

# Pt500 Pocket Sensor with Connecting Head

**Replaceable sensor insert**

**Delivered as a set**

**2 or 4 wire connection**



**TS** 27.01  
131  
EN 1434

## 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

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## Technical data

	Sensor insert
Element	Pt500 according to EN60751B
$\Delta t$ deviation (pairing)	0.04°C
Pairing	40°C and 130°C, control/sample at 85°C (depending on approval)
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-no. 1.4301
Density	IP65

## Approvals

### APPROVALS, HEAT SENSORS

TS27.01/131, DS/EN 1434 0: 20...150°C,  $\Delta\theta$ : 3...130 K

## Technical data

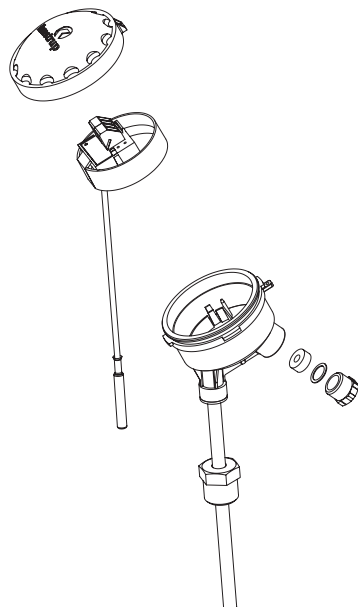
### POCKETS

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 $\frac{1}{2}$
Nipple material	AISI 304, W-no. 1.4301
Sensor tube material	AISI 304, W-no. 1.4301

## Fitting examples

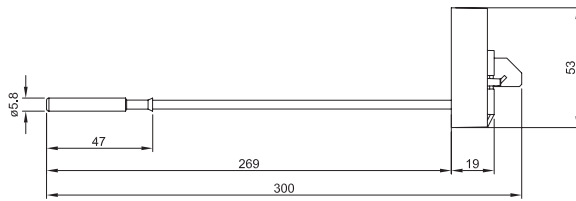
### CONSTRUCTION



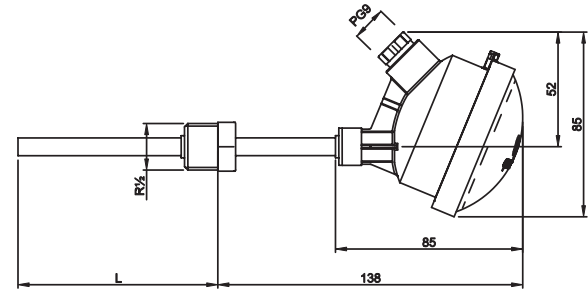


## Dimensional drawing

### SENSOR INSERT

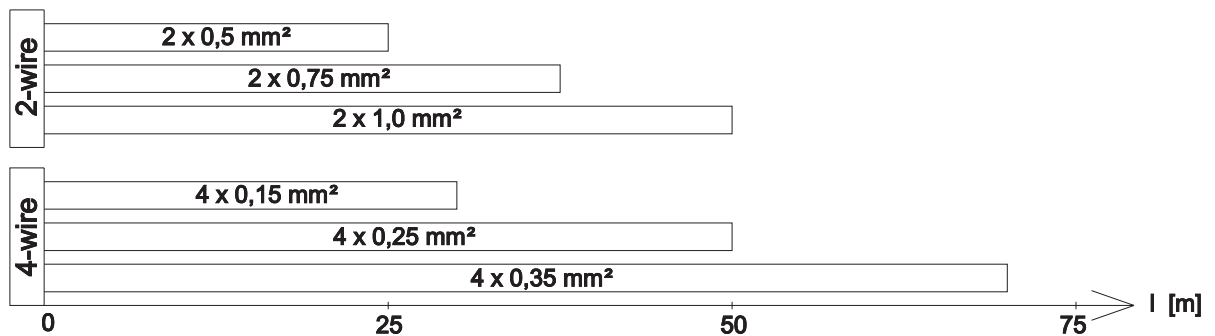


### SENSOR POCKET WITH A CONNECTING HEAD



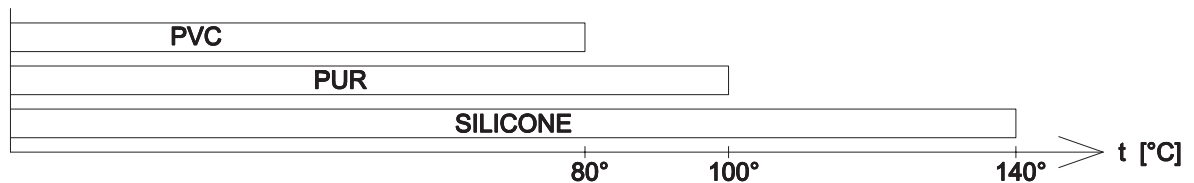
Længde (L): 90, 140 eller 180 mm

## Connecting cable



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

### CAP MATERIAL



Dimension connecting cable:  $\varnothing$ 5-10 mm (MULTICAL<sup>®</sup> 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.

\* Type numbers may vary due to local approvals

### 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

## Authorized distributor

Please contact Kamstrup A/S for information about your nearest distributor.