

RESISTANCE THERMOMETER

Measuring insert: Fixed

Process attachment: Clamp-on

Type:
RTBC-CO-H

Sheet No.
2-5 V2.1

5860-E010818V2.1



Application:

- For measuring temperatures in the food industry and the pharmaceutical, cosmetic and chemical/ technical industries
- Temperature measuring on pipes
- No contact to medium

Properties:

- Clamp-on
- Sensor: Pt100 in acc. with IEC 60751
- Mechanical and thermal stress in acc. with DIN 43772
- Withstands media temperatures of up to max 150°C
- Quick reaction time with silver bottom
- Degree of protection is determined by electrical connection; in this case of protection head
- Protection head can be turned to point in the desired direction
- Can be delivered with head mounted transmitter
- Reaction $T^{(\tau)}_{0,50}$, 6 – 12sek



MECHANICAL SPECIFICATIONS:

Protective sheath: -----

Stainless acid-proof steel, EN 1.4404 (AISI 316L)

Pipe diameter: -----

6 mm - Ø25 mm

Special

Protection head: -----

SRF (stainless steel, screw cap, cable gland PG9, IP67)

SRF (stainless steel, screw cap, M12x1 Plug, IP67)

Special

ELECTRICAL SPECIFICATIONS:

-----Sensor element:

1xPt100

-----Number of conductors:

3-wire

4-wire

-----Temperature range min/max:

-50/+150°C

Special

-----Tolerance in acc. with IEC 60751:

Type A DIN(i.e. $\pm(0,15+0,002 \times T_{\text{actual}})$ °C)

-----Cable type: (pre-mounted in Head):

Silicone (SS)

Silicone Braided Silicone(SBS)

Teflon Braided Teflon (TBT)

-----Cable length.

2 m

4 m

6 m

10 m

Special

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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

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°

[5350A Profibus standard](#)

[5350B Profibus ATEX, FM and CSA](#)

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