

# PTS 310A OUTDOOR TEMPERATURE SENSOR WITH A PLASTIC CONNECTION HEAD

rev10-20eng

## DESCRIPTION AND APPLICATIONS

The resistance-type sensor is designed for contact temperature measurement of gaseous substances. The plastic connection head is provided with a cable outlet bushing, the terminal board is located in the head. The standard temperature range of the sensor is -30 to 100°C. The sensor can be used for all control systems compatible with the sensor types or output signals listed in the Technical parameters table below. For easy installation, the sensor features a unique "S Head" design made by SENSIT s.r.o. The sensor is designed for use in a non-aggressive environment.



## DECLARATION OF CONFORMITY, CERTIFICATION, CALIBRATION

The manufacturer issues a **EU Declaration of conformity**.

**Calibration** – All the products are subject to a final metrologic inspection performed by a comparison with etalons or working instruments. Continuity of etalons and working instruments is amended by Section 5 of Act no. 505/1990 on metrology. The manufacturer offers an option to deliver sensors calibrated in the SENSIT s.r.o. company laboratory (according to the requirements of the EN ISO/IEC 17025 standard as amended), or in an accredited laboratory.

## SPECIFICATIONS

Sensor type	PTS 310A
Sensing element type	Pt 1000/3850
Measuring range (head ambient temp.)	-30 to 100 °C (-30 to 100°C)
Max. ss measuring voltage	1 mA

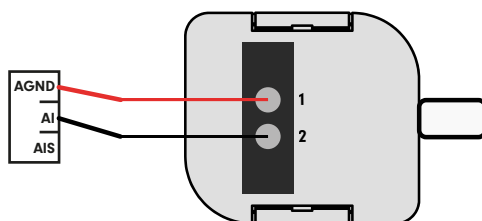
## OTHER PARAMETERS

Accuracy class	Pt1000: class B according to EN 60751 as amended, $\Delta t = \pm (0,3 + 0,005 t )$ in °C
Measuring probe length	25 mm
Response time	$\tau_{0,5} < 9 \text{ s}$ (in $1 \text{ m.s}^{-1}$ airflow)
Recommended wire gauge / wire outside diameter	035 to 1.5 mm <sup>2</sup> ; 4 to 8mm
Electric strength	500V/50Hz according to EN 60730-1
Insulation resistance	> 200 MΩ at 500 V <sub>DC</sub> , 25 ± 3 °C; humidity < 85 %
Ingress protection	IP 65 according to EN 60529
Measuring probe material	DIN 1.4301 stainless steel - variant A
Plastic head material	POLYAMIDE
Operating conditions	relative humidity: max. 100 % (at 25 °C) atmospheric pressure: 70 to 106 kPa
Weight approx.	0.1 kg

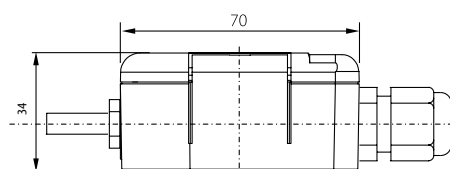
## WIRING DIAGRAM

SENSOR WITH A GROMMET:

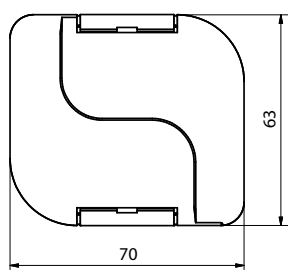
With resistance output



## DIMENSIONAL DRAWING



Variant A



SENSIT s.r.o., Školní 2610, 756 61 Rožnov pod Radhoštěm, Česká republika  
+420 571 625 571 · +420 571 625 572 · [obchod@sensit.cz](mailto:obchod@sensit.cz)



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