ACS contsys

## Resistance thermometer Pt100

Screw-in 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.

The sensing elements are embedded in the protective tube with magnesium oxide and hermisch 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  $+500\,^{\circ}$  C /  $+600\,^{\circ}$  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 $^{\circ}$ C +300 $^{\circ}$ C +500 $^{\circ}$ C / +600 $^{\circ}$ 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
	- 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
Connections:	<ul> <li>terminal compartment in aluminum, plastic or stainless steel housing</li> <li>Fixed connection cable - shielded PTFE, silicone, PVC,</li> <li>Fiberglass with steel mesh, others on request</li> <li>Lemo System, M12 system</li> </ul>
materials	
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):	<ul> <li>Housing: aluminum, stainless steel, polypropylene PP,</li> <li>POM polyoxymethylene</li> <li>Cable Material, see "Connection"</li> </ul>

## Order code PTK

