

## Immersion temperature probe for Pt100 liquid and gas measurement

# GTF 601

### Introduction

Reliable temperature measurement in liquids and gases starts with a probe that can handle heat, movement and daily use. This Pt100 immersion probe combines a bendable V4A sheathed element with high temperature resistance, high vibration resistance and long service life.

Users can select the accuracy level to match the task, with DIN Class AA (1/3 DIN Cl. B) or DIN Class B versions available. The standard measuring range is -200 ... +600 °C, while the Ø1.6 mm sheathed element covers -50 ... +600 °C and the Teflon-coated version is specified for -200 ... +250 °C in acid and seawater applications.

The family adapts well to different measuring points. A 150 mm probe length and Ø3 mm diameter are standard, with further lengths, diameters, cable materials and connection types available. Fast response in liquids supports efficient checks on site, with T90 <5 s in water at 0.4 m/s.



#### High temperature use

Covers -200 ... +600 °C as standard for liquid and gas measurement.



#### Stable under shock

High vibration resistance supports use in demanding measuring positions.



#### Fast in liquids

T90 is <5 s in water at 0.4 m/s for quick immersion readings.



#### Flexible installation

Bendable V4A sheath, Ø3 mm as standard, adapts to many measuring points.



#### Accuracy choice

Available in DIN Class AA (1/3 DIN Cl. B) or DIN Class B.

## Technical Specifications

### Measurement

|                        |                                                                                          |
|------------------------|------------------------------------------------------------------------------------------|
| Measuring principle    | RTD                                                                                      |
| Temperature sensor     | Pt100, DIN Class B / DIN Class AA (1/3 DIN Class B)                                      |
| Temperature range TC K | -200...+600 °C (-50...+600 with 1.6 mm diameter; -200...+250 when Teflon shrink-wrapped) |
| Response Time (T90)    | Water 0.4 m/s < 5 s, air 2 m/s approx. 60 s                                              |

### Probe

|                |                                                                                             |
|----------------|---------------------------------------------------------------------------------------------|
| Connection     | Mini-DIN plug, 4 wire / loose ends with wire end ferrules / 2 x banana plug Ø4 mm           |
| Probe Diameter | 3 mm (standard) / 4 mm (rigid probe tube - not bendable) / 1.6 mm (rigid for approx. 30 mm) |
| Handle         | Plastic handle with kink-resistant screw connection / Teflon / Compact                      |
| Probe length   | Standard: 150 mm (other lengths available)                                                  |
| Material       | AISI 316 stainless steel (V4A)                                                              |
| Type           | Immersion probe                                                                             |
| Cable          | PVC (standard) / Silicone (-50 ... +200 °C) / Teflon (-200 ... +250 °C)                     |

## Features

### Pt100 sensor element

The probe uses a Pt100 measuring element in a sheathed immersion design for temperature measurement in liquids and gases.

### Probe dimensions

The standard version has a 150 mm probe length and Ø3 mm bendable V4A sheath. Further lengths and diameters are available.

### Connection versions

Connection options include Mini-DIN plug in 4-wire configuration, loose ends with ferrules, or 2 x Ø4 mm banana plugs.

### Cable materials

The standard version uses a 1 m PVC cable. Silicone cable (-50 ... +200 °C) and Teflon cable (-200 ... +250 °C) versions are available in different lengths.

### Sheath variants

The family includes Ø3 mm standard sheaths, Ø4 mm rigid probe tubes and Ø1.6 mm sheathed elements with approx. 30 mm rigid section.

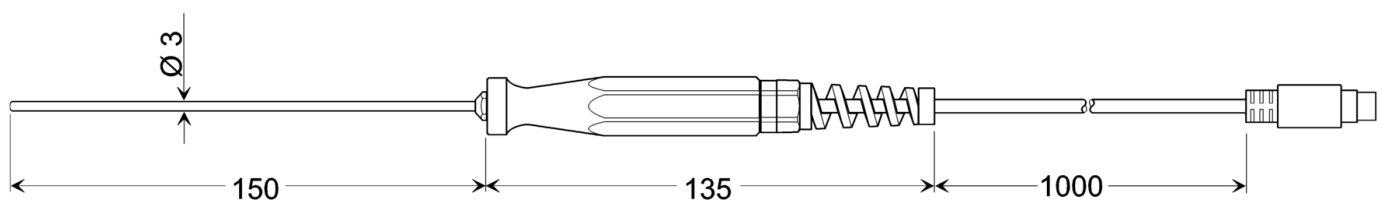
### Coated probe option

A Teflon-coated probe is available up to 200 mm probe length for acid and seawater applications, with a maximum temperature of 250 °C.

### Handle options

The standard handle is plastic with bend protection screw connection. Teflon handle and small probe handle options are available.

## Details



Dimensions in mm