

# PTS 350B CONTACT TEMPERATURE SENSOR

10-20eng

## DESCRIPTION AND APPLICATION

This temperature sensor is designed for contact surface temperature measurement. The sensor is delivered with a fastening strap and a locking clamp, and is suitable for measuring temperature of pipelines. Its dimensions also allow its placement under pipeline insulation. The standard temperature range of the sensor is -30°C to 105°C. The construction of the sensor itself is designed to insulate it from the ambient environment. The sensor can be used in all control systems compatible with the Pt 1000/3850 sensor. The sensor is designed for non-aggressive environment.



## DECLARATION, CERTIFICATION, CALIBRATION

The manufacturer issues EU **Declaration of Conformity**

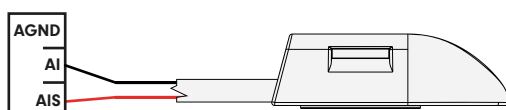
**Calibration** – All the products are subject to a final metrologic inspection performed by a comparison with etalons or working instruments. Continuity of etalons and working instruments is amended by Section 5 of Act no. 505/1990 on metrology. The manufacturer offers an option to deliver sensors calibrated 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 350B
Sensing element type	Pt 1000/3850
Measuring range	-30 to 105 °C
Max./Recomm. ss measuring current	Class. A: 0.5 mA / 0.2 mA; Tr. B: 0.8 mA / 0.3 mA
Sensor accuracy class *)	Class A according to EN 60751 as amended, $\Delta t = \pm (0.15 + 0.002 t )$ in °C Class B according to EN 60751 as amended, $\Delta t = \pm (0.3 + 0.005 t )$ in °C
Sensor connection	According to the wiring scheme
Response time	$\tau_{0.5} \leq 13$ s (on a smooth prism surface without paste)
Insulation resistance	> 200 MΩ at 500 V <sub>DC</sub> , 25 ± 3 °C; humidity < 85 %
Ingress protection	IP 65 according to EN 60529 as amended
Probe material	brass
Input cable	unshielded PVC, 2 x 0.35 mm <sup>2</sup> (cable ambient temperature: -30 to 105°C)
Input wire resistance	0,102Ω / 1 m at 25 °C
Standard cable length	3 m
Case material	POLYAMIDE
Standard band length	40 cm
Min. pipeline diameter	20 mm
Working conditions	relative humidity: max. 85 % (at 25°C ambient temperature) atmospheric pressure: 87 to 107 kPa
Weight approx.	0.15 kg

\*) Tested by submersion of the sensor into liquid, method error not considered - the influence of ambient temperature and outside factors, surface irregularities etc. For two-wire connection it is necessary to consider the input cable wire resistance. At 25°C, the wire resistance is 0.026°C/1 m.

## WIRING DIAGRAM



## DIMENSIONAL DRAWING

