



## Pt100 temperature sensor

### 7400

- Accuracy, IEC 60751 class A
- Terminal head DIN 43729 form B
- 1/2" RG connection
- Stainless, acid-proof steel
- Protection tube  $\varnothing 9 \times 1$
- Temperature range  $-50^{\circ}\text{C}$  to  $+400^{\circ}\text{C}$

#### Application

- Temperature measurement in industrial systems, eg. in the food, chemical and pharmaceutical industries, cold storage plants, district heating, power plants, refineries and ships.
- Temperature measurement in gas and floating media.

#### Technical characteristics

- The 7400 comes with a fixed measurement insert.
- The sensor element is a thin film platinum resistor - Pt100 - trimmed at a laboratory to comply with the resistance values of the standard IEC 60751, class A. The advantage of a thin film element is an ultra short reaction time. The Pt100 element is electrically isolated from the protecting tube and terminal head.
- The protecting tube is  $\varnothing 9 \times 1$  mm stainless, acid-proof steel W no. 1.4571 / AISI 316TI, filled with aluminum oxide powder. A 1/2" RG thread nipple is welded on the protecting tube with a packing sheet of  $\varnothing 30$  and span 30.
- The terminal head is a standard DIN 43729 form B housing produced in light-alloy metal, protected against corrosion through strong industrial lacquering.
- The sensor is available with or without cooling extension to keep the terminal head clear of isolated surfaces.

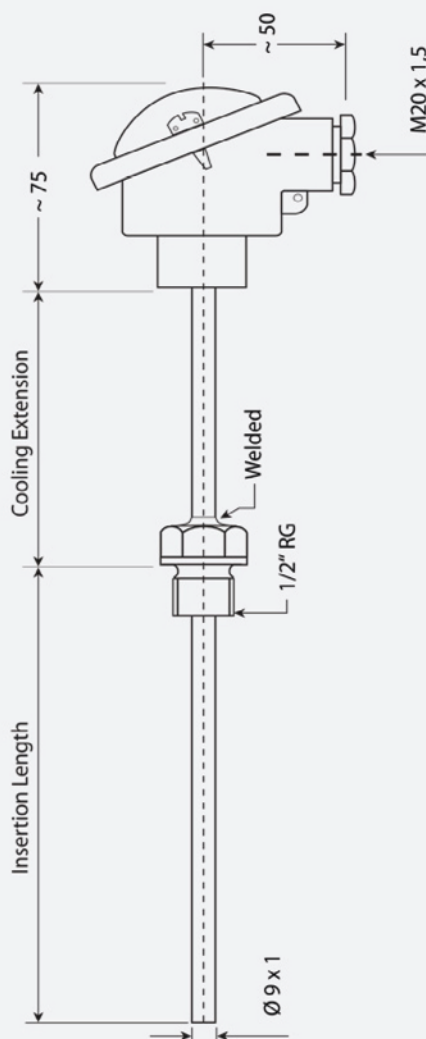
#### Electrical connection

- Each sensor is delivered with a three-wire connection which allows cable compensation to the sensor element.

#### Option

- Pt100 sensor type 7400 is available with a built-in ceramic socket (item no. 7423) or with a built-in 2-wire programmable transmitter for both standard and I.S. installations.

#### Applications



Order:

Type	Pt100 Sensors	Accuracy	Cooling extension	Insertion length
7400	1 x Pt100 : A	Class A : 1	None : A 100 mm : B	50 mm : 1 100 mm : 2 150 mm : 3 200 mm : 4 300 mm : 5 400 mm : 6

## Environmental Conditions

Protection degree..... IP54

## Mechanical specifications

Max. tightening torque..... 50 Nm  
Packing surface..... Ø 30 x Ø 21.5  
Max. pressure for insertion  
length ≤ 250 mm..... 36.5 bar  
Max. pressure for insertion  
length > 250 mm..... 22.5 bar  
Cable connection (screwed)..... M20 x 1.5  
Width of flats..... 30

## Common specifications

Recommended sensor current..... ≤ 2 mA  
Max. temperature diffusion  
at 0°C: IEC 60751 class A..... ≤ ±0.15°C  
Long-term stability: (≥1000  
hours at max. temperature)..... ≤ ±0.05°C  
Typical reaction time: water  
with flow 0.2 m/s..... t0.5 after 20 s / t0.9 after 28 s  
Typical reaction time: air  
with flow 1 m/s..... t0.5 after 60 s / t0.9 after 180 s