

TYPE K MEASURING PROBE (NICR-NI) WITH MINI FLAT PLUG

ACCURACIES THERMOCOUPLES:

Sensor accuracy according to DIN EN 60584-1: 2014-07

Class 1 for type K: $\pm 1.5^{\circ}\text{C}$ in the range $-40 \dots +375^{\circ}\text{C}$ **Class 1 for type N:** $\pm 1.5^{\circ}\text{C}$ in the range $-40 \dots +375^{\circ}\text{C}$ **Class 1 for type S:** $\pm 1^{\circ}\text{C}$ in the range $0 \dots 1100^{\circ}\text{C}$

SURCHARGES FOR SPECIAL DESIGNS:

(DESIGN-RELATED VARIATIONS ARE AVAILABLE)

Longer sensor tube

Surcharge for each additional 100 mm or part thereof

Longer sensor cable (silicone)

Surcharge for each additional 1 m started

Spiral cable, approx. 1.5 m stretched PUR

other sensor cable material 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 $-20 \dots +105^{\circ}\text{C}$)

Higher sensor accuracy:

DIN class AA, for Pt1000, 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

Handling fee for custom-made GF1TK/GF2TK/GF3TK

We reserve the right to charge a minimum order surcharge for custom-made products.

 $\frac{-65^{\circ}\text{C}}{+550^{\circ}\text{C}}$

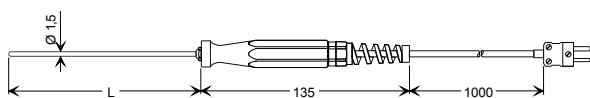
GTF 400

Item No. 600502

Immersion sensor for liquids/gases

 $-65 \dots +550^{\circ}\text{C}$

VERY FAST

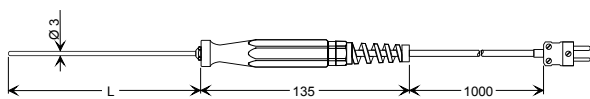


inexpensive, fast, resilient (rigid)

Corrosion-resistant V4A pipe $\varnothing 1.5$ mm, L = 130 mm, plastic handle, anti-kink screw connection, 1 m silicone cable, mini flat plugResponse time T_{90} : Water 0.4 m/s < 1 s
 $\frac{-65^{\circ}\text{C}}{+1000^{\circ}\text{C}}$

GTF 900

Item No. 600505

Immersion sensor for liquids/gases up to 1000°C $-65 \dots +1000^{\circ}\text{C}$ 

inexpensive, resilient (rigid)

Corrosion-resistant V4A pipe $\varnothing 3$ mm, L = 130 mm, plastic handle, anti-kink screw connection, 1 m silicone cable, mini flat plugResponse time T_{90} : Water 0.4 m/s < 2 s, air 2 m/s approx. 40 s
 $\frac{-200^{\circ}\text{C}}{+1150^{\circ}\text{C}}$

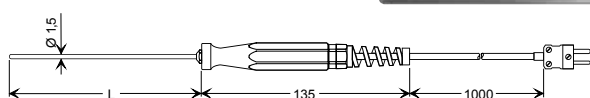
GTF 1200

Item No. 600507

Immersion sensor with sheathed thermocouple for highest temperatures

 $-200 \dots +1150^{\circ}\text{C}$

BENDABLE

Inconel 600 sheathed tube $\varnothing 1.5$ mm, bendable, L = 150 mm, plastic handle, anti-kink screw connection, 1 m silicone cable, mini flat plugResponse time T_{90} : Water 0.4 m/s approx. 3 s
 $\frac{-200^{\circ}\text{C}}{+1150^{\circ}\text{C}}$

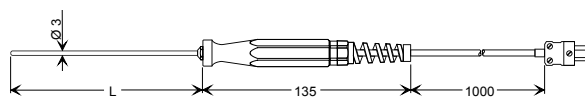
GTF 1200/300

Item No. 600510

Immersion sensor with sheathed thermocouple for highest temperatures

 $-200 \dots +1150^{\circ}\text{C}$

BENDABLE, POTENTIAL-FREE

Inconel 600 sheathed tube $\varnothing 3$ mm, bendable, L = 300 mm, plastic handle, anti-buckling glanding, 1 m silicone cable, mini flat plugResponse time T_{90} : Water 0.4 m/s approx. 5 s
 $\frac{-200^{\circ}\text{C}}{+1000^{\circ}\text{C}}$

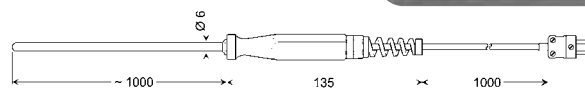
GTF 1000 AL

Item No. 600512

Immersion sensor with sheathed thermocouple for aluminum melt, etc.

 $-200 \dots +1000^{\circ}\text{C}$

VERY ROBUST



for aluminum melt, non-ferrous metals, etc.

GTF1000AL is suitable for short measurements in molten aluminum.

The wall thickness is reduced with each measurement (= wear)

V4A tube $\varnothing 6 \times 1.4$ mm, L = 1000 mm rigid, additional internal sheathed thermocouple, plastic handle, anti-kink screw connection, 1 m silicone cable, mini flat plugResponse time T_{90} : Water 0.4 m/s approx. 30 s
 $\frac{-65^{\circ}\text{C}}{+900^{\circ}\text{C}}$

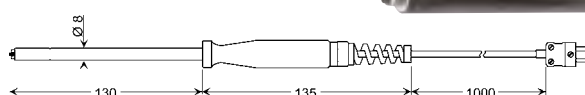
GOF 130

Item No. 600490

Surface probe with type K spiral spring

 $-65 \dots +900^{\circ}\text{C}$

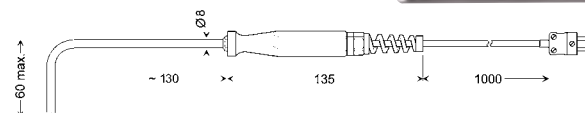
VERY FAST

for solid surfaces of any kind; 2 laser-welded, resilient spiral springs made of NiCr-Ni, V4A tube $\varnothing 8$ mm, plastic handle, anti-buckling glanding, 1 m silicone cable, mini flat plugResponse time T_{90} : approx. 5 s
 $\frac{-65^{\circ}\text{C}}{+900^{\circ}\text{C}}$

GOF 900 HO

Item No. 600500

Surface probe with type K spiral spring, curved

 $-65 \dots +900^{\circ}\text{C}$ 

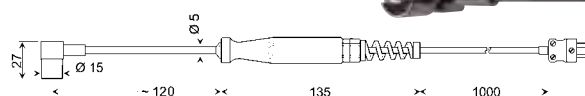
for solid surfaces of any kind; 2 laser-welded, resilient spiral springs made of NiCr-Ni, V4A tube bent, plastic handle, anti-buckling glanding, 1 m silicone cable, mini flat plug

Response time T_{90} : approx. 5 s
 $\frac{-65^{\circ}\text{C}}{+400^{\circ}\text{C}}$

GOF 200 HO

Item No. 600492

Surface probe with thermocouple spring strip, fast, angled

 $-65 \dots +400^{\circ}\text{C}$ 

for the fastest measurements at a limited height angled design, thermocouple spring strip, plastic handle, anti-buckling glanding, 1 m silicone cable, mini flat plug

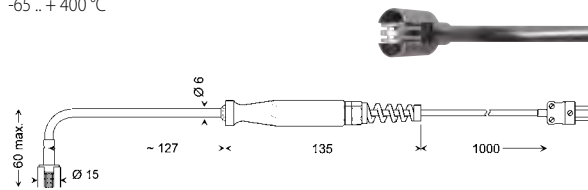
Response time T_{90} : approx. 2 s

TYPE K MEASURING PROBE (NICR-NI) WITH MINI FLAT PLUG

-65 °C
+400 °C

GOF 400 HO

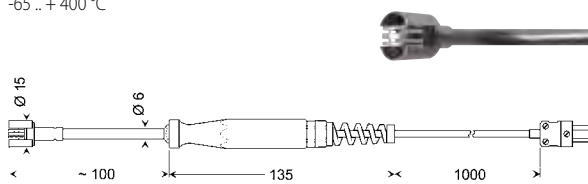
Item No. 600494

Surface probe with thermocouple spring strip, fast, angled
-65 .. + 400 °Cfor fastest measurements
angled design, thermocouple spring strip, plastic handle,
anti-buckling glanding, 1 m silicone cable, mini flat plugResponse time T_{90} : approx. 2 s

-65 °C
+400 °C

GOF 400 VE

Item No. 600496

Surface probe with thermocouple spring strip, fast
-65 .. + 400 °Cfor fastest measurements, thermocouple spring strip, plastic handle,
anti-buckling glanding, 1 m silicone cable, mini flat plugResponse time T_{90} : approx. 2 s**MH 400VE**

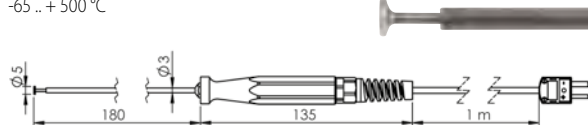
Item No. 607502

Magnet holder for GOF 400,
heat-resistant up to max. 100 °C

-65 °C
+500 °C

GOF 501

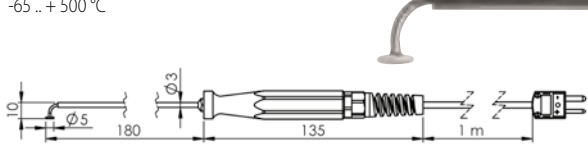
Item No. 475077

Surface probe with silver measuring surface
-65 .. + 500 °CFor straight and solid surfaces of any kind, solid silver plate, plastic handle,
anti-buckling glanding, 1 m silicone cable, mini flat plugResponse time T_{90} : approx. 3 s

-65 °C
+500 °C

GOF 501 HO

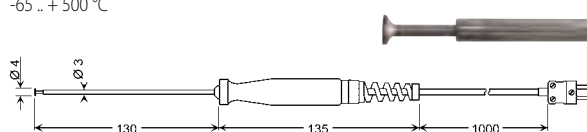
Item No. 475072

Surface probe with silver measuring surface, angled
-65 .. + 500 °CFor straight and solid surfaces of any kind, angled design, solid silver plate,
plastic handle, anti-buckling glanding, 1 m silicone cable, mini flat plugResponse time T_{90} : approx. 3 s

-65 °C
+500 °C

GOF 130 CU

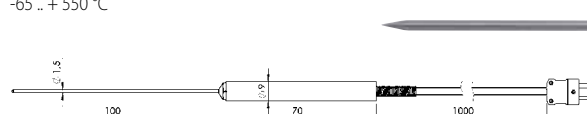
Item No. 600486

Surface probe with resilient copper plate
-65 .. + 500 °Cfor straight and solid surfaces of any kind
Spring-loaded Cu plate, plastic handle, anti-buckling glanding,
1 m silicone cable, mini flat plugResponse time T_{90} : approx. 5 s

-65 °C
+550 °C

GES 20-K

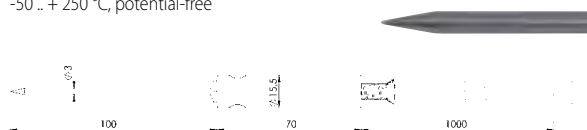
Item No. 602591

Core temperature/food probe, compact teflon handle
-65 .. + 550 °Cfor canteen kitchens, bakeries, butcher's shops, etc.
V4A tube with Ø 1.5 mm slim penetration tip, small teflon handle,
stainless steel kink protection, 1 m teflon cable, mini flat plugTemperature resistance: teflon handle and teflon cable 250 °C
Response time T_{90} : Water 0.4 m/s < 1 s, air 2 m/s approx. 12 s

-50 °C
+250 °C

GES 21-K

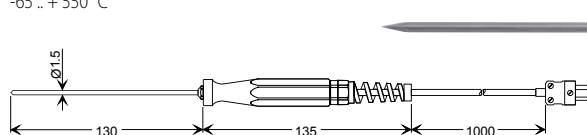
Item No. 600074

Core temperature/food probe
-50 .. + 250 °C, potential-freefor canteen kitchens, bakeries, butcher's shops, etc.
V4A tube Ø 3 mm with needle-shaped penetration tip, large white Teflon handle,
stainless steel kink protection, 1 m Teflon cable, mini flat plugTemperature resistance: teflon handle and teflon cable 250 °C
Response time T_{90} : Water 0.4 m/s < 2 s, air 2 m/s approx. 40 s

-65 °C
+550 °C

GES 130

Item No. 600514

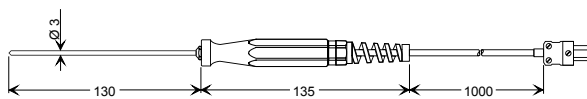
Insertion sensor for soft plastic media
-65 .. + 550 °CV4A tube with Ø 1.5 mm slim penetration tip, plastic handle, anti-kink screw
connection, 1 m silicone cable, mini flat plugResponse time T_{90} : Water 0.4 m/s approx. 1 s, air 2 m/s approx. 1.5 s

TYPE K MEASURING PROBE (NICR-NI) WITH MINI FLAT PLUG

-65 °C
+550 °C

GES 500

Item No. 600516
Insertion probe for soft plastic media
-65 .. + 550 °C

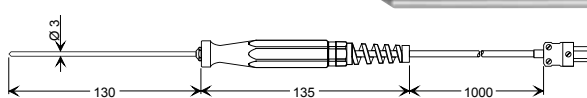


V4A tube Ø 3 mm with needle-shaped penetration tip, plastic handle, anti-buckling glanding, 1 m silicone cable, mini flat plug
Response time T_{90} : Water 0.4 m/s < 2 s

-65 °C
+1000 °C

GES 900

Item No. 600518
Insertion probe for soft plastic media
-65 .. + 1000 °C

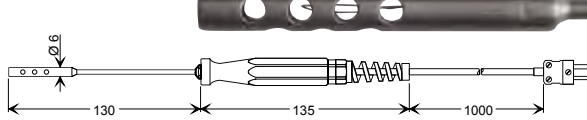


Spring-loaded V4A tube with Ø 3 mm penetration tip, plastic handle, anti-buckling glanding, 1 m silicone cable, mini flat plug
Response time T_{90} : Water 0.4 m/s approx. 5 s

-65 °C
+600 °C

GTL 130

Item No. 602304
Air/gas probe
-65 .. + 600 °C



for room temperature, smoke gases, etc.; Perforated V4A protective tube with thermocouple wires welded behind it, plastic handle, anti-buckling glanding, 1 m silicone cable, mini flat plug
Response time T_{90} : Air 2 m/s approx. 15 s

-50 °C
+250 °C

GTF 40 K-620

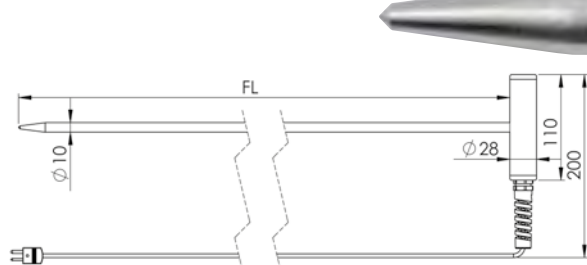
Item No. 610829
Stainless steel T-handle insertion probe
-50..+250 °C, type K, class 1, FL 620 mm

GTF 40 K-1000

Item No. 475184
Stainless steel T-handle insertion probe
-50..+250 °C, type K, class 1, FL 1000 mm

GTF 40 K-1500

Item No. 475185
Stainless steel T-handle insertion probe
-50..+250 °C, type K, class 1, FL 1500 mm

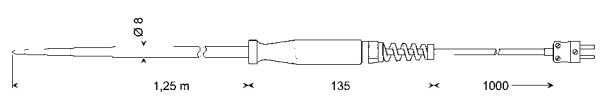


Stainless steel tube Ø10 mm with insertion tip, robust and ergonomic T-handle made of stainless steel, anti-buckling glanding, 1 m silicone cable, mini flat plug
Response time T_{90} : Water 0.4 m/s approx. 6 s

-65 °C
+200 °C

GKF 125

Item No. 600520
Compost sensor/grain sensor
-65 .. + 200 °C



fast in seconds and yet stable
V4A pipe Ø 8 mm at the front stepped down to Ø 3 mm, plastic handle, anti-buckling glanding, 1 m silicone cable, mini flat plug
Response time T_{90} : Water 0.4 m/s approx. 6 s

VERY ROBUST

-50 °C
+250 °C

GES200-K

Item No. 478767
Robust insertion probe,
for application in soils, bulk material, asphalt, etc.
-50 ... +250 °C, type K, class 1



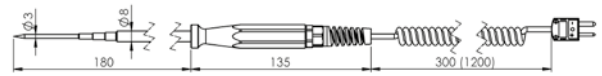
Stainless steel pipe Ø 8 mm with penetration tip, plastic handle, anti-buckling glanding, spiral cable (approx. 1.2 m stretched), mini flat plug
Response time T_{90} : Water 0.4 m/s approx. 4 s

NEW!

-65 °C
+550 °C

GAF 200

Item No. 600522
Asphalt probe or insertion probe
-65 .. + 550 °C

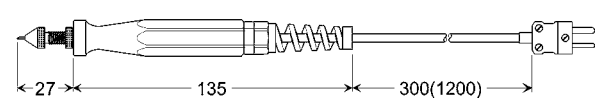


for liquids, soft plastic media, etc.; V4A pipe Ø 8 mm at the front stepped down to Ø 3 mm, plastic handle, anti-buckling glanding, spiral cable (approx. 1.2 m stretched), mini flat plug
Response time T_{90} : Water 0.4 m/s approx. 6 s

-50 °C
+200 °C

GRF 200

Item No. 604663
Tire sensor
-50 .. + 200 °C

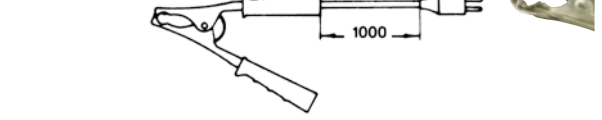


Insertion sensor within seconds with depth stop (needle adjustable from 0..14 mm depth). Suitable for tire temperature and other soft plastic media. Plastic handle, anti-buckling glanding, spiral cable (approx. 1.2 m stretched), mini flat plug
Response time T_{90} : approx. 5 s

-65 °C
+150 °C

GTZ 300

Item No. 603287
Clamp probe, type K
-65 .. + 150 °C



for pipe surface temperature measurements
for pipes up to approx. Ø 25 mm, 1 m silicone cable, mini flat plug
Response time T_{90} : approx. 3 s

TYPE K MEASURING PROBE (NICR-NI) WITH MINI FLAT PLUG

$\frac{-65\text{ }^{\circ}\text{C}}{+300\text{ }^{\circ}\text{C}}$

GTF 300

Item No. 600072

Wire probe for measurements within seconds
Twisted/welded measuring tip**GTF 300 -UV**

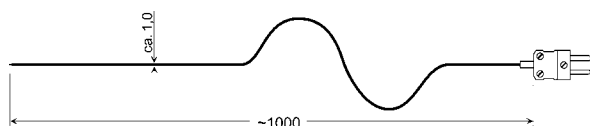
Item No. 600081

Wire probe for measurements within seconds
Measuring tip welded untwisted**GTF 300 -SP**

Item No. 605973

Wire probe for measurements within seconds
Measuring tip with welding bead

-65 .. + 300 °C, permanent insulation up to max. +250 °C

for air, gases, liquids, smallest surfaces
Teflon-insulated twisted $\varnothing$ 0.2 mm thermocouple wires,
welded measuring tip, very flexible, mini flat plugResponse time T_{90} : Water 0.4 m/s approx. 0.3 s

$\frac{-65\text{ }^{\circ}\text{C}}{+400\text{ }^{\circ}\text{C}}$

GTF 300 GS

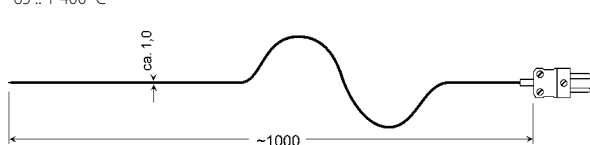
Item No. 602554

Wire probe, glass-silk insulated with mini flat plug
for measurements within seconds
twisted measuring tip**GTF 300 GS -UV**

Item No. 607893

Wire probe, glass-silk insulated with mini flat plug
for measurements within seconds
Measuring tip welded untwisted**GTF 300 GS -SP**

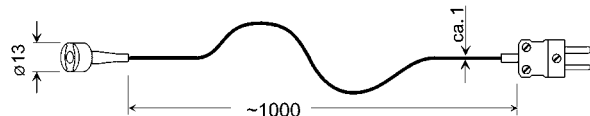
Item No. 606208

Wire probe, glass-silk insulated with mini flat plug
for measurements within seconds
Measuring tip with welding beadfor air, gases, smallest surfaces (not for liquids)
Glass silk insulated $\varnothing$ 0.2 mm thermocouple wires, mini flat plugResponse time T_{90} : Water 0.4 m/s approx. 0.3 s surcharge for any length
per m

$\frac{-65\text{ }^{\circ}\text{C}}{+250\text{ }^{\circ}\text{C}}$

GMF 250

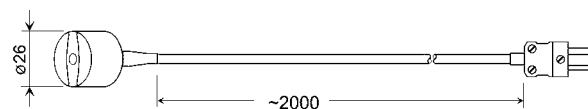
Item No. 600071

Surface magnetic probe
-65 .. + 250 °Cself-adhesive on magnetic materials, spring-loaded copper plate $\varnothing$ 5 mm,
1 m teflon-insulated twisted cable, mini flat plugResponse time T_{90} : approx. 5 s

$\frac{-65\text{ }^{\circ}\text{C}}{+200\text{ }^{\circ}\text{C}}$

GMF 200

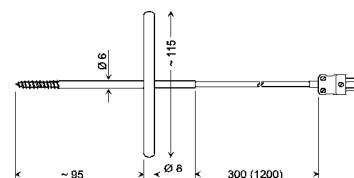
Item No. 601377

Surface magnetic probe
-65 .. + 200 °Cself-adhesive on magnetic materials (higher magnetic holding force),
spring-loaded copper plate $\varnothing$ 5 mm, stable 2 m long silicone cable, mini flat plug
Response time T_{90} : approx. 5 s

$\frac{-65\text{ }^{\circ}\text{C}}{+200\text{ }^{\circ}\text{C}}$

GGF 200

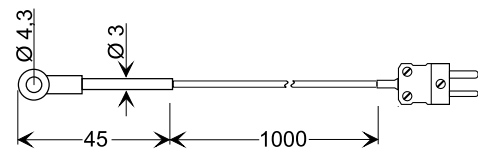
Item No. 603418

Screw-in frozen food probe, type K
-65 .. + 200 °Cfor screw insertion into frozen food, etc., without previous pre-drilling,
V4A tube $\varnothing$ 6 mm with screw tip, spiral cable (approx. 1.2 m stretched),
mini flat plugResponse time T_{90} : approx. 15 s

$\frac{-50\text{ }^{\circ}\text{C}}{+250\text{ }^{\circ}\text{C}}$

GKF 250

Item No. 600141

Cable lug probe
-50 .. + 250 °CFor tightening with a suitable screw (standard M4), 1 m teflon cable,
mini flat plugResponse time T_{90} : approx. 10 s

$\frac{-50\text{ }^{\circ}\text{C}}{+500\text{ }^{\circ}\text{C}}$

GLS 500

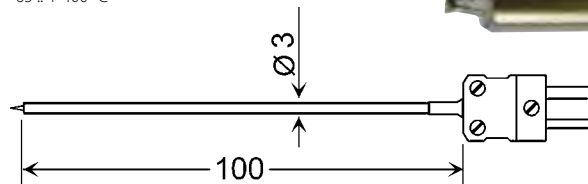
Item No. 602962

Soldering tip probe
-50 .. + 500 °C (briefly)for direct connection to the measuring instrument
2 laser-welded spring coil springs made of NiCr-Ni,
ceramic tube approx. 6 mm $\varnothing$, mini flat plugResponse time T_{90} : approx. 2 s

$\frac{-65\text{ }^{\circ}\text{C}}{+400\text{ }^{\circ}\text{C}}$

GTO 130 OK

Item No. 600134

Air/gas probe without cable
-65 .. + 400 °CInterchangeable probe without cable, also suitable for surfaces to
a limited extentType K-wires $\varnothing$ 0.5 mm, front welded and ground flat, V4A tube $\varnothing$ 3 mm,
mini flat plug rigidly connectedResponse time T_{90} : approx. 2 s

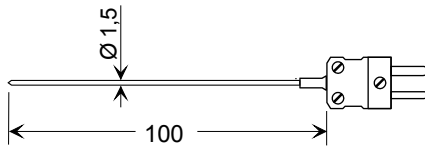
TYPE K MEASURING PROBE (NICR-NI) WITH MINI FLAT PLUG

-65 °C
+400 °C

GTE 130 OK

Item No. 601483

Insertion probe, without cable
-65 .. + 400 °C



Interchangeable probe without cable, for soft plastic media
Spring-loaded V4A tube with Ø 1.5 mm slim insertion tip,
mini flat plug rigidly connected

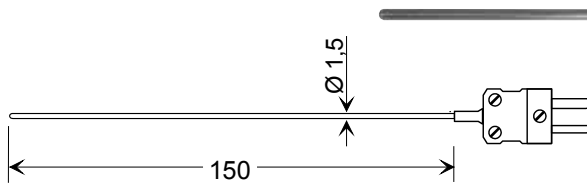
Response time T_{90} : Water 0.4 m/s < 1 s

-200 °C
+1150 °C

GTT-15-150

Item No. 607552

Sheathed thermocouple type K (NiCr-Ni), Immersion probe
-200 .. + 1150 °C



for air, gases, liquids

Sheathed thermocouple with Inconel 600 sheathed tube Ø 1.5 mm, bendable,
mini flat plug rigidly connected

Response time T_{90} : Water 0.4 m/s approx. 3 s

+50 °C
+1550 °C

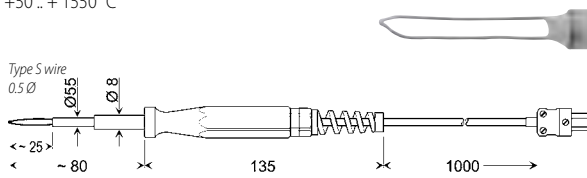
GBF 1550

Item No. 603037

Bunsen burner probe type S
+50 .. + 1550 °C

FOR HIGH
TEMPERATURES

Request daily rate



The tip of the probe may be held directly in the flame. V4A pipe Ø 8 mm,
with stepped ceramic pipe Ø 5.5 mm, plastic handle, silicone cable, mini flat plug

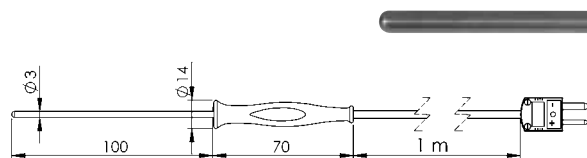
Response time T_{90} : approx. 2 s

-65 °C
+550 °C

GF 1TK-T3

Item No. 609695

compact type K hand probe with silicone handle, Ø 3 mm immersion probe
-65 .. + 550 °C, type K, class 1



Immersion tip Ø 3 mm made of V4A tube, black silicone handle -50 .. + 250 °C,
1 m silicone cable -50 .. + 200 °C, sensor tip and silicone handle IP67,
mini flat plug

Response time T_{90} : Water 0.4 m/s < 2 s, air 2 m/s approx. 40 s

VARIANT:**GF 1TK-T3-LE**

Item No. 609696

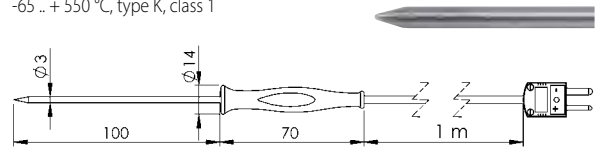
compact type K hand probe with silicone handle with loose ends

-65 °C
+550 °C

GF 1TK-E3

Item No. 609697

compact type K hand probe with silicone handle,
Ø 3 mm penetration probe
-65 .. + 550 °C, type K, class 1



Insertion tip Ø 3 mm made of V4A tube, black silicone handle -50 .. + 250 °C,
1 m silicone cable -50 .. + 200 °C, probe tip and silicone handle IP67,
mini flat plug

Response time T_{90} : Water 0.4 m/s < 2 s, air 2 m/s approx. 40 s

VARIANT:**GF 1TK-E3-LE**

Item No. 609698

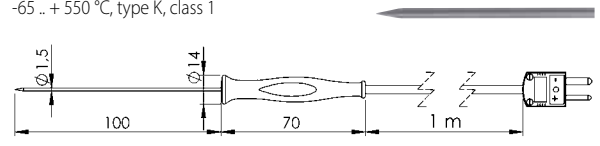
compact type K hand probe with silicone handle with loose ends

-65 °C
+550 °C

GF 1TK-E1.5

Item No. 609699

compact type K hand probe with silicone handle,
Ø 1.5 mm extra thin penetration probe
-65 .. + 550 °C, type K, class 1



Insertion tip Ø 1.5 mm made of V4A tube, black silicone handle -50 .. + 250 °C,
1 m silicone cable -50 .. + 200 °C, probe tip and silicone handle IP67, mini flat plug

Response time T_{90} : Water 0.4 m/s < 1 s, air 2 m/s approx. 15 s

VARIANT:**GF 1TK-E1.5-LE**

Item No. 609700

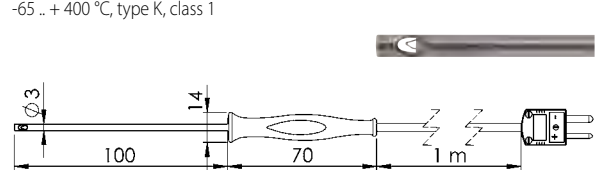
compact type K hand probe with silicone handle with loose ends

-65 °C
+400 °C

GF 1TK-L3

Item No. 611299

compact type K hand probe with silicone handle,
Ø 3 mm air sensor for clean media
-65 .. + 400 °C, type K, class 1



(use GF 1TK-T3 for dirty media), perforated V4A tube Ø 3 mm, measuring element
freely arranged, black silicone handle -50 .. + 250 °C,
1 m silicone cable -50 .. + 200 °C, mini flat plug

Response time T_{90} : Air 2 m/s approx. 15 s

VARIANT:**GF 1TK-L3-LE**

Item No. 611300

compact type K hand probe with silicone handle with loose ends