



Duct sensor (TMD) is used for air-conditioning duct temperature measurements.

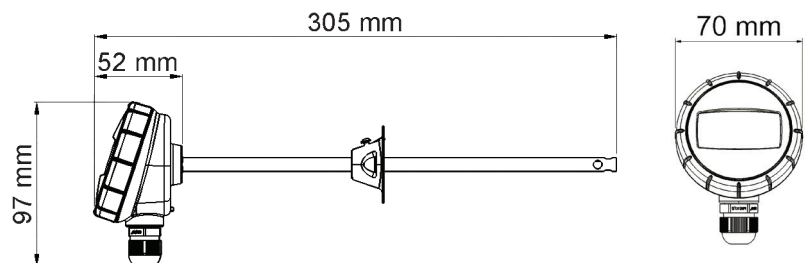
Type code	Meas. element	Meas. accuracy
TMD / NTC10	NTC 10	$\pm 0,2 \text{ }^\circ\text{C}$ (0-70 $^\circ\text{C}$ )
TMD / Pt1000	Pt 1000	$\pm 1 \text{ }^\circ\text{C}$ (0-70 $^\circ\text{C}$ )
TMD / Ni1000	Ni 1000 LG	$\pm 1 \text{ }^\circ\text{C}$ (0-70 $^\circ\text{C}$ )

### Technical information

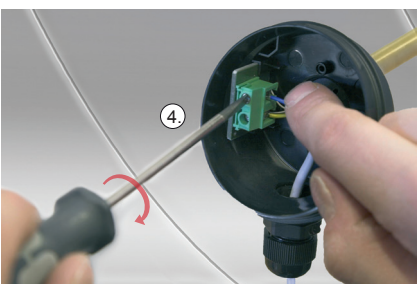
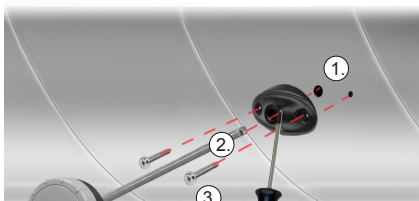
#### Materials

- Case	Cover PC, base PBT, seal PA
- Protective tube	Ms, $\varnothing$ 8 mm, length 250 mm
- Flange	PA
Protection class	IP 54 (case)
Seal	M16 x 1,5
Range of use	- 50 $^\circ\text{C}$ ...+ 60 $^\circ\text{C}$ (air)
Time constant	25 s
Immersion length	Adjustable

### Dimensions:



## Installation and connection



Install **the incoming air sensor** in central air flow as close as possible to the blower, but far enough in the duct so that air temperature differences are equalized. **The exhaust air sensor** must be installed on the exhaust air duct in front of the exhaust air fan.

The tip of the sensor must not touch the wall of the duct.

1. Drill an  $\varnothing$  8 - 8,5 mm hole in the duct for the sensor.
2. Use the sensor's protection tube or the drill to position the flange flush with the hole.
3. Fasten the flange to the air-conditioning duct with 2 screws. Push the duct sensor (TMD) to the appropriate depth and lock it with the screw on the flange. Make sure that the cable's bushing seal on the case goes down.
4. Open the screw-off lid and connect the sensor to the controlling device as a two-wire connection using weak current cable. The polarity of the cable is irrelevant.
5. Tighten the bushing seal so that it acts as a seal and repels water.

### NTC10

Tol.  $\pm 0,2$  °C (0-70 °C)

#### Temperature/Resistance

°C	$\Omega$
-50	672 600
-40	337 270
-30	177 210
-25	130 540
-20	97 140
-15	72 990
-10	55 350
-5	42 340
0	32 660
5	25 400
10	19 900
15	15 710
20	12 490
25	10 000
30	8 055
35	6 531
40	5 325
45	4 368
50	3 602
55	2 987
60	2 488
65	2 084
70	1 753
75	1 482
80	1 257
85	1 072
90	917,4
95	788,2
100	679,8
110	511,0
120	389,4
130	300,5
140	234,7

### Ni 1000 LG

Tol.  $\pm 0,4$  °C (0 °C)  
DIN EN43760  
tcr 5000 ppm / K

#### Temperature/Resistance

°C	$\Omega$
-50	790,9
-40	830,8
-30	871,7
-25	892,5
-20	913,5
-15	934,7
-10	956,2
-5	978,0
0	1000,0
5	1022,3
10	1044,8
15	1067,6
20	1090,7
25	1114,0
30	1137,6
35	1161,5
40	1185,7
45	1210,2
50	1235,0
55	1260,1
60	1285,4
65	1311,1
70	1337,1
75	1363,5
80	1390,1
85	1417,1
90	1444,4
95	1472,0
100	1500,0
110	1557,0
120	1615,4
130	1675,2
140	1736,5

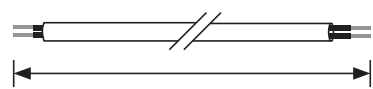
### Pt 1000

Tol.  $\pm 0,3$  °C (0 °C)  
DIN EN60751 B  
tcr 3850 ppm / K

#### Temperature/Resistance

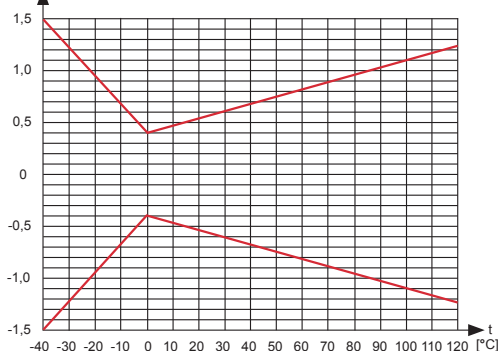
°C	$\Omega$
-50	803,1
-40	842,7
-30	882,2
-25	901,9
-20	921,6
-15	941,2
-10	960,9
-5	980,4
0	1000,0
5	1019,5
10	1039,0
15	1058,5
20	1077,9
25	1097,3
30	1116,7
35	1136,1
40	1155,4
45	1174,7
50	1194,0
55	1213,2
60	1232,4
65	1251,6
70	1270,8
75	1289,9
80	1309,0
85	1328,0
90	1347,1
95	1366,1
100	1385,1
110	1422,9
120	1460,7
130	1498,3
140	1535,8

2 x 0,5 mm<sup>2</sup> (Cu)



50 m	100 m
3,36 $\Omega$	6,72 $\Omega$

$\Delta T$  [K] Tolerance Ni 1000 LG



$\Delta T$  [K] Tolerance Pt 1000

