

# Temperature probes

## ACCURACY

### Pt100 / Pt1000:

sensor accuracy acc. to DIN EN 60751

<b>DIN cl. B:</b> (area of validity: -50 ... +500 °C)	±0.3 °C at 0 °C
<b>DIN cl. A:</b> (area of validity: -30 ... +300 °C)	±0.15 °C at 0 °C
<b>DIN cl. AA = 1/3 DIN cl. B:</b> (0 ... +150 °C)	±0.1 °C at 0 °C
<b>1/10 DIN cl. B:</b>	±0.03 °C at 0 °C

### Thermocouples:

sensor accuracy acc. to DIN EN 60584-2

<b>class 1 for Type K:</b>	±1.5 °C at range -40 ... +375 °C
<b>class 1 for Type N:</b>	±1.5 °C at range -40 ... +375 °C
<b>class 1 for Type S:</b>	±1 °C at range 0 ... 1100 °C

### PLEASE NOTE:

customized probes have to be ordered in writing!  
return or exchange are not possible!

## SPECIAL DESIGNS

### Upcharges:

**basic fee for custom made probe**

**longer probe tube**  
upcharge per further starting 100 mm

**longer cable (silicone)**  
upcharge per further starting meter

**other cable material**  
upcharge per meter, please refer to cable pricing p. 140

**teflon covered probe tube**  
(for probes up to 200 mm)  
(for probes used in acids and salt water, upper temperature range 250 °C)

**waterproof probe handle**  
(casted, only possible with PVC cable -20 ... +105 °C)

**higher sensor accuracy:**  
1/3 DIN class B, for Pt100 and Pt1000, tolerances: 0.1 °C at 0 °C

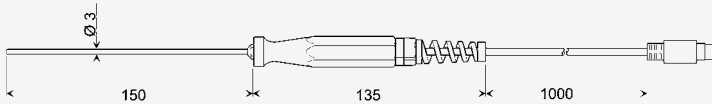
**higher sensor accuracy:**  
1/10 DIN class B, for Pt100-probes, tolerances: 0.03 °C at 0 °C

## Pt100 Measuring probe

### Immersion probe for liquids / gases, 4-wire

#### GTF 401

-50 ... +400 °C, DIN cl. B



#### Specification:

non-corrosive stainless steel tube (V4A), plastic handle, approx. 1 m 4-wire PVC cable, anti-buckling glanding, 4-pin miniature DIN-type plug

**Response time T<sub>90</sub>** approx. 10 s, air approx. 40 s

**suitable for** GMH 2000(SA), GMH 3530, GMH 3710, GMH 3750

#### GTF 401 1/3 DIN \*

-50 ... +400 °C, as GTF401 however 1/3 DIN class B (±0.1 °C at 0 °C)

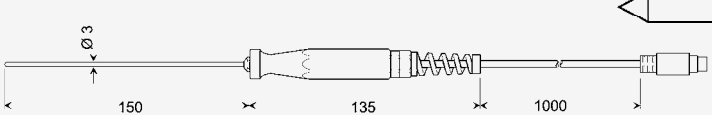
#### GTF 401 1/10 DIN \*

-50 ... +400 °C, as GTF401 however 1/10 DIN class B (±0.03 °C at 0 °C) and flexible jacket tube, Ø 3 mm

### Insertion probe for soft media, 4-wire

#### GES 401

-50 ... +400 °C, DIN cl. B



#### Specification:

Specification as for GTF401 but with needle type prod

**Response time T<sub>90</sub>** approx. 10 s

**suitable for** GMH 2000(SA), GMH 3530, GMH 3710, GMH 3750

#### GES 401 1/3 DIN \*

-50 ... +400 °C, as GES401 however 1/3 DIN class B (±0.1 °C at 0 °C)

### Immersion probe for liquids / gases, 4-wire

#### GTF 601

-200 ... +600 °C, DIN cl. B

#### Specification:

handle as per GTF150, approx. 1 m 4-wire PVC cable, 4-pin miniature DIN-type plug, flexible jacket tube, 3 mm Ø. (smaller tube diameter upon request)

**Response time T<sub>90</sub>** approx. 10 s

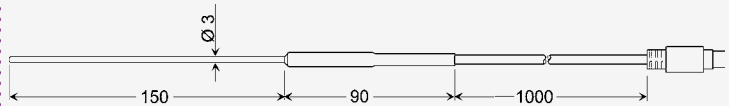
**suitable for** GMH 2000(SA), GMH 3530, GMH 3710, GMH 3750

#### GTF 601 1/3 DIN \*

-200 ... +600 °C, as GTF601 however 1/3 DIN class B (±0.1 °C at 0 °C)

#### GTF 35

-50 ... +400 °C, DIN cl. B



#### Specification:

non-corrosive stainless steel tube (V4A), approx. 1 m 4-wire PVC cable, 4-pin miniature DIN-type plug

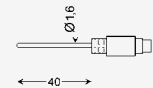
**Response time T<sub>90</sub>** approx. 10 s

**suitable for** GMH35xx, GMH3710, GMH3750

### Fast and accurate Measurement of ambient air

#### GLF 401 Mini

-25 ... +70 °C, DIN cl. A



#### Specification:

Ø 1.6 mm, FL = approx. 40 mm, 4-pin mini DIN-type plug, fast and accurate measurement of ambient air

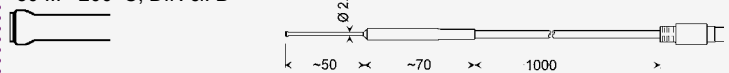
**Response time T<sub>90</sub>** approx. 15 s

**suitable for** GMH 3530, GMH 3710, GMH 3750

### Surface probe for solid surfaces

#### GOF 401 Mini

-50 ... +200 °C, DIN cl. B



#### Specification:

2 x 2.3 mm ceramic Pt1000 sensor mounted at the tip, V4A tube, 4-wire PVC cable with 4-pin miniature DIN-type plug

**Response time T<sub>90</sub>** approx. 15 s

**suitable for** GMH 3530, GMH 3710, GMH 3750

\* Please note the area of validity for the class of accuracy given above.