

# **Technical Data Sheet**

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

# RTD sensor with head for contact duct



Supplied with clip for DN 100 duct

## PROBE FEATURES

- Temperature sensor with base for all diameters ducts
- Measuring range (according to reference)

From -50 °C to +400 °C (PT100 et PT1000). From -20 °C to +120 °C (NTC).

- Mounting of wires: single pair (2,3 or 4 wires). multipair (4 or 6 wires).
- For other resistor type PT25, PT50, PT500, PT200 or NI, please contact us.

# **TBCT 50 / TBCTD 50 TMCT 50 / TMCTD 50**

#### TRANSMITTER FEATURES

Working temperature (according to reference)	For mounting TBCT type From -50 °C to +400 °C (PT100 and PT1000) From -20 °C to +120 °C (NTC) For mounting TMCT type From -50 °C to +250 °C (PT100 and PT1000) From -20 °C to +120 °C (NTC)		
Accuracy	PT100 or PT1000: see "Tolerances" table NTC: see "Tolerances" table		
Type of sensor	PT100 or PT1000: Class B, Class A, 1/3 DIN as per DIN IEC751  NTC: resistance at 25 °C, $R_{25}$ = 10KΩ  Nominal Beta B25/85 value = 3.695K ±1%		
Storage temperature	From -20 °C to +80 °C		
Height of clearance	45 mm		
Duct base	40 x 16 x 8,5 mm V-section Fixing by needle screw AU4G material (aluminium)		
Fitting	Supplied with stainless steel clip for DN 100, other clip on request		
Electrical connection	With or without terminal block 4/20 mA transmitter as option		
Connection head	Aluminium alloy Cable gland: M20 x 1.5 IP65 protection		



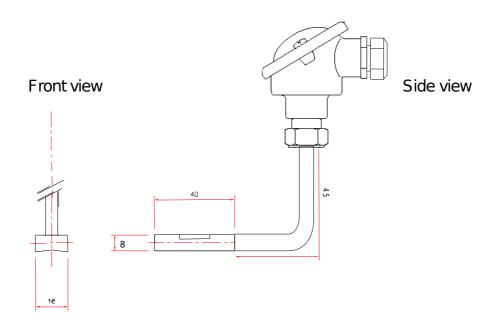
### Mounting of wires

For mounting TBCT type
Single pair 2, 3 or 4 wires or multipair 4 or 6 wires
No 6 wires for H mounting (+400 °C)
For mounting TMCT type
Single pair 2, 3 wires
Or multipair 4 wires only

# **TBCT 50 & TBCTD 50**

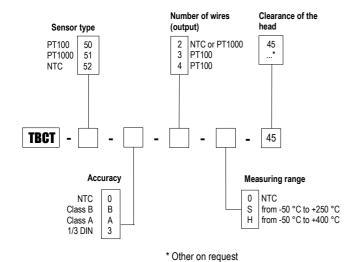
# Temperature sensor with standard head and with contact for duct

#### PROBE DIMENSIONS



#### PART NUMBERS

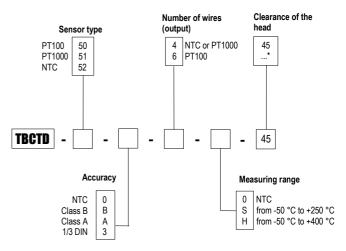
## • Single pair sensor - Ref. TBCT 50



Example: TBCT51-B-2-S-45

Model: PT1000 temperature sensor Class B, 2 wires, clearance of the head at 45°. Measuring range from -50 à +250 °C.

# • Multipair sensor– Ref. TBCTD 50



\* Other on request

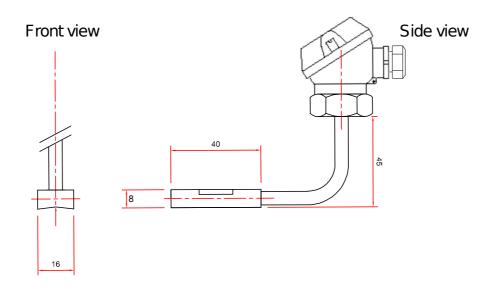
Example: TBCTD51-B-4-S-45

Model: PT1000 temperature sensor Class B, 4 wires, clearance of the head at  $45^\circ$ . Measuring range from -50 à +250 °C.

# **TMCT 50 & TMCTD 50**

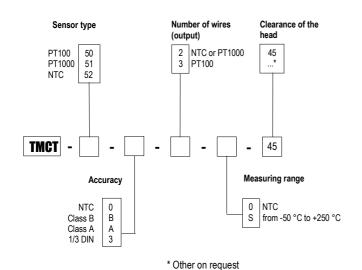
# Temperature sensor with miniature head and with contact for duct

#### **DIMENSIONS PROBE**



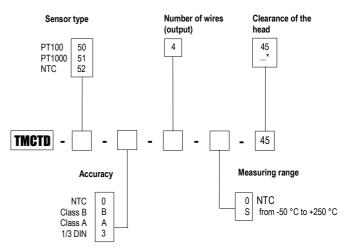
## PART NUMBERS

# • Single pair sensor – Ref. TMCT 50



Example: TMCT51-B-2-S-45 Model: PT1000 temperature sensor Class B, 2 wires, clearance of the head at  $45^\circ$ . Measuring range from -50 à +250 °C.

# • Multipair sensor – Ref. TMCTD 50



\* Other on request

Example: TMCTD51-B-4-S-45

Model: PT1000 temperature sensor Class B, 4 wires, clearance of the head at 45°. Measuring range from -50 à +250 °C.

#### TOLERANCE\* OF PT100 AND PT1000 PR0BES

Norm as per IEC 751 (1993).

	Tolerances						
Temp °C	Class B		Class A		1/3 DIN		
	± °C	± Ohms	± °C	± Ohms	± °C	± Ohms	
-100	0.8	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	0.8	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	

\*Resistance values for PT1000 ( $\Omega$ ) must be multiplied by 10 for the same corresponding temperature value (°C). I.e: at 0 °C for Class B PT1000 ± 0.3 °C  $\rightarrow$  ± 1.2  $\Omega$ 

## **TOLERANCE\* OF NTC PROBES**

Measuring range °C	Tolerances °C
From -20 °C to 0 °C	± 0.5 °C
From 0 °C to +70 °C	± 0.2 °C
From +70 °C to +100 °C	± 0.5 °C

\*all accuracies indicated in this technical data sheet were stated in laboratory conditions, and can be guaranteed for measurements carried out in the same conditions, or carried out with calibration compensation.

## ACCESSORIES (SEE DATASHEET)

- Transmitter output 4/20 mA or 0/10 V
- · Wall fixing support
- Stainless steel mounting brackets
- 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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