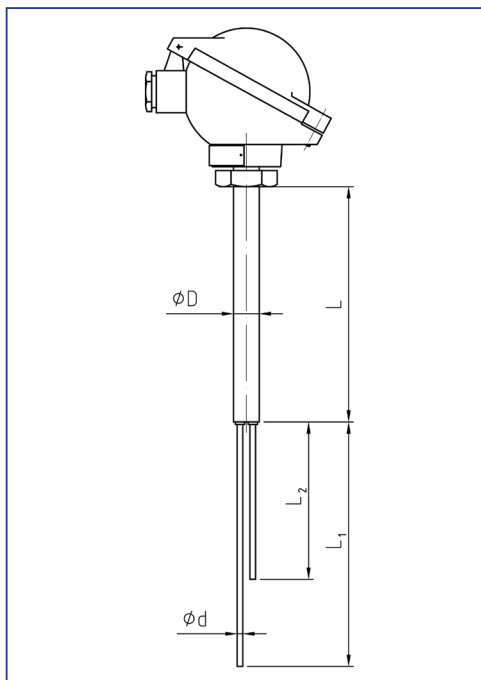


# TER-nP-49

## Straight Thermocouple (Type J, K) with connection head Multipoint



Straight multiple sheathed thermocouple type TER-nP-49 with connection head has been designed for high range temperature measurements -40°C to +1100°C.

The main area of application is temperature measurement of process fluids where high temperature variations are expected, short sensor time constant is required and there is need for temperature diagram for various points.

### Technical specification

| Sheathed sensor insert                | Temp. range - Class 1  | Sheath diameter d [mm] | Sheath material             | Characteristic                    |
|---------------------------------------|------------------------|------------------------|-----------------------------|-----------------------------------|
| 1xFe-CuNi (J), 2xFe-CuNi (J)          | -40°C...+700°C         | ø 3, ø 4.5, ø 6, ø 8   | Inconel 600 / 2.4816        | acc. EN 60584-1                   |
| 1xNiCr-NiAl (K), 2xNiCr-NiAl (K)      | -40°C...+1100°C        |                        |                             |                                   |
| Protect. tube diam. D [mm]            | Material acc. DIN/AISI | Max operating temp.    | Protect. tube length L [mm] | Sensor length L <sub>n</sub> [mm] |
| ø10, ø20, ø22                         | 1.4841 / 314           | +1100°C                | on request                  | on request                        |
| Connection head                       | Max operating temp.    | Transmitter            | Junction                    |                                   |
| DAA, DANA, DANAW with silicon sealing | +150°C                 | on request             | ungrounded                  |                                   |
|                                       |                        |                        | grounded                    |                                   |

Non-standard models available.

## Ordering Information

|     |   |      |   |   |   |   |   |   |   |   |   |   |
|-----|---|------|---|---|---|---|---|---|---|---|---|---|
| TER | A | P-49 | B | C | D | E | F | G | H | I | J | K |
|-----|---|------|---|---|---|---|---|---|---|---|---|---|

| A Amount of thermocouples n |                |
|-----------------------------|----------------|
|                             | specify amount |

| B Type of thermocouple |           |
|------------------------|-----------|
| J                      | Fe-CuNi   |
| K                      | NiCr-NiAl |

| C Junction |            |
|------------|------------|
| O          | ungrounded |
| Z          | grounded   |

| D Protection tube diameter D |          |
|------------------------------|----------|
| 10                           | D= 10 mm |
| 20                           | D= 20 mm |
| 22                           | D= 22 mm |

| E Protection tube length L |                 |
|----------------------------|-----------------|
|                            | specify in [mm] |

| F Protection tube material |              |
|----------------------------|--------------|
| 1.4841                     | 1.4841 / 314 |

| G Sheath diameter d |           |
|---------------------|-----------|
| 3                   | d= 3 mm   |
| 4,5                 | d= 4,5 mm |
| 6                   | d= 6 mm   |
| 8                   | d= 8 mm   |

| H Sensor lengths L <sub>1</sub> / L <sub>2</sub> /.../ L <sub>n</sub> |                 |
|-----------------------------------------------------------------------|-----------------|
|                                                                       | specify in [mm] |

| I Sheath material |                      |
|-------------------|----------------------|
| 2.4816            | Inconel 600 / 2.4816 |

| J Connection head |                   |
|-------------------|-------------------|
|                   | specify head type |

| K Operating temperature |               |
|-------------------------|---------------|
|                         | specify in °C |

### Ordering Example

**TER-2-P-49-1xK-O-22-500-1.4841-3-200/100-2.4816-DANAW-500**

stands for: Double thermocouple straight 1xNiCr-NiAl, ungrounded, protection tube diameter ø22 mm, length L=500 mm, material 1.4841, sheathed thermocouples diameter ø3 mm, lengths L1=200 mm, L2=100 mm and material Inconel600 (2.4816), connection head type DANAW, operating temp. up to 500°C.