

### DESCRIPTION

The air temperature sensor LTS 2000 is an encased hard glass platinum resistance Pt 100, placed in a plastic shaft. The sealing to the sensor is achieved via a cable gland. Back-mounted is a 5-pole plug connection, protection class IP 67 if plugged. The sensor is equipped with a 3 m long shielded cable 4 x 0.5 mm<sup>2</sup>. Depending on the application the sensor will be used for measurement of the air temperature 5 cm above ground in connection with a pluggable wire protection basket (with special fastening devices and ground spike).

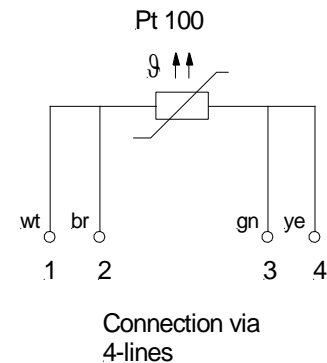
### TECHNICAL DATA

Sensor:	PT 100 acc. to DIN 60751 B, 1/3 tolerance, means +/- 0.1 K at 0 °C
Resistor:	100 Ω at 0 °C
Operating temp.:	-40...+60 °C
Response time in air	T 0.5: 23...25s
V = 1 m/s:	T 0.9: 78...80s
Self-heating coefficient (in air V = 1 m/s at 20 °C):	3 mA for Δt = 0.1 K
Shaft:	PETP, white
Dimensions:	See dimension drawing
Weight:	approx. 235 g without basket approx. 260 g with basket
Measuring cable:	4 x 0.5 mm <sup>2</sup> , shielded, LiY(C)Y, L= 3 m
Protection basket:	Socket made of PETP, white Protection basket made of stain- less steel wire 1.4301, ø 2 mm

### ORDERING CODE

Air temperature sensor LTS 2000 with encased hard glass platinum resistance Pt 100	<b>2013.0000</b>
Wire protection basket	<b>2013.1000</b>
Ground spike	<b>2014.2000</b>

### CONNECTION PLAN



### OPERATION- AND MAINTENANCE INSTRUCTIONS

#### ATTENTION:

As the glass sensor is breakable, please take appropriate care during handling.  
During non-usage or transport please always use the provided protection cover!

Connection to be acc. to the connection plan (see above) 4-wired, whereas over (1) and (4) a constant current (recommended: 0.5 mA) will be fed and the resulting resistor over (2) and (3) will be measured. The processing can be carried out by a suitable data acquisition unit, after consideration of the characteristic acc. to DIN 60751.

For the version "5 cm above ground" the plug-able wire protection basket should be used. This basket should be carefully shifted onto the shaft up to the stop.

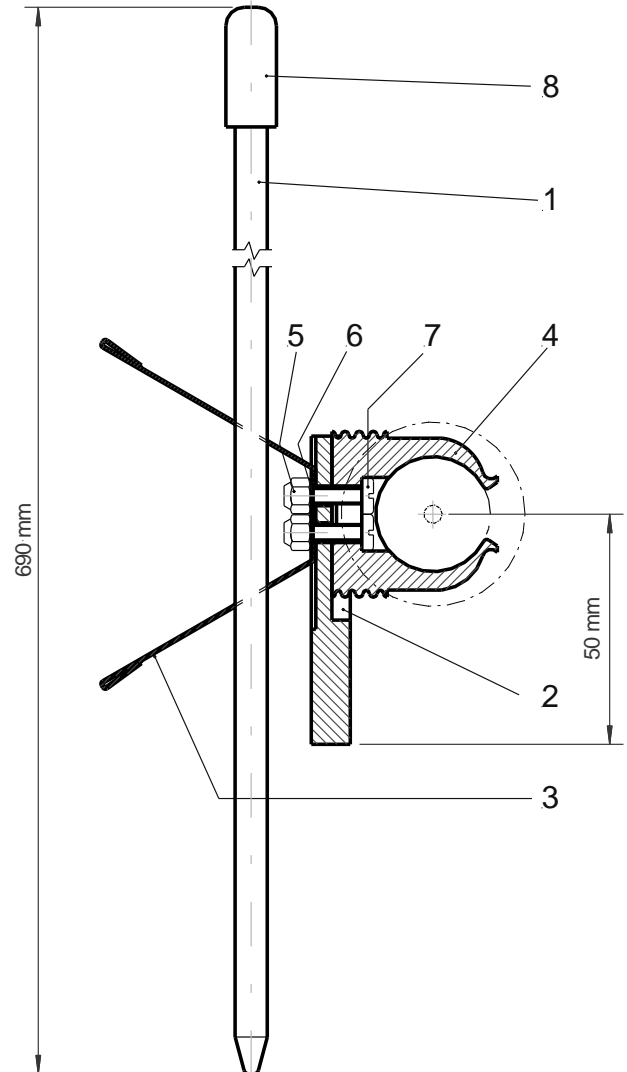
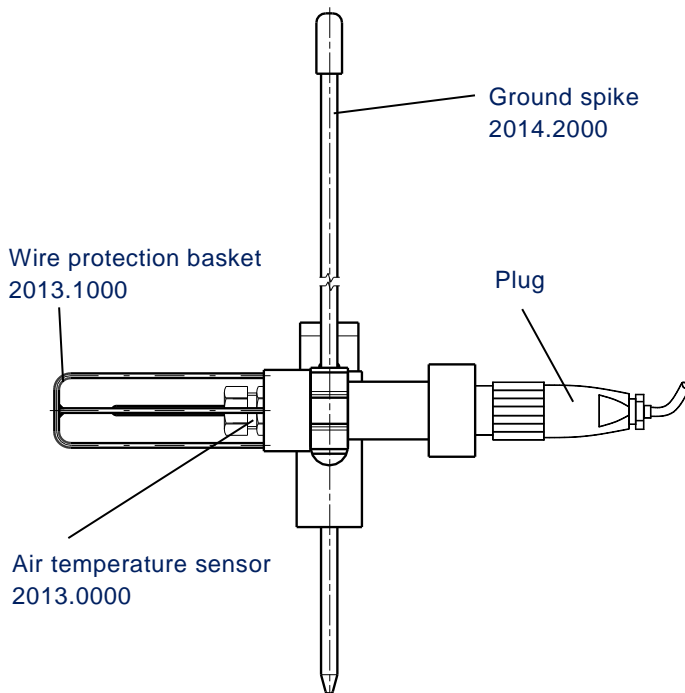
#### MAINTENANCE

Except for a casual cleaning with a dry or moistened cloth (don't use any chemicals!) no other maintenance is needed. After some time of operation the adapter pins should be checked for corrosion and the O-ring of the basket should be checked for ruptures. It is recommended to regrease the O-ring with silicone grease from time to time if the basket has been plugged frequently.

## MECHANICAL LAYOUT

### MOUNTING FOR »VERSION 5 CM ABOVE GROUND«

1. Pole
2. Distance spacer
3. Clamp spring
4. Clamp ring
5. Hex nut
6. Washer
7. Countersunk screw
8. Protection cap



Technical data are subject to change!