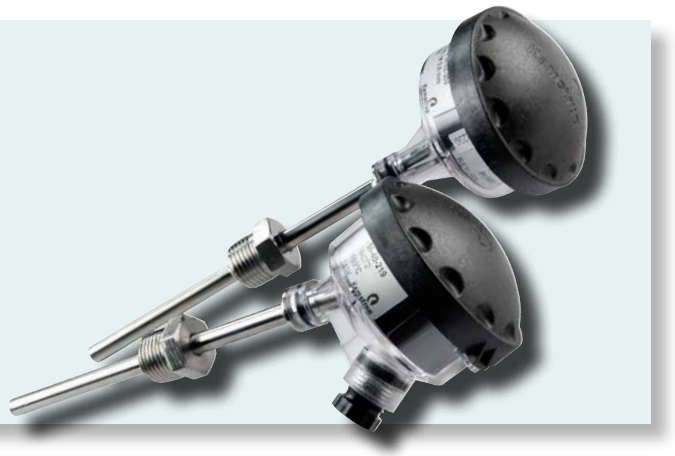
Pocket sensor with connecting head

DATABLAD

- **Replaceable sensor insert**
- **Delivered as a set**
- **2 or 4 wire connection**

TS 27.01 131
EN 1434

MID-2004/22/EC
CE M11 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.

Kamstrup

Industrivej 28, Stilling · DK-8660 Skanderborg · Tel.: +45 89 93 10 00 · Fax: +45 89 93 10 01 · info@kamstrup.com · www.kamstrup.com

Pocket sensor with connecting head

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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	2x0.25 mm²
Sensor tube material	AISI 304, W-nr. 1.4301
Protection class	IP65

Approvals

Approvals, heat sensors

TS27.01/131, DS/EN 1434	θ: 10...150°C, ΔΘ: 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	R½
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

Pocket sensor with connecting head

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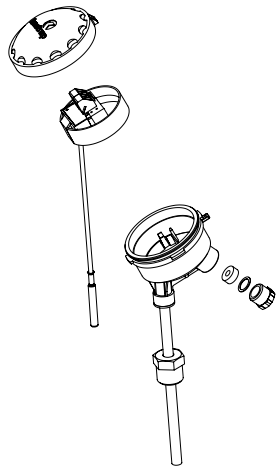
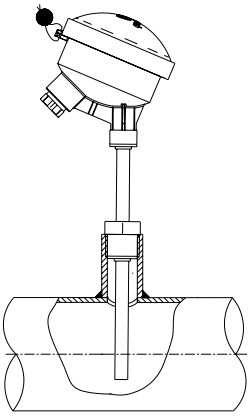
Fitting examples

Construction



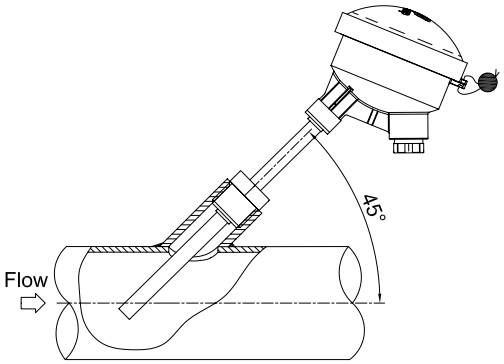
Example 1

Pocket sensor, mounted in “T”.



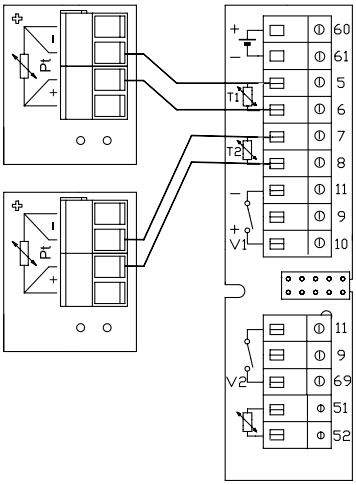
Example 2

Pocket sensor mounted in “T” with 45° angle.

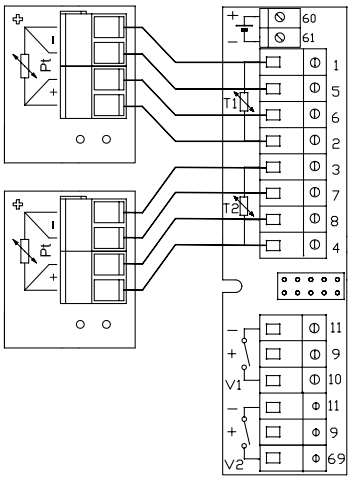


Electrical connection

2 wire

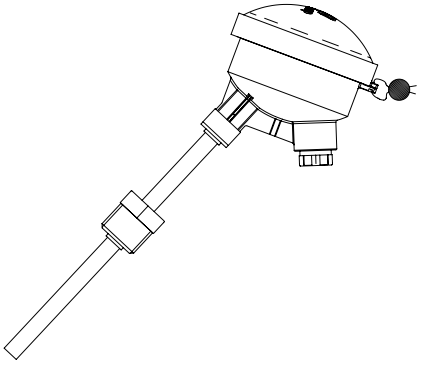


4 wire



Sealing example

Sealing of a pocket sensor with a connecting head.



Pocket sensor with connecting head

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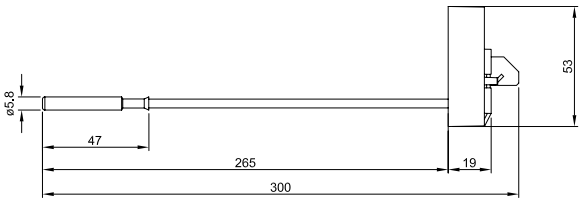
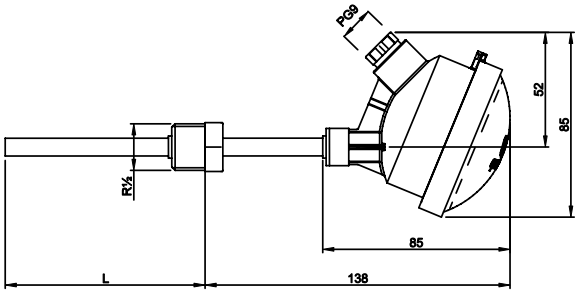
Dimensional drawing

Sensor insert

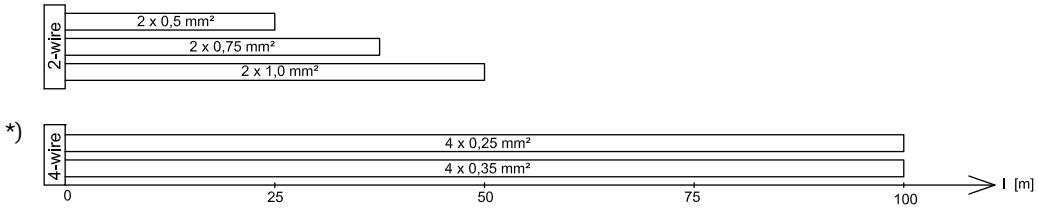


Sensor pocket with a connecting head



Length (L): 90, 140 or 180 mm

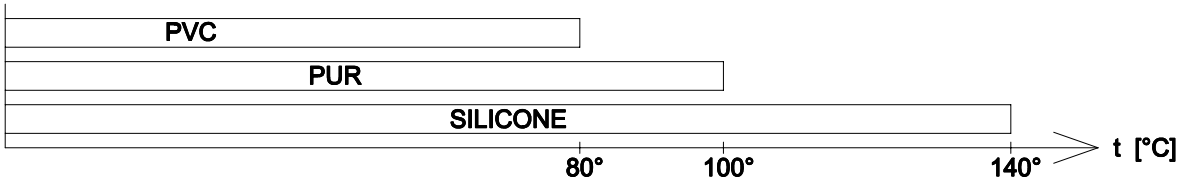
Connecting cable



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

*) MULTICAL® 601 and 801 are MID approved with 100 m of 4-wire cable.

Cap material



Standard values

Dimension connecting cable: ø5-10 mm (MULTICAL® max. ø6 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.