

KTM1

Duct / air duct temperature sensor, active



Summary

The KTM1 temperature sensor is an active (0..10 V output) analog duct temperature sensor for universal use.

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.

The sensors are intended for operating in any environment. They do not need any servicing or maintenance. The mounting flange is included.

Technical data

Power	24 V AC / DC, +/- 20 % for 0...10 V output (KTM1-U) 15...36 V DC, +/- 10 % for 4...20 mA output (KTM1-I)
Internal sensor	Pt1000
Measuring range	-20...+150°C, -50...+50°C, -20...+80°C, -30...+60°C, 0...+40°C, 0...+50°C, 0...+100°C, 0...+150°C
Outside temperature (electronics)	-30 ... 70 °C
Pocket material	Stainless steel 1.4571, V4A
Pocket dimensions	Ø= 6 mm, nominal length (NL) see table below
Body material	Polyamide, 30% glass fibre reinforced, colour white, similar to RAL 9010 (enclosure cover for display is transparent)
Electrical connections	Screw terminals for wires 0.14 ... 1.5 mm ²
Cable gland	M16 x 1,5
Protection degree	III according to EN 60730
Protection class	IP65 according to DIN 60529
Sensor accuracy	as in DIN EN 60751 class B
Weight	< 0,1 kg
Dimensions	see below
Accessories	MF-15-K Mounting flange

Type table

Type ID	Output signal
KTM1-U	0..10 V DC
KTM1-I	4..20 mA DC

Optional **KTM1-xx-Display** with single-line display with illumination.

Stem lengths

See NL on the drawing below. Other length except 150 mm must be specified in the order.

50 mm	on request
100 mm	on request
150 mm	default stem length
200 mm	on request
250 mm	on request
300 mm	on request

Ordering

Immersion temperature sensor:

KTM1 is delivered as set of the sensor (TM65) and the mounting flange (MF-15-K).

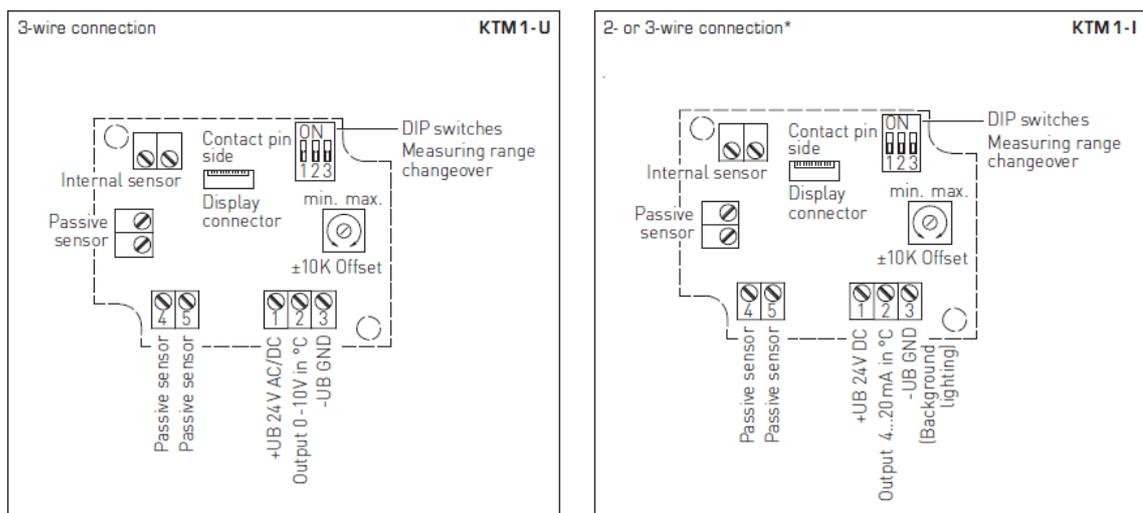
It is possible to order these parts separately.

Range setting

Measuring 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.

Terminals

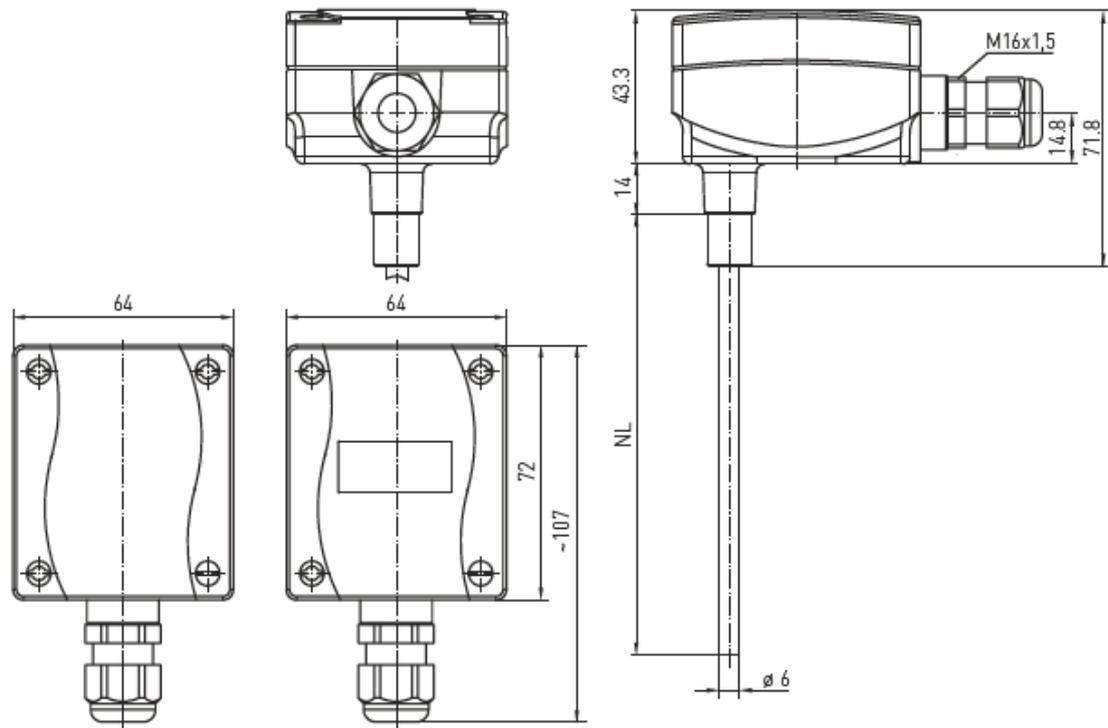


* 3-wire connection for devices with backlit display.

Dimensions

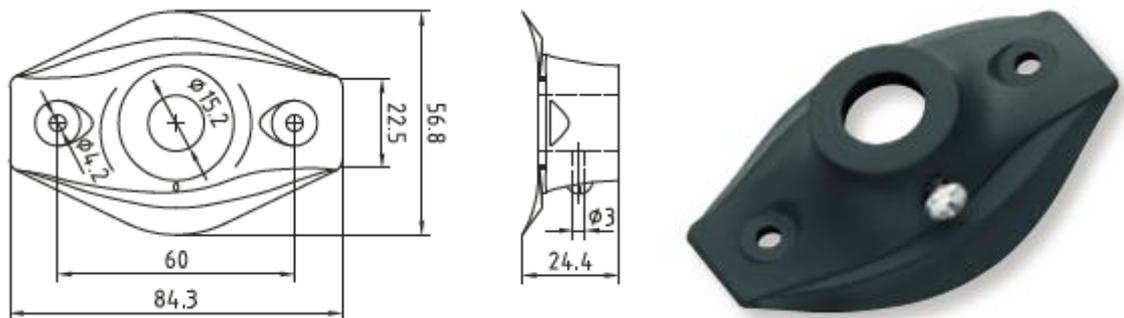
All dimensions in *mm*.

KTM1



Accessories

MF-15-K mounting flange



02/2014 Subject to technical changes.