

MWTM

Air duct average temperature sensor, active



Summary

The MWTM temperature sensor is an active analogue air duct average temperature sensor.

Applications

- HVAC systems – air temperature measuring and logging

Functions

The sensor uses a Pt1000 sensing element, the signal of which is electronically processed and available at the screw terminals as active signal 0...10 V DC or 4...20 mA DC. Measuring temperature range is settable inside of the device. **Maximal temperature range is -50 to +80 °C!**

The sensors are intended for operating in any environment. They do not need any servicing or maintenance. The mounting flange is included. The capillary tube is laid across of the air duct (see mounting diagram below).

Technical data

Power	24 V AC / DC, +/- 10 % for 0...10 V output (MWTM-U) 15...36 V DC, for 4...20 mA output (MWTM-I)
Measuring range	max. -50 ÷ +80 °C; see table below
Ambient temperature	max. -30 ÷ +70 °C
Humidity	< 95 % r.H.
Protection class	IP65 (according to EN 60529)
Sensor	Pt 1000, (DIN EN 60751, class B)
Terminals	screw terminals for wires 0.14 – 1.5 mm ²
Cable gland	M 16x1.5; inner diameter 10.4 mm including strain relief
Cover	polyamide, 30% glass fibre
Rod material	copper, plastic-coated with spring for buckling protection
Installation	minimum bending radius of 35 mm permissible vibration loads < ½ g
Accessories	MF-06-K mounting flange, plastic optional: KRD-04 capillary tube gland bracket MK-05-M mounting clamps (6 pieces)

display single-line display with illumination, 36x15 mm
display actual temperature

Dimensions

see below

Stem lengths

0,4 m specify in order
3,0 m specify in order
6,0 m specify in order

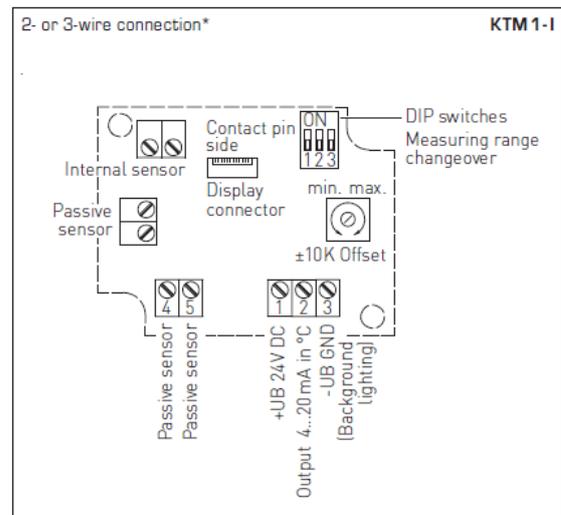
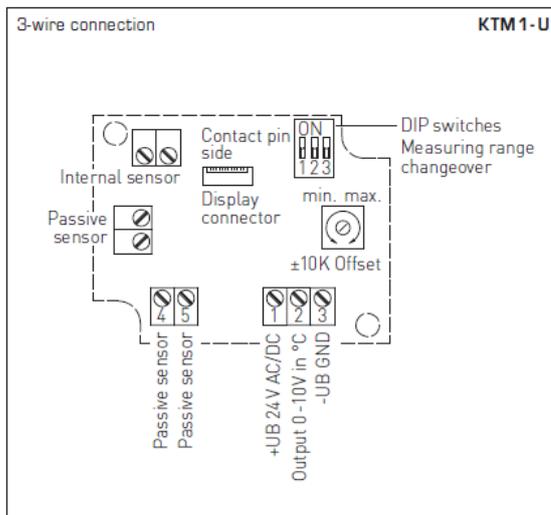
(optional up to 20 m)

Range setting

Adjustable range	DIP 1	DIP 2	DIP 3
-20...+150°C	ON	ON	ON
-50...+50°C	OFF	ON	ON
-20...+80°C	ON	OFF	ON
-30...+60°C	OFF	OFF	ON
0...+40°C	ON	ON	OFF
0...+50°C	OFF	ON	OFF
0...+100°C	ON	OFF	OFF
0...+150°C	OFF	OFF	OFF

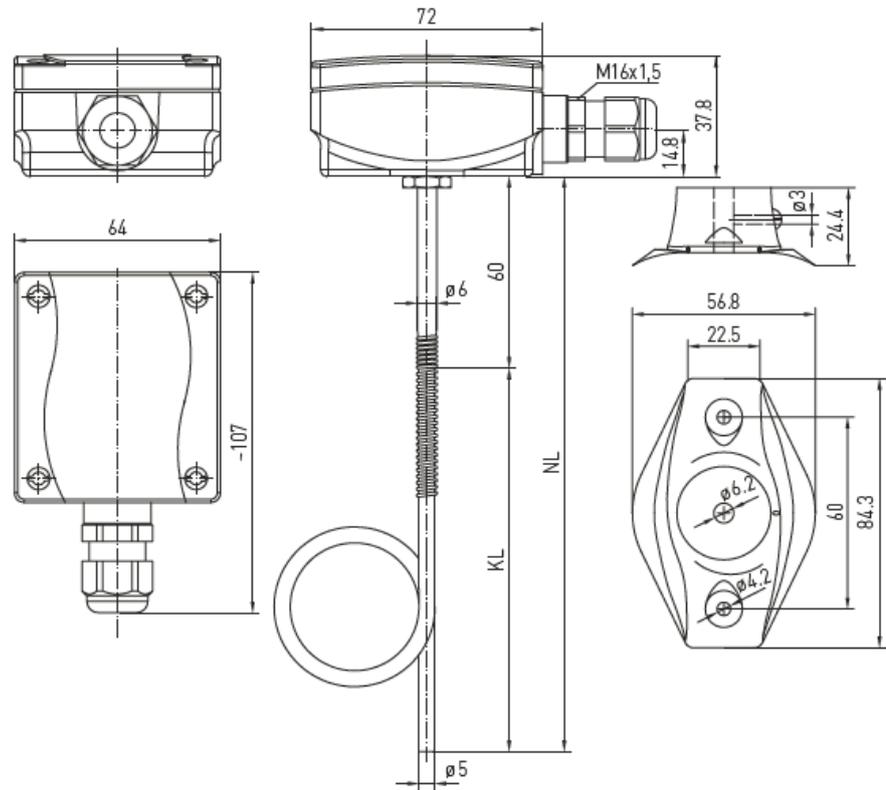
See the DIP switches layout below. Beware that the maximum admissible range of measured temperatures is -50 to 80 °C. The adjustable range only specifies the output signal scaling.

Terminals



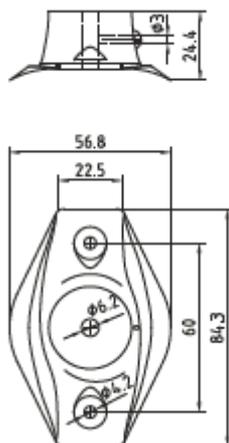
* 3-wire connection for devices with backlit display.

Dimensions

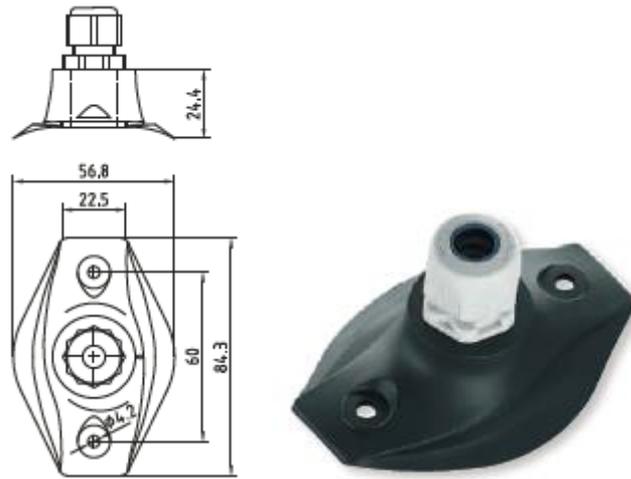


Accessories

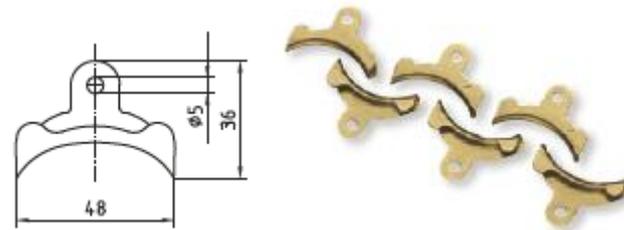
MF-06-K



KRD-04



MK-05-M



Mounting diagram

