



standard diving sleeve resistance thermometer Pt-100
with sliding sleeve

Description

Fundamentals of ACS Universal RTD standardized, high-quality platinum resistance form of a nominal resistance of 100 ohms at 0 ° C, tolerance classes A, B, 1/3B (AA) - in accordance with DIN EN / IEC 60751st.

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

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

High temperature versions +500 ° C / +600 ° C, low-temperature versions, special materials, special process connections, OEM versions are also available.

The given measuring temperature refers to an average temperature at the probe tip.

With cable versions, for example PTS / PTK and Pt100 sensors with connection head, possibly with integrated head transmitter, must be based on the respective maximum

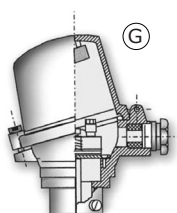
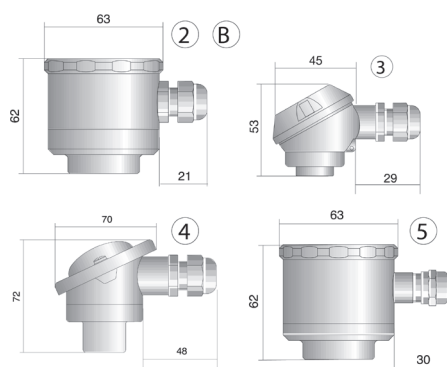
temperature of the cable, heads, etc., with on-site isolation, use of Pt100 be used with extension into account. The measurement speed of the individual Pt100 sensor is highly dependent on operating conditions, the measured medium and the physical dimensions.

The immersion depth should be not less than 50 mm. Shorter probe lengths clarify please always experienced with the ACS staff.

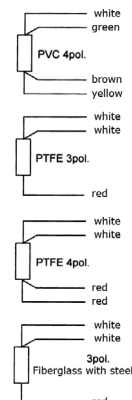
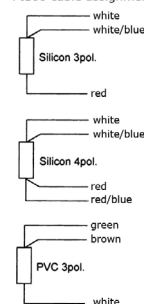


technical data	
measuring element:	Platinum resistance element Pt100/Pt1000, others by request
temperature ranges:	at measurement tip: -70°C...+300°C +500°C/ +600°C and low temperature versions by request
tolerance:	AA, A, B - according to IEC 60751
signal type:	- 1x Pt100: in 2-, 3-, 4-wire-switch
	- 2x Pt100: in 2x 2-wire or 2x 3-wire-switch
	- 3x Pt100: in 3x 2-wire-switch
connection:	- with flying leads for head transmitter mounting - head transmitter, 4...20 mA/ 0...10 V output, Standard, Ex, Profibus; others by request
	- connection area made out of aluminium, plastic or stainless steel - fixed connection cable - PTFE shielded, silicone, PVC, glass silk protected with steel mesh, others by request - Lemo-plug system, M12 plug system
materials	
materials (terms of process):	- protection tubes made of seamless stainless steel: 1.4571 (AISI 316Ti) - flanges, process connections: 1.4571 (AISI 316 Ti) - special materials by request
Materialien (terms of connection):	- housing: aluminium, CrNi-steel, PP-polypropylene, POM-polyoxymethylene - cable material -> see „connection“

Dimensioned drawing and connection



Pt100 cable assignment



order code

Sensor type

- 1 1x Pt100, 2-conductor
- 2 **1x Pt100, 3-conductor** (concessional type)
- 3 1x Pt100, 4-conductor
- 4 2x Pt100, 2-conductor (double Pt100 with exchangeable gauge slide only from ø 8 mm)
- 5 2x Pt100, 3-conductor (double Pt100 with exchangeable gauge slide only from ø 8 mm)
- 6 1x Pt1000, 3-conductor
- 7 3x Pt100, 2-conductor (3x Pt100 with exchangeable gauge slide, only from ø 8 mm)

Accuracy class (at double Pt100 price x 2) (DIN EN 60751:2009-05)

- B class B, up to +300°C** (concessional type)
- A class A, up to +300°C
- C class AA (formerly class 1/3B), up to +300°C
- Y special model e.g. high temperature et cetera
- P class AA (formerly class 1/3B), paired model, e.g. for heat quantity detection

Process connection, sensor diameter

(please order sliding sleeve separately)

- 1 **8 mm pipe diameter** (concessional type)
- 2 10 mm pipe diameter
- 3 6 mm pipe diameter
- 4 1.4571 / 8 mm, reduced cone point 5 mm, 40 mm lenght
- 6 1.4571 / 10 mm, reduced cone point 6 mm, 40 mm lenght
- 7 15 mm x 2 mm
- Y others

Material process side

- N 1.4571** (concessional type)
- O heat resistant steel 1.4841 up to 1100°C
- Y others

connection head

- A PP-head small
- B PP-head big
- 1 plastic head Delrin® small
- 2 plastic head Delrin® big
- 3 aluminium head small (not with sensor type 5 and 7)
- 4 aluminium head big** (concessional type)
- 5 stainless steel head big
- 7 PTFE-head small
- 8 PTFE-head big
- G aluminium head double size
- Y other construction forms

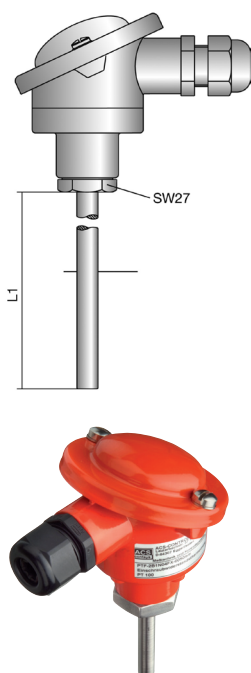
gauge slide

- F fixed** (concessional type)
- W exchangeable (at high temperature version always mandatory)

connectionart

- K connection with Klemmsockel** (concessional type)
- M connection for head transmitter⁽¹⁾ 4-20mA/0-10V fixed value (VT)**
- X connection head transmitter⁽¹⁾ UTN-500 programmable by software
- T connection for head transmitter PTN-600 PROFIBUS PA-interface
- D connection with wire ends for self-mounting of head transmitter
- G connection for 2x head transmitter
- L connection with 2x clamp socket
- Y special model

lenght L1 sensor in mm
(concessional lengths: 100 | 150 | 200 mm)



order code

PTF

0 mm