



Features

- Sensing elements
Thermistors, Platinum and Nickel
NTC 10K, NTC 1.8K, NTC 20K, PTC, PT100, PT1000, NI1000 etc.
- Probe lengths
50, 100, 150, 200, 250, 300 and 400 mm
- Easy to fix penetration dept with mounting flange
- IP 65 protection
- Simple 2-wire connection
- Economical way to measure temperature

Technical data

Measuring range	-30 to +150°C
Sensing elements	See ordering (other elements on request)
Connections	2-wire (on request 3 and 4-wire)
Probe material	Steel
Probe diameter	6mm
Probe length	50, 100, 150, 200, 250, 300 or 400 mm
Housing material	Plastic
Housing dimensions	72x64x39 mm excluding cable entry gland
Protection	IP 65
Mounting	With supplied (attached) flange
Isolation resistance	> 100Mohm, at 20°C (500 Vdc)

Ordering

Type no.	Description
TDSH NTC 10K xxx	Duct temperature sensor
TDSH NTC 1.8K xxx	Duct temperature sensor
TDSH NTC 20Kxxx	Duct temperature sensor
TDSH KTY 2K xxx	Duct temperature sensor
TDSH PT100 xxx	Duct temperature sensor
TDSH PT1000 xxx	Duct temperature sensor
TDSH NI1000 xxx	Duct temperature sensor

xxx = probe length in mm; 50, 100, 150, 200, 250, 300 or 400.

Order example:
Type number for duct temperature sensor PT1000 with
150 mm probe length will be TDSH PT1000 150.

Application/Description

The duct temperature sensor TDSH is used for sensing the air temperature in heating, ventilation and air conditioning systems (e.g. in supply air, extract air or mixed air ducts).

The TDSH is a passive duct temperature sensor available with different sensing elements such as NTC 10K, NTC 1.8K, NTC 20K, PTC, PT100, PT1000, NI1000 etc.

Passive sensing elements is a low cost alternative to measure temperature with simple 2 wire connection.

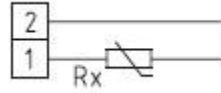
The probe is made of quality steel, available with several different lengths from 50 mm to 400 mm.

A flange is supplied with the TDSH for mounting and adjustment of penetration depth.

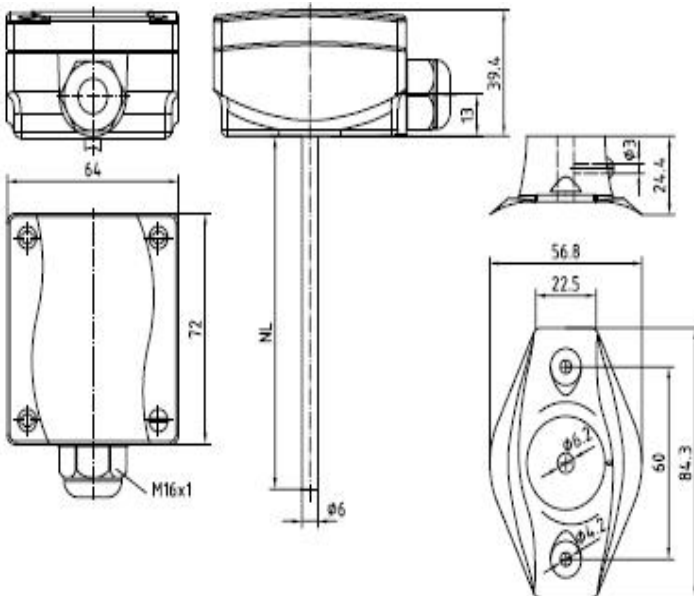
The sensing element is located in the end of the probe and wiring connection is inside the IP 65 housing on a terminal block, the housing is supplied with a plastic cable entry gland.

Connection

1x two-wire connection

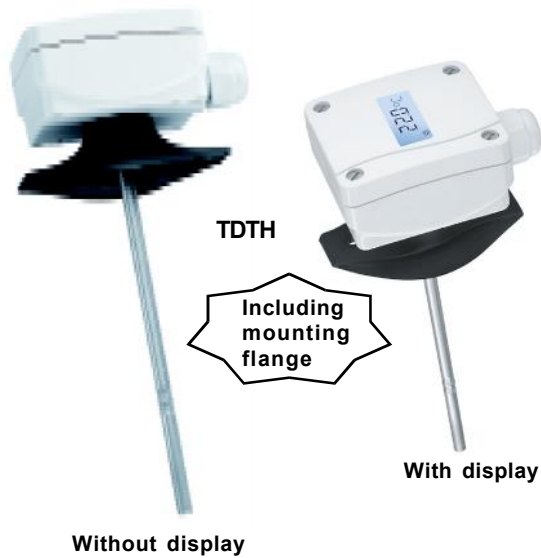


Dimensions (mm)



NL = 50, 100, 150, 200, 250, 300 or 400 mm (probe length)

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Features

- Active transmitters
0-10 Vdc or 4-20 mA output
- 8 different temperature ranges in same unit, selectable via jumpers on pcb:
-20°C to +150°C, -50°C to +50°C, -20°C to +80°C, -30°C to +60°C, 0 to +40°C, 0 to +50°C, 0 to +100°C and 0 to +150°C
other temperature ranges on request
- With or without display
- Probe lengths
50, 100, 150, 200, 250 and 300 mm
- Easy to fix penetration dept with mounting flange
- IP 65 protection

Ordering

Duct temperature transmitter

Type no.	Output	Display
TDTH 010 xxx	0-10 Vdc	No
TDTH 420 xxx	4-20 mA	No
TDTH 010 xxxD	0-10 Vdc	Yes
TDTH 420 xxxD	4-20 mA	Yes

xxx = probe length in mm; 50, 100, 150, 200, 250 or 300.

Examples:

Ordering code for unit with 0-10 Vdc output and 150 mm probe without display will be TDTH 010 150.

Ordering code for unit with 4-20 mA output and 200 mm probe with display will be TDTH 420 200D.

Technical data

Measuring ranges	8 different temperature ranges in same unit as standard selectable via jumpers on pcb. with manual zero point correction (+/-10K)
Sensing element	PT1000, DIN EN 60751, class B
Accuracy	0.3 K (Kelvin)
Connections	3-wire for 0-10 Vdc 2-wire for 4-20 mA
Power supply	24 Vac/dc +/- 10% for output 0-10 Vdc 15-35 Vdc for output 4-20 mA
Ambient temperature	-30°C to +70°C
Humidity	< 95% r.H. non-precipitating air
Protection type	IP65 (according to EN 60529)
Protection class	III (according to EN 60730)
Housing material	Plastic, material polyamide, 30% glass-globe-reinforced with quick-locking screws colour pure-white (similar RAL9010)
Housing dimensions	72x64x39 mm excluding cable entry gland
Cable gland	M16, including strail relief
Standards	CE conformity, electromagnetic compatibility according to EN 61326:2006 according to EMC directive 2004/108/EC
Display	single line display with illumination, cutout 37x15 mm (W x H), for displaying actual temperature (only for TDTH 010D and TDTH 420D)
Probe material	Stainless steel, 1.4571, V4A
Probe diameter	6mm
Probe length	50, 100, 150, 200, 250 or 300 mm
Mounting	By a plastic mounting flange, included in the delivery of TDTH

Application/Description

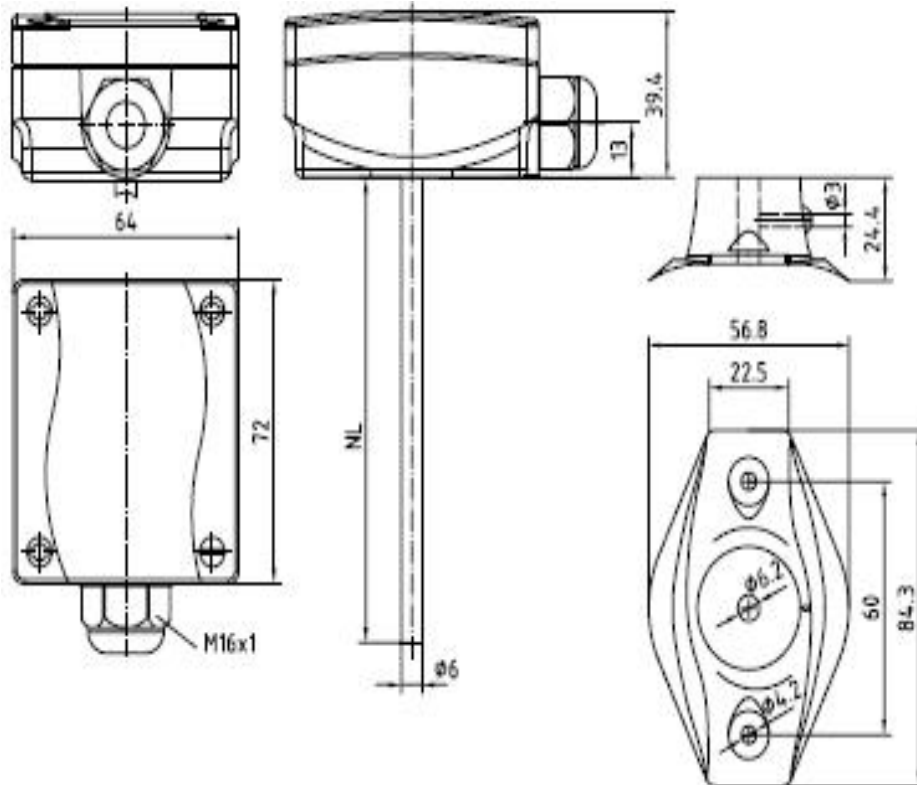
The duct temperature transmitter TDTH is used for sensing the air temperature in heating, ventilation and air conditioning systems (e.g. in supply air, extract air or mixed air ducts).

The immersion temperature transmitters TITB/TITS are available with 0-10 Vdc or 4-20 mA output with 8 different measuring temperature ranges selectable on pcb in same unit.

The probe is made of quality steel, available with several different lengths from 50 mm to 300 mm.

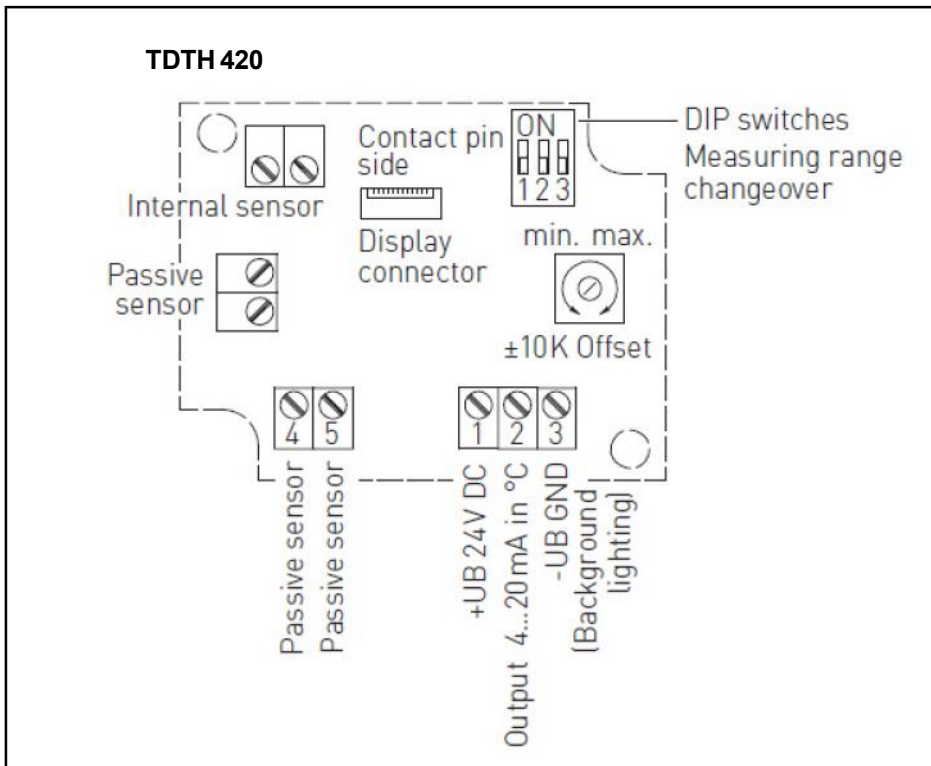
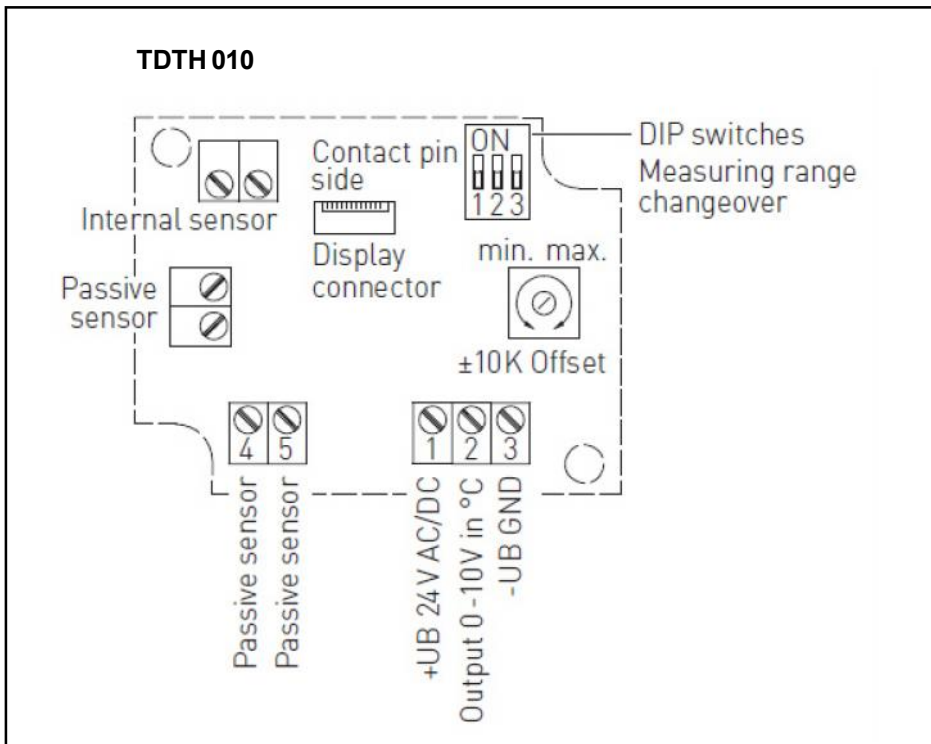
A flange is supplied with the TDTH for mounting and adjustment of penetration depth.

The sensing element is located in the end of the probe, wiring connection is inside the IP 65 housing on a terminal block, the housing is supplied with a plastic cable entry gland.

Dimensions (mm)

NL = 50, 100, 150, 200, 250 or 300 mm (probe length)

Electrical connections



8 different temperature ranges in same unit, selectable via jumpers on pcb

Measuring ranges (adjustable)	JP 1	JP 2	JP 3	JP 4
-20 °C ... + 150 °C				
-50 °C ... + 50 °C				
-20 °C ... + 80 °C				
-30 °C ... + 60 °C				
0 °C ... + 40 °C				
0 °C ... + 50 °C				
0 °C ... + 100 °C				
0 °C ... + 150 °C				

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