



Insertion resistance thermometer Pt100 with pre-fitted cable or socket

Description

Basics of ACS Universal RTD form standardized, high-grade platinum measuring resistors with a nominal resistance of 100 ohms at 0 ° C, the tolerance classes AA, A, B - IEC 60751st

ACS Pt100 sensors are characterized by high accuracy and reproducibility and are extremely reliable. The sensing elements are embedded in the protective tube with magnesium oxide and hermetically closed. Thus, a good heat transfer and vibration protection is obtained.

Standard measuring temperatures are -70 ° C .. +300 ° C;

High temperature versions measure up to +500 ° C / +600 ° C. Low temperature versions, special materials, process connections and OEM versions are also available.

The given measuring temperature refers to a medium temperature at the probe tip.

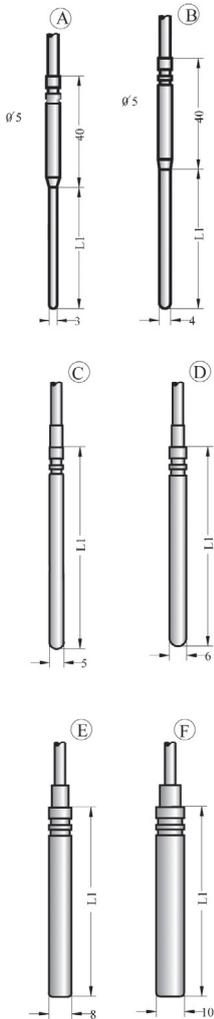
For cable versions, for example PTS / PTC and PT100 sensors with connection head, possibly with built-in head transmitter, must be made to the respective maximum temperature of the cable, heads, etc. by use of on-

site isolation or Pt100 with neck tube into consideration. The measured speed of the individual Pt100 sensor is highly dependent on the operating conditions, the medium to be measured and the mechanical dimensions. The immersion depth should not be less than 50 mm. Shorter probe lengths, please always clarify with the experienced ACS employees.



technical data	
Measuring element:	Platinum resistance element Pt100 / Pt1000, others on request
Temperature ranges:	at the tip: -70 ° C .. +300 ° C +500 ° C / +600 ° C and low temperature version on request
Tolerance:	AA, A, B - IEC 60751
Signal:	- 1x Pt100: 2 -, 3 -, 4-wire circuit
	- 2x Pt100: in 2x 2x 2-wire or 3-wire circuit
Connections:	- Pt100 3x: 3x in 2-wire circuit
	- Free wire ends for self-installation of a head transmitter - Head Transmitter, 4 .. 20mA / 0 .. 10V output, standard, Ex, Profibus, others on request
Materials (process side):	- terminal compartment in aluminum, plastic or stainless steel housing - Fixed connection cable - shielded PTFE, silicone, PVC, Fiberglass with steel mesh, others on request - Lemo System, M12 system
Materials (connection side):	- protective tubes made of seamless stainless steel 1.4571 (AISI 316Ti) - Flanges, process connections: 1.4571 (AISI 316 Ti) - Special materials on request
	- Housing: aluminum, stainless steel, polypropylene PP, POM polyoxymethylene - Cable Material, see "Connection"

Order code PTS



order code

PTS mm

Equipment

sensor type

- 1 1x Pt100, 2-wire
- 2 **1x Pt100, 3-wire** (preferred type)
- 3 1x Pt100, 4-wire
- 4 2x Pt100, 2-wire (double Pt100 only from $\varnothing 5$ mm)
- 5 2x Pt100, 3-wire (double Pt100 only from $\varnothing 5$ mm)
- 6 1x Pt1000, 3-wire
- 7 2x Pt100, 4-wire (double Pt100 only from $\varnothing 5$ mm)

accuracy class (at 2-fold Pt100 price x 2)

- B class B, up to +200°C** (preferred type)
- A class A, up to +200°C
- C class AA (formerly class $1/2B$), up to +200°C
- Y Special version, for example, high temperature, etc.

design

- A see dimension drawing A 3 x 0,3 mm
- B see dimension drawing B 4 x 0,3 mm
- C see dimension drawing C 5 x 0,5 mm
- D see dimension drawing D 6 x 0,5 mm
- E see dimension drawing E 8 x 1 mm
- F see dimension drawing F 10 x 1 mm

material sensor

- N 1.4571** (preferred type)
- T 1.4571 with PTFE coating
- Y Special version

cable

- A PVC up to +80°C
- B PTFE up to +200°C** (only at 1xPt100 possible) (preferred type)
- C silicone up to +180°C (not at 2xPt100 3-wire)
- D fiberglass with steel braid 300°C (only 3-wire)
- L plug connector LEMO SA 4-pole size 1 up to +80°C
- Y special version
- P plug connector LEMO SA 8-pole size 2

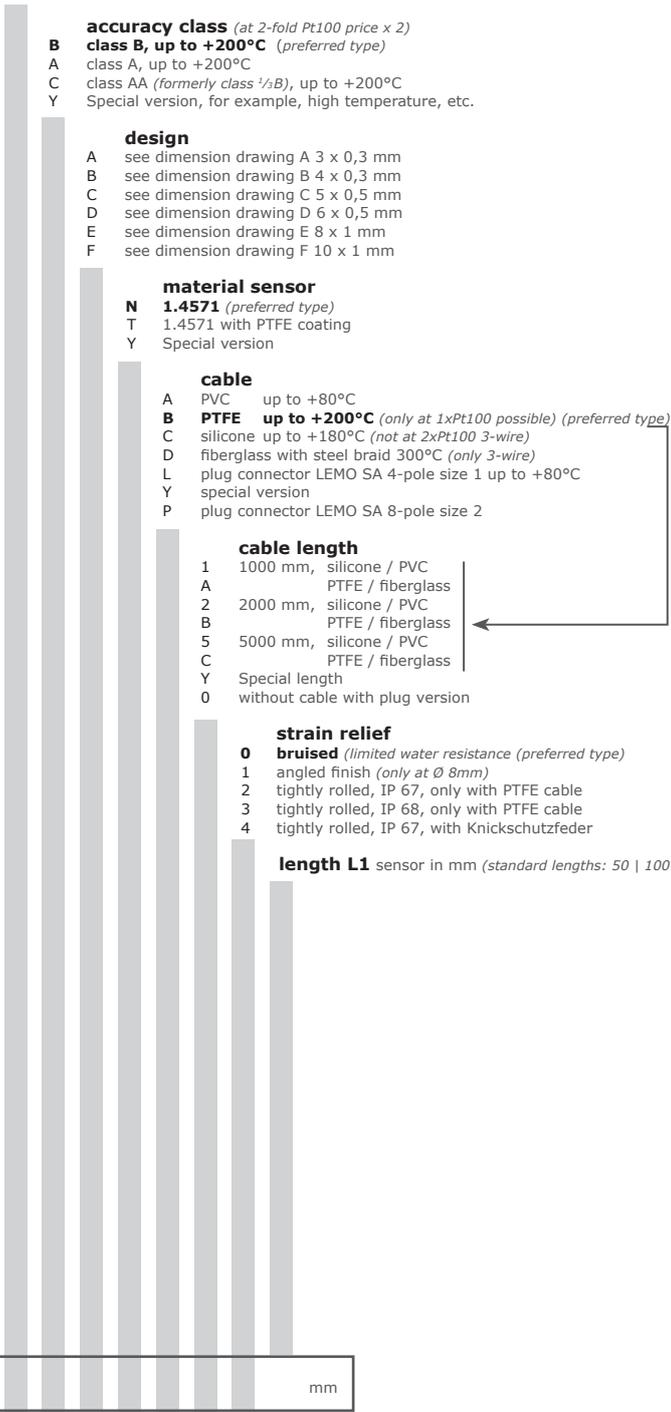
cable length

- 1 1000 mm, silicone / PVC
- A PTFE / fiberglass
- 2 2000 mm, silicone / PVC
- B PTFE / fiberglass
- 5 5000 mm, silicone / PVC
- C PTFE / fiberglass
- Y Special length
- 0 without cable with plug version

strain relief

- 0 bruised** (limited water resistance (preferred type))
- 1 angled finish (only at $\varnothing 8$ mm)
- 2 tightly rolled, IP 67, only with PTFE cable
- 3 tightly rolled, IP 68, only with PTFE cable
- 4 tightly rolled, IP 67, with Knickschutzfeder

length L1 sensor in mm (standard lengths: 50 | 100 | 150 mm)



order information
LEM04
LEM08

version
LEMO SA-connector 4-pole size 1
LEMO SA-connector 8-pole size 2