

# Pocket Sensor with Connecting Head

**Replaceable sensor insert**

**Delivered as a set**

**2 or 4 wire connection**



TS 27.01  
131

EN 1434

MID-2004/22/EC

CE M09 0200

## Application

A sensor pair is used together with electronic heat meters for measuring return and flow pipe temperatures in heating installations.

The sensor has a built-in platinum resistor with an electric resistance, which changes with the temperature.

Measuring the resistance value gives an analog indication of the temperature.

A heat meter calculates the differential temperature of a heating installation on the basis of measured forward and return temperatures. Based on the differential temperature and the volume of liquid measured, the energy consumed can then be determined.



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## Technical data

	Sensor insert
Element	Pt500 according to EN60751
Pairing	EN 1434
Temperature of medium	0...150°C short-term 160°C
Ambient temperature	-10...70°C
Storage & transportation temperature	-25...70°C
Response time $\tau_{0,5}$	Max. 25 sec.
Medium	Heating water
Humidity	< 98% RF condensing
Pressure level	Pocket
Flow velocity	Pocket
Diameter	ø5,8 mm
Sensor tube length	47 mm
Sillicone cable	2 x 0,25 mm <sup>2</sup>
Sensor tube material	AISI 304, W-nr. 1.4301
Protection class	IP65

## Approvals

### Approvals, heat sensors

TS27.01/131, DS/EN 14340: 10...150°C,  $\Delta\theta$ : 3...140 K

### MID designation

Mechanical environment Class M1

## Technical data

### Pockets

Temperature of medium	0 - 160°C
Medium	Heating water
Pressure level	PN25
Flow velocity	Max. 3 m/sec.
Diameter	8 mm
Length	90, 140 and 180 mm

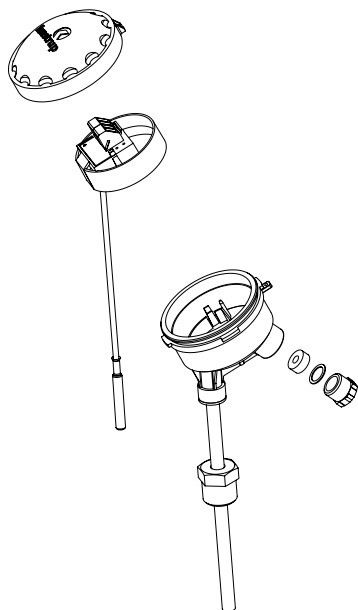
Connection	R <sup>1</sup> / <sub>2</sub>
Nipple material	AISI 304, W-no. 1.4301
Sensor tube material	AISI 304, W-no. 1.4301

### Connection head

Cover	PC + 20% Gf
Case	PC

## Fitting examples

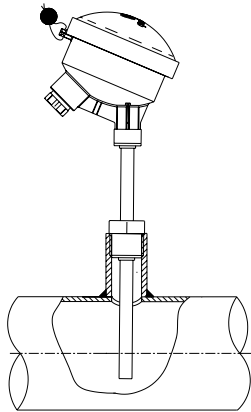
### Construction



# Fitting examples

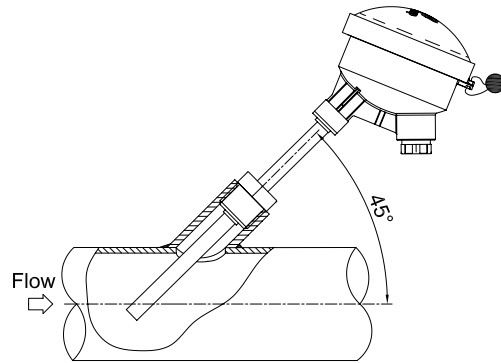
## Example 1

Pocket sensor, mounted in "T".



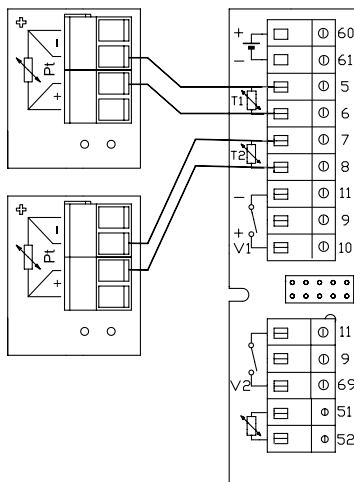
## Example 2

Pocket sensor mounted in "T" with 45° angle.

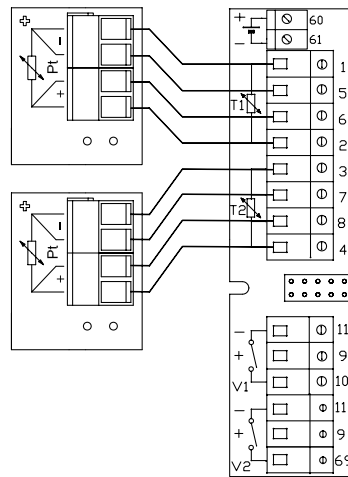


# Electrical connection

## 2 wire

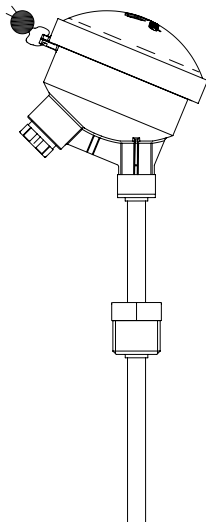


## 4 wire



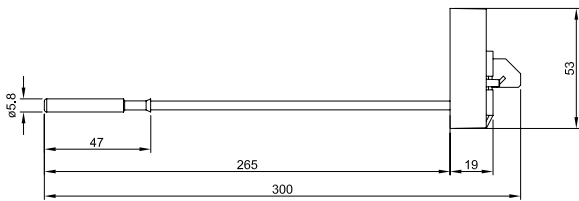
# Sealing example

Sealing of a pocket sensor with a connecting head.

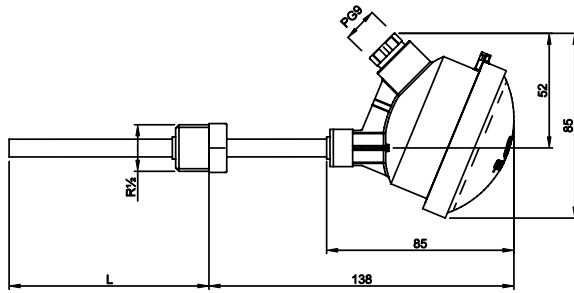


# Dimensional drawing

## Sensor insert

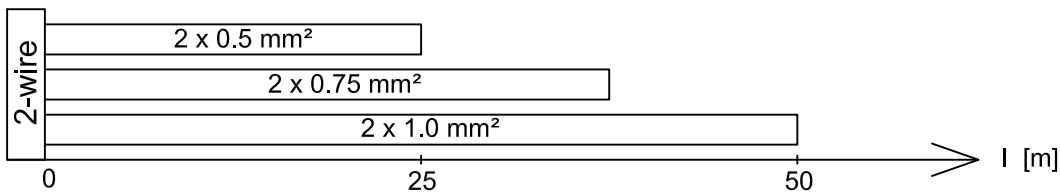


## Sensor pocket with a connecting head



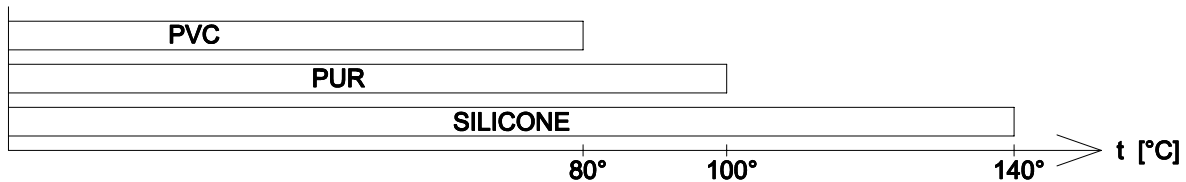
Length (L): 90, 140 or 180 mm

# Connecting cable



Please note that flow and return sensors must be connected with equally long cables when using two-wire connection.

## Cap material



Standard values

Dimension connecting cable:  $\varnothing$ 5-10 mm (MULTICAL® max.  $\varnothing$ 6 mm)

# Order specification

## Sensor insert (pair)

Type No.*	Description
65-56-40-XXX	Pt500 sensor insert (2 pcs.) for pocket with connecting head. Is used for pockets with a length of 90, 140 and 180 mm.

## Sensor pocket with a connecting head

Type No.	Description
65-56-02-300	Sensor pocket with a connecting head, length = 90 mm
65-56-03-300	Sensor pocket with a connecting head, length = 140 mm
65-56-04-300	Sensor pocket with a connecting head, length = 180 mm

\* Type numbers may vary due to local approvals.