

ALTM 1, 2 Strap-on temperature sensors - active



Summary

The ALTM temperature sensors are electronic strap-on sensors for universal use. They provide output signal 0...10V or 4...20 mA DC.

Applications

- HVAC systems – pipe / floor heating temperature measuring
- media temperature monitoring and logging

Functions

The sensor uses a Pt1000 sensing element (EN 60751, Class B), the signal of which is processed, converted to voltage or current and available at the screw terminals. Other temperature ranges are optional (see table). Do not exceed maximum environment temperature! In case of temperatures higher than 100°C, it is advisable to use ALTM2 with separated sensor part which is connected to the electronics with a cable.

The sensors are intended for operating in an outdoor or industry environment. They do not need any servicing or maintenance and can be mounted in any position.

The insert provides a slot for a 300 mm steel band with an adjustable lock for mounting on pipes with diameter 13...92mm, i. e. 1/4"...3".

Technical data

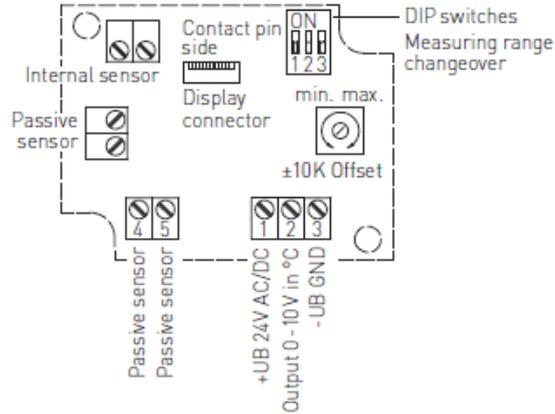
Power	24 V AC/DC for output 0-10 V 15–36 V DC for output 4...20 mA (depending on working resistance)
Measuring ranges	ALTM 1 -50... 100°C ALTM 2 -50... 150°C
Load	-U: min. 5 kΩ -I: max. 500 Ω (at 24V; $R=(U-14 V)/0.02 A$)
Environment temperature	-30...70 °C
Protection class	IP65
Terminals	screw terminals for wires 0,14 – 1,5 mm ²
Cable (ALTM2)	1.5 m, silicone up to 150 °C (optional teflon up to 250 °C or glass fibre with steel wire mesh up to 350 °C)
Cover	polyamide, 30% glass-globe-reinforced

Sensor types

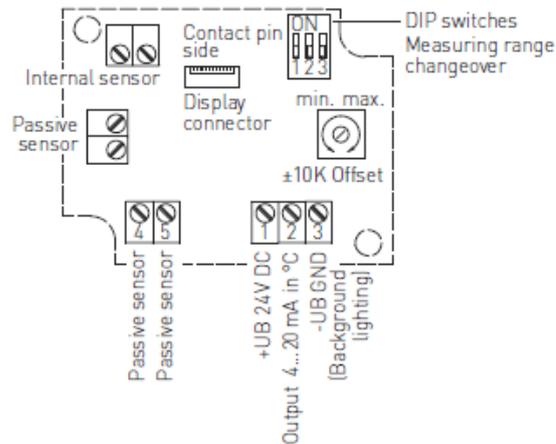
Type	Output	Separated sensor part
ALTM1-U	0...10 V	no
ALTM1-I	4...20 mA	no
ALTM2-U	0...10 V	yes
ALTM2-I	4...20 mA	yes

Terminals

RTM-U



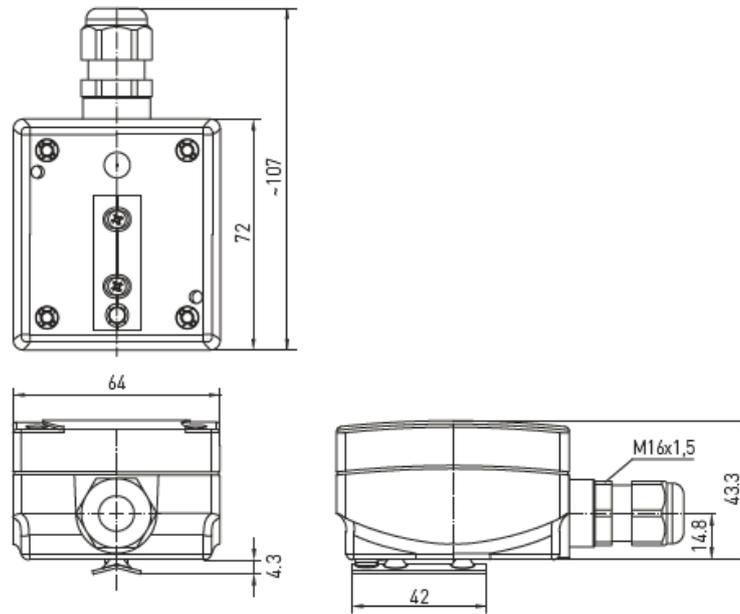
RTM-I



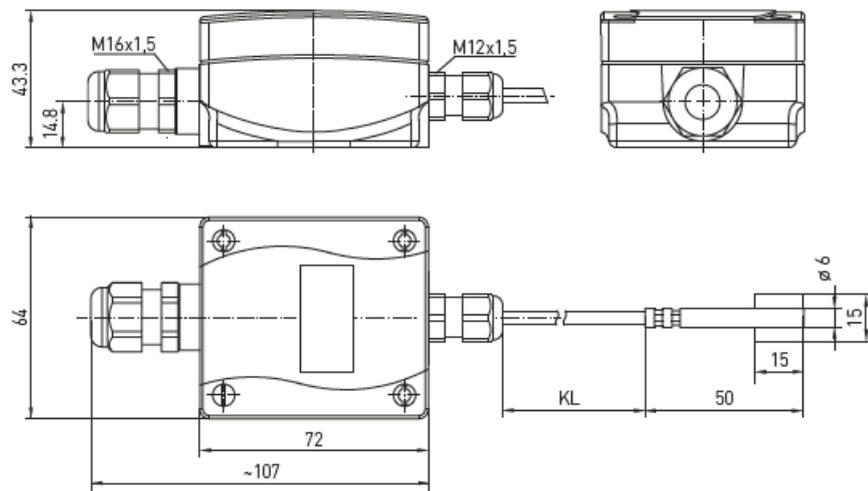
Measuring ranges (adjustable)	DIP 1	DIP 2	DIP 3
-20°C...150°C	ON	ON	ON
-50°C...50°C	OFF	ON	ON
-20°C...80°C	ON	OFF	ON
-30°C...60°C	OFF	OFF	ON
0°C...40°C	ON	ON	OFF
0°C...50°C	OFF	ON	OFF
0°C...100°C	ON	OFF	OFF
0°C...150°C	OFF	OFF	OFF

Dimensions

ALTM1



ALTM 2



03/2014 Subject to technical changes.