Pt500 Pocket Sensor with Connecting Head

Replaceable sensor insert

Delivered as a set

2 or 4 wire connection

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 IEC 751B
Δt 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	45 mm
Silicone cable	$2 \times 0.5 \text{ mm}^2$
Sensor tube material	AISI 304, W-no. 1.4301
Density	IP65

POCKETS

Temperature of medium	0 - 160°C	Diameter	8 mm
Medium	Heating water	Length	90, 140 and 180 mm
Pressure level	PN25	Connection	R ½
Flow velocity	Max. 3 m/sec.	Nipple material	AISI 304, W-no. 1.4301
		Sensor tube material	AISI 304, W-no. 1.4301

Fitting examples

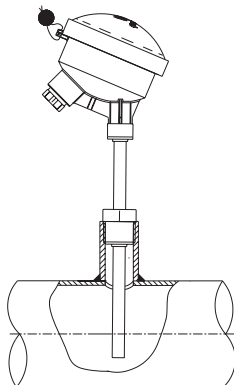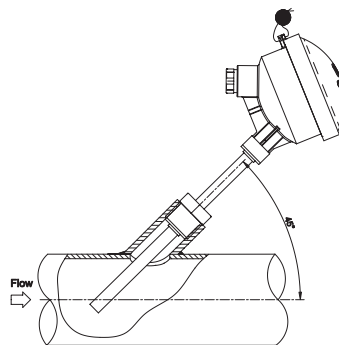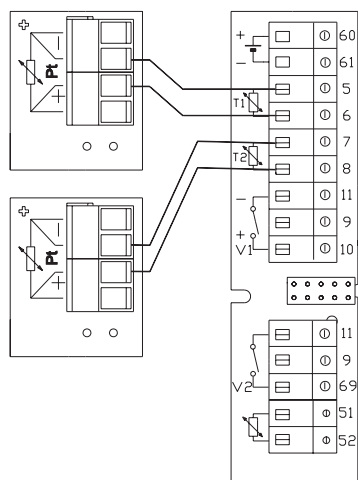### CONSTRUCTION
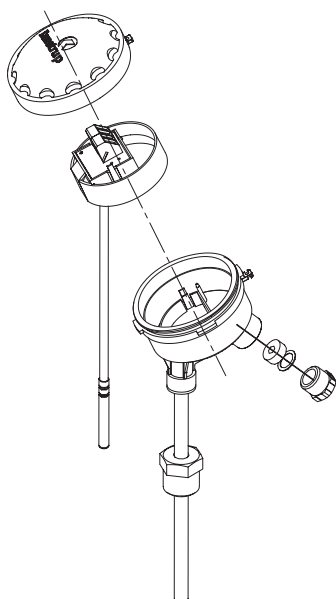
Fitting examples

Pocket sensor, mounted in "T"

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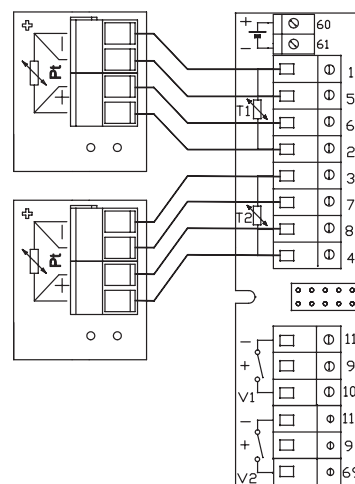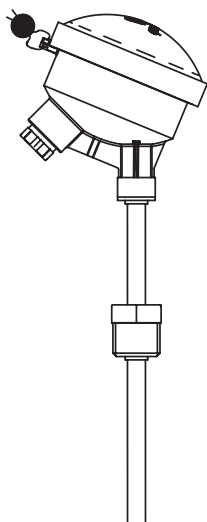
Flow

Electrical connection

2 WIRE

4 WIRE

Sealing example
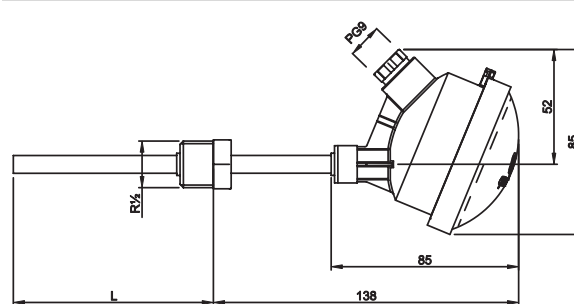
Sealing of a pocket sensor with a connecting head.

Dimensional drawing
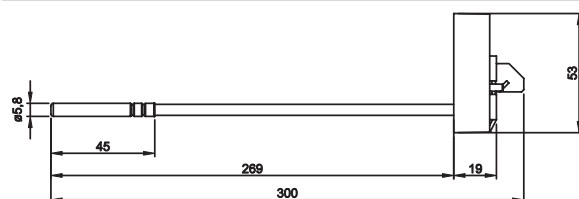
Length (L):   90, 140 or 180 mm

Connecting cable
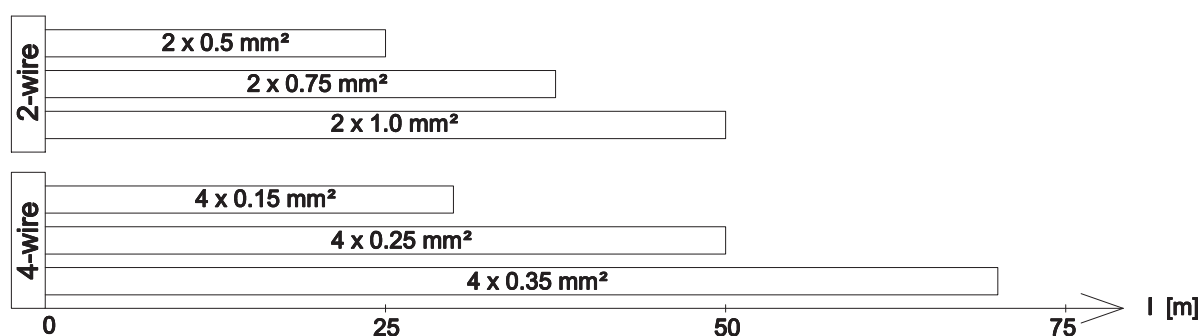
CAP MATERIAL
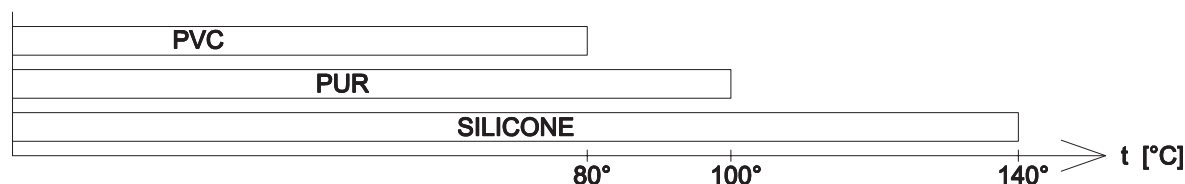
Order specification

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

Authorized distributor

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