

# Temperature sensor

Clamp-on

AT 7780

<b>Dimension range</b> 4-57 mm	<b>PN</b> -	<b>Temperature range</b> -40°C to +150°C	<b>Material</b> Stainless steel /Plastic
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## Range of application

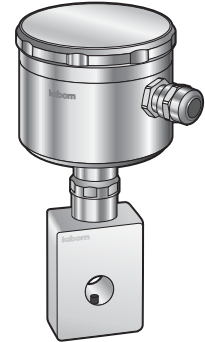
For measuring the surface temperature of pipes and control of processes. Used eg Of the life and pharmaceutical industry where there are greater hygiene requirements.

## UBB.32 Temperature transmitter

Continuous output signal 4-20 alt. Pt100 signal.

## Quality assurance

Class A acc. to EN60751. Transmitter acc. to directive EMC 2004/107/EC.



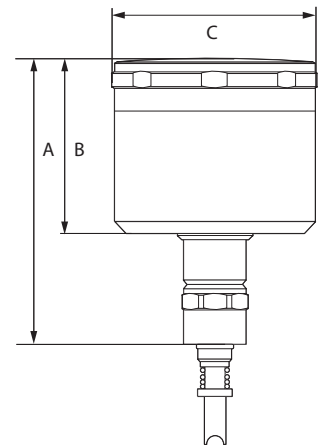
AT 7780

## Material Specification

1	Insulating material	Plastic
2	Heat transfer plate	Stainless steel 1.4305
3	Neck	Stainless steel 1.4305

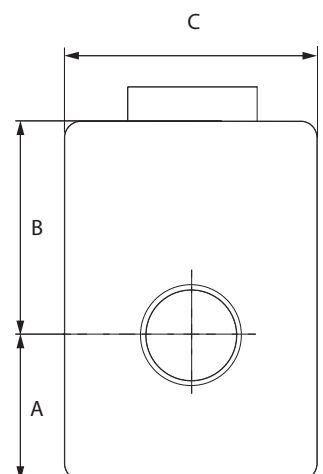
## Measurement

A	83,5
B	51
C	60



## Function and design

Temperature sensors primarily intended for hygiene applications where interference in the pipes is not desirable. Easily mounted on existing pipes. No welding required. The heat transfer between the PT100 sensor and the tube is achieved through a built-in contact system (a stainless steel ink). The PT100 sensor is protected by an insulating, removable block of heat-resistant plastic. Measurement technology PT 100, wire. Measurement range -40 ° C to + 150 ° C. Output PT 100 alternatively 4-20mA. The extremely small delay this method causes, compared to a traditional solution is usually negligible. See diagram.

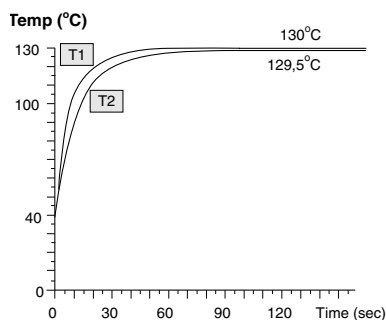


rör-Ø	A	B	C
4-17.2	20	30	35
18-38	30	40	70
38.1-57	40	50	85

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T1=PT100 with thermowell  
T2=7780 no touch PT100

## Technical information

### PT100 sensor

Measuring range	-40°C to +150°C
Connection	3-wire
Accuracy PT100 element	Class A acc. to EN 60751
Protection class	IP65
Pipe dimension	4...57mm (outside diameter)
Electrical connection	Cable entry
Alternative ooutput signal (stated upon ordering)	4-20mA

## Technical information

### Transmitter (option)

Supply voltage	24VDC
Connection	2-wire
Working temperature	-40°C to +85°C
Output signal*	4-20mA, invertable
Response-time*	1s (standard)
Accuracy (RTD)	≤ ±0,3 °C

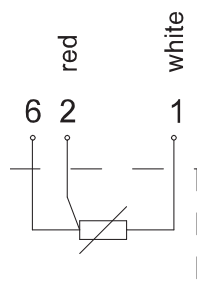
\*Wanted inverted signal or other respons time, specify this when ordering.

## Accessories and options

As an option, the temperature sensor can be ordered with output 4-20mA. Measurement area is stated when ordering. Desired software for transmitter programming "Loop Link 5905" can be ordered separately..

## Installation

The insulating plastic block consists of two parts and is mounted outside the tube by means of two hexagonal screws. It is important that the heat transfer plate is positioned against the pipe for best measurement results. The PT100 sensor can be mounted in any position but is advantageously fitted with the PT100 sensor underneath the tube, especially with steam or liquids.



## How to order

### Example: AT 7780-33,7T

<b>AT 7780</b>	<b>33,7</b>	<b>T</b>
Fig.no.	The pipes outer diameter	Transmitter