

PTS 320 TEMPERATURE SENSOR WITH A PROBE AND A PLASTIC HEAD

rev11-20en

DESCRIPTION AND APPLICATION

This temperature sensor is designed for contact measurement of temperature of gaseous or liquid substances. The plastic head covering the sensor's terminal box features a grommet or a connector. When combined with a centre holder, the sensor is suitable for measuring temperature in air conditioning ducts. The modified variant with a welded fitting can be then used for measuring internal pipeline temperature. The standard temperature range of the sensor is -50 to 150°C. By extending the probe length, it is possible to increase the maximum temperature up to 250°C. The sensor can be used in any system compatible with the sensor types or the output signals listed in the specifications table. For easy installation, the sensor features a unique "S-head" design made by the SENSIT s.r.o. The sensor is designed for chemically non-aggressive environment.



DECLARATION, CERTIFICATION, CALIBRATION

The manufacturer issues the **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.

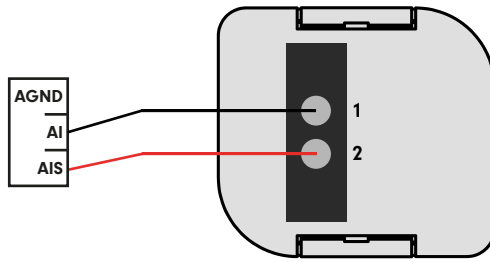
SPECIFICATIONS

Sensor type	PTS 320
Sensing element type	Pt 1000/3850
Measuring range (head ambient temperature)	-50 to 150 °C (-30 to 100 °C)
Max. ss measuring current	1 mA
Accuracy class	Class B according to EN 60751 as amended, $\Delta t = \pm (0.3 + 0.005 t)$ in °C
Standard probe length	120 mm
Response time	$\tau_{0,5} < 9$ s (in flowing water at 0.4 m.s ⁻¹)
Recommended wire gauge– sensor with a grommet	0.35 to 1.5 mm ²
Sensor connection	according to the wiring scheme
Insulation resistance	> 200 MΩ at 500 V _{DC} , 25 ± 3 °C; humidity < 85%
Ingress protection	IP 65 according to EN 60529 as amended
Probe material	DIN 1.4301 stainless steel
Head material	POLYAMIDE
Working conditions	relative humidity: max. 100 % (at 25 °C temperature); atmospheric pressure: 70 to 107 kPa
Weight cca	0.15 kg

WIRING SCHEME

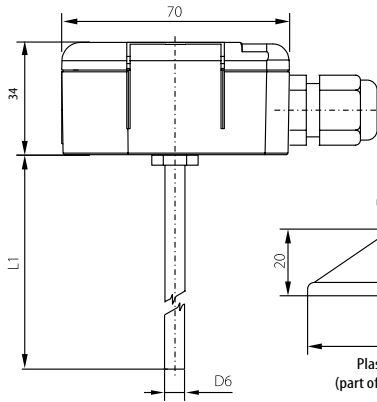
SENSOR WITH A GROMMET:

With resistance output

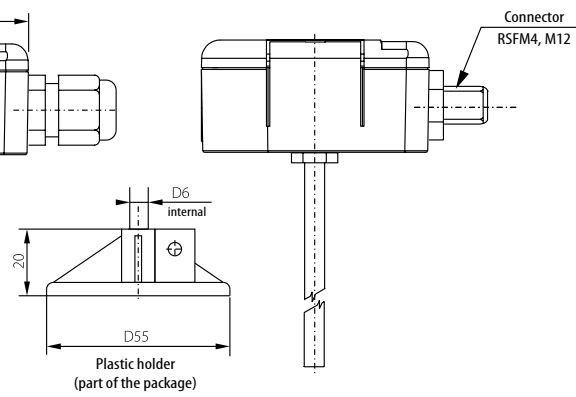


DIMENSIONAL DRAFT

With a grommet



With a connector



Accessories

