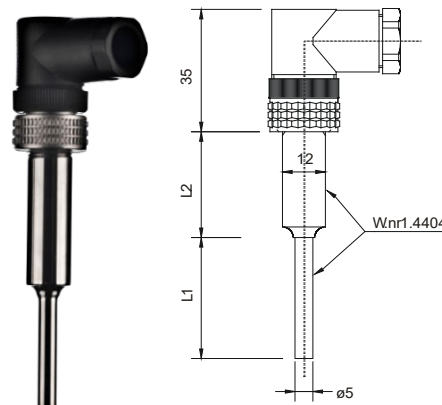
Cold applications (below -50°C) will influence the material and the measurement. CRYO treatment is needed to ensure a correct and working sensor down to -196°C.

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:

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

---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

Other on request