



Pt100 resistance thermometer for flush weld

## 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.

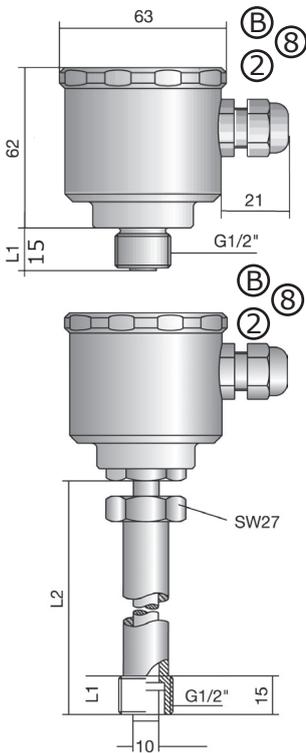
For cable versions, for example PTS / PTC and PT100 sensors with connection head, possibly with built-in head transmitter, must be made to the respective maximum temperature of

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 check 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
Toleranzklasse:	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:	- 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 (process side):	- protective tubes made of seamless stainless steel 1.4571 (AISI 316Ti) - Flanges, process connections: 1.4571 (AISI 316 Ti) - Special materials on request
Materials (connection side):	- Housing: aluminum, stainless steel, polypropylene PP, POM polyoxymethylene ; - Cable Material, see "Connection"

# Order code PTB



- sensor type**  
 1 1x Pt100, 2-wire  
 2 **1x Pt100, 3-wire** (preferred type)  
 3 1x Pt100, 4-wire

- Accuracy** (Pt100 in 2-fold price x 2)  
 B Class B  
**A class A** (preferred type)

- Process connection G 1/2"** (weld-see page 44)  
**A weld for TEM-10 or TEM-11** (see figure A) (preferred type)  
 (Weld-not included)  
 Y other

- Material measuring surface**  
**N 1.4571** (preferred type)  
 Y other

- neck tube**  
**A without neck tube to +85 ° C** (preferred type)  
 B with neck tube made of stainless steel (standard L2 = 100 mm) up to +200 ° C aligned  
 Y with neck tube of choice in mm

- type**  
 B PP big head  
**2 plastic head size of Delrin**®  
 4 for valve plug DIN 43650  
 8 PTFE head large  
 Y other designs

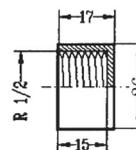
- measuring insert**  
**G permanently mounted in version with neck tube made of stainless steel or valve plug**  
**changeable at version without neck tube Version 2.0** (preferred type)

- Connection**  
**K Connection with terminal block** (preferred type)  
**M connector for head transmitter 4-20mA/0-10V fixed value**  
**X connection head transmitter UTN-500 software programmable**  
**T connector for head transmitter PTN-600 PROFIBUS PA interface**  
**D connector with wire ends for self-installation of head transmitter**  
**U with 1 m connection cable**  
**Z valve plug DIN 43650**  
**Y Special version**

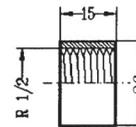
Transmitter only  
 with terminal head  
 „Large“ possible

- Probe length L1 in mm** (contact sensor)  
 Length 0015 mm

- Neck tube length L2 in mm**  
 Neck tube made of stainless steel, Adjustable 110mm  
 other lengths on request



TEM - 10  
closed



TEM - 11  
open

order code

<b>PTB</b>	F	mm	mm
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