

Technical Data Sheet

Pressure / Temperature / Humidity / Air Velocity / Airflow / Sound level



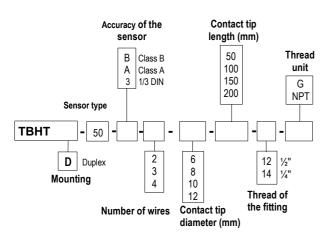
RTD sensor with standard head and resistive element for very high temperature use

TBHT 50 / TBHTD 50

- Temperature sensor with or without compression fitting and stainless steel contact tip.
- Measuring range (According to reference): from -50 to +550 °C
- Mounting of wire: single pair (2,3 or 4 wires). multipair (4 wires).

PART NUMBERS

To order, just add the codes to complete the part number.



^{*} Other dimension on request

Example: TBHT-50-B-3-8-100-12G.

Model: PT 100 temperature probe, class B, 3 wires diameter 8 mm and length including thread 100 mm.

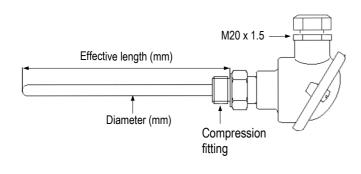
With compression fitting 1/2 G.

Standard measuring range from -50 °C to + 550 °C.

TECHNICAL FEATURES

From -50 °C to +550 °C			
PT100: see "Tolerances" table			
PT100: Class B, Class A, 1/3 DIN As per DIN IEC751			
Single pair 2, 3 or 4 wires Multi pair only 2 x 2 wires			
From -20 °C to +80 °C			
316 L stainless steel, no welding, 3/4 to 4/4 hard			
316 L stainless steel			
With or without, 1/4, 1/2, male Gas or NPT plug (other tread on request)			
With or without terminal block Transmitter 4/20 mA 0/10 V as option			

DIMENSIONS

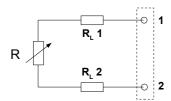


TOLERANCE OF PT100 PROBES

Norm as per IEC 751 (1993).

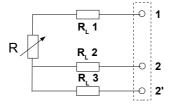
Temp °C	Tolerances						
	Class B		Class A		1/3 DIN		
	± °C	± Ohms	± °C	± Ohms	± °C	± Ohms	
-100	8.0	0.32	0.35	0.14	0.27	0.11	
-50	0.55	0.22	0.25	0.1	0.19	0.08	
0	0.3	0.12	0.15	0.06	0.1	0.04	
100	8.0	0.3	0.35	0.13	0.27	0.1	
200	1.3	0.48	0.55	0.2	0.44	0.16	
300	1.8	0.64	0.75	0.27	0.6	0.21	
400	2.3	0.79	0.95	0.33	0.77	0.26	

2-wire connection



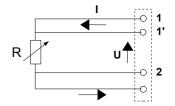
This is the simplest way, but line resistors (RL1 and RL2) are connected to the sensor in a series circuit. The addition of RL1 + RL2, leads to an off-set between measured temperature and real temperature. This connection must be avoided.

• 3-wire connection



This connection involves identical line resistors (RL1-RL2-RL3), RL2 + RL3 allow you to measure the line resistance that will be subtracted from the measured resistance between 1 and 22' terminals. This is the most common connection.

• 4-wire connection

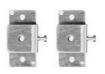


Regulated current is going through 11' and 22' terminals and the measurement is made at the sensor terminals, so none of the line resistors are taken into account. This is the most accurate connection.

ACCESORIES (SEE DATASHEET)

- Transmitter output 4/20 mA or 0/10 V
- · Wall fixing support
- Stainless steel mounting bracket
- 1/4 " or 1/2" Gas screw nut
- · Stainless steel compression fitting
- PTFE or stainless steel ferrule for compression fittings





- Sleeve to weld for food industry
- · Stainless steel union fitting
- 1/2" Gas or NPT thread cuff
- Thermo-conducting silicone grease
- Calibration certificate
- Thermowell



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