

SUITABLE PT100 MEASURING SENSOR (4-WIRE)

ACCURACIES PT100:

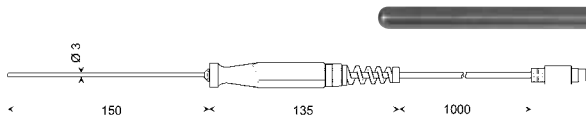
Sensor accuracy according to DIN EN 60751
DIN class B: (validity range: -50 .. + 500 °C) ± 0.3 °C at 0 °C
DIN class A: (validity range: -30 .. + 300 °C) ± 0.15 °C at 0 °C
DIN class AA = 1/3 DIN class B: (Validity range: 0 .. + 150 °C) ± 0.1 °C at 0 °C
1/10 DIN Kl. B: (validity range: 0 .. + 100 °C) ± 0.03 °C at 0 °C

SURCHARGES SPECIAL DESIGNS:
 (DESIGN-RELATED VARIATIONS ARE AVAILABLE)

longer sensor tube: surcharge per additional 100 mm or part thereof
longer sensor cable (PVC): surcharge per additional 1 m or part thereof
Coiled cable stretched approx. 1.2 m
other cable types on request
Sensor tube with teflon shrinkage
 (for temperature sensors up to 200 mm)
 (for measurements in acids and sea water. max.measuring range = 250 °C)
Sensor handle waterproof encapsulated (only possible with PVC cable -20 .. + 105 °C)
higher sensor accuracy: DIN class AA, for Pt100, tolerances: 0.1 °C at 0 °C
higher sensor accuracy:
 1/10 DIN class B, for Pt100 sensors, tolerances: 0.03 °C at 0 °C
Handling fee for custom-made products

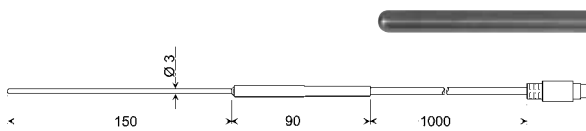
GTF 401
 Item No. 600377
 Immersion sensor for liquids/gases
 -50 .. + 400 °C, DIN class B

GTF 401 DIN class AA
 Item No. 600378
 Immersion sensor for liquids/gases
 -50 .. + 400 °C, DIN class AA (± 0.1 °C at 0 °C)



corrosion-resistant V4A pipe Ø 3 mm, plastic handle, anti-kink screw connection, approx. 1 m 4-pole PVC cable, 4-pole Mini DIN connector
Response time T₉₀: Water 0.4 m/s approx. 10 s, air 2 m/s approx. 40 s

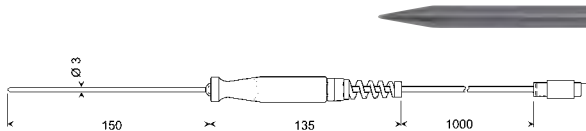
GTF 35
 Item No. 600391
 Immersion sensor for liquids/gases
 -50 .. + 400 °C, DIN class B



corrosion-resistant V4A pipe Ø 3 mm, shrink tubing, approx. 1 m 4-pole PVC cable, 4-pole Mini DIN connector
Response time T₉₀: Water 0.4 m/s approx. 10 s, air 2 m/s approx. 40 s

GES 401
 Item No. 600384
 Insertion sensor for soft plastic media
 -50 .. + 400 °C, DIN class B

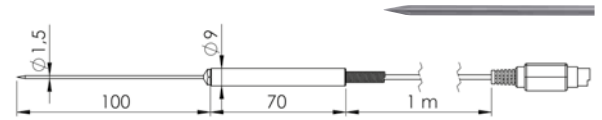
GES 401 DIN class AA
 Item No. 600385
 Insertion sensor for soft plastic media
 -50 .. + 400 °C, DIN class AA (± 0.1 °C at 0 °C)



V4A tube Ø 3 mm with needle-shaped penetration tip, plastic handle, anti-kink screw connection, approx. 1 m 4-pole PVC cable, 4-pole mini DIN connector
Response time T₉₀: Water 0.4 m/s approx. 10 s, air 2 m/s approx. 40 s

GES 20-P4 DIN class A
 Item No. 414061
 Core temperature/food probe, compact teflon handle -70..+250 °C, Pt100 class A

GES 20-P4 DIN class B
 Item No. 413543
 Core temperature/food probe, compact teflon handle -70..+250 °C, Pt100 class B

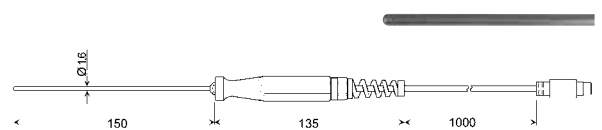


V4A tube with Ø 1.5 mm slim penetration tip, small teflon handle, stainless steel
 Anti-kink protection, 1 m teflon cable, 4-pole mini DIN connector
Response time T₉₀: Water 0.4 m/s < 1 s, air 2 m/s approx. 12 s

Advantages of the sheathed element Pt100:

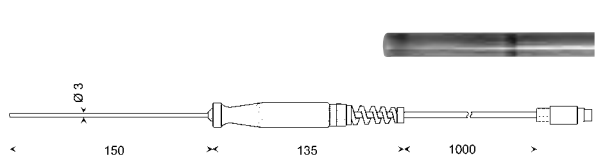
- high temperature resistance
- sheathed tube is bendable
- high shock resistance
- long lifetime

GTF 401 / 1.6
 Item No. 602066
 Immersion sensor with sheathed element Pt100 -50 .. + 400 °C, DIN class B



V4A sheathed element, bendable, Ø 1.6 mm, plastic handle, anti-kink screw connection, approx. 1 m 4-pole PVC cable, 4-pole mini DIN connector
Response time T₉₀: Water 0.4 m/s < 2 s, air 2 m/s approx. 25 s

GTF 401 1/10 DIN
 Item No. 600379
 Immersion sensor with sheathed element Pt100 -50 .. + 400 °C, recommended: 0 .. + 100 °C, 1/10 DIN class B (± 0.03 °C at 0 °C)



V4A sheathed element, bendable, Ø 3 mm, plastic handle, anti-kink screw connection, approx. 1 m 4-pole PVC cable, 4-pole mini DIN connector
Response time T₉₀: Water 0.4 m/s < 5 s, air 2 m/s approx. 60 s

IMPORTANT NOTE:
 ACCURACY DIN CLASS AA (1/3 DIN) ONLY IN THE RANGE 0 .. + 150 °C. ACCURACY 1/10 DIN ONLY IN THE RANGE 0 .. + 100 °C. IF THE TEMPERATURE SENSOR IS USED IN HIGHER MEASURING RANGES, THE ACCURACY IN THE VALIDITY RANGE CAN NO LONGER BE GUARANTEED; IN EXTREME CASES THE SENSOR MAY EVEN PERMANENTLY LOSE THE ACCURACY CLASS!

PORTABLE INSTRUMENTS

SOFTWARE

ACCESSORIES

ALARM / PROTECTION LEVEL

SUITABLE PT100 MEASURING SENSORS (4-WIRE)

-200 °C
+600 °C

GTF 601

Item No. 600387

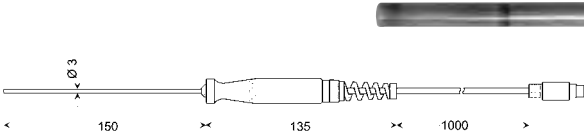
Immersion probe with sheathed element Pt100 -200 .. + 600 °C, DIN class B

-200 °C
+600 °C

GTF 601 DIN class AA

Item No. 600388

Immersion sensor with sheathed element Pt100 -200 .. + 600 °C, DIN class AA (± 0.1 °C at 0 °C)



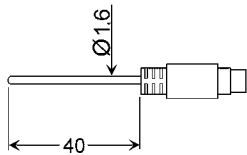
V4A sheathed element, bendable, Ø 3 mm, plastic handle, anti-kink screw connection, approx. 1 m 4-pole PVC cable, 4-pole mini DIN connector
Response time T₉₀: Water 0.4 m/s < 5 s, air 2 m/s approx. 60 s

-25 °C
+70 °C

GLF 401 Mini

Item No. 600395

Ambient air sensor without cable, -25 .. + 70 °C, DIN class A



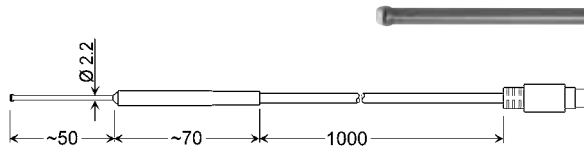
V4A pipe Ø 1.6 mm, FL = approx. 40 mm, 4-pole mini DIN connector
Response time T₉₀: Air 2 m/s approx. 25 s

-50 °C
+200 °C

GOF 401 Mini

Item No. 600396

Surface sensor, ceramic front side -50 .. + 200 °C, DIN class B



Front side Pt100 ceramic plate 2 x 2.3 mm, V4A tube Ø 2.2 mm, approx. 1 m 4-pole PVC cable, 4-pole mini DIN connector
Response time T₉₀: approx. 15 s

CALIBRATED MEASURING SYSTEMS PT 100



GENERAL:

The total measurement errors result, among other things, from the sum of the measurement errors of the device and the probe. In order to keep this as low as possible, we offer you the following calibrated and optimized measuring systems. Due to their excellent system accuracy, these are excellently suited for quality assurance within the scope of ISO9000ff, as reference devices in production, service, and maintenance, etc. The system is optimized by creating a characteristic curve that is determined separately for each temperature sensor and stored in the device (GMH 3750) or by sensor calibration with the aid of zero point and slope (GMH 3710). Due to the low measuring current, there is no self-heating of the sensor; furthermore, the measurement is thermo-voltage compensated.

GMH 3750 / SET1

Item No. 602690

Set including device, GTF401 AA, ISO calibration certificate -20 ... 70 °C and case GKK3500

TECHNICAL SPECIFICATIONS:

Optimized measuring range:	-20 .. + 70 °C
Temperature sensor:	GTF 401 DIN class AA, Pt100, 4-wire
System accuracy:	better than 0.07 °C (in the opt. measuring range)
Calibration points:	-20 °C / 0 °C / +70 °C

GMH 3750 / SET2

Item No. 602691

Set including device, GTF401 AA, ISO calibration certificate 0 ... 250 °C and case GKK3500

TECHNICAL SPECIFICATIONS:

Optimized measuring range:	0 .. + 250 °C
Temperature sensor:	GTF 401 DIN class AA, Pt100, 4-wire
System accuracy:	better than 0.3 °C (in opt. measuring range)
Calibration points:	0 °C / 100 °C / 250 °C

GMH 3710 / SET1

Item No. 602687

Set including device, GTF401 AA, ISO calibration certificate -20 ... 70 °C and case GKK3500

TECHNICAL SPECIFICATIONS:

Optimized measuring range:	-20 .. + 70 °C
Temperature sensor:	GTF 401 DIN class AA, Pt100, 4-wire
System accuracy:	better 0.1 °C (in opt. measuring range)
Calibration points:	-20 °C / 0 °C / +70 °C

GMH 3710 / DKD1

Item No. 602689

Set including device, GTF401 AA, DKD calibration certificate -20 ... 70 °C and case GKK3500

TECHNICAL SPECIFICATIONS:

Optimized measuring range:	-20 .. + 70 °C
Temperature sensor:	GTF 401 DIN class AA, Pt100, 4-wire
System accuracy:	better 0.1 °C (in opt. measuring range)
Calibration points:	-20 °C / 0 °C / +70 °C

SCOPE OF DELIVERY:

Measuring instrument GMH 3750 or GMH 3710, temperature sensor GTF 401 DIN class AA, plastic case GKK 3500 and calibration certificate with 3 calibration points

IMPORTANT NOTE:
 ACCURACY DIN CLASS AA (1/3 DIN) ONLY IN THE RANGE 0 .. + 150 °C. ACCURACY 1/10 DIN ONLY IN THE RANGE 0 .. + 100 °C. IF THE TEMPERATURE SENSOR IS USED IN HIGHER MEASURING RANGES, THE ACCURACY IN THE VALIDITY RANGE CAN NO LONGER BE GUARANTEED; IN EXTREME CASES THE SENSOR MAY EVEN PERMANENTLY LOSE THE ACCURACY CLASS!

PORTABLE INSTRUMENTS | SOFTWARE | ACCESSORIES | ALARM / PROTECTION, LEVEL