Temperature

NiCr-Ni thermowire T 190-0

Accuracy: NiCr-Ni class 2*
Insulation :   Glass fiber (wires and sheath)
Operating temp.: -25°C to +400°C
Wire diameter: 0.5 mm
External diameter: approx. 1.3 x 2.1 mm

NiCr-Ni thermowire per meter
with glass fiber covering   **Order no. LT01900**

NiCr-Ni thermowire sensor, welded tip, with
ALMEMO® connector 1.5m long **Order no. FTA3900**
ALMEMO® connector 5m long   **Order no. FTA3900L05**

NiCr-Ni thermowire T 190-1

Accuracy: NiCr-Ni class 2*
Insulation :   Glass fiber (wires and sheath)
Operating temp.: -25°C to +400°C
Wire diameter: 0.2 mm
External diameter: approx. 0.6 x 1.0 mm

NiCr-Ni thermowire per meter
with glass fiber covering   **Order no. LT01901**

NiCr-Ni thermowire sensor, welded tip, with
ALMEMO® connector 1.5 m long **Order no. FTA3901**
ALMEMO® connector 5m long   **Order no. FTA3901L05**

NiCr-Ni thermowire T 190-2

Accuracy: NiCr-Ni class 2*
Insulation :   PVC (wires and sheath)
Operating temp.: -10°C to +105°C
Wire diameter: 0.5 mm
External diameter: approx. 2.2 x 3.4 mm

NiCr-Ni thermowire per meter
with PVC insulation   **Order no. LT01902**

NiCr-Ni thermowire sensor, welded tip, with
ALMEMO® connector 1.5 m long **Order no. FTA3902**
ALMEMO® connector 5 m long   **Order no. FTA3902L05**

NiCr-Ni thermowire T 190-3

Accuracy: NiCr-Ni class 2*
Insulation :   Silicone (wires and sheath)
Operating temp.: -45°C to +200°C
Wire diameter: 0.5 mm
External diameter: approx. 4 mm

NiCr-Ni thermowire per meter
with silicone insulation   **Order no. LT01903**

NiCr-Ni thermowire sensor, welded tip, with
ALMEMO® connector 1.5 m long **Order no. FTA3903**
ALMEMO® connector 5 m long   **Order no. FTA3903L05**

* Range of validity see page 07.03

DAkkS or factory calibration KT90xx temperature for sensor or measuring chain (sensor + device) (see chapter Calibration certificates)
DAkkS calibration meets all the requirements regarding test resources laid down in DIN EN ISO/IEC 17025.

NiCr-Ni thermowire T 190-10

Accuracy: NiCr-Ni class 2*
Insulation :   FEP (Wires and sheath)
Operating temp.: -200°C to +205°C
Wire diameter: 0.5 mm
External diameter: approx. 1.5 x 2.5 mm

NiCr-Ni thermowire per meter
with FEP insulation   **Order no. LT019010**

NiCr-Ni thermowire sensor, welded tip, with
ALMEMO® connector 1.5m long **Order no. FTA39010**
ALMEMO® connector 5m long   **Order no. FTA39010L05**

NiCr-Ni thermowire T 190-11

Accuracy: NiCr-Ni class 2*
Insulation :   FEP (Wires and sheath)
Operating temp.: -200°C to +205°C
Wire diameter: 0.2 mm
External diameter: approx. 1.3 x 2.0 mm

NiCr-Ni thermowire per meter
with FEP insulation   **Order no. LT019011**

NiCr-Ni thermowire sensor, welded tip, with
ALMEMO® connector 1.5m long **Order no. FTA39011**
ALMEMO® connector 5m long   **Order no. FTA39011L05**

NiCr-Ni thermowire T 190-7

Accuracy: NiCr-Ni class 2*
Insulation :   Ceramic fiber (Wires and sheath)
Operating temp.: -40°C to +1200°C
Wire diameter: 0.8 mm
External diameter: approx. 3 x 4 mm

NiCr-Ni thermowire per meter
with ceramic fiber insulation **Order no. LT01907**

NiCr-Ni thermowire sensor, welded tip, with
ALMEMO® connector 1.5m long **Order no. FTA3907**
ALMEMO® connector 5m long   **Order no. FTA3907L05**

Nur für trockene, nicht agressive Umgebung!

NiCr-Ni compensation line T 191-1

compensation line: NiCr-Ni
Insulation :   PVC (Wires and sheath)
Operating temp.: -10°C to +105°C
Wire diameter: 0.5 mm
External diameter: approx. 3.6 mm

NiCr-Ni bunched conductor with PVC insulation,
for each meter   **Order no. LT01911**

Other types are available on request.
LT01912 Insulation Silicone/silicone/glass filament, up to 200°C
LT01913 Insulation PVC / screening film / PVC, up to 105°C

NiCr-Ni thermal line (Litze) T 191-6

Thermal line (stranded wire): NiCr-Ni*
Insulation: Wires : FEP, sheath : silicone
Operating temp.: -50...+200°C
Wire diameter: 0.7 mm
External diameter: approx. 3.8 mm

NiCr-Ni thermal line (stranded wire) with FEP / silicone
insulation, per meter   **Order no. LT01916**

* Range of validity see page 07.03
** There is no adverse temperature effect at the juncture from measuring element to cable. see page 07.03

DAkkS or factory calibration KT90xx temperature for sensor or measuring chain (sensor + device) (see chapter Calibration certificates)
DAkkS calibration meets all the requirements regarding test resources laid down in DIN EN ISO/IEC 17025.

Temperature

ALMEMO® connector for thermocouples (see Chapter Input connectors)

For Types K, N, L, J, T
(no thermo-electric transition / with thermal material)

NiCr-Ni (K)	**Order no. ZA9020FS**
NiCroSil-NiSil (N)	**Order no. ZA9021FSN**
Fe-CuNi (J)	**Order no. ZA9021FSJ**
Cu-CuNi (T)	**Order no. ZA9021FST**

For Types U, S, R, B, AuFe-Cr

Cu-CuNi (U)	**Order no. ZA9000FSU**
PtRh10-Pt (S)	**Order no. ZA9000FSS**
PtRh13-Pt (R)	**Order no. ZA9000FSR**
PtRh30-PtRh6 (B)	**Order no. ZA9000FSB**
AuFe-Cr (A)	**Order no. ZA9000FSA**

ALMEMO® adapter plug with miniature flat socket

For Types K, J, T, S

NiCr-Ni (K)	**Order no. ZKA029RA**
Fe-CuNi (J)	**Order no. ZJA029RA**
Cu-CuNi (T)	**Order no. ZTA029RA**
PtRh-Pt (S)	**Order no. ZSA029RA**

Miniature flat connectors for thermocouples types K, J, T, S, E
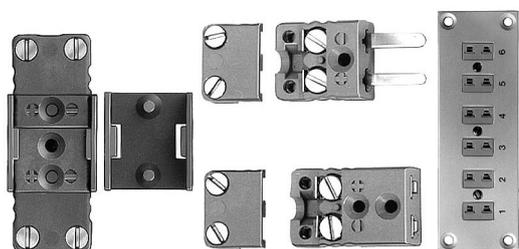
Examples for NiCr-Ni (K):

NiCr-Ni flat socket	**Order no. ZK9029FB**
NiCr-Ni flat connector	**Order no. ZK9029FS**
Locking plate (10 pieces)	**Order no. ZB9029VP**
NiCr-Ni single built-in socket	**Order no. ZK9029FE**
1-row panel with NiCr-Ni socket	**Order no. ZK9029FB1**
6-row panel with NiCr-Ni socket	**Order no. ZK9029FB6**

- Connectors with thermo contacts for avoiding voltage corruption at thermocouple junctions.
- For ambient temperatures –183 to +200 °C.
- Locking plate for complete coupling.

Order numbers for the above examples are compiled from the following coding elements : Z①9029F②③.

The coding elements can be taken from the table below.

Ordering:

Type ①	Color (IEC 584)	Variant ②	Panel ③	Panel dimensions
NiCr-Ni (K)	green	Male connector = S	1-er (1-rhg)	38 x 38 x 2.5 mm
Fe-CuNi (J)	black	Female connector = B	6-er (1-rhg)	113 x 38 x 2.5 mm
Cu-CuNi (T)	brown		12-er (1-rhg)	203 x 38 x 2.5 mm
NiCr-CuNi (E)	lilac		24-er (2-rhg)	203 x 76 x 2.5 mm
PtRh-Pt (S)	orange			mounting depth: 25.4 mm

DAkkS or factory calibration KT90xx temperature for sensor or measuring chain (sensor + device) (see chapter Calibration certificates)
DAkkS calibration meets all the requirements regarding test resources laid down in DIN EN ISO/IEC 17025.