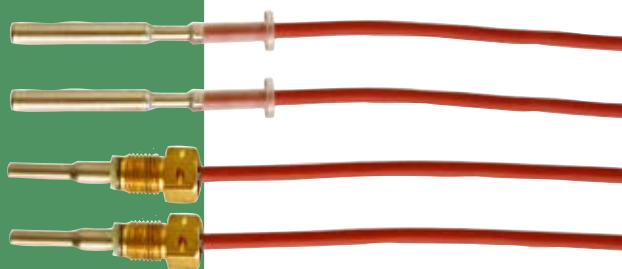


Data sheet

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Temperature sensors and pockets

- For mounting in pocket or directly in the fluid flow
- Heat-resistant silicone cable
- Paired at delivery
- Temperature sensors in stainless steel
- Short reaction time



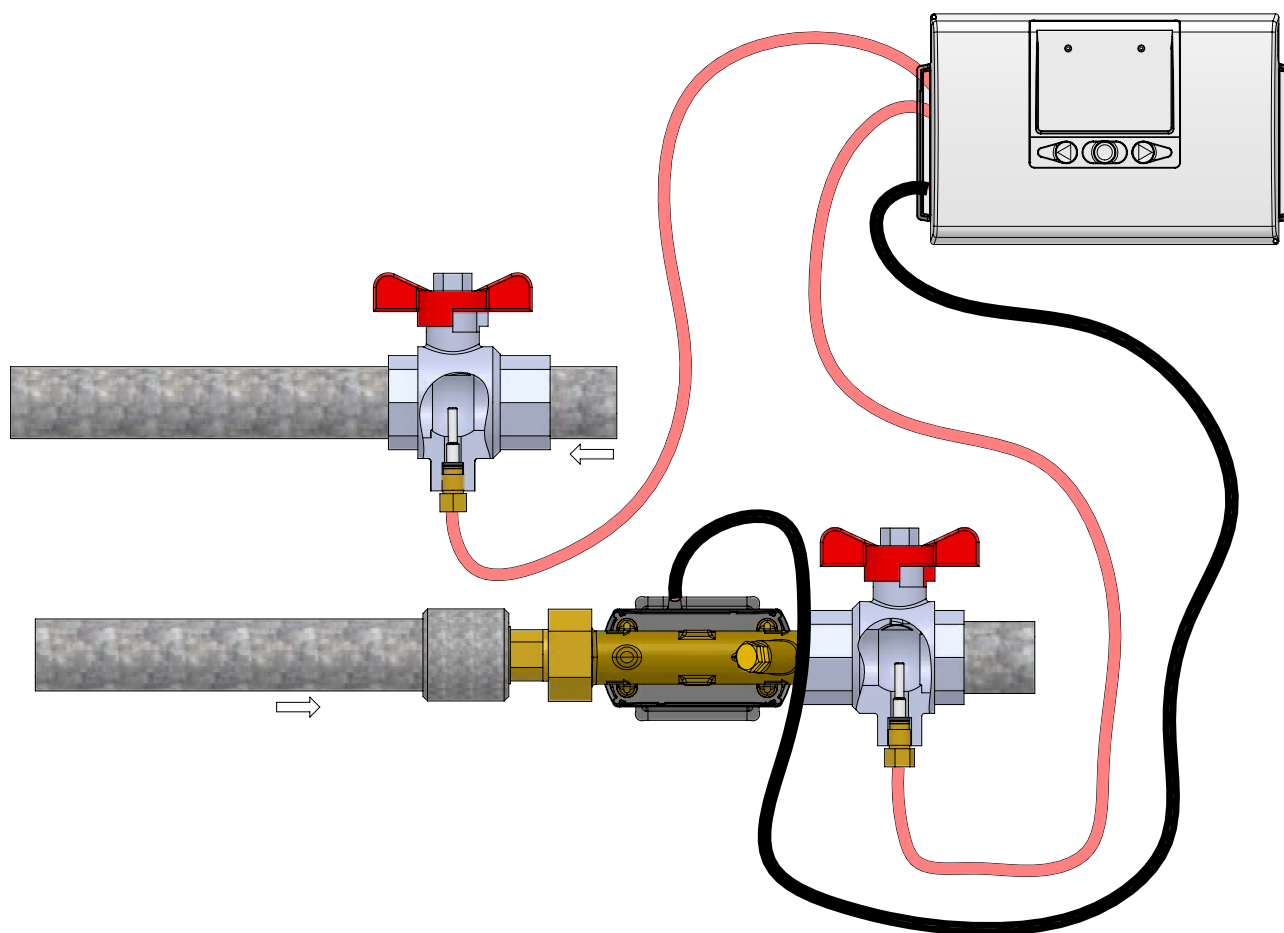
MID

CE M18 0200

Application

A temperature sensor pair is used together with the electronic energy meters for the measurement of inlet and outlet temperatures. Depending on the type, the sensor pairs can be used directly in the fluid flow or installed in a pocket. The temperature sensor has a built-in platinum resistance of which the electrical resistance changes with temperature. A measurement of the resistance value is thus an analog expression of the temperature.

An energy meter calculates the differential temperature of a heat installation on the basis of the measurements of the inlet and outlet temperatures. The energy consumption is then calculated by using the measured differential temperature and the measurement of the quantity of flow-through water.



Approvals and verifications

MID approval: DK-0200-MI004-036

Temperature range	θ : 2...150 °C
Temperature difference	$\Delta\theta$: 3...140 K

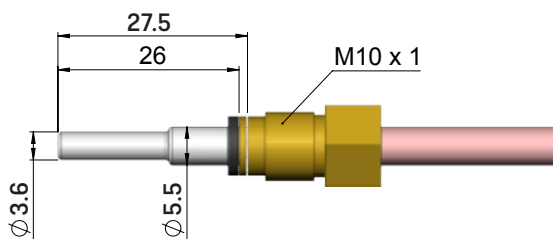
Danish cooling approval: TS 27.02 004

Temperature range	θ : 2...150 °C
Temperature difference	$\Delta\theta$: 3...140 K

Pairing and verification are in accordance with A1434-5:2015.

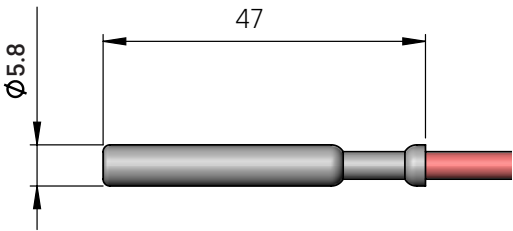
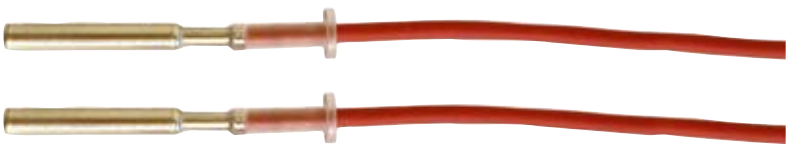
Temperature sensors

Direct short temperature sensor



Temperature sensors

ø5.8 temperature sensor

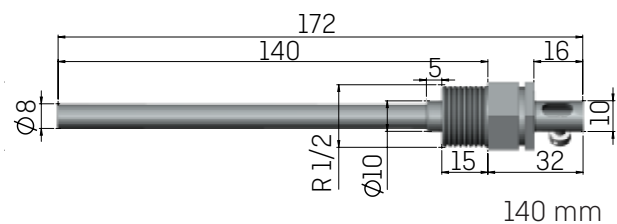
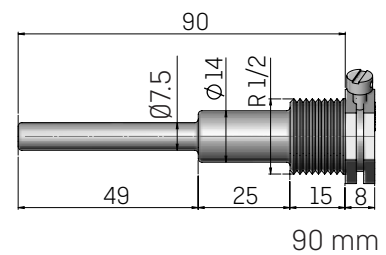
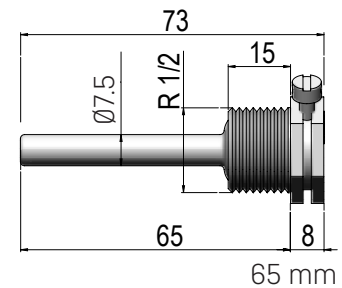


Technical data on temperature sensors

	Direct short temperature sensor	ø5.8 mm temperature sensor
Element	Pt500 according to EN 60751	
Time constant $\tau_{0.5}$	2 s	5 s
Minimum submersion depth	17 mm	22 mm
Diameter	ø3.6 MM/ø5.5 mm	ø5.8 mm
Material	AISI 316L, W-no. 1.4404	
Silicone cable	2 x 0.25 mm ²	
Cable lengths	1.5 m, 3 m	1.5 m, 3 m, 5 m, 10 m

Pockets for $\varnothing 5.8$ mm temperature sensor

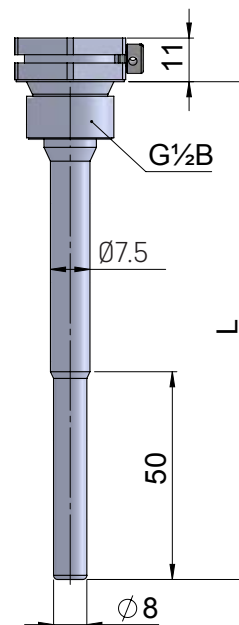
Pockets with thread R $\frac{1}{2}$



Technical data on pockets with thread R $\frac{1}{2}$

Installation lengths	65 mm, 90 mm, 140 mm
Thread	Cone-shaped thread R $\frac{1}{2}$
Material	65 mm pocket, 90 mm pocket: AISI 304 / W.No. 1.4301 140 mm pocket: AISI 316Ti / 1.4571
Time constant $\tau_{0.5}$	65 mm pocket, 90 mm pocket: Max 8 s 140 mm pocket: Max 25 s
Type numbers in approval	65 mm pocket: 6557-324 90 mm pocket: 6557-327 140 mm pocket: 6557-314

Pockets with thread G $\frac{1}{2}$ B



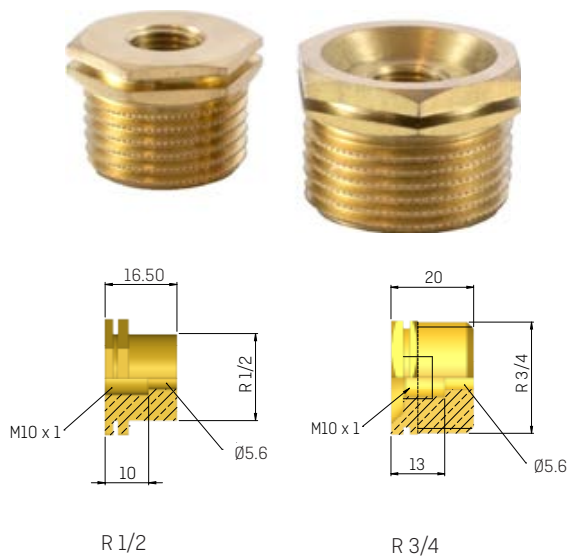
Technical data on pockets with thread G $\frac{1}{2}$ B

Installation lengths L	85 mm, 120 mm, 210 mm
Thread	Straight thread G $\frac{1}{2}$ B
Gasket	Copper sealing (supplied in the bag with 2 pockets)
Material	AISI 316L / W.-No. 1.4404
Time constant $\tau_{0.5}$	Max 12 s
Type numbers in approval	85 mm pocket: 6557-343 120 mm pocket: 6557-344 210 mm pocket: 6557-345

Application areas of temperature sensors and pockets

Ambient temperature	-10 °C...70 °C
Storage and transport temperature	-25 °C...70 °C
Media	District heating water
Temperature of medium	0...150 °C, briefly 160 °C
Humidity	< 98 %, rF condensing
IP class	IP 65
Approved mechanical classes	M1, M2
Approved pressure stages for short direct temperature sensor	PN16, PN25
Approved pressure stages for pockets type number 6557-324/327/314	PN16, PN25
Approved pressure stages for pockets type number 6557-343/344/345	PN16, PN25, PN40
Maximum flow rate for pockets	3 m/s

Nipples for direct short temperature sensors



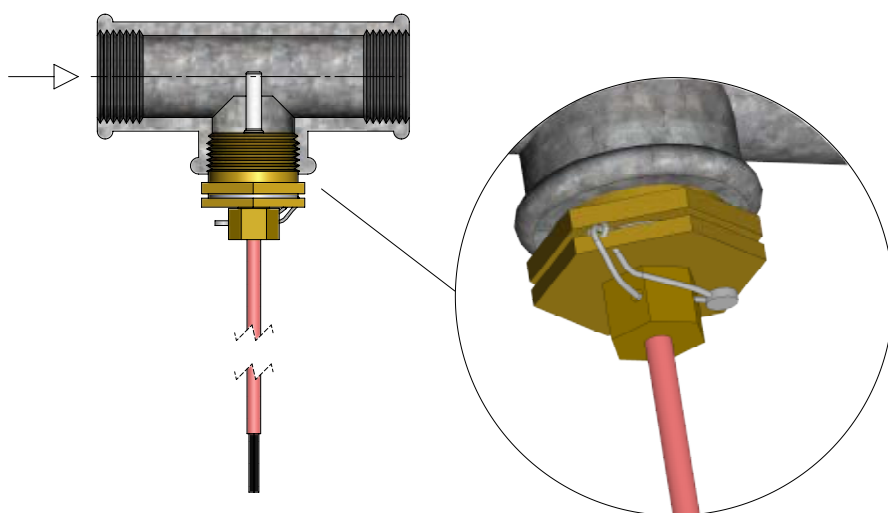
Technical data on nipples

Connection	R ½ or R ¾
Material	MS 58 Bb
Nipples can be used in both PN16 and PN25 installations.	

Mounting examples

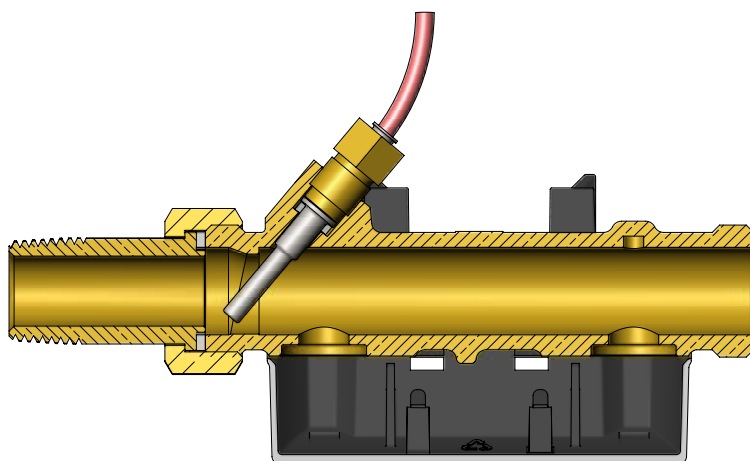
Example 1

Direct short temperature sensor mounted in the T-piece by means of a nipple.



Example 2

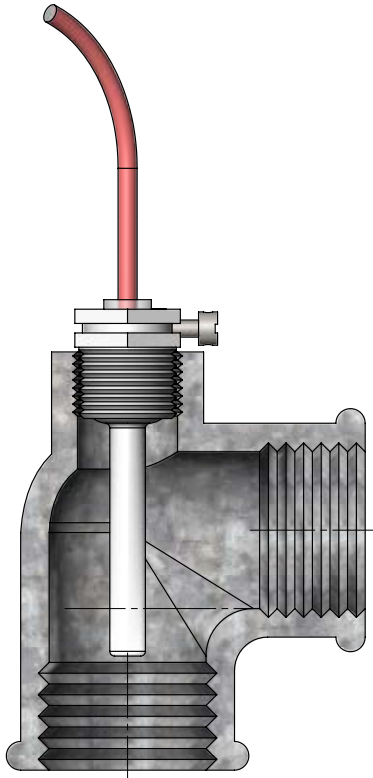
Direct short temperature sensor mounted in ULTRAFLOW®.



Mounting examples

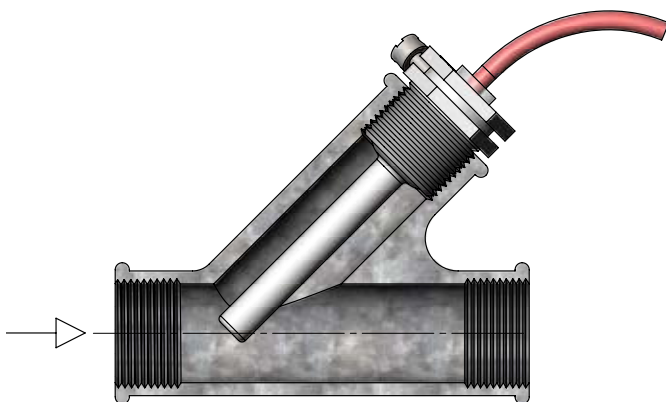
Example 3

ø5.8 mm pocket sensor mounted at a 90 degree angle by means of pocket, type number 6557-324.



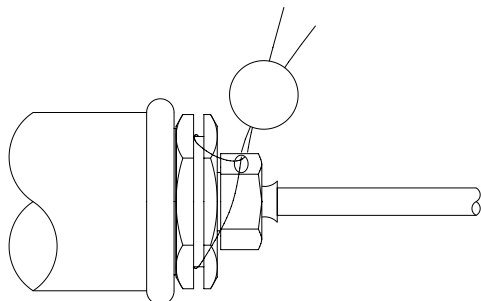
Example 4

ø5.8 mm pocket sensor mounted in tee with a 45° lateral Y-piece by means of pocket, type number 6557-324.

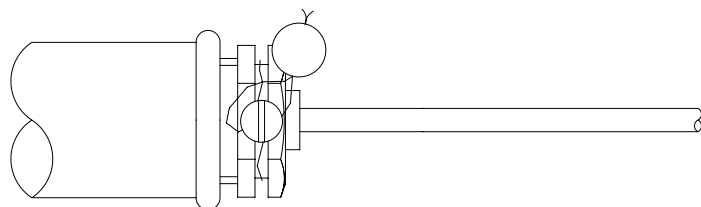


Sealing examples

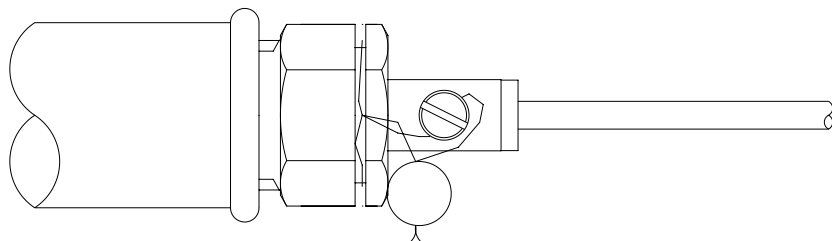
Sealing of the direct short temperature sensor mounted in a nipple R $\frac{1}{2}$.



Sealing of $\varnothing 5.8$ mm temperature sensor mounted in pocket, type number 6557-324.



Sealing of $\varnothing 5.8$ mm temperature sensor mounted in pocket, type number 6557-314.



Overview of order numbers

Temperature sensor set

Ordering number*

66-0-0F0-XXX

66-0-0G0-XXX

65-0-0A0-XXX

65-0-0B0-XXX

65-0-0C0-XXX

65-0-0D0-XXX

Description

Pt500 direct short sensor set (2 pcs.) with 1.5 m cable

Pt500 direct short sensor set (2 pcs.) with 3 m cable

Pt500 ø5.8 mm pocket sensor set (2 pcs.) with 1.5 m cable

Pt500 ø5.8 mm pocket sensor set (2 pcs.) with 3 m cable

Pt500 ø5.8 mm pocket sensor set (2 pcs.) with 5 m cable

Pt500 ø5.8 mm pocket sensor set (2 pcs.) with 10 m cable

* The order number may vary due to local approvals

Pockets for pocket sensors

Ordering number

6557-424

6557-427

6557-414

6557-443

6557-444

6557-445

Description

Bag with 2 pcs. of 65 mm pocket with R½ thread

Bag with 2 pcs. of 90 mm pocket with R½ thread

Bag with 2 pcs. of 140 mm pocket with R½ thread

Bag with 2 pcs. of 85 mm EN1434 pocket with thread and 2 copper gaskets

Bag with 2 pcs. of 120 mm EN1434 pocket with thread and 2 copper gaskets

Bag with 2 pcs. of 210 mm EN1434 pocket with thread and 2 copper gaskets

Accessories

Ordering number

6556-491

6556-492

2210-131

Description

R½ spacer nipple for direct short temperature sensor

R¾ spacer nipple for direct short temperature sensor

Fiber gasket for direct short temperature sensor

Temperature sensors and pockets

Kamstrup A/S

Industrivej 28, Stilling
DK-8660 Skanderborg
T: +45 89 93 10 00
F: +45 89 93 10 01
info@kamstrup.com
kamstrup.com