

DATA SHEET

(Technical subjects to change
Date 01/2008)

Surface-contacting temperature sensor ANTF1

Application

Perfect for temperature detection on piping and tubes. Connection to common heating and regulating systems is possible with different measuring elements¹.

Product overview

ANTF1	Sensor	Passive, ranges upon request ¹ Measuring transducer MUA active, 4...20mA Measuring transducer MUV active, 0...10 V
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Specifications

In general:

Installation length:	See dimensional drawing
Material sensor sleeve:	Aluminium
Connecting head material:	PA6/GK30
Connecting head colour:	White
Protection class:	IP65 according to EN60529
Weight:	107 g
Cable entry point:	M16x1

Measuring temperature	
Sensor tip:	-50°C...+100°C
Casing:	-50°C...+100°C

Measuring elements¹:

Following measuring elements are available:

- PT100
- PT100 1/3DIN
- PT1000
- PT1000 1/3DIN
- Ni1000
- Ni1000TK5000
- FeT
- NTC 5k, 10k, 20k
- NTC 1,8 kOhm
- Precon
- KTY81-210
- LM235Z

Measuring ranges:	Depends on measuring element
Accuracy:	Depends on measuring element
Measurement current:	<1mA
Connection:	Max. 1,5mm ² via terminal screws 2-Wire/3-Wire/4-Wire



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Measuring transducer MUA²

Power supply: DC 15...30 V
Current sensor: $\leq 0,5\text{mA}$
Lowest measuring point: 25K
Highest measuring point: 1050K
Measuring ranges: Freely programmable
Output: 4...20mA
Electrical connection: $\leq 1,75\text{mm}^2$ via terminal screws

Measuring transducer MUV³

Power supply: DC 15...30 V
Current Sensor: $\leq 0,5\text{mA}$
Lowest measuring point: 25K
Highest measuring point: 1050K
Measuring ranges: Freely programmable
Output: 0...10 V
Electrical connection: $\leq 1,75\text{mm}^2$ via terminal screws

Installation information

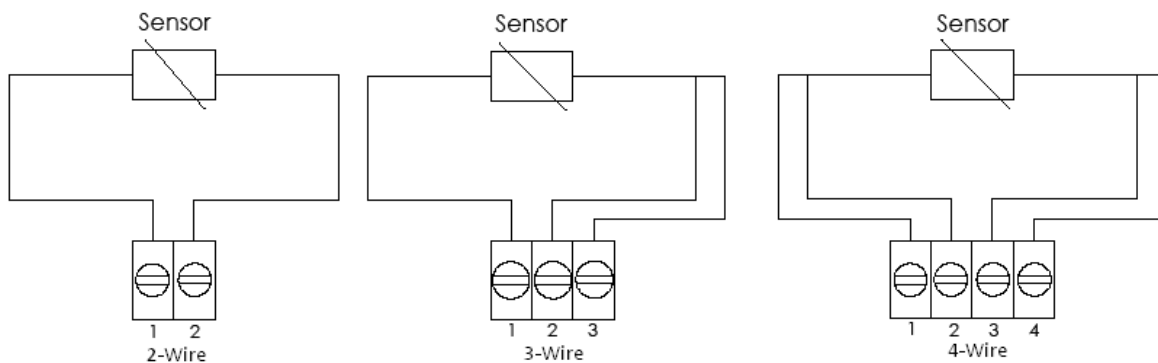
Please use the enclosed strap to mount the device on top of the tubing. You should use a heat conductive paste between tubing and device to assure a perfect heat transfer. To prevent irruption of condensed water we would hardly recommend to mount the device on top of the tubing.

NOTICE:



These instruments must be installed by authorised specialists only! Devices shall only be used for their intended purpose. The customer has to ensure adherence to the building and safety regulations and has to avoid all dangers of any kind.

Connection diagram (passive temperature sensors)



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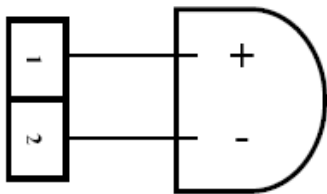
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Connection of LM235Z

The LM235Z is a semiconductor IC. Please pay attention to polarity while connecting! The polarity is marked at the casing. The LM235Z has a maximum allowable measurement current of 400µA...5mA with 10mV/°K.

Please pay attention to polarity: clamp 1 = (+), clamp 2 = (-)



Optional accessories

Measuring transducer: MUA output (4...20 mA) ²
 MUV output (0...10V) ³

Standards

EMV: EN60730-1 (2000) Interference resistance
 EN60730-1 (2000) Emitted interference
CE-Conformance: 89/336/EWG Electromagnetic compatibility

Dimensional drawing:

(Dimensions in mm)

ANTF1

