



# 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 Ø 9 x 1
- Temperature range -50°C to +400°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 Ø 9 x 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 Ø 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.

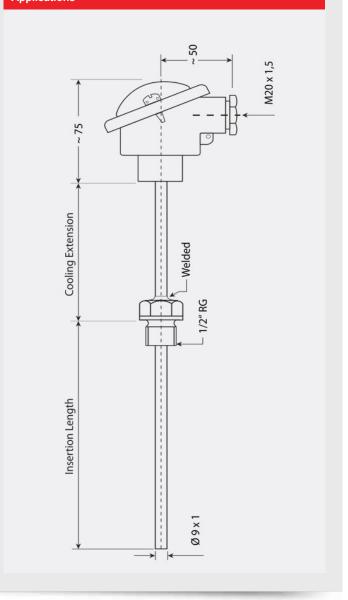
## Electrical connection

• 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:

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