

## Customized jacket thermo elements NiCr-Ni, Type K

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

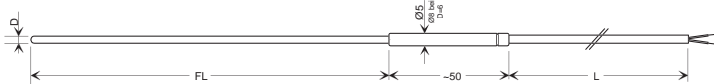
ALSO IN TYPE N AVAILABLE



MECHANICALLY SOUND

#### HIGHLIGHTS:

- 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)
- Potential-free (thermoelement wires have no connection to the outer jacket)
- Optimum accuracy acc. to DIN IEC584 class 1



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

Type:	Ø mm	FL mm <sup>-20mm</sup>
GTF101-5/05150	0.5	150
GTF101-5/05250		250
GTF101-5/05500		500
GTF101-5/051000		1000
GTF101-5/051500		1500
GTF101-5/10150	1.0	130
GTF101-5/10250		230
GTF101-5/10500		480
GTF101-5/101000		980
GTF101-5/101500		1480
GTF101-5/15150	1.5	130
GTF101-5/15250		230
GTF101-5/15500		480
GTF101-5/151000		980
GTF101-5/151500		1480
GTF101-5/30150	3.0	130
GTF101-5/30250		230
GTF101-5/30500		480
GTF101-5/301000		980
GTF101-5/301500		1480
GTF101-5/60150	6.0	130
GTF101-5/60250		230
GTF101-5/60500		480
GTF101-5/601000		980
GTF101-5/601500		1480

#### Specification:

<b>Jacket material:</b>	Inconel 600, flexible - other materials upon request and against upcharge
<b>Insulation:</b>	highly compressed pure MgO
<b>Thermo wires:</b>	NiCr-Ni, DIN IEC 584, welding insulated (volt-free)
<b>Accuracy:</b>	optimum accuracy (cl. 1) = ±1.5 °C or ±0.4 % of measuring value (Almost double accuracy as compared to class 2. As a comparison with class 2: ±2.5 °C or ±0.75 % of meas. value)
<b>Connecting cable:</b>	silicone compensation line, 1 m long (max. 200 °C), loose ends. (Longer line or other material against upcharge)
<b>Temperature application range:</b>	-220 ... +1150 °C (Probe tip and front part; wire outlet: max. 200 °C, for cable p.r.t. accessories) (Accuracy class 1 applicable from -40 ... +1000 °C)

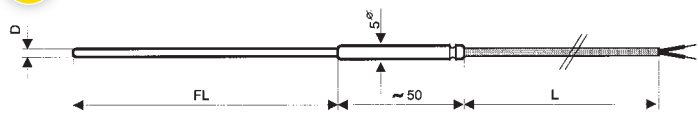
#### Accessories and spare parts:

<b>Clamping screw connection</b>	Ø 1.5, 3.0 or 6.0 mm
<b>Silicone cable</b>	(up to 200 °C)
<b>G4P Glass silk cable</b>	(up to 400 °C)
<b>NST1200</b>	Internal flat-pin plug

Other accessories see previous page

Special sizes, mantle materials, et. upon request.

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



### GTF 101 P

Temperature probe

#### Characteristic:

The GTF 101 is a temperature probe that can be fully tailored according to customers' requirements. The robust GTF 101 is especially suited for applications at high permanent temperatures and pressures in air, gases or liquids. The temperature is measured with resistance temperature sensors (Pt100 or Pt1000)

#### Specifications:

<b>Probe diameter D:</b>	3 mm, 4 mm, 5 mm, 6 mm, 8 mm, other diameters upon request
<b>Cable sleeve:</b>	for probe diameters D 3 mm, 4 mm, 5 mm, 6 mm, 8 mm: there is a cable sleeve $\varnothing$ 5 mm x 50 mm in addition to the fitting length for probe diameters D 6 mm and MB3 or MB4: there is a cable sleeve $\varnothing$ 8 mm x 35 mm with taper to $\varnothing$ 5 mm x 17 mm in addition to the fitting length <b>Note:</b> The temperature of the cable sleeve must not exceed the permitted temperature of the cable.
<b>Accuracy:</b>	DIN class B, DIN class A, 1/3 DIN class B, 1/10 DIN class B
<b>Tube material:</b>	V4A stainless steel

GTF 101 P 1 2 3 4 5 6 7 8

#### Product key:

##### 1. Sensor element

P	Pt100
T	Pt1000

##### 2. Sensor element connection

2L	2-wire
3L	3-wire
4L	4-wire

##### 3. Accuracy

A	DIN class A
B	DIN class B (standard)
D	1/3 DIN class B
Z	1/10 DIN class B

##### 4. Measuring range MB

MB1	-50 ... +400 °C
MB2	-200 ... +400 °C
MB3	-70 ... +600 °C (mantle element)
MB4	-50 ... +850 °C (Pt 100 mantle element)

##### 5. Probe diameter D

D30	3.0 mm
D40	4.0 mm
D50	5.0 mm
D60	6.0 mm
D80	8.0 mm
Dxx	other diameter in mm

##### 6. Fitting length EL

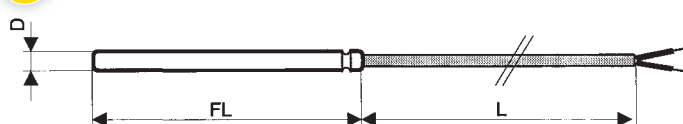
0050	50 mm
0100	100 mm
0150	150 mm
0250	250 mm
0500	500 mm
1000	1000 mm
1500	1500 mm
xxxx	any length in mm

##### 7. Cable length L

L01	1 m silicone cable (standard)
Lxx	any length in m

##### 8. Type of cable

P	PVC cable up to max. 105 °C (surcharge per 1 m cable length L)
S	silicone cable up to max. 200 °C (surcharge per 1 m cable length L)
T	Teflon cable up to max. 250 °C (surcharge per 1 m cable length L)
G	glass silk cable up to max. 400 °C (surcharge per 1 m cable length L)



### GTF 101 P-OKH

Temperature probe

#### Characteristic:

The GTF 101 is a temperature probe that can be fully tailored according to customers' requirements. The robust GTF 101 is especially suited for applications at high permanent temperatures and pressures in air, gases or liquids. The temperature is measured with resistance temperature sensors (Pt100 or Pt1000)

#### Specifications:

<b>Probe diameter D:</b>	3 mm, 4 mm, 5 mm, 6 mm, 8 mm, other diameters upon request
<b>Accuracy:</b>	DIN class B, DIN class A, 1/3 DIN class B, 1/10 DIN class B
<b>Tube material:</b>	V4A stainless steel

GTF 101 P-OKH 1 2 3 4 5 6 7 8

#### Product key:

##### 1. Sensor element

P	Pt100
T	Pt1000

##### 2. Sensor element connection

2L	2-wire
3L	3-wire
4L	4-wire

##### 3. Accuracy

A	DIN class A
B	DIN class B (standard)
D	1/3 DIN class B
Z	1/10 DIN class B (only with MB1, MB2 and Pt100)

##### 4. Measuring range MB

MB1	-50 ... +200 °C
MB2	-50 ... +250 °C (only with Teflon or glass silk cable)
MB3	-50 ... +400 °C (only with glass silk cable)
MB4	-200 ... +250 °C (only with Teflon cable)

##### 5. Probe diameter D

D30	3.0 mm (only with Teflon cable)
D40	4.0 mm (only with Teflon cable)
D50	5.0 mm
D60	6.0 mm
D80	8.0 mm
Dxx	other diameter in mm

##### 6. Fitting length EL

0050	50 mm
0100	100 mm
0150	150 mm
0250	250 mm
0500	500 mm
1000	1000 mm
1500	1500 mm
xxxx	any length in mm

##### 7. Cable length L

L01	1 m silicone cable (standard)
Lxx	any length in m

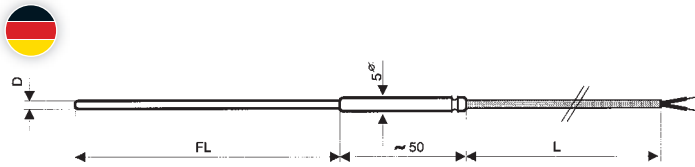
##### 8. Type of cable

S	silicone cable up to max. 200 °C (surcharge per 1 m cable length L)
T	Teflon cable up to max. 250 °C (surcharge per 1 m cable length L)
G	glass silk cable up to max. 400 °C (surcharge per 1 m cable length L)

Special lengths, special sheath materials, etc. upon request.

Handheld instrument  
Display / Controller  
Logger / EASYBus  
Transmitter  
Temperature probe  
Alarm / Protection

Industry - temperature probe



**GTF 101 K**

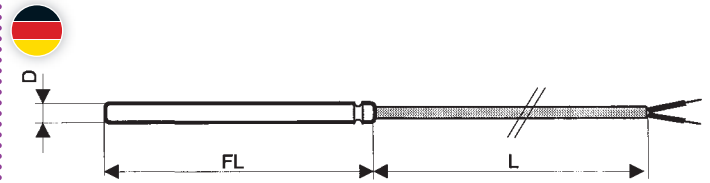
Temperature probe

<b>Characteristic:</b>	
The GTF 101 is a temperature probe that can be fully tailored according to customers' requirements. The robust GTF 101 is especially suited for applications at high permanent temperatures and pressures in air, gases or liquids. The temperature is measured with thermocouple wires (NiCr-Ni).	
<b>Specifications:</b>	
<b>Sensor element:</b>	NiCr-Ni (type K)
<b>Measuring range:</b>	-200 ... +1150 °C
<b>Probe diameter D:</b>	1.5 mm, 3 mm, 6 mm other diameters upon request
<b>Cable sleeve:</b>	for probe diameters D 0.5 mm, 1 mm, 1.5 mm, 3 mm: there is a cable sleeve Ø 5 mm x 50 mm in addition to the fitting length for probe diameters D 6 mm: there is a cable sleeve Ø 8 mm x 35 mm with taper to Ø 5 mm x 17 mm in addition to the fitting length <b>Note:</b> The temperature of the cable sleeve must not exceed the permitted temperature of the cable.
<b>Accuracy:</b>	class 1
<b>Tube material:</b>	cable sleeve: V4A stainless steel, probe tube: Inconel 600

GTF 101 K 1 2 3 4

<b>Product key:</b>	
<b>1. Probe diameter D</b>	
D15	1.5 mm
D30	3.0 mm
D60	6.0 mm
Dxx	other diameter in mm
<b>2. Fitting length EL</b>	
0100	100 mm
0150	150 mm
0250	250 mm
0500	500 mm
1000	1000 mm
xxxx	any EL in mm (e.g.: 0100 = 100 mm)
<b>3. Cable length L</b>	
L01	1 m silicone cable (standard)
Lxx	any length in m (e.g.: L03 = 3 m)
<b>4. Type of cable</b>	
S	silicone cable up to max. -50 ... +200 °C (standard)
T	Teflon cable up to max. -200 ... +250 °C
G	glass silk cable up to max. -50 ... +400 °C

Standard types see page 131.



**GTF 101 K-OKH**

Temperature probe

<b>Characteristic:</b>	
The GTF 101 is a temperature probe that can be fully tailored according to customers' requirements. The robust GTF 101 is especially suited for applications at high permanent temperatures and pressures in air, gases or liquids. The temperature is measured with thermocouple wires (NiCr-Ni).	
<b>Specifications:</b>	
<b>Sensor element:</b>	NiCr-Ni (type K)
<b>Probe diameter D:</b>	3 mm, 5 mm, 6 mm, other diameters upon request
<b>Accuracy:</b>	class 1
<b>Tube material:</b>	V4A stainless steel

GTF 101 K 1 2 3 4 5

<b>Product key:</b>	
<b>1. Probe diameter D</b>	
D30	3.0 mm only with Teflon cable
D50	5.0 mm
D60	6.0 mm
Dxx	other diameter in mm
<b>2. Fitting length EL</b>	
0050	50 mm
0100	100 mm
0150	150 mm
0250	250 mm
0500	500 mm
1000	1000 mm
xxxx	any EL in mm (e.g.: 0100 = 100 mm)
<b>3. Measuring range</b>	
MB1	-50 ... +200 °C
MB2	-50 ... +250 °C only with Teflon or glass silk cable
MB3	-50 ... +400 °C only with glass silk cable
<b>4. Cable length L</b>	
L01	1 m silicone cable (standard)
Lxx	any length in m (e.g.: L03 = 3 m)
<b>5. Type of cable</b>	
S	silicone cable up to max. -50 ... +200 °C (standard)
T	Teflon cable up to max. -200 ... +250 °C
G	glass silk cable up to max. -50 ... +400 °C

Special lengths, special sheath materials, etc. upon request.