

Temperature probes

Accuracy:

Pt100 / Pt1000: sensor accuracy acc. to DIN EN 60751
DIN cl. B: (area of validity: -50 ... +500 °C) ±0,3°C at 0°C
DIN cl. A: (area of validity: -30 ... +300 °C) ±0,15°C at 0°C
DIN cl. AA = 1/3 DIN cl. B: (0 ... +150 °C) ±0,1°C at 0°C
1/10 DIN Kl. B: ±0,03°C at 0°C

Thermocouples: sensor accuracy acc. to DIN EN 60584-2
class 1 für Typ K: ±1,5°C at range -40...+375°C
class 1 für Typ N: ±1,5°C at range -40...+375°C
class 1 für Typ S: ±1°C at range 0...1100°C

Special designs (Upcharges):

basic fee for custom made probe

longer probe tube

longer cable (silicone)

other cable material

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 Kl. B,

for Pt100 and Pt1000,

tolerances: 0,1°C at 0°C

higher sensor accuracy: 1/10 DIN Kl. B,

for Pt100-probes,

tolerances: 0,03°C at 0°C

upcharge per further starting 100 mm

upcharge per further starting meter



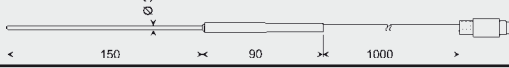
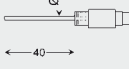
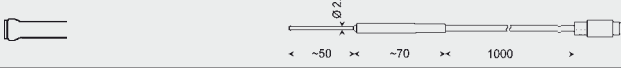
upcharge per meter

please refer to cable pricing p. 135

Please note:

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

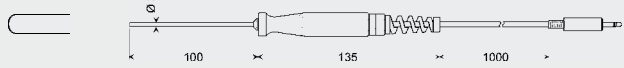
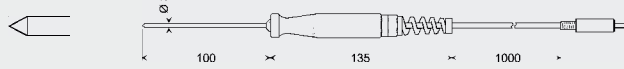

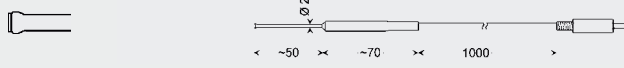
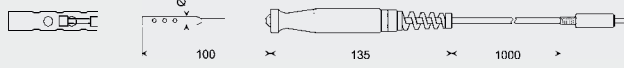
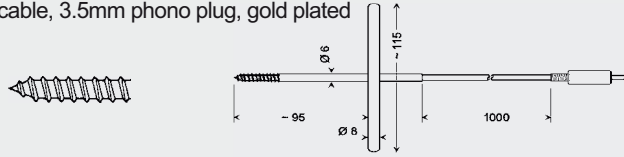
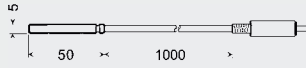
Pt100 Measuring probe

Ordering type Range / DIN Class	Application / Dimensions (mm) techn. specification	Response time T ₉₀	suitable for	Price
GTF 401 -50 ... +400°C DIN cl. B GTF 401 1/3 DIN * -50 ... +400°C GTF 401 1/10 DIN * -50 ... +400°C	Immersion probe for liquids / gases non-corrosive stainless steel tube (V4A), plastic handle, approx. 1 m 4-wire PVC cable, anti-buckling glanding, 4-pin miniature DIN-type plug  as GTF401 however 1/3 DIN class B (±0,1°C at 0°C) as GTF401 however 1/10 DIN class B (±0,03°C at 0°C) and flexible jacket tube, Ø 3mm	approx. 10 sec.	GMH2000(SA) GMH35xx GMH3710 GMH3750	
GES 401 -50 ... +400°C DIN cl. B GES 401 1/3 DIN * -50 ... +600°C	Insertion probe for soft media Specification as for GTF401 but with needle type prod  as GES401 however 1/3 DIN class B (±0,1°C at 0°C)	approx. 10 sec.	GMH2000(SA) GMH35xx GMH3710 GMH3750	
GTF 601 -200 ... +600°C DIN cl. B GTF 601 1/3 DIN * -200 ... +600°C	Immersion probe for liquids / gases, 4-wire handle as per GTF150, approx. 1 m 4-wire PVC cable, 4-pin miniature DIN-type plug, flexible jacket tube, 3mm Ø. (smaller tube diameter upon request) as GTF601 however 1/3 DIN class B (±0,1°C at 0°C)	approx. 10 sec.	GMH2000(SA) GMH35xx GMH3710 GMH3750	
GTF 35 -50 ... +400°C DIN cl. B	Immersion probe for liquids / gases, 4-wire non-corrosive stainless steel tube (V4A), approx. 1 m 4-wire PVC cable, 4-pin miniature DIN-type plug 	approx. 10 sec.	GMH35xx GMH3710 GMH3750	
GLF 401 Mini -25 ... +70°C DIN cl. A GOF 401 Mini -50 ... +200°C DIN cl. B	Fast and accurate Measurement of ambient air Ø 1,6 mm, FL = ca. 40 mm, 4-pin mini. DIN-type plug  Surface probe for solid surfaces, fast 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 	approx. 15 sec.	GMH35xx GMH3710 GMH3750	

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

Pt1000 - Measuring probes, 2-wire

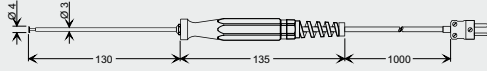
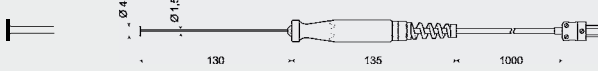
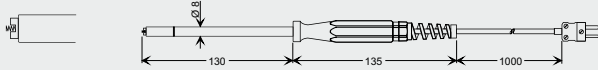
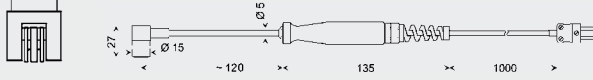
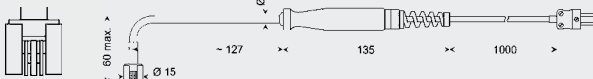
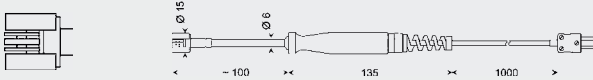
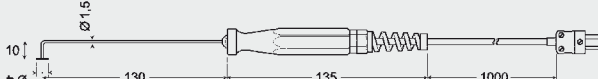
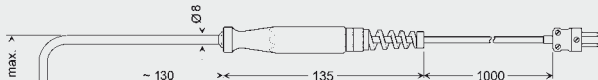
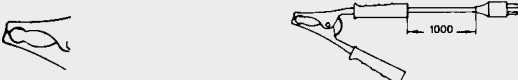
All types of probes also available for Pt100 2- / 3- or 4-wire connection

Ordering type Range	Application / Dimensions (mm) techn. specification	Response time T_{90}	suitable for	Price
GTF 175 -70 ... +200°C Pt1000 class B	Immersion probe for liquids / gases non-corrosive stainless steel tube (V4A), plastic handle, anti-buckling glanding, 1m highly flexible silicone cable, 3.5 mm gold plated jack connector 	fluid approx. 10 sec. air approx. 40 sec.	GMH175 GFTH200 ST60, ST80	
GTF 175 LE	like before but with loose cable ends		GIA20EB	
GTF 175 / 1.6 -70 ... +200°C Pt1000 class B	Immersion probe for liquids / gases probe tube: jacket element $\varnothing 1.6$ mm, flexible, other data p.r.t. GTF175	fluid approx. 4 sec. air approx. 25 sec.	GMH175 GFTH200 ST60, ST80	
GTF 175 / 1.6 - LE	like before but with loose cable ends		GIA20EB	
GES 175 -70 ... +200°C Pt1000 class B	Insertion probe for soft media stainless steel tube (V4A) with slim insertion tip, other data p.r.t. GTF175 	approx. 10 sec.	GMH175 GFTH200 ST60, ST80	
GES 175 LE	like before but with loose cable ends		GIA20EB	
GOF 175 -70 ... +200°C Pt1000 class B	Surface probe for solid surfaces S2 x 2.3mm ceramic Pt1000 sensor mounted at the tip. V4A tube, quadratric 3 x 3 mm at the tip, other data p.r.t. GTF175 	approx. 60 sec.	GMH175 ST60, ST80	
GOF 175 LE	like before but with loose cable ends		GIA20EB	
GOF 175 Mini -70 ... +200°C Pt1000 class B	Surface probe for solid surfaces, fast S2 x 2.3mm ceramic Pt1000 sensor mounted at the tip, V4A tube, 1m silicone cable, 3.5 mm gold plated jack connector 	approx. 15 sec.	GMH175 GFTH200 ST60, ST80	
GLF 175 -70 ... +200°C Pt1000 class B	Air/gas probe for clean media (for dirty measurands use GTF175), punched V4A protection tube, fast miniaturized Pt1000 mounted freely in tube, resulting in fast response, other data p.r.t. GTF175 	approx. 15 sec.	GMH175 GFTH200 ST60, ST80	
GLF 175 LE	like before but with loose cable ends		GIA20EB	
GGF 175 -70 ... +200°C Pt1000 class B	Probe for deep-frozen products to screw into deep-frozen products, etc. no predrilling required. Stainless steel (V4A) tube, 6 mm \varnothing with screw prod, flexible silicone cable, 3.5mm phono plug, gold plated 	approx. 15 sec.	GMH175 GFTH200 ST60, ST80	
GTF 2000 -50 ... +200°C Pt1000 class B	Air- / tube mounting probe Probe for diving tube. Tube of stainless steel, highly flexible silicone cable 2 x 0.25 ² , 3.5mm gold plated phono plug 		GMH175 GFTH200 ST60, ST80	
GTF 2000 LE	Customized cable lengths (1m standard), each beginning meter like before but with loose cable ends		GIA20EB	
GTF 2000 WD -20 ... +105°C Pt1000 class B	Air- / tube mounting probe - water proof type Construction like described before, but cable of PVC and tube enclosed water proof, max. 105°C!		GMH175 GFTH200 ST60, ST80	
GTF 2000 WD - LE	like before but with loose cable ends		GIA20EB	

We manufacture all types of probes according to Your special desires - low priced and fast. Please contact us.

NiCr-Ni (Type K) - Measuring Probe

class 1 = highest precision-class according to DIN

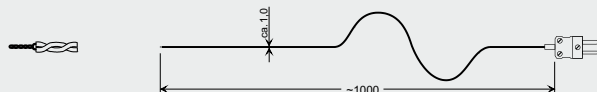
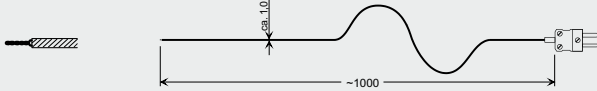
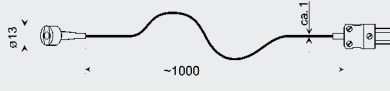
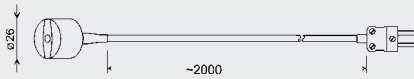
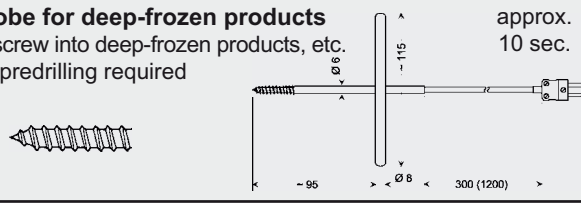

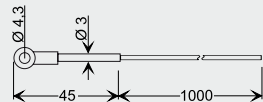
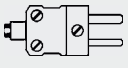

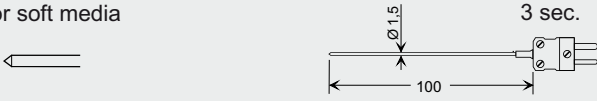
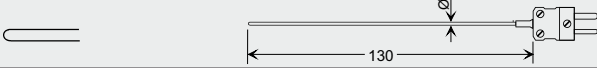
Ordering type	Range °C	Application / Dimensions (mm)	Response time T_{90}	further technical details
GOF 130CU	-65 ... +500°C	Surface probe for straight and solid metal surfaces 	approx. 3 sec.	Spring-loaded copper plate, plastic handle, silicone cable, DIN-type flat-pin plug
GOF 500	-65 ... +500°C	Surface, immersion, air, gas probe for any solid surface 	approx. 5 sec.	Solid copper plate, plastic handle, silicone cable, DIN-type flat-pin plug
GOF 130	-65 ... +900°C	Surface probe for any solid surface 	approx. 2 sec.	2 laser welded NiCr-Ni resilient springs, V4A-tube, plastic handle, silicone cable, DIN-type flat-pin plug
GOF 200HO	-65 ... +400°C	Surface probe for fastest measurements in small gaps 	approx. 2 sec.	Small elbow-type, flexible thermocouple tapes, plastic handle, silicone cable, DIN-type plug
GOF 400HO	-65 ... +400°C	Surface probe for fastest measurements 	approx. 2 sec.	Flexible thermocouple tapes, plastic handle, silicone cable, DIN-type plug
GOF 400VE	-65 ... +400°C	Surface probe for fastest measurements 	approx. 2 sec.	Flexible thermocouple tapes, plastic handle, silicone cable, DIN-type plug Accessories MH 400VE: magnet holder, heat resistant up to 100 °C
GOF 500 HO	-200 ... +500°C	Surface probe for fastest measurements Ø 1,5 MTE (K) Inconel 600 	approx. 5 sec.	Solid copper plate, plastic handle, silicone cable, DIN-type flat-pin plug
GOF 900 HO	-65 ... +900°C	Surface probe for any solid surface 	approx. 2 sec.	2 laser welded NiCr-Ni resilient springs, V4A-tube, plastic handle, silicone cable, DIN-type flat-pin plug
GTZ 300	-65 ... +150°C	Clip-on probe for temperature measurements at tube surfaces 	approx. 3 sec.	for tubes up to approx. 1" Ø, silicone cable, DIN-type flat-pin plug

NiCr-Ni Standard Measuring Probe "Type K" (ctd.)

Probes as Pt100 or Pt1000 upon request

Ordering type	Range °C	Application / Dimensions (mm)	Response time T ₉₀	further technical details
GTF 400	-65 ... +550°C	Immersion probe inexpensive, fast, elastic (rigid)	approx. 3 sec.	Stainless steel tube, 1.5Ø, L=130mm, silicone cable
GTF 900	-65 ... +1000°C	Immersion probe inexpensive, elastic (rigid)	approx. 5 sec.	Stainless steel tube, 3Ø, L=130mm, silicone cable (any length against upcharge) each additional 100mm
GTF 1200	-200 ... +1150°C	Immersion probe for High-temperature flexible thermowell	approx. 3 sec.	Inconel 1.5Ø, L=150mm, silicone cable, DIN-type flat-pin plug, electrically insulated
GTF 1200/300	-200 ... +1150°C	Immersion probe flexible thermowell	approx. 5 sec.	Inconel 3Ø, L=300mm, electrically insulated
GTF 1000 AL	-200 ... +1000°C	Immersion probe for aluminium melt, non-ferrous metal, etc.	approx. 30 sec.	V4A tube Ø6x1,4 mm, L=1000mm rigid, plastic handle, 1m silicone cable, DIN-type flat-pin plug, add. internal jacket TC, high lifetime
GES 21K	-50 ... +250°C	Core temperature- / food probe big white teflon handle water- and steam-tight, stainless steel anti-buckling		1 m teflon cable, loose ends, teflon handle Use for canteen kitchen, bakeries, butcher's shops, etc.
GES 130	-65 ... +550°C	Insertion probe for soft media	approx. 3 sec.	Flexible stainless steel (V4A) needle, 1.5 mm Ø, plastic handle, silicone cable, DIN-type flat-pin plug
GES 500	-65 ... +550°C	Insertion probe for soft media	approx. 5 sec.	Flexible stainless steel (V4A) needle, 3 mm Ø, ...
GES 900	-65 ... +1000°C	Insertion probe inexpensive, elastic (rigid)	approx. 5 sec.	Stainless steel (V4A) tube, 3Ø, L=130mm, plastic handle, silicone cable, DIN-type flat-pin plug
GKF 125	-65 ... +200°C	Probe for compost, grain etc. quick response within seconds but also rigid design	approx. 6 sec.	V4A tube 8mm dia. reduced to 3 mm, plastic handle, silicone cable, DIN-type flat-pin plug
GAF 200	-65 ... +550°C	Injection or asphalt probe for liquid or soft media etc.	approx. 6 sec.	V4A tube 8mm dia. reduced to 3 mm, plastic handle, spiral cable stretchable to 1.2m, DIN-type flat-pin plug Upcharge for other probe length
GTL 130	-65 ... +600°C	Air/gas probe (room temperature, smoke gases etc.)	approx. 1,5 sec.	Stainless steel (V4A) tube, plastic handle, silicone cable, DIN-type flat-pin plug

NiCr-Ni Standard Measuring Probe "Type K" (ctd.)

Ordering type	Range °C	Application / Dimensions (mm)	Response time T_{90}	further technical details
GTF 300	-65 ... +300°C	Quick-response measurements in air, liquids, for very small surfaces 	approx. 0,3 sec.	Twisted pair of teflon insulated thermowell wires, 0,2 mm Ø each, welded measuring prod, very flexible, DIN-type flat-pin plug. Any length (up to 50m) against upcharge.
GTF 300 GS	-65 ... +400°C	For high temperatures in gases, air and for solid surfaces (not suitable for liquids) 	approx. 0,3 sec.	Pair of glass fibre insulated thermowell wires, 0,2 mm Ø each, DIN-type flat-pin plug. Upcharge for special length of probe
GMF 250	-65 ... +250°C	Magnetic surface probe sticks at magnetic materials, resilient measuring probe with small metal plate, approx 5mm dia. 	approx. 5 sec.	approx. 1m of twisted teflon insulated wire, DIN-type flat-pin plug
GMF 200	-65 ... +200°C	Magnetic surface probe sticks at magnetic materials, resilient measuring probe with small metal plate, approx 5mm dia. 	approx. 5 sec.	extended type (higher magnetic force), rigid 2m silicone cable, DIN-type flat-pin plug
GGF 200	-65 ... +200°C	Probe for deep-frozen products to screw into deep-frozen products, etc. no predrilling required 	approx. 10 sec.	Stainless steel (V4A) tube, 6 mm Ø with screw prod, spiral cable (approx. 1.2 m drawn out), DIN-type flat-pin plug
GRF 200	-50 ... +200°C	Tire probe fast response insertion probe with stop screw (needle adjustable 0 to 14 mm). Suitable for measuring temperature of tires and other soft media. 	approx. 5 sec.	plastic handle, spiral cable (approx. 1.2m drawn out), DIN-type flat-pin plug
GKF 250	-50 ... +250°C	Cable lug probe 		1 m teflon cable, loose ends
GLS 500	-50 ... +500°C	Soldering tip probe for direct connection to instrument 	approx. 2 sec.	thermo couple springs (~5mm) with laser welded meas. point (wires 0.3 Ø), ceramic tube approx. 6 Ø, DIN-type flat-pin plug
GTO 130 OK	-65 ... +400°C	Air-/Gas probe (changeable probe without cable) limited suitable also for surfaces 		NiCr-Ni-wire 0,5 Ø, welded and grinded flat, V4A-tube, DIN-type flat-pin plug, rigid connection
GTE 130 OK	-65 ... +400°C	Insertion probe (plug-in type without cable) for soft media 	approx. 3 sec.	Flexible stainless steel (V4A) needle, 1.5 mm Ø, DIN-type flat-pin plug, rigid connection
GTT 1150 OK	-200 ... +1150°C	Immersion probe (also suitable for gases/air - use as surface probe limited) 	approx. 3 sec.	Thermowell, Inconel 1.5 mm Ø, electrically insulated , flexible, DIN-type flat-pin plug, rigid connection (other length or Ø p.r.t. p. 126)

Customized jacket thermo elements NiCr-Ni, low price standard lengths available from stock

(Delivery on short notice from stock or within 1 or 2 working days) - please do not hesitate to contact us !)

1. Jacket thermo elements NiCr-Ni (type K) complete with miniature flat-pin plug NST1200 (free from thermal e.m.f.)

Specification:

Jacket material: Inconel 600, flexible - other materials upon request

Insulation: highly compressed pure MgO

Thermo wires: NiCr-Ni, DIN IEC 584, welding insulated (volt-free)

Accuracy: optimum accuracy (Cl. 1) = $\pm 1.5^{\circ}\text{C}$ or $\pm 0.4\%$ of measuring value

(Almost double accuracy as compared to class 2. As a comparison with class 2: $\pm 2.5^{\circ}\text{C}$ or $\pm 0.75\%$ of meas. value)

Temperature application range: $-220 \dots +1150^{\circ}\text{C}$ (Probe tip and front part; wire outlet: max. 200°C)
(Accuracy class 1 applicable from $-40 \dots +1000^{\circ}\text{C}$)

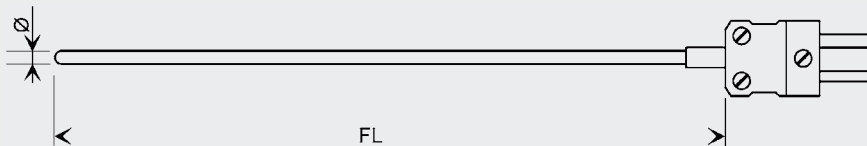
Upon request:

Miniature flat-pin coupling free from thermal voltage. (Please order separately)

Type NKU 1200

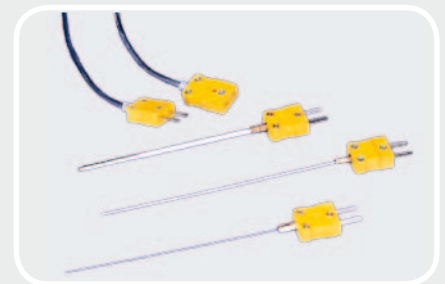
Integral U-coupling (for installation in front panels)

Type NKU 1200 O



Advantages of the flat-pin plug free from thermal e.m.f.:

- Same material for contacts and thermo elements
- No incorrect temperature values due to different materials
- Polarity cannot be mixed up
- One plug size for \varnothing from 0,5 to 6,0 mm
- Any extension possible (extension cable VKA-1m or length per customers' requests)
- Sensor elements can be exchanged easily



Type	\varnothing mm	FL mm $\pm 10\text{mm}$	Price	Type	\varnothing mm	FL mm $\pm 10\text{mm}$	Price
GTT05150	0,5	160		GTT30150	3,0	145	
GTT05250		260		GTT30250		245	
GTT05500		510		GTT30500		495	
GTT051000		1010		GTT301000		995	
GTT051500		1510		GTT301500		1495	
GTT10150	1,0	145		GTT60150	6,0	145	
GTT10250		245		GTT60250		245	
GTT10500		495		GTT60500		495	
GTT101000		995		GTT601000		995	
GTT101500		1495		GTT601500		1495	
GTT15150	1,5	145		Accessories:			
GTT15250		245		NKU1200	(coupling free from thermal e.m.f.)		
GTT15500		495		NKU1200O	(U-coupling free from thermal e.m.f.)		
GTT151000		995		NST1200	(plug free from thermal e.m.f.)		
GTT151500		1495		AGL1	(silicone compensation line)		
				VKA-1m	plug-in extension cable (each additional meter)		

All thermo elements accuracy class 1 (Almost double accuracy than class 2!)

2. Jacket thermo elements NiCr-Ni (type K) complete with cable sleeve and 1m silicone cable (compensation line), loose wire ends

Specification:

Jacket material: Inconel 600, flexible - other materials upon request and against upcharge

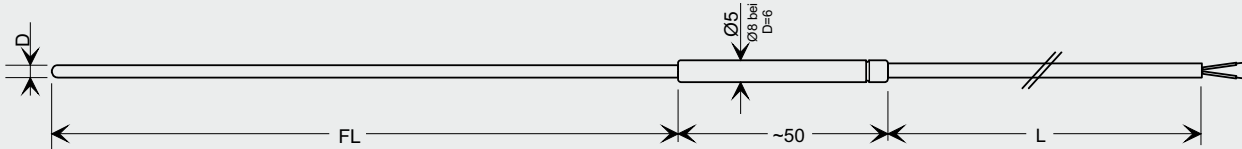
Insulation: highly compressed pure MgO

Thermo wires: NiCr-Ni, DIN IEC 584, welding insulated (volt-free)

Accuracy: optimum accuracy (Cl. 1) = $\pm 1.5^{\circ}\text{C}$ or $\pm 0.4\%$ of measuring value
(Almost double accuracy as compared to class 2. As a comparison with class 2: $\pm 2.5^{\circ}\text{C}$ or $\pm 0.75\%$ of meas. value)

Connecting cable: silicone compensation line, 1m long (max. 200°C), loose ends. (Longer line or other material against upcharge)

Temperature application range: $-220 \dots +1150^{\circ}\text{C}$ (Probe tip and front part; wire outlet: max. 200°C , for cable p.r.t. accessories)
(Accuracy class 1 applicable from $-40 \dots +1000^{\circ}\text{C}$)



L = 1m, for other cable length or other accessories p.r.t. accessories

Advantages:

- Mechanically sound
- Can be subjected to high temperatures and pressures
- Resistant to aggressive atmospheres
- Minimum dimensions, therefore short response times
- Flexible (the smaller the diameter the smaller the bending radii)
- Optimum accuracy acc. to DIN IEC584 class 1
- Potential-free (thermoelement wires have no connection to the outer jacket)




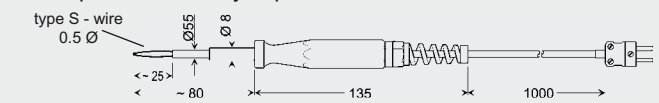
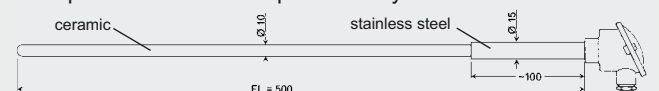
Accessories: (against upcharge)

- Additional clamping screw-type connection for $\varnothing 1.5, 3.0$ and 6.0 (stainless steel). Design with st. steel clamping piece (for high temperatures) or with teflon clamping piece (up to $+250^{\circ}\text{C}$ - can be removed). Various thread diameters available (p.r.t. page 134-135)
- Extended or other cable (please specify upon order): silicone cable (up to 200°C) or glass silk cable (up to 400°C).
- Internal flat-pin plug (NST1200)

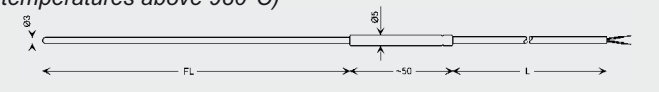
Type	\varnothing mm	FL mm ^{-20mm}	Price	Type	\varnothing mm	FL mm ^{-20mm}	Price
GTF101-5/05150	0,5	150		GTF101-5/30150	3,0	130	
GTF101-5/05250		250		GTF101-5/30250		230	
GTF101-5/05500		500		GTF101-5/30500		480	
GTF101-5/051000		1000		GTF101-5/301000		980	
GTF101-5/051500		1500		GTF101-5/301500		1480	
GTF101-5/10150	1,0	130		GTF101-5/60150	6,0	130	
GTF101-5/10250		230		GTF101-5/60250		230	
GTF101-5/10500		480		GTF101-5/60500		480	
GTF101-5/101000		980		GTF101-5/601000		980	
GTF101-5/101500		1480		GTF101-5/601500		1480	
GTF101-5/15150	1,5	130		Accessories: Clamping screw conn. $\varnothing 1.5, 3.0$ or 6.0 Silicone cable (up to 200°C) Glass silk cable (up to 400°C) Internal flat-pin plug (NST1200) Other accessories see pages 126, 134 and 135.			
GTF101-5/15250		230					
GTF101-5/15500		480					
GTF101-5/151000		980					
GTF101-5/151500		1480					

Accuracy class 1 for all thermo elements (almost double accuracy than class 2!)


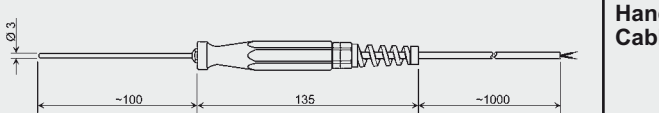
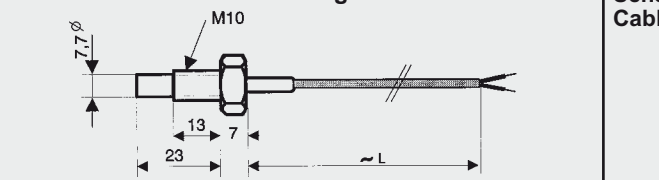
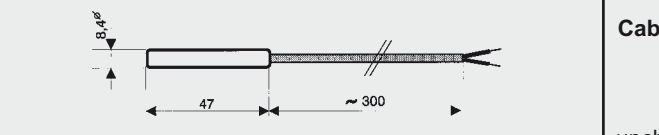
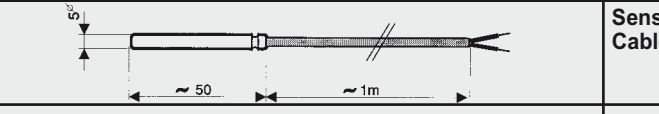

Pt10Rh-Pt (Typ S) - measuring probes (class 1) for highest temperatures

Ordering type Measuring range	Application / Dimensions (mm)	Response time T_{90}	further technical details
GTF 1500/300 +50 ... +1500°C	Probe for burning kilns or similar applications Avoid fast temperature changes. Heat up and cool down the probe slowly with kiln. 		ceramic tube (type 610) (FL=300mm), stainless steel handle, silicone cable, DIN-type flat-pin plug type "S"
GTF 1500/500 +50 ... +1500°C			as above, however FL = 500mm
GBF 1550 +50 ... +1550°C	Bunsen burner probe Probe tip can be directly exposed to the flame. 	approx. 2 sec.	stainless steel tube Ø8mm, with reduced ceramic tube Ø5.5mm, plastic handle, silicone cable, DIN-type flat-pin plug type "S"
GTF 103 HT-S +50 ... +1600°C	Probe for fixed installation in burning kilns and similar appl. Heat up and cool down the probe slowly with kiln. 		sensor tube made of high-grade ceramic KER710, ALU-B sensor head <i>other length upon request</i>

NiCrSi-NiSi (Typ N) - meas. probes (class 1) low cost measuring of high temperatures (permanent up to 1300°C)

GTF101-N03250 -50 ... +1300°C (short-term peaks up to 1330°C)	Probe for permanent high temperatures <i>Mantle material: special steel with extraordinary resistivity against oxidation at high temperatures and excellent corrosion resistance in chlorine and ammoniacal environments (Protective layer emerges at temperatures above 980°C)</i> 	approx. 5 sec.	stainless steel tube (FL=250mm), 1m silicone cable, loose cable ends upcharge for any cable length
GTF101-N03500			as above, however FL = 500mm
GTF101-N031000			as above, however FL = 1000mm
other probes (Typ N) please refer to pages 126 / 127			

Silicium - meas. probes (sensor: KTY ...)

GTF 1400 B Sensor: KTY 81-210 -20 ... +110°C Replacement for KTY 11-6	Temperature probe for GPRT1400AN  OPTION: teflon covered probe tube (for use in salt water)	Sensor tube: made of V4A, with shrinkable sleeve at cable outlet Cable: approx. 1 m of highly flexible silicone cable with Ø 3.5 mm plug
GMF 11/180 Sensor: KTY 83-110 -50 ... +175°C	Screw-type sensor M10 	Sensor tube: V4A Handle: polyamide Cable: approx. 1m of highly flexible cable (2 x 0.25²)
GMF 15/81 Sensor: KTY 81-121 -50 ... +60°C	Immersion/touching/air sensor 	Sensor tube: V4A Cable: flexible silicone cable (2 x 0.25²), approx. 1m long
GMF 15/180 Sensor: KTY 83-110 -50 ... +60°C		
GMF 30/180 Sensor: KTY 83-110 -50 ... +60°C	 * Replacement for KTY 11-6 in the range -20 ... +60°C	Sensor tube: aluminium head, Ø 8.4 mm Cable: flexible silicone cable (2 x 0.25²), approx. 30 cm long upcharge per m of silicone cable
GMF 30/210 * Sensor: KTY 81-210 -50 ... +60°C		
GMF 30/180 V4A Sensor: KTY 83-110 -50 ... +175°C		Sensor tube: V4A-head, Ø5 mm Cable: approx. 1 m of highly flexible silicone cable.
GMF 30/81 V4A Sensor: KTY 81-121 -50 ... +150°C		Sensor tube: V4A-head, Ø 6 x 46 mm Cable: approx. 1 m of silicone cable.