

**THERMOCOUPLE THERMOMETER**  
Measuring insert: Fixed

**Type:**  
**TC-TM1**

Sheet No.  
3-35 V2.1  
5550-E010818V2.1

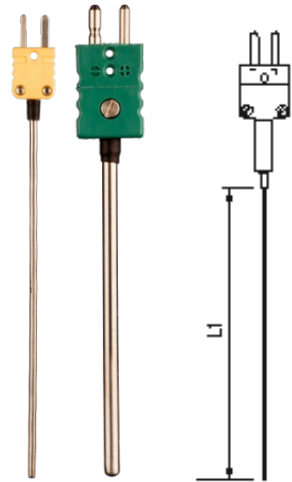


**Application:**

- For measuring temperatures in situations that require the sensor:
  - to be robust
  - to be flexible/ bendable
  - to have a quick reaction time
- Usually applied in:
  - Processing plants
  - Engines
  - Power plants

**Properties:**

- Thermocouple thermometer type K, J, E, N, T, S and R in acc. with DIN IEC 584-1
- Constructed in accordance with DIN 43733
- Measuring inset: fixed
- Process attachment: coupling, soldering or other mechanical means of attachment
- Outer protective sheath: various materials depending on the task in question
- Ambient temperatures min/max: 25/+120°C (Depending on cable insulation)
- Approved by: GOST, TCRU on request.



**MECHANICAL SPECIFICATIONS:**

**Protective tube: -----**

Wnr.1.4571 (AISI316TI)  
Wnr.1.4841  
Wnr.2.4816 (Inconell 600)  
Special

**Sensor diameter: -----**

Ø1mm, Ø1.5mm, Ø3mm, Ø6mm  
Special

**Immersion length: -----**

150mm  
300mm  
500mm  
1000mm  
Special

**Process attachment: -----**

None  
Adjustable nipple 1/4" BSP  
Adjustable nipple 1/2" BSP  
Special

**ELECTRICAL SPECIFICATIONS:**

**----Sensor element:**

Type K (NiCr-Ni)	max +1150°C
Type J (Fe-CuNi)	max +700°C
Type E (NiCr-CuNi)	max +800°C
Type N (NiCrSi-Ni)	max +1250°C
Type T (Cu-CuNi)	max +300°C
Type R (Pt13%Rh-Pt)	max +1600°C
Type S (Pt10%Rh-Pt)	max +1600°C
Special	

**----Number of thermocouples:**

1xTC  
Special

**----Tolerance in acc. with DIN 43732:**

Class 1 for K,J,E,N (i.e.  $\pm 1,5^{\circ}\text{C}$  or  $\pm(0,0040 \times T)$ )  
Class 1 for R,S (i.e.  $\pm 1,0^{\circ}\text{C}$  in the area 0-1100°C)  
Class 2 for K,J,E,N (i.e.  $\pm 2,5^{\circ}\text{C}$  or  $\pm(0,0075 \times T)$ )  
Class 2 for R,S,B (i.e.  $\pm 2,5^{\circ}\text{C}$  or  $\pm(0,0025 \times T)$ )  
Special

**----Electrical connection:**

Mini plug  
Plug