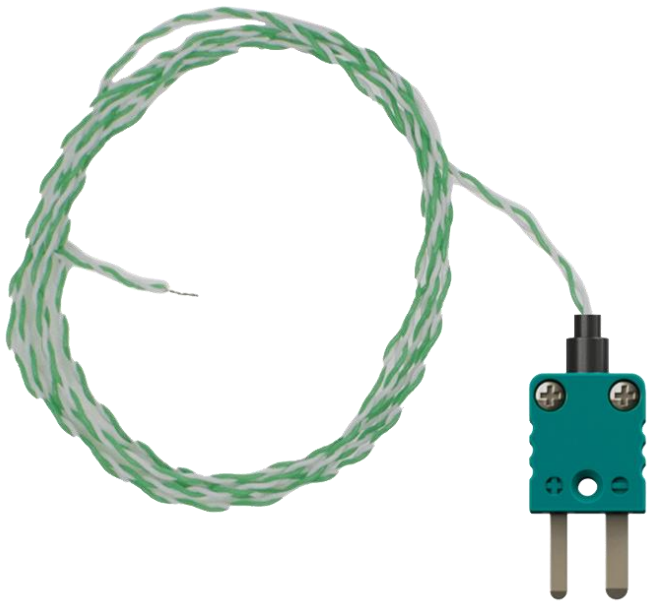
GTF 300 & GTF 300 GS

Type K wire probes



- **Quick-response measurements**
- For air, gases, diminutive surfaces & liquids (GTF 300 only)
- Various measuring tips available:
  - Twisted & welded
  - Non-twisted/welded
  - With weld bead
- Teflon- or glass filament insulated
- **Wide measurement range:**
  - Teflon-insulated:
    GTF 300: -65 ... +250 °C
    (300 °C at bare tip)
  - Glass filament insulated:
    GTF 300 GS: -65 ... +400 °C
- **Precise**: Class 1

DESCRIPTION

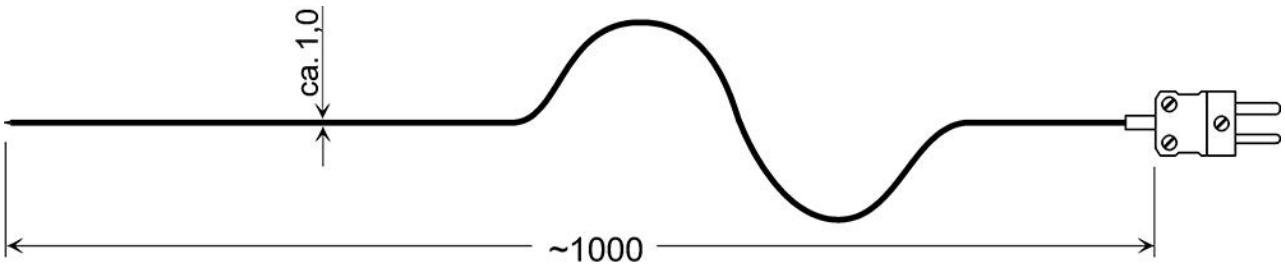
These high-quality Type K thermocouples (NiCr-NiAl) are specifically designed for applications that require extremely fast response times and maximum flexibility. With a fine thermocouple wire diameter of just 0.2 mm and a fast response time of approximately 0.3 seconds, they enable lightning-fast measurements in air, gases, on very small surfaces, and in liquids (GTF 300 only).

Two insulation variants are available for optimal adaptation to the application site: The **Teflon-insulated version (GTF 300)** is waterproof and highly temperature-resistant, making it ideal for demanding measurements up to +250 °C (300 °C at bare tip). The **glass filament insulated version (GTF 300 GS)** is optimized for dry environments and covers an extended temperature range up to +400 °C.

All probes comply with accuracy class 1 – the highest accuracy class for thermocouples – and are available with three different tip configurations (twisted/welded, untwisted welded, or with a weld bead). Connection is available via a miniature flat plug (optionally with kink protection) or loose ends with wire end ferrules, available in cable lengths of 1, 2, 5, or 10 meters (other lengths available upon request).

When combined with a suitable display device (see section “Suitable instruments”), the temperature probes can optionally be equipped with DAkkS/ACCREDIA-accredited calibration ISO/IEC 17025 or with ISO 9001 calibration.

Technical drawing (with 1-meter probe cable and miniature flat plug):



Teflon-insulated

GTF300-00
Measuring tip
twisted/welded

GTF300-UV
Measuring tip
non-twisted/welded

GTF300-SP
Measuring tip
with weld bead

Glass filament insulated

GTF300GS-00
Measuring tip
twisted/welded

GTF300GS-UV
Measuring tip
non-twisted/welded

GTF300GS-SP
Measuring tip
with weld bead

TECHNICAL SPECIFICATION

	GTF 300	GTF 300 GS
Sensor	Ø 0.2 mm thermocouple wires Type K (NiCr-NiAl)	
Measuring range	-65 ... +250 °C (300 °C at bare tip)	-65 … +400 °C
Accuracy	Class 1: ± 1.5 °C (-40 °C to +375 °C) or 0.40 % (+375 °C to +1000 °C)	
Response time (T_{90})	Water 0.4 m/s approx. 0.3 s	
Cable	Teflon-insulated, up to max. +250 °C, highly flexible	Glass filament insulated
Dimensions	Ø approx. 1 mm, L = 1 m, 2 m, 5 m, 10 m	
Connection	Miniature flat-pin plug	
	Miniature flat-pin plug with kink protection Loose ends with wire end ferrules	
Application	Liquids	Not for liquids
	air, gases, diminutive surfaces	

ORDER CODES

Type K wire probe – Teflon-insulated

GTF300 - **1** - **2** - **3**

1	**Connection**	
		Miniature flat-pin plug (standard)
	KS	Miniature flat-pin plug with kink protection
	LE	Loose ends with wire end ferrules
2	**Wire probe length**	
	L01	1 m (standard)
	L02	2 m
	L05	5 m
	L10	10 m
3	**Option**	
	00	Measuring tip twisted & welded
	UV	Measuring tip untwisted welded
	SP	Measuring tip with weld bead

Type K wire probe - glass filament insulated

GTF300GS - **1** - **2** - **3**

1	**Connection**	
		Miniature flat-pin plug with kink protection (standard)
	LE	Loose ends with wire end ferrules
2	**Wire probe length**	
	L01	1 m (standard)
	L02	2 m
	L05	5 m
	L10	10 m
3	**Option**	
	00	Measuring tip twisted & welded
	UV	Measuring tip untwisted welded
	SP	Measuring tip with weld bead

STANDARD ARTICLES

GTF300-L01-00	Type K wire probe, Teflon-insulated, miniature flat plug, measuring tip twisted & welded, 1 m, -65 ... +250 °C (300 °C at bare tip), Class 1	**Art. No. 600072**
GTF300-L01-UV	Type K wire probe, Teflon-insulated, miniature flat plug, measuring tip non-twisted welded, 1 m, -65 ... +250 °C (300 °C at bare tip), Class 1	**Art. No. 600081**
GTF300-L01-SP	Type K wire probe, Teflon-insulated, miniature flat plug, measuring tip with weld bead, 1 m, -65 ... +250 °C (300 °C at bare tip), Class 1	**Art. No. 605973**
GTF300GS-L01-00	Type K wire probe, glass filament insulated, miniature flat plug with kink protection, measuring tip twisted & welded, 1 m, -65 ... +400 °C, Class 1	**Art. No. 602554**
GTF300GS-L01-UV	Type K wire probe, glass filament insulated, miniature flat plug with kink protection, measuring tip non-twisted welded, 1 m, -65 ... +400 °C, Class 1	**Art. No. 607893**
GTF300GS-L01-SP	Type K wire probe, glass filament insulated, miniature flat plug with kink protection, measuring tip with weld bead, 1 m, -65 ... +400 °C, Class 1	**Art. No. 606208**

SUITABLE INSTRUMENTS

PRO 131.2	2-channel handheld temperature meter for thermocouple probes, graphic display. Device in carton box, incl. batteries, QuickStart, test protocol, without temperature probe	**Art. No. 486119**
PRO 135.2	2-channel handheld temperature meter/data logger for thermocouple probes, graphic display. Device in carton box, incl. batteries, QuickStart, test protocol, USB cable, without temperature probe. Free Software ProXware downloadable from Senseca website	**Art. No. 486118**
ECO 130	Type K thermocouple quick response thermometer (formerly G 1200). Device in carton box, incl. batteries, manual, test protocol, without probe	**Art. No. 486708**
ECO 130.2	Type K quick response 2-channel-alarm-thermometer (formerly G 1202). Device in carton box, incl. batteries, manual, test protocol, without probe	**Art. No. 486732**