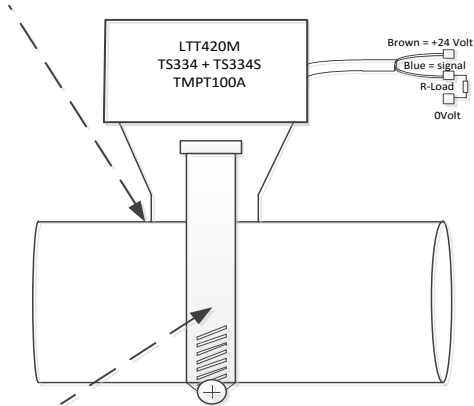# Mounting –and Wiring- instructions

Heat conducting paste, type HTSP (-50 to 200°C), is applied to the sensor, before mounting it on the process pipe (about 0,01 ml.)


LTT420M
TS334 + TS334S
TMPT100A

Brown = +24 Volt
Blue = signal
R-Load
0Volt

Fasten the sensor to the process pipe with steel-stringband (cutt off length = circumference of the pipe + 30 m.m.). The stringband have to be tightend, so that the sensor is absolutely fastened to the process pipe. Sensor Bracket type LHRS-345 recommended, if the sensor regularly and quickly have to be dismounted and remounted, in exactly the same position. (See mounting accessories on www.sensonic.dk) At temperatures below 70°C, you can use standard plastic cable-stringbands.

R-load **LTT420M** max (ohm) = $\dfrac{\text{supply voltage - 10.5}}{0.02}$

R-load **TS334/°C** max (ohm) = $\dfrac{\text{supply voltage - 7}}{0.033}$

When mounting onto a process pipe, where the temperature exceeds 120°C, follow the instructions on the drawing below, to avoid superheating of the unit.
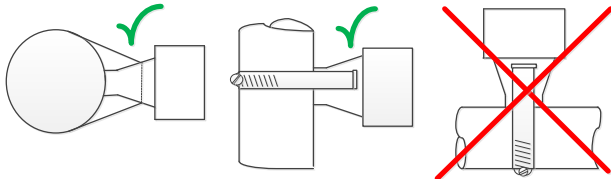
Only mount the sensor on straight pipe parts.

www.sensonic.dk

For further information please contact:

SenSonic
Temperature Measuring System

CLAMP-ON
Temperature sensors

Idea:

Thermometric tests have shown that the surface temperature corresponds to the temperature of the liquid in a process pipe, if only there is a little flow in the pipe.

The Sensonic surface sensor is designed so that the thermal energy-loss from the measuring point is minimal because of a very efficient self-insulation which gives the best possible temperature measuring.

Advantages:

- Measuring temperature of process pipe without welding in a sensor pocket.
- Minimal thermal loss from the measuring point.
- Measure on pipes with dimensions from 4 DN and upwards.*
- Ideal for aseptic processes.
- Small dimensions.
- Easy to mount.
- Low mounting costs.
- Economical temperature measuring.
- Robust design.

  * From 4DN to 8DN, a special centering and insulating adapter, type ADPT-04 should be used.

The surface sensors are available in many versions:

See our new temperature sensors
TTS500FA and TS550FC
on our home page
www.sensonic.dk

• TS334F(S)/°C

Temperature switch, 2-wire which changes mode at set point (input to PLC etc).

• TMPT100FA

PT100 sensor, 4-wire connection.

TECHNICAL DATA

Dimensions 22mm x 30mm x 28mm

Reaction time 1τ = 1 sec.
Protection class = IP 68

TS334F(S)/°C	
Supply voltage	7 - 30 VDC
Output/consumption current	3.3 and 33 mA
Off current / temp. < set point	3.3 mA ± 10%
On current / temp. > set point	33 mA ± 10
Switch point/optional	-40 – 180 °C
Hysteresis typ.	< 0.3 °C
Accuracy electronic better than	± 0.5 °C
LED indicator for ON/OFF mode	
Sensor accuracy 1/3 din B, see TMPT100FA below	

TMPT100FA
PT100 1/3 din B curve, accuracy in °C better than ±(0,1+(measured temperature x 0,0017))
Measuring range   -40 – 180 °C
Measuring error due to thermal loos typically:
(TP-TA) x -0,003 °C(where TP = processtemperature and TA=ambient temperature)
4 wire connection
Cable length   2 meter **
**other cable length are available

PT500 and PT1000 types are also available on request.