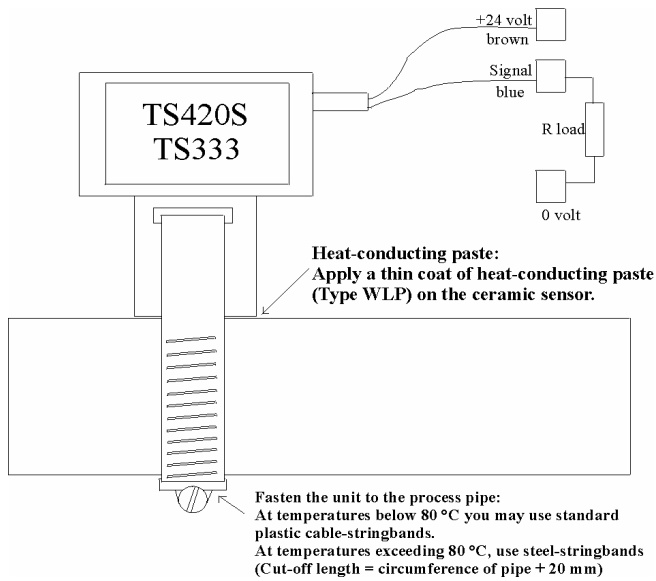


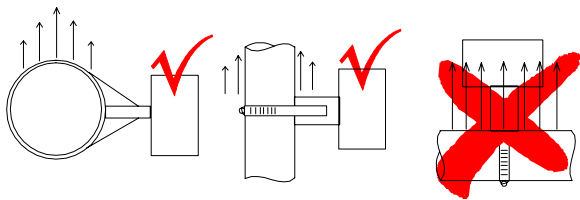
Mounting Instructions



$$\text{R-load LTT420S max (ohm)} = \frac{\text{supply voltage} - 10.5}{0.02}$$

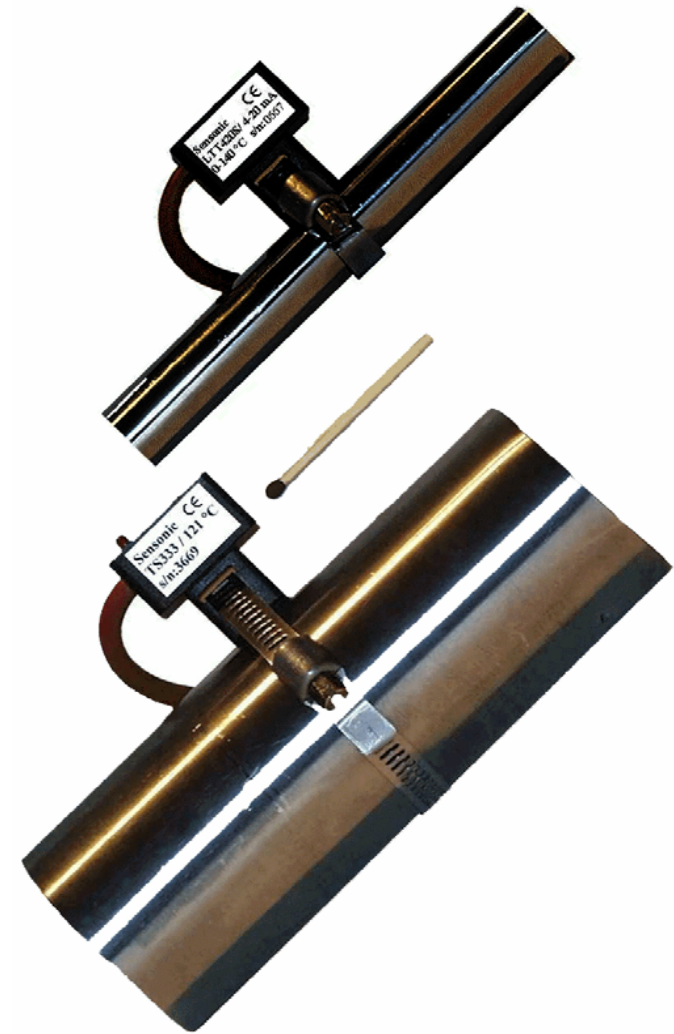
$$\text{R-load TS333/°C max (ohm)} = \frac{\text{supply voltage} - 7}{0.033}$$

When mounting onto a process pipe, where the temperature exceeds 80°C, follow the instructions on the drawing below, to avoid superheating of the unit.



Only mount the sensor on straight pipe parts.

>>SENSONIC<< Temperature Measuring System



CLAMP-ON
Temperature sensors

For further information please contact:



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 10 DN and upwards.
- Ideal for aseptic processes.
- Small dimensions.
- Easy to mount.
- Low mounting costs.
- Economical temperature measuring.
- Robust design.

The surface sensors are available in 3 types:

- **LTT 420S**
Standard 4-20 mA, 2-wire temperature transmitter.
- **TS333/°C**
Temperature switch, 2-wire which changes mode at set point (input to PLC etc).
- **TSPT100A**
PT100 sensor, 4-wire connection.

TECHNICAL DATA

Dimensions 22mm x 30mm x 28mm

Reaction time $1\tau = 0.5$ sec.

LTT420S

Supply voltage	10.5-34 VDC
Effect of variance on supply voltage	≤ 0.0001 mA/V
Output/consumption current	4-20 mA
Measuring range **	-25 – 150 °C
Linearity error	$\leq \pm 0.15$ % F. S.
Ambient temperature coefficient	$\leq \pm 0.01$ % F. S./°C
Accuracy better than	± 0.3 % F.S. ± 0.2 °C

** Min. span ≥ 25 °C.

Standard span: 0-50°C, 0-100°C, 0-140°C & 0-150°C

TS333/°C

Supply voltage	7 - 30	VDC
Output/consumption current	3.3 and 33	mA
Off current / temp. < set point	3.3	mA
On current / temp. > set point	33	mA
Switch point/optional	-25 – 150	°C
Hysteresis	< 0.3	°C
Accuracy better than	± 0.7	°C
LED indicator for ON/OFF mode		

TSPT100A

PT100-Kl. A	DIN 43760
Measuring range	-25 – 150 °C
4-wire connection	
Length of cable	1.5 metre **

**Other lengths of cables are available

A PT1000 type is also available on request.